

## TECHNOLOGICAL FINANCE (FINTECH) AND ITS PERFORMANCE IN ALBANIA

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**Abstract:** *The main purpose of this paper presented by the authors has to do with the realization of an analysis on the progress and level of use of Financial Technology (FinTech) with a focus on the banking sector in the state of Albania. The notion of FinTech is a dedicated term for financial technology in the digital age. The diversity of this technological solution brings with it the promise of faster, cheaper, safer and more transparent financial transactions via the internet. In the paper carried out by the authors, primary data obtained from the completion of more than 500 questionnaires by individuals located in Tirana, Elbasan and Durres districts were used. Also, in this paper, other secondary data were used, which were provided by the base data of the Central Bank of the Albanian State, from the base data of the World Bank and the International Monetary Fund. This This paper describes the implications of policies regarding the promotion of relevant institutional policies regarding the increase in the level of use of Technological Finance in the state of Albania. The continued application of innovative technologies in finance and especially in the Fintech sector is very important, this will serve as a tool to increase the level of financial economic development in Albania (Toska, 2021). The findings underscore the potential for FinTech to foster financial inclusion and economic growth in Albania, provided that regulatory frameworks and digital infrastructures are strengthened. The paper presented by the authors also discusses financial policy implications and recommends some important measures that should be considered by the Albanian government and the Central Bank of Albania. By further stimulating the adoption and development of technological Finance in Albania, and by implementing international protocols regarding cyber security.*

**Keywords:** *Financial Technology (FinTech), Digital Payment, Financial Banking System, Fintech and Banking.*

### 1. INTRODUCTION

The notion of FinTech is the combination of the words finance and technology. In various papers presented by international authors, the term BancTec is often used as a synonym for FinTech (Zavolokina, 2016). This term is essentially used to describe the application of new technologies that serve to improve and automate all processes related to various financial services. FinTech is increasing its scale of expansion in the international economy and in the near future it is thought that it will rival the banking system, as the products offered by FinTech are rapidly replacing the services offered by the Banking System and beyond with innovative products and services (Puschmann, 2017). The combination of continuous innovation with

digital technology of this spectrum, enabled the creation and development of several FinTech models that are applied in businesses (Giglio, 2021). As part of these innovations, we have a continuous increase in the convergence of the two industries, Finance and Information Technology. In the context of the implementation of financial technologies in various subjects, it is observed that the cost of transactions is decreasing, the efficiency and pace of conducting transactions has also increased. Technological Finance also includes innovations in the field of financial education, in the field of investments, the banking sector and cryptocurrencies (Gomber, 2018).

## **2. LITERATURE REVIEW**

The emergence of FinTech has helped businesses reduce costs and increase profitability resulting in attracting investors and media (Haddad, 2019). These investors are not only interested because of the profitability, but also because it is beneficial for society. To further elaborate, FinTech has provided alternative opportunities for underserved societies where people, for example, do not have bank accounts. For example, people who don't get loans from traditional banks for home loans turn to shadow banks and FinTech shadow banks, which tend to give them loans without any calculation and bank account requirements. However, on the other hand, these loans are characterized by higher interest rates, which in turn attracts a certain segment of investors (Buchak, 2018). The reason for this is that FinTech makes it easy and low-cost to do charity work, regardless of their income level. This emerging and innovative industry has also attracted media attention due to innovative and appealing solutions to the general public. FinTech uses big data analytics to better understand consumer behaviors, needs and demands to find the best possible solutions, which was once done by big data companies and cloud technology companies (Lee, 2018). Increasingly, Financial Technology is becoming commonplace not only for consumers but also for the general public (Haddad, 2019). Innovation has its own issues such as stability, sustainability (Leong, 2017) and the safety. Technological finance should be an essential part of the overall policy solution to help identify and address the challenges in increasing finance (Loukoianova, 2024). Innovations in the industry, in which Technological Finances are a part, are making it possible to increase the degree and quality of cooperation between Fintech companies and Financial Institutions, especially in the banking spectrum. Also, these innovations are improving the quality of the realization of the whole of the transactions that develop between financial institutions and their customers (Arner, 2020). Experience gained during the period of COVID-19 highlighted the importance of promoting digital spectrum services, especially for individuals and various economic entities. The financial sector of the economy, which includes the FinTech sector, has been growing steadily, especially over the last years. During this period, it has been observed that universal banks are losing a comparative advantage that has come from more immediate access to information from entities seeking credit to expand their activity (Stulz, 2019). Fiscal policies that are applied in different countries should have a focus, more substantial investments, especially in the digital spectrum. However, innovation has the potential for consumer and reputational well-being of regulators, supervisors and the financial services industry (Anagnostopoulos, 2018).

### **3. METHODOLOGY**

The paper presented by the authors is mainly based on primary data of both the qualitative and quantitative spectrum. Also in this paper, secondary data provided by institutions at the national and international level have been used. The research model applied by the authors is based and structured around a questionnaire that aims and aims to assess the possibility of the growth of Technological Finance in the state of Albania. Looking at and studying this approach both from the point of view of consumer demand for FinTech products and from the point of view of supply. Data collection process by the authors. The totality of primary data collected through this questionnaire is presented as follows. The questionnaires were distributed both physically and electronically using the Microsoft Forms software program. The authors considered a total of 574 valid questionnaires to be part of this study. Out of the total of 425 questionnaires that were distributed in Hard Copy format, only 260 questionnaires were fully completed and were considered valid. Meanwhile, 314 questionnaires were completed by the interviewees electronically using the Microsoft Forms program. The entire process of distributing, completing and collecting all the questionnaires was spread over a period of eight months. More specifically, the filling process started in June 2024 until January 2025. All the individuals who took part in this survey are people who live in the district of Tirana, in the district of Elbasai and in the district of Durrës. About 88% of the people who participated in this sampling are individuals who work in private economic entities, self-employed or students. While only 68 people or in other words 12% of the total sampling are individuals who are employed in public institutions. Sampling Technique. In this paper, a purposeful non-probability sampling technique was used, in relation to the persons who were selected and who have knowledge of banking services or FinTech products. The selection aimed to capture a broad demographic range to provide comprehensive insights into consumer behavior and preferences. Questionnaire Structure. The survey instrument used by the authors in this paper is divided into four main sections:

- Socio-economic profile of respondents.
- Information and usage patterns related to traditional retail banking products.
- Interaction with and use of innovative banking products, including FinTech solutions.
- Customer behavior and purchase patterns related to banking services.

The first part of the questionnaire was adapted with questions regarding the socio-economic profile of the respondents. The second section of this questionnaire, the information and use of retail banking products by the interviewees of this survey is included. The third section of this questionnaire includes information and the use of innovative banking products. The fourth section of this questionnaire includes the behavior and purchases of the bank's customers. The answers obtained from the data processing of the questionnaire were processed by the authors using the Microsoft Excel computer software. From the total of 574 completed questionnaires, looking at the gender perspective, it turns out that 330 of the respondents are women, or to say it differently, 57.49% of the total are women. While 244 questionnaires were completed by men, or in other words, 42.51% of the total number of respondents are male. The process of processing and analyzing the data of the respondents. All the data used in this paper was processed and analyzed by the authors using the Microsoft Excel software program. From the point of view of gender distribution, the summarized results show that 330 people surveyed

or otherwise 57.49 were female. While the other 244 people are male or otherwise the latter constituted 42.51 of all respondents. Also, in this paper, other secondary data were used, which were provided by the base data of the Central Bank of the Albanian State (Bank of Albania, 2025), from the base data of the World Bank (World Bank, 2025), from the base data of Statista and the International Monetary Fund (IMF, 2025). Ethical aspect of the paper. All the individuals who participated in this survey, have completed the questionnaire with their full will and without being influenced, also all persons were informed about the purpose of this paper. Confidentiality was maintained during the entire process of collection, processing and analysis of the data collected by the authors.

## **4. RESULTS**

### **4.1 FinTech users in USA and Europe.**

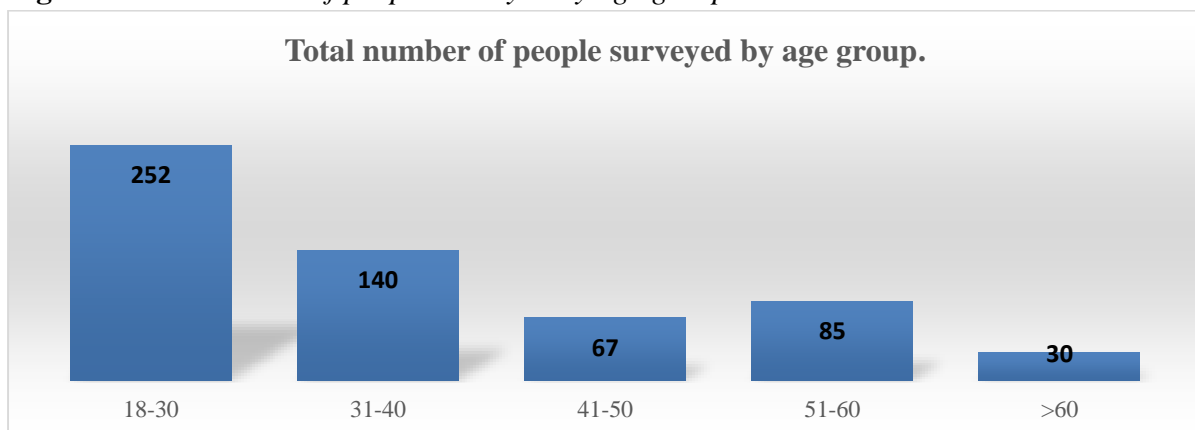
Especially during the last decade, the financial sector in which Technological Finance is a part has experienced a significant growth in different countries such as, the United States of America (USA), various countries that are part of the European Union (EU) and the Republic of Canada. The industry in which Technological Finance is part of during the year 2024 has managed to generate a value that is in the limit of 226.76 billion dollars. Based on projections calculated by different researchers, it is claimed that Technological Finance will reach the value of 917.17 billion dollars by the end of 2032, growing by a value of 16.8%. (Marketdataforecast, 2024). Based on data published by Statista, it is said that, The number of economic entities of the fintech spectrum in the European continent reached 9200 units during the year 2024 (Statista Research Department, 2025). At the same time, it is noted that fintech users are increasingly adapting to this technological innovation, especially the sector related to digital payments, where the European user base of this applied technology is expected to reach the expected level of 368 million users by the end of this year. Based on the data obtained from Statista in February 2025, it turns out that: The United Kingdom is the country with the highest number of Fin Tech companies operating in Europe. In the UK, it turns out that they extend their activity with a total of 3,300 companies in the financial technology spectrum. The country with the second highest number of companies that are part of the Fin Tech sector is Germany. While the French state is in third place with a number of 522 economic entities that are part of FinTech. In fourth place is the state of Switzerland in which 497 Fin Tech companies operate. While in the state of Spain, 463 companies in the financial technology spectrum operate during the month of February 2025 (Statista, 2025).

### **4.2 FinTech in Albania.**

A new law on Payment Services has entered into force in Albania. The law is based on the Second European Payments Directive (PSD 2). This law, applied in the European Union countries, brought fundamental changes, especially in the payment markets, where Open Banking is at the core of the PSD 2 Directive. PSD 2 directive is that of open banking. The importance of this law is not yet very tangible, mainly due to the lack of a developed sector of financial institutions. In terms of online bill payments, online purchases and account access via e-banking, Albania ranks last in the region. In the study conducted and published during 2020, which was carried out by the World Bank in collaboration with the University of Cambridge, it is shown that only 28.8% of the total Albanians have made transactions using bank cards in

the time interval of one year. For other countries, this indicator starts from around 39% for Kosovo, up to over 66% for Serbia. In the Eurozone, an average of 92.5% of households have used digital payments at least once in the last 12 months before the survey. The published study shows that, 7.7% of all Albanians have used bank cards to make various payments. In other countries of the Balkans, such as in the state of Kosovo, it turns out that for this period of time 16.5% of the population used bank cards to make various payments, while this indicator in Serbia is at the level of 39.4%. The above data shows why Albania remains a difficult terrain for Fintech businesses; but on the other hand, they also testify to great potential for the growth of the business of payments and financial services in the field of technology. Based on data from the Bank of Albania, it results that the number of transactions through remote banking channels, through internet banking or mobile banking, for 2020 has increased by a value of 14% compared to 2019. The growth in the FinTech market is influenced by several factors summarized below. Firstly, we can say that the increasing adoption of latest generation smartphones and the internet has made digital solutions more accessible to consumers, leading to an increase in demand for fintech services. Secondly, we can say that the COVID-19 pandemic has accelerated and increased the level of digital payments and investments, as consumers have had to adapt to remote transactions. Thirdly, we can say that regulatory changes have enabled fintech companies to compete with traditional financial institutions on a more level playing field. Fourth, advances in technology, particularly in the field of Artificial Intelligence Software and the evolution of blockchain-based systems, have opened up new options for innovation in the field of FinTech. The Financial Market in which FinTech is applied has a tendency to continue to grow at a rapid pace, fueled by continuous technological advances, changing consumer behavior and support for clearer laws and regulations. It is also worth noting that the digital payment system on the part of consumers is growing more and more, as the latter are increasingly preferring SMAT devices as a means of payment. Digital investment platforms are also expected to grow in popularity as more individuals look to manage their finances online. After processing the data of the questionnaires by the authors through the computer program Microsoft Excel, the summarized findings and their interpretation are presented below.

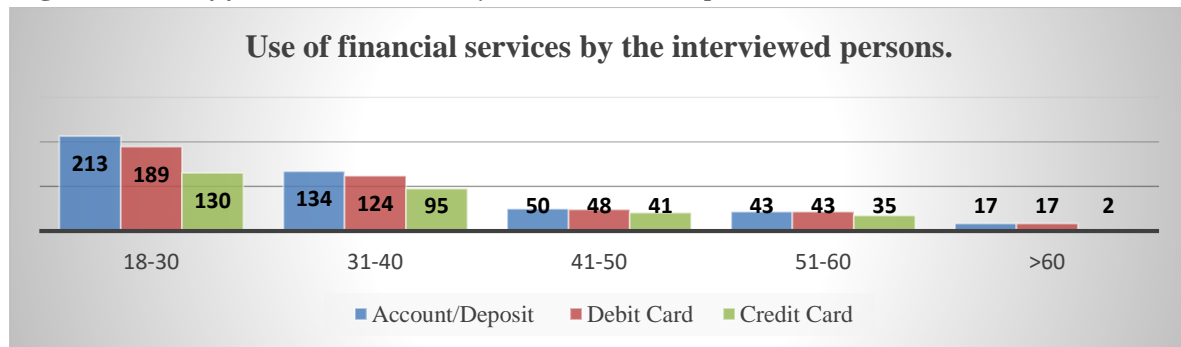
**Figure1.** *Total number of people surveyed by age group.*



Source: Data processed by the authors with Microsoft Excel Program (March 2025).

From the total of 574 individuals who participated in this survey, it resulted that: 252 individuals who completed the questionnaires belong to the age group between 18 and 30 years old, or in other words 44.7% of the respondents. It is noted that 140 individuals who completed the questionnaires belong to the age group between 31 and 40 years old, or in other words 24.3% of the respondents. It is noted that 67 people who completed the questionnaires belong to the age group between 41 and 50 years old, or in other words 11.67% of the respondents. It is noted that 85 people who completed the questionnaires belong to the age group between 51 and 60 years old, or in other words 10.1% of the respondents are part of this interval. And finally, 30 people who participated in the survey belong to the age group over 60, or in other words 5.2% of the total.

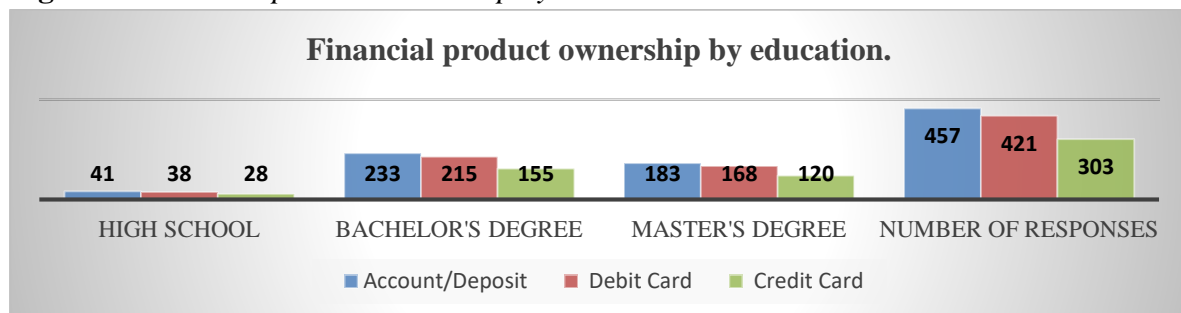
**Figure 2.** *Use of financial services by the interviewed persons.*



Source: Data processed by the authors with Microsoft Excel Program (March 2025).

In the above graph it is observed that: 213 individuals who are part of the age group 18 to 30 years old have a bank account. 189 individuals of this age group own a debit card and 130 of them own a credit card. In the above graph it is observed that: 134 individuals of the age group 31 to 40 years old have a bank account. 124 individuals of this age group own a debit card and 95 of them own a credit card. In the above graph it is observed that: 50 individuals of the age group 41 to 50 years old have a bank account. 48 individuals of this age group own a debit card and 41 of them own a credit card. In the above graph it is observed that: 43 individuals who are part of the age group 51 to 60 years old have a bank account. 35 people of this age group own a debit card and 35 of them own a credit card. In the above graph it is observed that: 17 people of the age group over 60 years old have a bank account. 17 individuals of this age group own a debit card and 2 of them own a credit card.

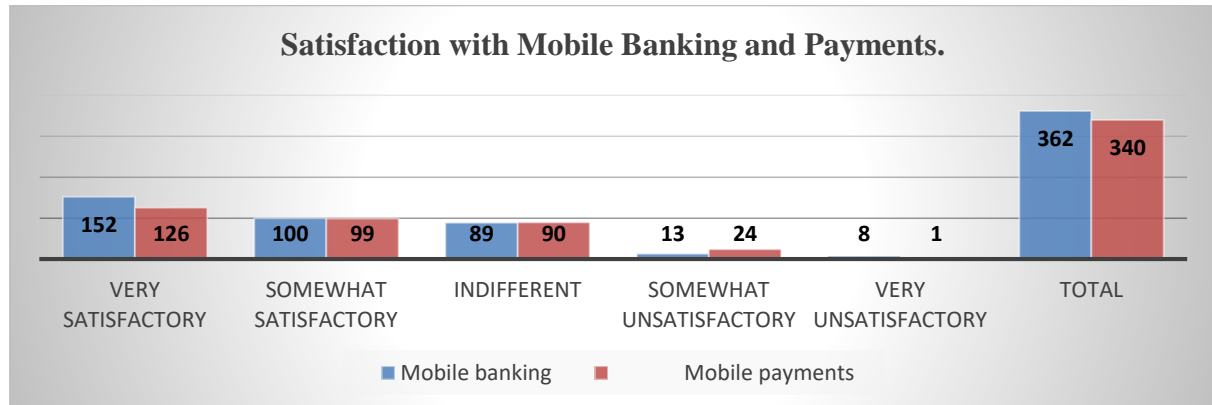
**Figure 3.** *Financial product ownership by education.*



Source: Data processed by the authors with Microsoft Excel Program (March 2025).

Based on the data processed by the questionnaires, we find that: Most of the interviewees who have a bank account or deposit number are people with a Bachelor's degree, specifically we find that there are 233 individuals. While 183 individuals are persons with a Master's degree and only 41 persons from all the respondents who have a bank account or deposit have a high school diploma. Based on the graph above, we can say that the higher the level of education, the higher the claim of respondents to have a bank account or deposit, on the contrary, such a percentage is low among respondents with a high school diploma.

**Figure 4.** *Satisfaction with Mobile Banking and Payments.*



Source: Data processed by the authors with Microsoft Excel Program (March 2025).

Based on the answers received from 362 people regarding the level of dissatisfaction they have from using Mobile Bank during the last 12 months, it turns out that 152 people are very satisfied, 100 people are somewhat satisfied, 89 people are indifferent about this question, 13 people are somewhat dissatisfied and 8 people are very dissatisfied with this service. Based on the answers received from 340 respondents, the latter claim that they have made a payment transaction via mobile phone during 12 months, it turns out that 126 people are very satisfied, 99 people are somewhat satisfied, 90 people are indifferent about this question, 24 people are somewhat dissatisfied and 1 person is very dissatisfied with this service.

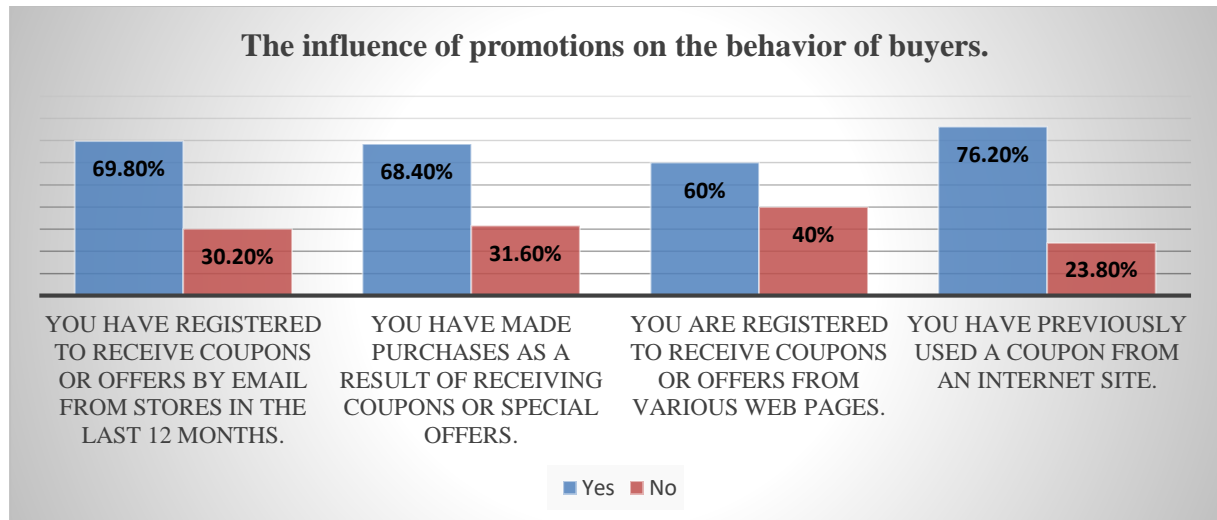
**Figure 5.** *Online shopping behavior.*



Source: Data processed by the authors with Microsoft Excel Program (March 2025).

The use of mobile phones to make online purchases is claimed by about 53.5% of the survey respondents. On the contrary, about 46.5% claim that they do not use online shopping. About 67.7% of respondents claim that they do online price comparisons when making large purchases, and about 65.4% of them look at online customer reviews. Despite being relatively new to Albania, around 18% of respondents claim to have used the QR barcode scanning application to compare prices to find the best deal.

**Figure 6.** *The influence of promotions on the behavior of buyers.*



Source: Data processed by the authors with Microsoft Excel Program (March 2025).

The increased use of the Internet and mobile phones has opened up new opportunities for retailers to advertise and reach potential customers at a limited cost. About 30.2% of respondents claim to have signed up to receive coupons or special offers via e-mail from retail stores in the past 12 months. About 31.6% of them claim to have made a purchase because of these coupons or special offers. Additionally, about 40% of respondents signed up to receive coupons or offers from the website, and about 23.8% of them took advantage of these promotions.

## 5. DISCUSSIONS

The market in which technological finance is a part, during these years, is expected to continue growing at an accelerated rate, influenced by continuous technological developments, consumer behavior and regulatory support (Statista, 2025). The platforms in which digital investments are made are expanding during these years, with individuals and investors who are looking for potential options to make investments at low costs. The growth of digital assets such as cryptocurrencies and NFTs has also created new opportunities for investors and traders. Advances in technology, such as AI and blockchain, have opened up new opportunities for fintech innovation, driving further growth in the market. Digital investment platforms are also expected to grow in popularity as more individuals seek to manage their finances online (Statista, 2024).

The growth of digital assets and neobanking has a tendency to continue. In general, we can say that the market in which Fintech is part, has a tendency to grow, influenced by technological developments. In Albania, there is a need for a more complete regulation in relation to legal acts and the implementation of fintech, especially in the payments sector.

In Albania, there is a need for a more complete regulation regarding legal acts and the implementation and support of fintech especially in the payments sector. This development would contribute to reducing the informal economy and opening up new opportunities, especially for the economic subjects of the innovative spectrum. Market participants can dedicate resources to improve financial education and financial inclusion and actively participate in ongoing engagements driven by national financial education policies.

More investment is needed in consumer protection, information and transparency on the conditions involved in financial products and services. The information must be processed and delivered in such a way that it is easily understood by the general public.

The Banking System in Albania, which comprises about 90% of the total Financial System of our country, should play a bigger and more important role, especially in diversifying their portfolio by increasing investments, especially in the capital markets and more widely.

The Bank of Albania in cooperation with the Albanian State and the Financial Supervisory Authority should have a higher level of focus, especially on the diversification of financial instruments present in the financial and capital markets. These interventions can attract a variety of potential investors at the international and national level who, through their investments, will affect the growth and expansion of the market. A similar situation is also presented in the work carried out by Natia Surmanidze regarding the state of Georgia (Surmanidze, 2023).

All economic entities involved in or interested in the market in Albania should focus particularly on comprehensive initiatives related to financial education. In the current reality of our country, the main FinTech products are mainly offered by the banking sector. Greater investments are needed in protecting consumer privacy, increasing the level of transparency for the public regarding the financial products offered.

In conclusion, we can say that the Industry in which Financial Technology (Fintech) is part, has a great potential for sustainable growth both at the international level and at the national level. Albania as a country of the Western Balkans that is trying to join the European Union should establish and implement a supportive regulatory framework based on the best international practices in this field.

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