

VIRTUAL CURRENCIES, FINTECH, BLOCKCHAIN, AN EVER-CHANGING ECONOMIC WORLD. THE SOCIAL IMPACT OF FINANCIAL TECHNOLOGIES

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Abstract

Nowadays, science and technology are in an elevated development and it has effects upon all levels of social life. In this context, payment systems, trading and money have gradually become further and further influenced by elements of information technology and cybernetics. Digitization is an irreversible process, it involves adapting theoretical knowledge to the updated reality, thus, the research aimed to review, through analysis of contemporary writings, key issues related to virtual currencies, Fintech and technologies that are increasingly influencing economic transactions and money. The main purpose of the paper is to assess the degree of knowledge and acceptance of people related to virtual currencies and services offered by companies in the Fintech segment, in the context of their prompt emancipation and the possibility to replace the classic options in the foreseeable future. The methodology approached is the qualitative one, and a questionnaire was conducted to substantiate the research. In conclusion, through this research, we managed to expose an overview of what fintech, blockchain and virtual currencies entail, but also of some risks, opportunities and related weaknesses, to assess the degree of knowledge and acceptance of society related to virtual currencies and Fintech services, but also their ability to influence the quality of life and implicitly the human society.

Keywords

Fintech, virtual currencies, Bitcoin, blockchain, risk.

JEL Classification

A10, G20.

Introduction

If the twentieth century was a century in which the world has gone through the great economic crisis of the interwar years 1929 - 1933, through two world wars and then,

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through the Cold War, a century during which the plane, the helicopter, the tape recorder and the washing machine entered our lives one by one, the 21st century is the one when humanity steps into the unknown, a century where information technologies suddenly enter our lives, overwhelm us and put us in front of a conceptual dilemma, or we accept them, we adapt and continue to live and develop, practically understanding that we are addicted to using them, or we become a pariah of modern society.

According to the authors Maslennikov, Fedotova and Sorokin (2017) the 21st century with the technological innovations it brings, radically changes the perspective through which modern society is viewed and comes with the need for a new architecture of the global financial system. Technological innovations represent practically an avalanche that leads to the increase of related financial flows. All this has a huge impact on the financial services sector, and Fintech is entering our world with quick steps.

At the same time, with the continuous development of science and technology, inclusive the form and the role of money have undergone changes over time, to respond at the systemic evolutions. Dibrova (2016) in her research mentions that when we talk about money and their functions, probably the fundamental idea would be to separate the concept of money from that of wealth.

Although, it seems that there is a strong connection between the two, the forces that generate them are still different. Thus, according to Greco (2001), the wealth and money creation are two completely different things. Wealth is created by applying human skills to natural resources in countless ways to produce useful goods and services. Planting crops, assembling computers, building houses and even publishing a newspaper are all examples of wealth production. On the other hand, money is a human invention, it is a symbol created through a deliberate process involving entities called banks.

According to the authors Rogojanu and Badea (2015), the money can be seen as a natural product of human economy, a discovery of civilization on its historical path of emancipation to better serve the needs of people.

Currently, one of the most important topics in the economic-financial field is represented by virtual currencies. They practically appeared in 2009, with the launch of the first virtual currency „Bitcoin”, the rise was incredible, their use growing rapidly, due to the huge interest of users, generated by the opportunity to invest in something new and get then a definite profit.

We live in a new era of language and communication so the bitcoin payment system will allow people to sell products and services faster, easier and more secure. (Maftai, 2014)

Rogojanu and Badea (2015) talk about the emergence of Bitcoin as a result of spontaneous actions of some individuals and not of some legal authorities, the goal being gradually transformed into the defence of private, free, non-inflationary currency that would be consistent with developments in information technology.

According to Nakamoto (2008), a virtual currency or a cryptocurrency is defined as a chain of digital signatures.

Yazdinejad et al. (2020) note in their research that, virtual currency transactions have increased dramatically in the last years, and this trend unavoidably attracts cyber-attacks, people preoccupied with such activities being ready to speculate on vulnerabilities and hit targets. At the same time, it is very difficult to detect such threats.

Dzhusov and Rubtsova (2017) mention that the growing popularity of virtual currencies was most likely stimulated by the pressure exerted by some state regulators on financial business subjects in order to identify and close gaps in their own system. Bitcoin quotation at the moment seems very much overestimated, but nevertheless a continuation of the quotation increase is possible considering the continued growth of popularity and demand for cryptocurrency. It can be assumed that from year to year will appear more and more companies, that will propose to make payments in virtual currencies.

After reaching the level of \$ 20,000 per Bitcoin in 2017, followed a period of stagnation and even regression, the euphoria surrounding virtual currencies gradually fading. There were voices that passed even on the dead line everything that means virtual currencies based on peer-to-peer and blockchain. Thus the forecast for Bitcoin and the other virtual currencies that are largely clones of the first, was that they will erode over time and will no longer have the ability to generate interest comparable to that of the first decade of existence. But no one could predict that there would be a pandemic context generated by the Sars-Cov-2 virus and that the influence of the latter on everything that means economic, social and political will be so great. In December 2020 Bitcoin manages to reach again the figure of \$20,000 and even exceed it, and about a month later in January 2021 it manages to reach approximately \$40,000, which is practically double than the maximum value ever reached since the launch and until the onset of the pandemic.

The vast majority of virtual currencies in circulation are blockchain-based. Houben and Snyers (2018) define a blockchain as a mechanism that involves encryption, using a set of specific mathematical algorithms, to create and verify a growing data structure, to which data can be added but cannot be eliminated, and which takes the form of a chain of "Transaction Blocks" that functions as a distribution register.

Another booming sector is Fintech. Trivially, we can define a Fintech as an entity that aims to provide financial services, involving advanced technologies and innovation, one of the most famous Fintechs, present also in Romania, is Revolut.

Eckenrode and Friedman (2017) characterize FinTechs as more flexible and less constrained by certain rules than companies with a long history behind them, many FinTechs are expected that will revolutionize existing business models in the industry and will take over a significant market share, and as a result some companies with a big tradition may become irrelevant players.

Fintech according to Moro-Visconti, Rambaud and Pascual (2020) promises to really upset the financial industry by streamlining and greatly reducing the cost, and increasing the quality of financial services. FinTechs business models combine, among others: artificial intelligence, blockchain, big data analytics, social networks, e-finance and are much more flexible than those of traditional financial institutions.

Zaletskaya (2016) mentions that banks due to the rapid growth of the Fintech segment could lose under certain conditions by 2025 between 40-60% of revenues targeting traditional microfinance activities, consumer loans, deposits and other services provided to people.

According to Das (2019) another impact that Fintech could have in time would be the influence of the demand for labor in the field of services. Fintech first of all involves advanced technology and artificial intelligence which would lead to the replacement in

processes of data processing, collection and provision, which were carried out up to the present stage with the help of human labor, of people strictly with computing technology. As much as we do not want to, we must recognize that in the case of processing large series of data and when the processes are repetitive, artificial intelligence is superior than the human intellect. On the other hand, the jobs will not be affected if the decisions are not guided by strict causal relationships, such as those in the risk management area.

According to Al Nawayseh (2020) the process of recognition and emancipation of fintech is still ongoing following many challenges, thus considerable time and effort is required for long-term success and acceptance at the societal level. At the same time, the challenge generated by the connection between the potential risks and benefits of Fintech innovations is more emphasized in the emerging countries, because people with fewer social-economic resources, who come from a poorer environment do not have enough information about new financial products, and is unlikely to seek financial information.

However, few studies have been conducted to reflect the reality of the adoption and distribution of financial services based on advanced technologies and respectively the degree of information of the masses about new financial opportunities such as virtual currencies and Fintech.

Thus, the current paper aims to answer the following questions:

- What is the people's degree of knowledge about virtual currencies in the context of recent evolutions in the cryptocurrency market and what do they think about the magnitude of the phenomenon;
- What is people's opinion about the development of financial technologies (Fintech) and the growth of financial services degree of digitalization.

1. Review of the scientific literature

The first cryptocurrency ever launched is Bitcoin. According to the authors Hileman and Rauchs (2017), it began operating in January 2009 and is the first decentralised cryptocurrency, with the second cryptocurrency, Namecoin, not emerging until more than two years later in April 2011. Today, there are hundreds of cryptocurrencies with market value that are being traded, and thousands of cryptocurrencies that have existed at some point. The common element of these different cryptocurrency systems is the public ledger ('blockchain') that is shared between network participants and the use of native tokens as a way to stimulate participants for running the network in the absence of a central authority. However, there are significant differences between some cryptocurrencies with regards to the level of innovation displayed. The majority of cryptocurrencies are largely clones of bitcoin or other cryptocurrencies and simply feature different parameter values. These cryptocurrencies show little to no innovation and are often referred to as „altcoins“. Examples include Dogecoin and Ethereum Classic.

According to the work of the authors Narbutaite and Sapkauskiene (2018), Bitcoin, the first virtual currency, which is the strongest so far, is based on a peer-to- peer platform and comes to deliver as a new payment system. Bitcoins are independent and are not

administered by banking institution, but bitcoin users and owners can control them, although it is not a means of payment approved by law. Although the virtual currency Bitcoin was not accepted immediately, with the gradual increase of the price, the interest to invest also increased. Thus, if in 2012 the price of a Bitcoin was \$ 6, it reaches, in 2017, a price of \$ 20,000. Even if the most of countries with a strong economy seek to find the best way to regulate and tax virtual currencies, countries with strong economies but high-level corruption, such as Russia, are against recognition and see virtual currencies as a threat.

The authors Hileman and Rauchs (2017) mention that four of the most important key sectors of cryptocurrencies are „Exchanges”, „Wallets”, „Payments” and „Mining”.

The mining process is of particular importance, because as a result, new bitcoins are obtained. In the work of the authors Yazdinejad et al. (2020) mining is defined as a vital process that is responsible for the verification of transactions in all cryptocurrencies that run on blockchain. This process requires the first blockchain network nodes to solve a complex mathematical problem to generate new blocks and retain the integrity of the transactions. Miners must solve a hash problem to create a valid block. Eventually, miners take an amount of the mined currency as a reward. This process can generate dividends just as well for people who carry out illegal activities, such as illegal taking over of the remote control over the mining equipment of the miner through computer programs.

An aspect that has been widely debated and researched is the sensitivity of virtual currencies to macro-financial changes. Erdas and Caglar (2018), following the research carried out, determined that there is a causality relationship between Bitcoin prices and S&P 500 Index. The results suggest that a negative shock in Bitcoin leads to negative and positive shocks in the S&P 500 Index and a positive shock in Bitcoin leads to negative shocks in the S&P 500 Index.

Moreover, it is observed that causal relations do not exist between Bitcoin and gold, Brent oil, US dollar and BIST 100 Index. In conclusion, Bitcoin currency does not seem to be significantly affected by macro-financial developments.

Since the beginning of the rise of virtual currencies, the problem has arisen, that the lack of control over the cryptocurrency market and the anonymity of those who carry out transactions, could lead to dubious transactions.

The authors Houben and Snyers (2018) mention in their paper that it is well known that because of the pseudo-anonymity of virtual currencies, which does not allow for proper monitoring of related transactions, it is very complicated to combat issues such as money laundering, tax evasion or terrorist financing. A striking example of the risks brought by the anonymity surrounding cryptocurrencies is the story of Ali Shukri Amin, who provided instructions over Twitter on how to use Bitcoin to mask the provision of funds to Daesh/Islamic State.

As previously mentioned in the paper, a risk associated with the activity of trading with virtual currencies and/or mining is that someone through a cyber-attack, using computer software to access and control your electronic equipment obtaining benefits on your behalf. The authors Yazdinejad et al. (2020) describe the process as being a direct abuse on the victim's equipment, without her consent the attacker being able to carry out mining activities, calculations and complex equations. Therefore, the malware actor can

compete against other miners and carry out mining activities without the costly overhead. The victims may not be aware when they are under attack, some common side effects include: reducing the speed of other processes, growing your electricity bills, decreasing the lifetime of your device.

Security and surveillance failures have allowed hackers to change the value of digital currency. Ethereum, another form of digital currency, suffered a theft of \$ 50 million in 2016. These hacks are generally addressed to large holders of encryption that do not keep their security standards up to date. This is the main reason why the value of these currencies decreases, increases and returns to a constant amount.

Angerer et al. (2020) identify in their study 5 main risk areas: market risk, liquidity risk, general perceived risk, operational risk and cyber risk.

Naeem et al. (2021) talk in their research about the fact that the markets of cryptocurrencies are immature, have weak regulatory frameworks, and less information disclosure. They involve a lot of speculative activities, evolve around anonymous and pseudonymous fundamentals, and are highly subject to psychological and sociological factors. Participants in the cryptocurrency markets are generally young individuals with a low level of education, an animal spirit, and their information is irregular. Therefore, the cryptocurrency markets are often criticized as highly risky. Furthermore, by far there exists no unified framework or model to determine the fair value of a cryptocurrency. These malfunctions can be magnified by catastrophic events, such as the COVID-19 outbreak.

- The absence of legislative base regulating Bitcoins or those alike as well as their generated risks for the users can be admitted and should be strongly supervised by the authorities as suspicious transactions.

- National authorities have announced the main risks of trading or making deals with Bitcoins and alike, but there is no concrete unified plan of dealing with them.

- There is a strong need to unify the taxation laws and their implementation to cope with virtual currencies.

- None of national financial authority encouraged the use of Bitcoins or those alike, therefore, any transactions related to virtual currencies should be specifically monitored fully acknowledging the genuine aim of such activities.

- At the time of 2016, no national financial authority admitted Bitcoins to possess a serious risk for national currencies or existing financial system, still, neglecting the proper supervision may lead to increase of illegal financial activities.

Even if Bitcoin is characterized not only by opportunities and advantages, but also by a series of risks that persist since the launch of the currency, its price practically exploded in the pandemic year 2020, an increase that continued in 2021. An overview of the evolution Bitcoin price in the pandemic year 2020 can be seen in figure no.1.

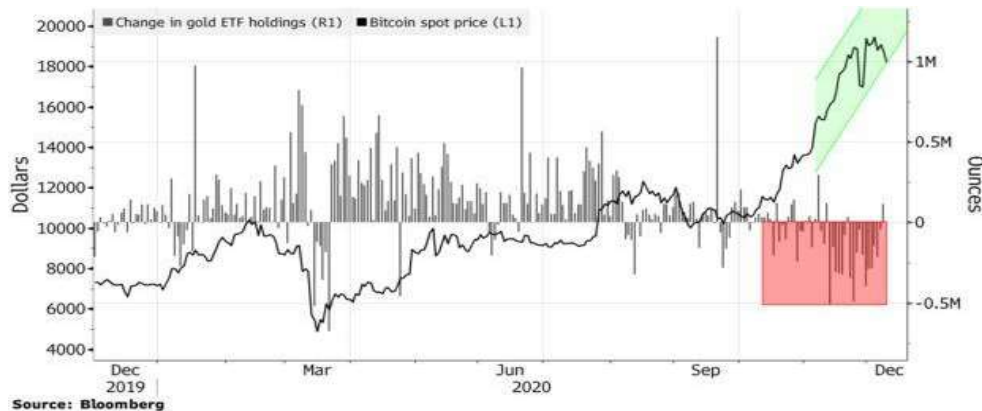


Figure no. 1. Bitcoin price evolution dec 2019 – dec 2020.

Source: Bloomberg, (Spence, 2020)

In an article written by correspondent Makortoff (2020) published on the website of the British publication The Guardian, it is mentioned that the growing popularity of cryptocurrencies argues that gradually they would replace the precious metal gold in terms of investment security and as a store of value.

According to an article written by Spence (2020), published by the American news agency Bloomberg since October 2020, there has been a tendency to increase investments in Bitcoin and also decrease investments in the precious metal Gold, and this process will continue for a long time, respectively is expected a major exchange between the virtual currency market and the gold market.

According to The Guardian, the price of a Bitcoin could reach and exceed \$ 146,000 if it really strengthens its reputation as an alternative to the precious metal Gold.

A detail of the relationship between Bitcoin and Gold can be seen in figure no. 2, from which we can clearly see that in the moments of the culmination of the Bitcoin price, the same does not happen with the gold quotation.

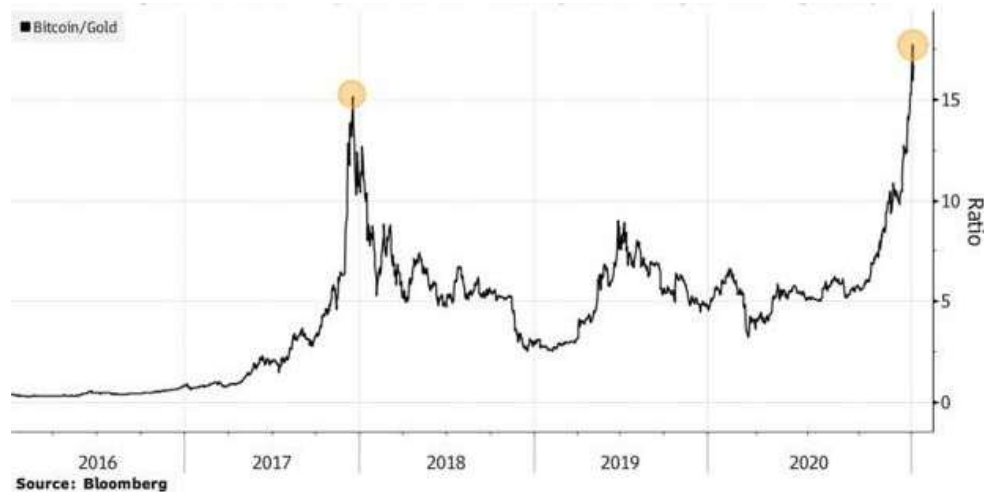


Figure no. 2. The ratio between the Bitcoin and Gold quotation 2016 - 2020

Source: Bloomberg, (Ossinger, 2020)

Since its inception, an important element for the emancipation of virtual currencies has been the blockchain.

Yazdinejad et al. (2020) mention that blockchain technology was introduced to the real-world through Bitcoin cryptocurrency. As its backbone, this technology offers several key features in network communication such as decentralization, transparency, security, and trust in a peer-to-peer manner. Blockchain has a vital role in empowering cryptocurrencies. Bitcoin, Monero, and Ethereum have demonstrated to be practically useful in other domains beyond payments due to their secure-by-design nature. The ever-rising popularity of cryptocurrencies is generating a considerable amount of interest among developers and security researchers.

Seffinga, Lyons and Bachmann (2017) mention in their research a number of advantages of blockchain such as:

- Faster and cheaper Processing;
- Improved trade accuracy;
- Reduced transaction risk;
- Fluid transition;
- Stronger focus;
- Lower costs;
- Decentralized;
- Open;
- Real time.

According to Bhushan and others (2020) Blockchain technology is majorly focused on protecting transactions without considering the privacy aspect. The first blockchain that provides transaction unlikability is Zerocoin that facilitates trading between a special coin (called Zerocoin) and Bitcoin. These Zerocoins makes use of cryptographic mixer

to hide likability between corresponding Bitcoin and Zerocoins. The efficiency of the cryptographic operation of Zerocoin is improved by Zerocash that acts as a standalone blockchain and is fully private.

Sapra and Dhaliwal (2021) mention in their research six basic features of Blockchain: immutable, transparent, no intermediaries, anonymity, decentralized and append only mode.

In blockchain, the users/peers are generally classified in three categories according to their computing capability and tasks assigned:

- Simple Node – this type of nodes neither store the complete copy of the blockchain nor mine the block. They can only send or receive transactions.

- Full Node – this type of nodes can maintain a complete copy of blockchain. It validates the transactions and propagates them. It checks for the malicious transactions in the network and stops it from routing. These nodes don't mine the block but are essential for the security of blockchain.

- Miner Node - these are the full nodes of blockchain with the additional capability of mining the blocks and adding them to the blockchain. These nodes are selected on the basis of consensus protocol used for the blockchain. (Sapra , Dhaliwal, 2021)

In the following paragraphs we will approach a segment that has the potential to change forevermore the face of the financial field, it is called Fintech.

Fintech can enhance the financial services industry in many ways, from providing a better client experience to reducing friction, strengthening critical infrastructure components, increasing access to the financial system, realizing efficiencies and reducing costs for market participants and the investing public. For all these benefits, however, fintech may also pose negative consequences, such as exacerbating cybersecurity threats or amplifying third-party risks.

According to Das (2019) Fintech is any technology that eliminates or reduces the costs of financial intermediation. According to a study by the authors Candraningrat et al. (2021) that aimed to describe the role of Financial Technology in enhancing the financial position of SMEs, thus providing services based on advanced financial technologies in the case of SMEs could have a positive effect in solving the problem of capital development.

The authors Gai, Qiu, Sun (2017) propose the classification of technical perspectives and Fintech problems on five major dimensions: security and privacy, data techniques, hardware and infrastructure, applications and management, and service models.

Moro-Visconti, Rambaud, Pascual (2020) classifies Fintech companies into two categories: competitive and collaborative. Competitive FinTechs are larger and mature firms, not necessarily hyper-specialized, aiming to squeeze out new competitors with lower prices. Collaborative FinTechs offer ancillary services to enhance the position of competitors, cooperating with banks. Cooperation is primarily geared to the integration of a FinTech application along the financial intermediation supply chain. A further pattern is be represented by co-opetition, according to which FinTechs and banks both compete and cooperate.

According to Das (2019) Fintech may be characterized by technological change in three broad areas of finance: raising capital, allocating capital and transferring capital. For example, payment systems efficiently transfer capital. Firms such as CommonBond

(<https://commonbond.co/>) are using technology to revolutionize how capital is supplied. Likewise, robo-advising platforms are changing the way capital is allocated.

Boot and Others (2021) addresses in their paper the effects that recent innovations in data collection and processing, distribution, and connectivity could have on the structure of financial intermediation. These developments pose a formidable challenge to the traditional business model of universal banking, which is based on horizontally and vertically integrated financial service provision. In the extreme case, this trend can relegate banks to upstream services providers, to increase server storage capacity and the speed at which data is transferred, which is also very important for all peer to peer network users. While digital platforms' focus on retail customers and SMEs limits their reach, the increasing relevance of cloud computing services enables large technology firms to directly engage with large corporate clients, and thus compete with banks in financial services provision to this clientele as well.

In recent years, the trend to invest in the Fintech segment is constantly growing. According to Das (2019) Fintech is developing at an accelerated pace. Annual fintech financing in 2018 was \$112 billion, comprised of 2,196 deals, doubling over that of the previous year 2017 when the amount was around \$51 billion). The Fintech ecosystem comprises companies from different segments, such as: payments and transfers, lending and financing, retail banking, financial management, insurance, markets and exchanges. FinTechs generally attract customers with products and services that are more user-friendly, efficient, transparent, and automated than those currently available. Traditional banks have not yet exhausted the possibilities for improvements along these lines. Nevertheless, as FinTech is innovative but inherently unpredictable, customers are still hesitant to adopt and use it, so affecting its growth.

Another type of financial service based on advanced technology is Peer-to-Peer lending. According to the authors Candraningrat et al. (2021) providers of Peer to Peer (P2P) Lending services will match borrowers and lenders. The loan recipient will provide information on himself both personally and financially, then the lender will decide whether to contribute to the loan request or not, after the evaluation of the documents by a third party called the organizer and based on their individual risk appetite. The organizer evaluates the credit of the borrower, and if the credit is considered appropriate, the loan request is registered on the platform, he earns his income from the commission for the borrowing transactions. Each loan will be borne by several lenders, each of whom will contribute a portion of the loan until the loan is fully funded. After being fully funded, the loan will be returned based on its origin and the lender will get a proportion of the principal and interest payments until the loan is due, an overview is presented in figure no. 3.

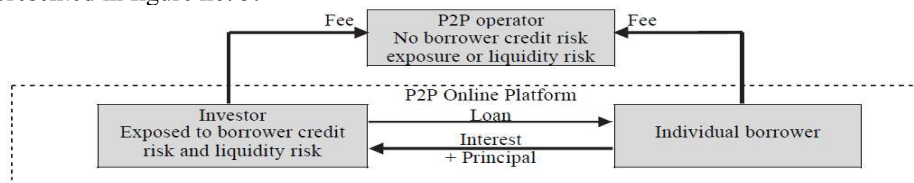


Figure no. 3. Basic P2P lending model

Source: Candraningrat et al. 2021, p. 227

Many Fintechs, especially those focused-on payment systems, provide almost the same services as traditional banking institutions and share the same customers, respectively. According to Moro-Visconti, Rambaud, Pascual (2020) recent tendencies require the banks to increase investment in FinTech, rethink service distribution channels and especially the business-to-consumers models.

In order to survive banks must react mandatory, face increasing competitive pressure and adopt new strategies. A trend of Fintech evolution compared to IT companies and the banking sector can be found in figure no.4.

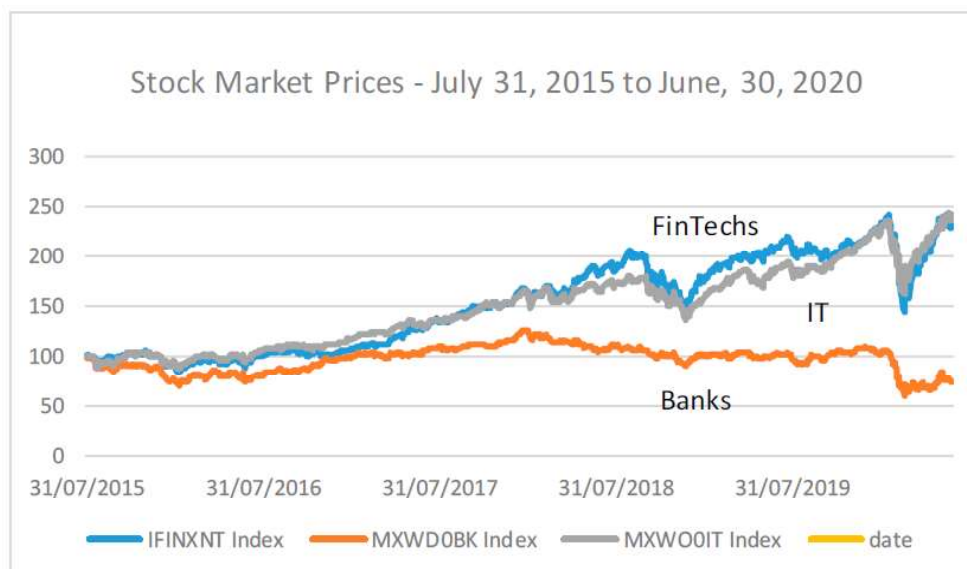


Figure no. 4. Fintech vs technological and banking stock market index 2015 – 2019

Source: Moro-Visconti et al., 2020, p. 9

2. Research methodology

The current research started from the following two questions:

- What is the people's degree of knowledge about virtual currencies in the context of recent evolutions in the cryptocurrency market and what do they think about the magnitude of the phenomenon?
- What is people's opinion about the development of financial technologies (Fintech) and the growth of financial services degree of digitalization?

In order to be able to create an overview related to the general aspects of the new financial technologies addressed in this research and to determine whether they will affect human society, and how, we have gone through a number of relevant works that have provided a reasonable picture and brought us a comprehensive and adequate understanding of the key elements that reside in the following: types of services, benefits, risks and speed of international spread.

Given that technology practically defines the century in which we live, it is unlikely that the individual "human" could have a life that is not positively or negatively affected by the new financial instruments and the opportunities, benefits, and risks associated with them.

In order to further analyze the level of knowledge and opinion of people related to new financial technologies and to assess whether human society is ready or not for the changes that come with them, we decided to have a qualitative approach and use a questionnaire as the basis of research.

The questionnaire was distributed online through the google platform between February and May 2021. The target audience was represented by people working in the financial field because we considered that we will obtain data of higher relevance if we will avoid the general public, being a risk of getting erroneous answers from people working in other fields.

The questionnaire contains 27 questions with yes or no answers, 5-step Likert scale or other options for general questions. An item in the questionnaire has the role of a verification question that we placed there, in order to be able to exclude possible distorted questionnaires.

One hundred eleven questionnaires were obtained, 4 were excluded due to the erroneous answer to the verification question, and another questionnaire was excluded, because it was incomplete and we considered that it does not reflect relevant information to be analysed.

Consequently, 106 questionnaires were considered for the analysis of the results. With the mention that for some specific questions, related to the Fintech segment, we considered only the answers provided by the people who benefited from such an experience, respectively they can express a correct and relevant opinion on the problem.

3. Results and discussion

The questionnaire was distributed randomly, regardless of gender, age or area of origin in order to avoid any type of discrimination, but also to obtain as relevant information as possible.

To the question related to the happiness of the respondents most of the respondents answered medium - very high, respectively we can conclude that the standard of living and quality of life of the respondents, regardless of the fact that the area of origin is good.

A positive aspect is the fact that, all those surveyed pointed out the fact that they know about cryptocurrencies.

Cryptocurrencies have a number of weaknesses, gaps and associated risks, respectively, we asked a question, to find out if people know about them, and 79% of those surveyed answered yes, which indicates that the subject is one of high interest and is closely pursued by the social masses.

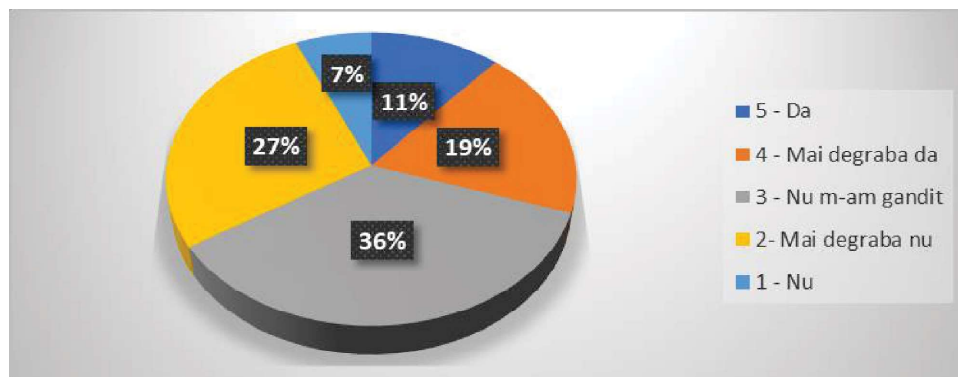


Figure no. 5. The answer for the question if with the development of virtual currencies, transactions will become more safe

Source: Own research

The virtual currency market is constantly evolving, new currencies are appearing, new technologies are developing and respectively there is an expectation that over time transactions will become more secure, but according to the results obtained, only 30% of respondents answered yes or rather yes (Figure no. 5) and respectively, they believe in this fact, which certainly represents a weak point for virtual currencies and could slow down their ability to emancipate over time. Also, a negative aspect is the fact that, 61% of the respondents consider that keeping savings in virtual currencies is less secure than keeping in a classic financial-banking institution answering no or rather no (Figure no. 6).

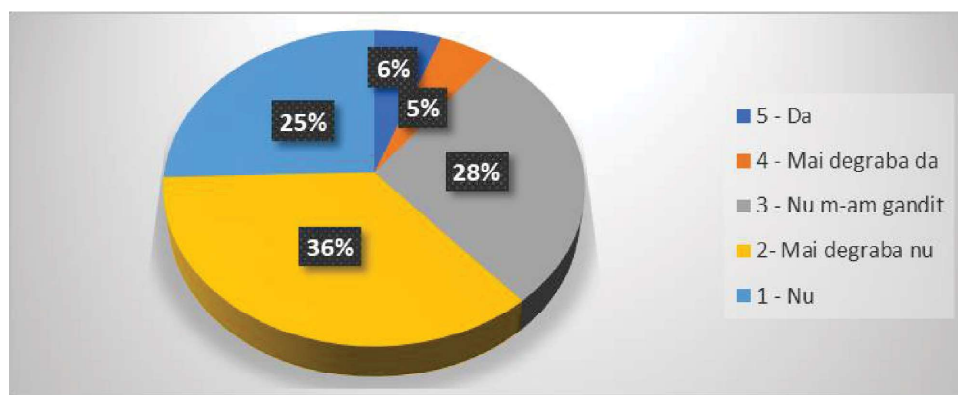


Figure no. 6. „If would you keep your savings in virtual currencies, do you think it would be safer than in a classical financial-banking institution?”

Source: Own research

Most respondents are rather reluctant to give up physical money in favor of virtual currencies, respectively 54% answered that they would not give up or rather would not give up physical money (Figure no. 7).

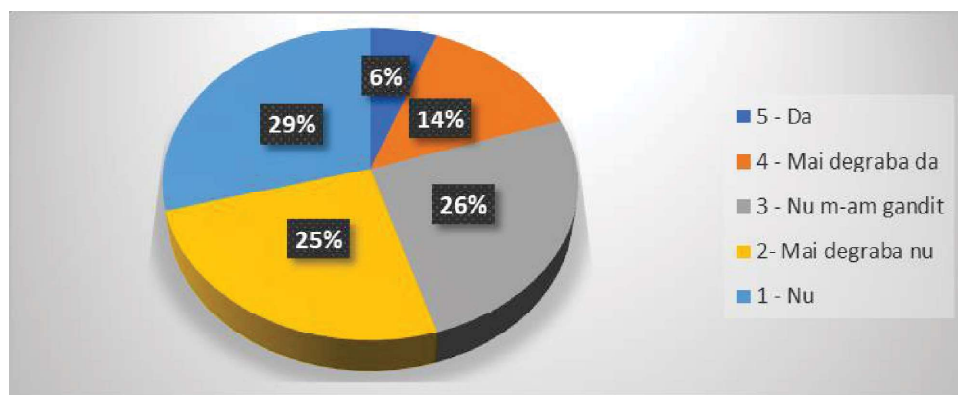


Figure no. 7. The answer to the question related to the willingness to give up physical money in favor of virtual currencies

Source: Own research

Although the vast majority of respondents said they know about the risks and weaknesses associated with cryptocurrencies, the possibility to invest in this segment is viewed with relatively good eyes, 45% of respondents answering yes or rather yes (Figure no. 8), in contradiction, we can mention the fact that only 38% of the respondents believe that the rise of virtual currencies and their spread will have a general positive influence answering yes or rather yes, there are 31% of respondents who answered no or rather no, respectively, they think that in a long-term perspective, the impact will be negative (Figure no. 9).

Most of the respondents know about the Fintech segment, and 56% actually had or have a bank account in an online bank.

Among those who do not yet have a bank account 56% (no, rather no) do not intend to open one in the next 12 months, on the other hand 95% of those who already have a bank account say that he would recommend to a friend.

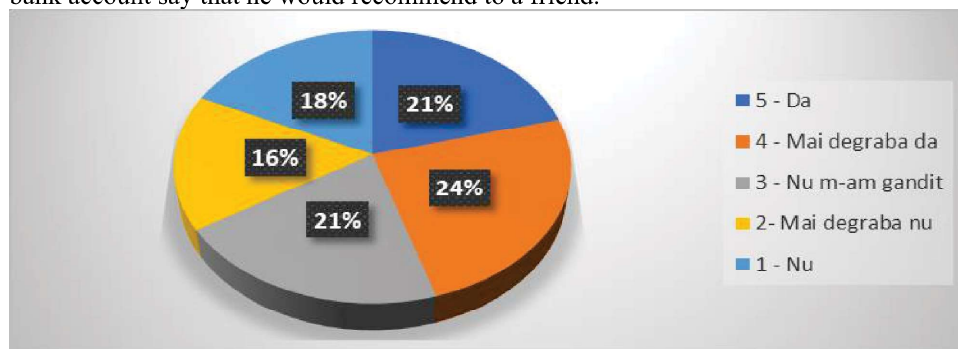


Figure no. 8. The predisposition of the respondents regarding investments in cryptocurrencies

Source: Own research

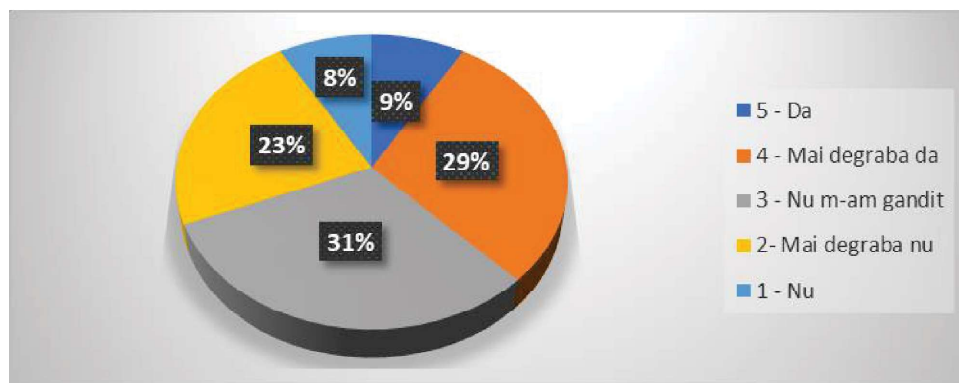


Figure no. 9. „Do you think that the rise of the cryptocurrency phenomenon (Bitcoin) will have a general positive influence?”

Source: Own research

For the question if online banks are safer than the classic ones, 40% were reluctant and answered no or rather no (Figure no. 10).

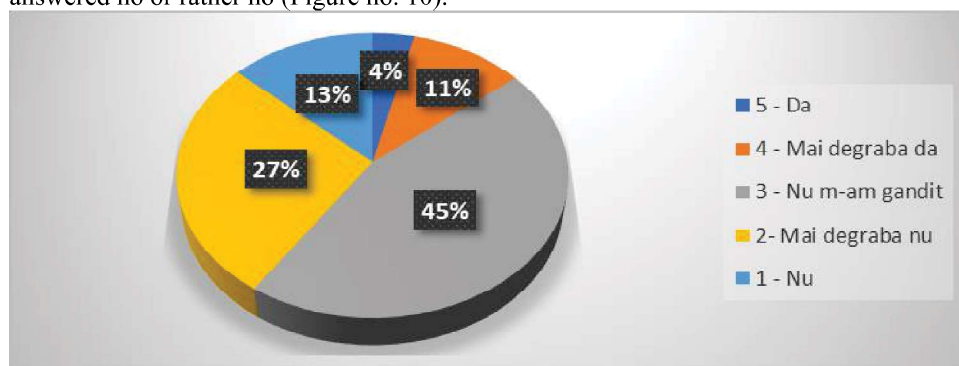


Figure no. 10. „Do you think that online banks are safer than classic banks?”

Source: Own research

Among those who already have an account in an online bank, 64% believe that the services are higher quality than in a classic bank (Figure no. 11), 86% consider an online bank to be more convenient (Figure no. 12), and 78% consider that an online bank has a higher degree of accessibility (Figure no. 13).

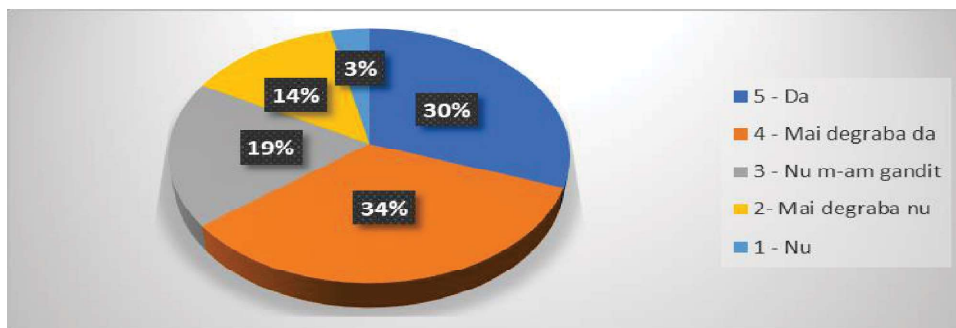


Figure no. 11. „Do you appreciate the quality of the services offered by online banks as better than the services offered by classical banks?”

Source: Own research

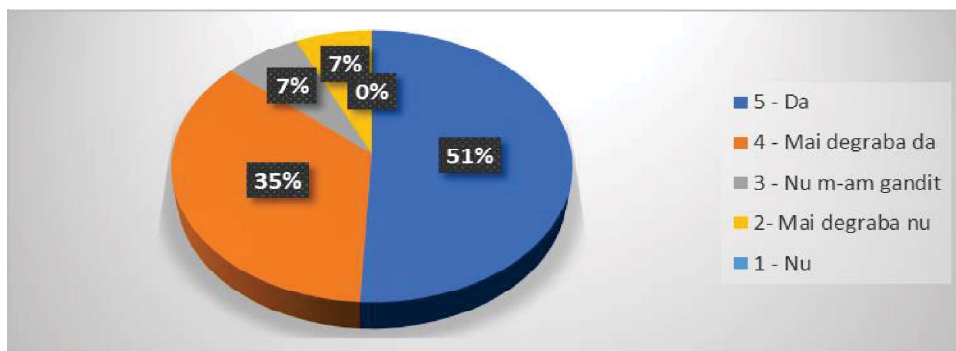


Figure no. 12. „Is an online bank more convenient than a classic one?”

Source: Own research

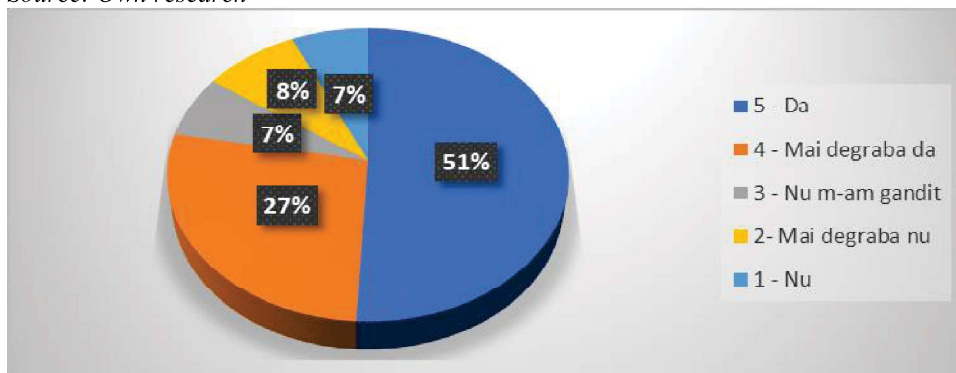


Figure no. 13. „Does an online bank have a higher degree of accessibility than a classic bank?”

Source: Own research

Although the quality, convenience and accessibility of online banks are appreciated, 59% would not be ready to permanently give up the accounts held in traditional banks (Figure no. 14).

Among those surveyed, 96% made payments online, 75% stating that they would prefer to make payments exclusively online (Figure 15).

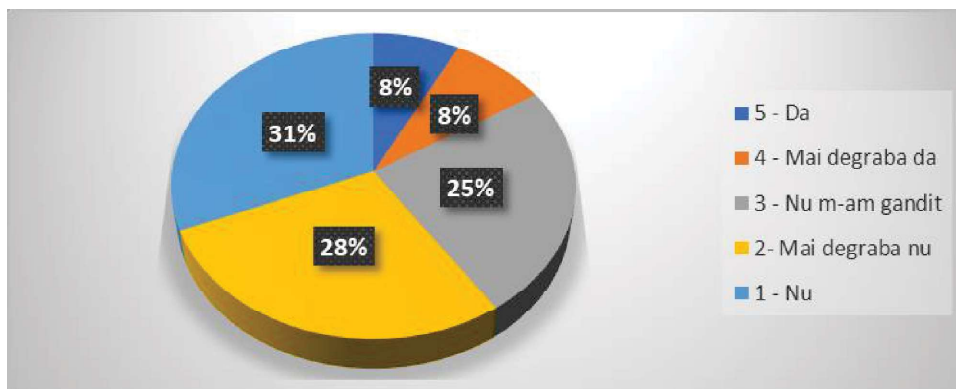


Figure no. 14. „Would you permanently give up accounts held in a classic bank in favor of opening accounts exclusively in an online bank?”

Source: Own research

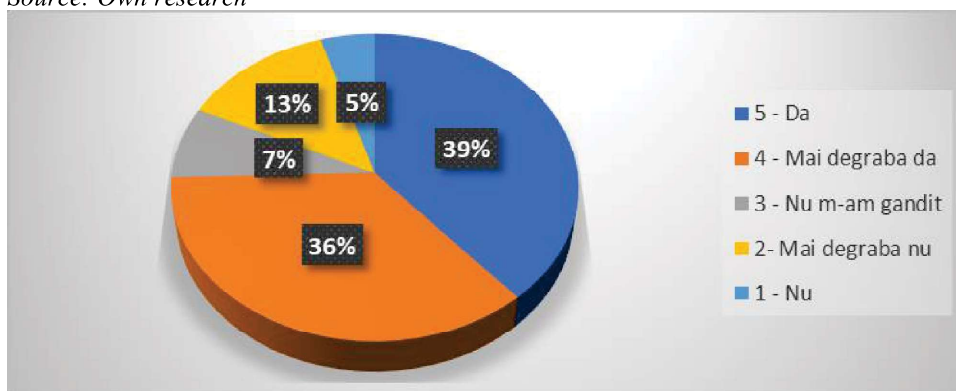


Figure no. 15. „Would you prefer to make all payments exclusively online?”

Source: Own research

New technologies offer the possibility of contracting an exclusive online loan through the P2P platform, which helps the borrower avoid wasting time and the endless series of documents required in a classic banking institution, 56% of participants to the questionnaire process consider this opportunity as positive (Figure no. 16).

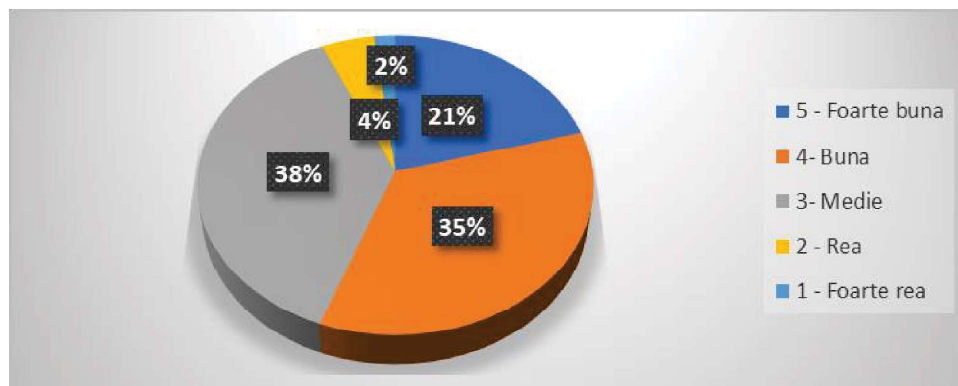


Figure no. 16. „What do you think about the possibility of taking out a loan exclusively online?”

Source: Own research

A greater openness is also reflected regarding the possibility to invest in the Fintech segment, compared to virtual currencies, in this case 57% giving the answer yes or rather yes (Figure no. 17), at the same time 77% believe that the development of the Fintech segment will positively influence society and quality of human life (Figure no. 18).

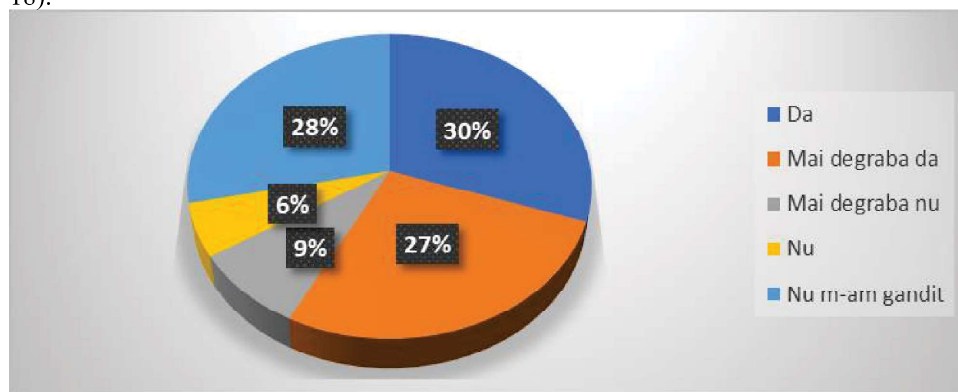


Figure no. 17. „If would you have the necessary resources, would you be tempted to invest in the financial technology segment (FinTech)?”

Source: Own research

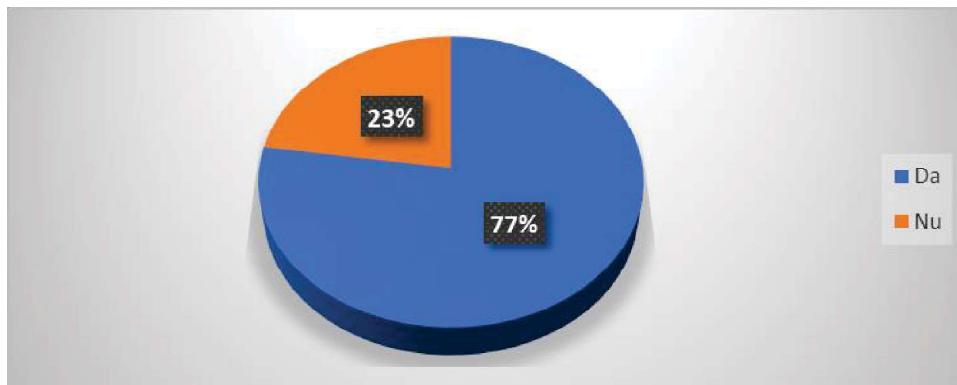


Figure no. 18. „Do you think that the development of financial technologies (FinTech) would have a positive influence on society and on the quality of your life, respectively?“

Source: Own research

Conclusions

The paper reflects the general theoretical aspects related to virtual currencies, the Fintech segment and to present the social impact, respectively the degree of knowledge, and the way of perception of the human masses on new financial technologies.

As a positive fact, we can mention that the vast majority know about the key elements related to the Fintech segment and cryptocurrencies.

Both are able to influence society in the foreseeable future, with Fintech technologies already doing so. But the associated risks, the legal framework not very well defined, but also the fact that more than 10 years after their appearance are not yet widely available to the human masses, being intended rather for a certain segment of the population, disadvantages virtual currencies, the results of the study suggesting a certain reluctance of society.

On the other hand, the Fintech segment will continue to grow in the medium and long term, the vast majority of respondents already contacting with some of the services offered, such as online payments or online bank accounts and appreciating them as more convenient, more qualitative and easier to access than the classic equivalents, also showing openness to new types of services.

Finally, we can mention that the services offered by Fintech companies not only come to revolutionize and cover the thirst for new of the 21st century, but are also able to make a substantial contribution to increasing the quality of human life.

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