

Use of financial technology in Albania _____

_____ **Dr. Ismet Voka**¹ _____

DEPARTMENT OF ECONOMICS & FINANCE,
EUROPEAN UNIVERSITY OF TIRANA
ismet.voka@uet.edu.al

_____ **Prof. Ass. Dr. Filipos Ruxho**² _____

FACULTY OF BUSINESS AND MANAGEMENT,
UNIVERSUM COLLEGE, KOSOVO
filip.ruxho@universum-ks.org

Abstract

The main purpose of this study is to conduct an analysis on the use of financial technology in Albania. Fintech is a term dedicated to financial technology in the digital age. The diversity of this technological solution brings with it the promise of faster, cheaper, more secure and transparent financial transactions through the internet. Fintech business

¹ Dr. Ismet Voka has over 10 years of experience in teaching, oriented by high performance and academic levels that focus on the acquisition of knowledge by students. He completed his doctoral studies in the field of economics and sustainable development at the European University of Tirana after completing his studies at the Faculty of Economics, Agricultural University of Tirana. Author of several publications in the review of scientific products at home and abroad for the economic company related to foreign direct investment, economic, integration of the Western Balkan countries into the European Union, imports and exports, technology and innovation in the company of Albanian enterprises, etc. Participants in several conferences at home and abroad. From October 2018 and full-time pedagogy, at the Department of Economy and Finance.

² Prof. Assoc. Dr. Filipos Ruxho is engaged at Universum College, Kosovo in the position of Vice President for Innovation and External Relations as well as in the position of Academic Director of the Department of Business and Management. He has several years of experience in lectures. He completed his doctoral studies in economics and sustainable development after completing his MBA studies in Greece at the ALBA Graduate Business School of the American College of Greece and his Bachelor of Business Administration studies at the Faculty of Economics at the University of West Attica in Athens. The interest in scientific research is mainly focused on the fields of business digital transformation, innovation management, economics and sustainable development with a special focus on SMEs of the manufacturing industry in terms of their importance in the overall development of a country's economy.

model is the specific application of Fintech in economics and financial fields. This enables users to perform financial transactions remotely, which improves the efficiency of banking transactions and saves customers time. The constant shifts towards e-commerce, digital payments, instant payments, cash substitutes have increased significantly nowadays. The document describes the policy implications regarding the promotion of relevant institutional policies in relation to increasing the use of Fintech in the country.

Keywords: *Fintech, digital payment, banking, financial system*

1. Introduction

Fintech is the abbreviated version of the word Financial Technology, which is used to describe businesses that provide financial services using modern software and technology. Some Fintech developments have improved traditional services, for example online banking applications, while others have revolutionized various services or created new products, such as Bitcoin. Companies that use newly developed digital and online technologies in the financial services industries, the ways in which these financial services are provided and how they affect consumers are very complex. In fact, in a relatively short period of time, the emergence of a new generation of Fintech companies has greatly influenced the way they do business, how consumers interact and how they think about the future of finance. There are a variety of factors that influence when we look at the development of the financial system in the country, ranging from technological advancements that have changed the way we do almost everything in our daily lives. By providing financial services with technology, consumer behaviour has changed, making them demand more personalized, faster and cheaper financial services.

The rapid development of the financial system is moving towards business models that use “cash” as little as possible, making consumers adopt the habit of digital transactions. Financial companies around the world have changed the way people think about money, which is something that is coming to our country at a rapid pace. With more and more financial companies using advanced technologies in their systems like artificial intelligence (AI), financial services and products are provided faster and more convenient for consumers. It is important to note that the development of smart phones, the online world became much more accessible to the general public with the most visible mobile data and Wi-Fi allowing everyone to connect from all over the world. Smartphones are one of the most used devices to access the internet and use financial services.

1.1. Objectives of the paper and research question

The main purpose of this study is to conduct an analysis on the spread and applications of financial technology in Albania. To fulfil the purpose of this study, we have formulated research question as follows:

Research Question: How widespread is the use of financial technology in Albania?

The objectives of this research paper are:

- Fintech impact on financial inclusion,
- Comparative analysis of Fintech in Albania and in the countries of the region,
- Fintech macroeconomic impact,
- Impact of Covid-19 on Fintech usage.

1.2. Methodology

The working methodology is built in order to realize the purpose of the work and provide answers to research questions. The research is based on the collection and analysis of secondary data. Data sources are: Bank of Albania, World Bank and International Monetary Fund. Also, in function of the work we have relied on contemporary literature, scientific works made by other authors. Once the data is collected, it is processed, analyzed and interpreted. At the end of the paper, the conclusions are summarized and the relevant recommendations are given

2. Literature review

Ever since information technology began to flourish in the world, the financial market has begun to adopt its services in its ranks. In the 1950s, the first credit card was created, laying the groundwork for a cashless payment system. Diner's Club was the first to introduce them in the 1950s and American Express followed suit in 1958 thus creating a new era of financial services. Fintech in its "adolescence" (1967-2008) coincided with the period when the world began to move from analog to digital technology. Traditional financial institutions were one of the first to adopt such devices, and surprisingly for the average reader it's nothing special today - a simple handheld calculator and the first ATM installed by Barclays Bank in 1967. (Douglas W. Arner, 2017).

In the 1970s the first digital stock exchange, NASDAQ, was created, which laid the foundations for the culture of functioning of modern financial markets, which are still used today. In 1973 SWIFT was created which is the most common

communication protocol between financial institutions. It facilitates a very large amount of international transactions. The 1980s introduced the first major bank computers and the introduction of the first online banking system. It gained popularity in the 1990s due to the development of the internet as we know it now as well as e-commerce business models.

By the early 2000s banks have fully digitalized their services and the era of global financial markets is officially beginning. This is the timeline when we have seen most of the development in the IT industry and the financial sector. With the global financial crisis in 2008, which made the overall economic crisis more understandable globally, the overall banking industry lost its good reputation. With many financial professionals losing their job status, people began to look for more reliable ways to look for money, which would be different from traditional banking systems. Because of this, we saw the emergence of new financial services and currency systems which in this case was cryptocurrency. With the release of Bitcoin in 2009, the world saw that it was possible to have a currency system without relying on it in major banks.

The DeFi market has grown exponentially in recent years. Today this value has reached \$ 50.12 billion in total locked value (TVL). (Burak, 2021). Although DeFi is working with leading Fintech industry players to embrace technology to facilitate smart contracts, it can grow beyond the core applications. Fintech companies can use block chains to decentralize financial services such as asset management, financial data exchange, security and P2P credit. (Burak, 2021). Toby Lewis, CEO of Novum Insights, a technology company, sees this trend intensifying: “We will see a lot more use of cryptocurrencies and block chain space in the future. There are new projects related to some of the protocols, such as like Ethereum, Solana and Polkadot. And I think it’s super exciting that things like Lightning are coming online.

According to statistics, 77% of traditional financial institutions plan to focus more on Fintech innovations to improve customer retention. Fintech companies will continue to provide banks with advanced platforms to reach and retain customers, while banks, in turn, will provide the infrastructure that enables the growth of Fintech firms. Innovations in the Fintech Industry will help improve Fintech companies’ cooperation with banks. It will also improve the way transactions between financial institutions and their clients are conducted. (Dolgorukov, 2021)

The positive macroeconomic impact of financial inclusion is well documented, both theoretically and empirically. Sahay and other authors (Ratna Sahay, 2015) show that financial access and financial deepening support lower income growth and inequality, with limited negative externalities in financial stability as long as the regulatory environment is sound. Studies also show the benefits of increasing financial inclusion. However, the financial involvement of less productive agents can also negatively impact growth (Dabla-Norris, 2018).

Other authors suggest that digital financial inclusion may play an important role in mitigating the economic impact of the COVID-19 crisis and in curing it, provided that the preconditions for accelerating digital services exist. Several studies have found that digital financial inclusion can help mitigate economic shocks and smooth consumption (Jack W. S., 2014). Experience with the COVID-19 crisis underscores the importance of promoting digital services to those most in need. Fiscal policy should include investments in digital infrastructure such as access to electricity, mobile and internet coverage, digital ID among others (Čihák, 2020).

2.1. Fintech risks in financial inclusion

Regulators across the globe have begun to assess Fintech-related risks and formulate policies, and these need to be accelerated during and after the COVID-19 crisis. Internationally, the Financial Stability Board (FSB) has concluded that Fintech and Big Tech do not yet pose systemic risks (Financial Stability Board (FSB), 2017). At the same time, it is worth remembering that the push for financial inclusion without proper regulation contributed to the global financial crisis of 2008. The development of digital lending is already raising concerns about predatory lending practices in some countries, which may be even more prevalent in the ongoing COVID-19 crisis (Faux, 2020). In Indonesia, the Financial Services Authority has recently identified and closed more than 1,000 illegal peer-to-peer lenders that provided prohibited financial services or operated without a proper license. Therefore, a sound policy approach at the global and local levels is crucial (Čihák, 2020).

As Fintech develops and becomes more sophisticated, unequal access to the necessary physical infrastructure or insufficient human capital may create a new source of financial exclusion, especially among women, the poor and the elderly, both in EMDE and in economies. advanced (G20, 2019). The COVID-19 shock has caused a strong shift towards digital financial services, a trend that could exacerbate the financial exclusion of those groups left behind. Moreover, “easy” digital credit creates risks for people with limited financial knowledge (Kaffenberger, 2018). The use of large data and algorithms by Fintech firms to profile customers can allow them to reach customers who, until then, were excluded from the traditional financial sector due to lack or limited credit history (Bazarbash, 2019).

But there are concerns that it could also instill prejudices present in historical records, and this in turn could perpetuate the unfair treatment - and exclusion - of certain categories of consumers. While concern is ubiquitous, the issue has been studied primarily in the case of digital lending in the United States, where different treatment and fair lending violations based on customer characteristics have been identified as a risk (Jagtiani, 2017).

2.2. Fintech companies and their future

Traditional financial services institutions should consider Fintech as a partner to further develop the financial industry, embrace the innovations brought by technology and transform the industry from abroad, and succeed in areas where other traditional financial institutions have failed. Fintech companies are now leading the industry and creating a wide range of new financial products and services, with the goal of making money management easier and more effective. Access to funds has become much more transparent and less centralized around the world, and the traditional way of lending money from a bank through loans and mortgages is being combined with new financing models such as crowd-funding and peer-to-peer lending. These new, non-traditional methods of money laundering have allowed investors to thrive while giving access to loans to those who may not qualify for a traditional loan in the money needed through other sources. Therefore, it is imperative that financial education be one of the main topics to be addressed by financial institutions as well as regulatory bodies in the country, for all levels of society including students, families and retirees, as Fintech aims to ensure inclusion financial.

Fintech is changing our lives and habits by making trading, banking and money exchange easier without the need for physical human interaction. However, the financial sector has some challenges to overcome, especially in terms of regulation and data protection to gain consumer trust. With all the technological advancements in use business leaders are advised to look for opportunities and adopt Fintech applications in their business models to win tomorrow's customers.

3. Empirical Analysis

The main purpose of this study is to conduct an analysis on the spread and applications of financial technology in Albania compared to countries in the region. Also in this paper we aim to analyse the impact of Fintech on financial inclusion and the impact of Covid-19 on the use of financial technology.

3.1. Use of Fintech in Albania. Comparative analysis with countries in the region

The new law "On payment services" has entered into force in Albania. The law reflects the Second European Payment Directive (PSD 2), which in the European Union brought about significant changes in payment markets. The most innovative concept brought by the 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 through e-banking, Albania ranks last in the region.

FIGURE 1: Online payments in the region

| Albania | Kosovo | Serbia | Bosnia & Herzegovina |
|--|--|--|--|
| Internet usage (of pop.) 80% | Internet usage (of pop.) 97% | Internet usage (of pop.) 79% | Internet usage (of pop.) 74% |
| Did online shopping (age 15+) 15–19% | Did online shopping (age 15+) 19–22% | Did online shopping (age 15+) 33–35% | Did online shopping (age 15+) 20–24% |
| Paid bills via internet (age 15+) 11–13% | Paid bills via internet (age 15+) 16–19% | Paid bills via internet (age 15+) 25–27% | Paid bills via internet (age 15+) 16–19% |
| Accessed a bank account online (age 15+) 12–15% | Accessed a bank account online (age 15+) 14–17% | Accessed a bank account online (age 15+) 25–27% | Accessed a bank account online (age 15+) 15–18% |

Source: World Bank, 2020

A 2018 World Bank study is among the documents that shed light on the payment instruments used by Albanian consumers. (The World Bank, 2018). The survey showed that Albanian consumers send and receive daily payments in the vast majority of physical money (cash), with 96% of payments initiated and 90% of payments received. The surveyed businesses report that 99.2% of the entire volume of payments were received in cash, versus 66% of the initiated payments. Only 15% of surveyed businesses accept electronic payments through an electronic terminal (POS). The consumer survey shows that cash payments are mainly in the purchase of foodstuffs and necessities. Albanians make most of the payments for utility bills / various periodic services; of these, 90% are carried out in cash. Also, 95% of individual-to-individual transfers are made in cash. Making payments is an activity that carries costs in money and time much greater than we can imagine. A study by the Bank of Albania and the World Bank on the costs and savings of small value payments has shown that in total, these payments have a cost of about 2.5% of Gross Domestic Product. (The World Bank, 2018).

Albania's relative backwardness in the use of electronic payment instruments is also confirmed by several comparative studies. A joint study between the World Bank and the University of Cambridge, published in 2020, showed that only 28.8% of Albanians have made or received a card payment in the last 12 months. This figure is significantly lower compared to all other countries in the region. For other countries, this indicator starts from about 39% for Kosovo, up to over 66% for Serbia. In the Eurozone, on average 92.5% of households have used digital payments at least once in the last 12 months before the survey. The study also shows that 7.7% of Albanians have used a bank card for payment, while in other countries, this percentage varies

from 16.5% for Kosovo, to 39.4% for Serbia. Even in the possession of credit card, a payment instrument conceived mainly for non-cash payments, Albania is last in the ranking of the Western Balkan countries. Only 8% of Albanians hold a credit card, compared to 9.7% of Bosnians, 10.4% of Kosovars, 16.7% of Montenegrins, 17.4% of Macedonians and 17.6% of Serbs. In the Eurozone, almost 45% of individuals hold a credit card (The World Bank, 2018).

The above data show why Albania remains a difficult terrain for Fintech businesses; but, on the other hand they also testify to great potentials for the growth of the business of payments and financial services related to technology.

3.2. E-banking, in Covid-19 and post Covid-19

Electronic banking service is already offered by 11 of the 12 commercial banks in Albania. With the increasing importance of technology in society, banks are putting more focus on promoting these services as an alternative channel for customer relations. The promotion of electronic banking increased even more after the outbreak of the pandemic, driven by the regulatory measures of the Bank of Albania, which during the closing of the economy suspended the commissions for interbank payments via the Internet. The number of distance bank payments increased. According to the Bank of Albania, the number of transactions through remote banking channels, such as internet banking or mobile banking, for 2020 increased by 14% compared to a year ago. For example, at Raiffeisen Bank during this time, registrations on the digital platform increased by 36%, transactions through it increased by 20%, online transactions increased by 64%. (Capo, 2021). The positive impact of the pandemic is also confirmed in the performance of card payments. According to the Bank of Albania, the number of card payments in Albania reached more than 5.8 million during 2020, the highest level ever recorded.

4. Conclusions and recommendations

Financial technology development is a sustainable development tool that can improve the efficiency of the financial industry. The analysis has shown that the introduction of new technologies in Fintech contributes to the automation and robotization of private asset management processes.

By developing Fintech, companies / banks can improve their business, reduce transaction costs, improve efficiency and create more attractive business models for customers. Banks in Albania have very innovative online banking applications, however in terms of online bill payments, online purchases and account access through e-banking we are the latest in the region. Therefore, it is necessary for banks to increase direct work with customers in the context of financial education,

so that the entire financial and economic environment where we operate is oriented towards digital platforms.

The promotion of electronic banking increased even more after Covid-19, driven also by the regulatory measures of the Bank of Albania, which during the closing of the economy suspended the commissions for interbank payments via the Internet.

The Bank of Albania in the framework of the National Payment Strategy as “instant payments” would greatly help in creating a more automated financial field less dependent on physical cash and closer to the digital world. On the other hand, this encourages banks to invest in new technologies, which are not small investments, but which all depend on the support with the increase of users and widespread use of these services.

Research on the role of Fintech as a driver and transformer of financial markets is a promising path for the future and deserves further attention. Fintech is the future and that information technology makes the impossible possible.

5. References

- Islam, A. S. (2018). Does Mobile Money Use Increase Firms' Investment? Evidence from Enterprise Surveys in Kenya, Uganda, and Tanzania. 687-708.
- Jack, W. S. (2014). Risk Sharing and Transactions Costs: Evidence from Kenya's Mobile Money Revolution. *American Economic Review* 104, 183-223.
- Adhami, S., Giudici, G., & Martinazzi, S. (2018). Why do businesses go crypto? An empirical analysis of initial coin offerings. *Journal of Economics and Business*, 100, 64-17. doi:10.1016/j.jeconbus.2018.04.001
- Alt, R., Beck, R., & Smits, M. T. (2018). FinTech and the transformation of the financial industry. *Electronic Markets*, 28(3), 235-243. doi:10.1007/s12525-018-0310-9
- Anagnostopoulos, I. (2018). Fintech and regtech: Impact on regulators and banks. *Journal of Economics and Business*, 100, 7-25. doi:10.1016/j.jeconbus.2018.07.003
- Arner, D. W., Barberis, J. N., & Buckley, R. P. (2015). The evolution of Fintech: A new post-crisis paradigm. *Georgetown Journal of International Law*, 47, 1271-1319.
- Arner, D. W., Barberis, J. N., & Buckley, R. P. (2016). The emergence of regtech 2.0: From know your customer to know your data. *Journal of Financial Transformation*, 22, 79-86.
- Arner, D. W., Barberis, J. N., & Buckley, R. P. (2017a). FinTech, RegTech, and the reconceptualization of financial regulation. *Northwestern Journal of International Law & Business*, 37(3), 371-413.
- Arner, D. W., Zetzsche, D. A, Buckley, R. P, & Barberis, J. N. (2017b). Fall 3). Fintech and Regtech: Enabling Innovation while Preserving Financial Stability. *Georgetown Journal of International Affairs*, 18, 47-58. doi: 10.1353/gia.2017.0036
- Arslanian, H. (2016) How FinTech is shaping the future of banking. TEDx Talks. Retrieved from
- The World Bank. (2018). The World Bank. Retrieved from *Strategjia Kombetare per pagesat me vlera te vogla ne Shqiperi (2018-2023)*

- Banka e Shqipërisë. (2019). Balancimi i mundësive dhe rreziqeve FinTech – zbatimi i “Axhendës së Balit”
- Banka e Shqipërisë. (2020). Bank of Albania.
- Bazarbash, M. (2019). “FinTech in Financial Inclusion: Machine Learning Applications in Assessing Credit Risk. Washington, DC: IMF Working Paper No. 19/109, International Monetary Fund.
- Burak, A. (2021). Fintech Payment Trends in 2021: Six Experts Weigh In. *Payments Journal*.
- Capo, G. (2021, January 3). “Ligji i ri do të nxisë modernizimin e pagesave”. (R. B. Albania, Interviewer)
- Carstens, A. (2018, December 4). Big Tech in Finance and New Challenges for Public Policy. Retrieved from <https://www.bis.org/speeches/sp181205.htm>
- Dabla-Norris, E. Y. (2018). Constraints on Financial Inclusion and Their Impact on GDP, TFP, and Inequality. National Bureau of Economic Research.
- Douglas W. Arner, J. N. (2017). Retrieved from The iyer report: <http://www.theiyerreport.com>
- Emerging Payments. (2020). “Fintech: The History and Future of Financial Technology”.
- Adrian, T. a.-G. (2019). The Rise of Digital Money. Washington, DC: IMF Fintech Note No. 19/01, International Monetary Fund
- Alliance for Financial Inclusion (AFI). (2018). Retrieved from “Fintech for Financial Inclusion”: A Framework for Digital Financial Transformation
- Financial Stability Board (FSB). (2017). Financial Stability Implications from Fintech: Supervisory and Regulatory Issues that Merit Authorities’ Attention.
- Brammertz, W., & Mendelowitz, A. I. (2018). From digital currencies to digital finance: The case for a smart financial contract standard. *The Journal of Risk Finance*, 19(1), 76–92. doi:10.1108/JRF-02-2017-0025
- Brandenburger, A. M., & Nalebuff, B. J. (1996). Co-opetition. New York: Doubleday.
- Brody, M., Lev, O., Taft, J. P., Wilkes, G., Bisanz, M., Shinohara, T., & Tsai, J. (2017). Three financial regulators issue reports on product and service innovations. *Journal of Investment Compliance*, 18(1), 84–91. doi:10.1108/JOIC-02-2017-0005
- Buchak, G., Matvos, G., Piskorski, T., & Seru, A. (2018). Fintech, regulatory arbitrage, and the rise of shadow banks. *Journal of Financial Economics*, 130(3), 453–483. doi:10.1016/j.jfineco.2018.03.011
- Chen, L. (2016). From fintech to finlife: The case of fintech development in China. *China Economic Journal*, 9(3), 225–239. doi:10.1080/17538963.2016.1215057
- David-West, O., Iheanachor, N., & Kelikume, I. (2018). A resource-based view of digital financial services (DFS): An exploratory study of Nigerian providers. *Journal of Business Research*, 88, 513–526. doi:10.1016/j.jbusres.2018.01.034
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. doi:10.2307/249008
- De Kerviler, G., Demoulin, N. T., & Zidda, P. (2016). Adoption of in-store mobile payment: Are perceived risk and convenience the only drivers? *Journal of Retailing and Consumer Services*, 31, 334–344. doi:10.1016/j.jretconser.2016.04.011
- Dranev, Y., Frolova, K., & Ochirova, E. (2019). The impact of fintech M&A on stock returns. *Research in International Business and Finance*, 48, 353–364. doi:10.1016/j.ribaf.2019.01.012
- Drasch, B. J., Schweizer, A., & Urbach, N. (2018). Integrating the ‘Troublemakers’: A taxonomy for cooperation between banks and fintechs. *Journal of Economics and Business*, 100, 26–42. doi:10.1016/j.jeconbus.2018.04.002