

## CONSIDERATIONS ON THE FINANCIAL, ACCOUNTING AND RELATIONAL IMPACT OF FINTECH PLATFORMS ON ROMANIAN COMPANIES

Lucia Camelia RISTI, Cristina NICOLAESCU, Monica Suzana VERESS

“Aurel Vlaicu” University of Arad, Romania

[lucia\\_risti@yahoo.com](mailto:lucia_risti@yahoo.com), [cris.nicolaescu2@gmail.com](mailto:cris.nicolaescu2@gmail.com), [monicabija@yahoo.com](mailto:monicabija@yahoo.com)

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### Abstract:

*The emergence of FinTech has generated a new paradigm of financial culture by proposing innovative models of financial applications and products that have given rise to a new type of business with financial technology at its core. The considerations in this article focus on companies as beneficiaries of FinTech and cover all six business functions proposed by Gomber, Koch and Siering respectively: Digital Financing, Digital Investments, Digital Money, Digital Payment, Digital Insurances and Digital Financial Advice. The stated functions are analysed along three lines: the financial consequences of these approaches at company level, how to recognise the generated flows in company accounting and the implications for supplier-beneficiary communication.*

*The study methods used are the review of international and Romanian literature on the one hand, and of the regulations applied in Romania regarding FinTech, on the other hand, and also, empirical analysis on revealing cases of the phenomenon and questionnaire.*

*As a summary of our conclusions, we can state that the impact of these technologies on Romanian companies is positive. Romanian companies are interested in accessing FinTech technology, but there is a slowdown in the pace of implementation generated both by relatively small investments in this area and insufficient financial education of managers.*

**Key words:** FinTech platforms, finance, accounting, communication

**JEL classification:** D83,G10,M41

### INTRODUCTION

New business models and technology concepts provide a basis for innovative solutions in finance and beyond. Today's financial customers demand smart, easy-to-use financial services, regardless of location and time, and at ever decreasing costs. A growing internet-based economy, new usage patterns of digital devices and media, and a decreasing reluctance to use online channels, not only for seeking financial information but also for financial transactions are key structural changes driving these developments (Varma, P., Nijjer, S. , Sood, K., Grima, S. , Rupeika-Apoga, R., 2022).

Under these circumstances the emergence and development of FinTech platforms has exponentially altered the international financial system. The paradigm shifts thus generated affect the social mechanisms that regulate the performance of companies, creating the need to change the current role played by participants in financial transactions.

Despite the clear evidence that these problems exist, studies that explore the details of these relationships and how new ways of doing business influence companies are quite rare. The objective of this article is to review and analyse the current state of research in this area and to formulate some views on how companies are influenced by these relationships in terms of financing, accounting for the flows generated by the new relationships and the novel modes of communication they involve. To achieve this objective, the method chosen is a systematic review of the literature, i.e., material published between 2001 and 2022.

As far as this article is concerned, since our aim is to analyse the impact of FinTech platforms on Romanian companies, the international phenomenon will be used only as a reference frame. Therefore, although the review of the international literature on this topic is part of the article, more emphasis will be placed on how this topic is analysed in the Romanian literature. As a

result, although the starting point in achieving each objective of the article will be the international experience, the novelty element is brought by the presentation of the particularities of the relationships between companies and FinTech platforms in Romania.

The emergence and expansion of FinTech platforms has generated some mutations also in terms of supplier-customer relations, as the services provided by these platforms have forced companies to adopt a new approach to their relations with the providers of these services. Therefore, another issue on which we formulate some opinions is how FinTech platforms influence company-customer relationships in Romania, because this new type of relationship, besides the obvious benefits, comes with certain risks for the beneficiaries.

As a result, in order to be able to enjoy the advantages offered by these revolutionary services, beneficiary companies will need to know the potential risks they are assuming, such as: risk of fraud or misconduct by FinTech entities or third parties, certain features of these operations may lead to conflicts of interest between FinTech, platforms and beneficiary companies, - increased risk of cyber fraud through exploitation of vulnerability and lack of user knowledge, companies relying on these platforms for funding or investment may face liquidity problems or even go bankrupt.

With this in mind, in the present article we have developed and analysed a questionnaire to determine the extent to which companies using the services offered by FinTech platforms are aware of these risks and, if so, the extent to which they are willing to take them.

Numerous private companies in Romania have used the opportunities offered by FinTech platforms to optimise their business, whether it is online payments, financing, investments or the use of digital money. These operations require specific ways of accounting. In this article, we make proposals on how to record the flows generated by transactions between companies and FinTech platforms in company accounts.

Another issue we address in this article is the impact that the use of FinTech platforms has on company finances.

Thus, numerous SMEs face a lack of liquidity and cannot get sufficient funding from the existing banking system even if they are willing to pay higher interest. In this respect, FinTech platforms can be the solution whether we are taking into consideration factoring, which in this case is fast, flexible and fully digitised, or we are discussing the raising funds through crowdfunding or other forms of online financing as alternatives to traditional, classical forms of financing.

Financial advice through FinTech platforms to make informed financial decisions, better tailored to the specifics of each business, is another financial service that companies can turn to.

This article discusses the advantages and disadvantages of these services for companies in Romania and the impact of using them.

## **REVIEW OF THE SCIENTIFIC LITERATURE**

The literature in the domain abounds in approaches to digital business platforms, with each study following and reporting on a specific phenomenon, technique or at least facet of operations.

It should be noted, however, that although the international literature is very well represented, the Romanian one is less so. The aspect is justified in particular by the fact that businesses with the procurement of resources on digital platforms have been initiated in countries of the world after the financial crisis of 2008 as an alternative, these FinTech start-ups, being identified the United Kingdom, the United States and Southeast Asian countries. In Romania, it was only after 2020 that there was an interest from the traditional banking player but also from some non-bank investors to use platforms and other digital means in their business. Thus, the scientific literature follows this trend.

The FinTech phenomenon has been studied in the works of Walker, A. (2014) presenting financial digitalization and its impact on traditional banking, Santander InnoVentures, Oliver Wyman and Anthemis Group (2015) with a very interesting research on the transformation of

banking services under the effect of FinTech challenges or Arner, D.W., J. Barberis and R.P. Buckley (2015) who put the consequences of the financial crisis under the microscope in their paper and consider the FinTech paradigm a result of it, then in the paper written by Chishti, S. and J. Barberis (2016) which proposes a review of financial technology, aimed at investors, entrepreneurs and not least visionaries, as its title self-proclaims. In the same year, a French author, Darolles, S. (2016) reviewed the realities and implementation of digital finance in France.

Arner D, Barberis J, Buckley R (2017) made an analysis of the FinTech phenomenon in the context of insufficient regulation of the field.

Ryan Clements (2019) proposes a foray into risk management and prudential management of FinTech operations on the case study of the United States and Canada, an approach on the same theme proposed by Daniel Monroy, Jorge Armando Corredor H(2021) on the case study of Colombia.

A more recent paper, published this year, proposed by the Indian authors Sandeepa Kaur, Simarjeet Singh, Sanjay Gupta, Sangeeta Wats (2023) on risk management associated with the FinTech sector in the context of financial decentralisation and the reduction of state control as a result of globalisation.

We cite some significant works in the Romanian literature such as the paper on crowdfunding platforms by Micu, I. and A. Micu (2016) on influencing the Romanian capital market with the FinTech paradigm, then the paper by Manta O. (2018) which proposes a review of the means, methods, and financial tools specific to the FinTech field.

So far, the Romanian academic literature is quite limited, probably the development of the field in Romania leading to further systematic analysis and research. Bălțoi I.C.M. (2020) proposes a study on the financial climate in which the FinTech phenomenon is developing in Romania. Then, more recently, Drugă R.I. (2021) with a current study on the behaviour of young Romanians in relation to digital technology.

## RESEARCH METHODOLOGY

The study methods used are the analysis of international and Romanian literature on the one hand, and of the regulations applied in Romania regarding FinTech on the other hand.

In order to analyse the way in which companies record in their accounting the flows generated by operations carried out with FinTech platforms, we used the scenario method, proposing models for these records.

In order to formulate opinions on the impact of FinTech platforms on companies, we designed a questionnaire with 22 questions that we applied to companies in the western part of Romania. In our study, we analysed the following digital services: payments, financing, investment, insurance, cryptocurrencies, and financial consulting. Another aspect we looked at was whether consumers use specialised or banking platforms for these services. Next, we tried to find out respondents' opinions on why they would/would not use one of the mentioned platform categories.

In the last questions, respondents were asked to express their views on the future scenario they envision on the relationship between specialist FinTech companies and traditional banking/insurance institutions.

The conducted testing was an empirical one and it was carried out in December 2022 and January 2023 respectively. On the basis of the answers received from the respondents, we processed the results using the non-parametric descriptive statistics method.

## RESULTS AND DISCUSSION

### ASPECTS OF THE FINANCIAL IMPACT OF FINTECH PLATFORMS ON COMPANIES

The question now arises as to why an entrepreneur would choose a digital platform over the established commercial, investment or agricultural banks specialising in different economic markets? The studies (Cholakova&Clarysse, 2015) conducted on the "psychology" of financing models have revealed an aversion among entrepreneurs, even small businesses, to involve family or friends, for more or less subjective reasons, in their investment operations. This aversion to the associated social risk, to friction and to the quality of interpersonal and interfamilial relationships leads to the choice of a financing model outside the immediate social circle. Until recently, it has been the banks and stock exchanges active in the financial markets that were the ones to monopolise it. Limiting the risks associated with financing through these two models, in addition to their credibility and transparency, the stock exchanges have ensured their hegemony on the financial and capital markets. After the 2008 financial crisis, it was cyclically proven, for the umpteenth time, that banks were not infallible, dragging the stock exchanges down with them, with significant falls in the shares of listed companies and considerable losses borne by investors.

In the climate generated by the crisis, ideas were put into practice by start-ups to create and provide an interface for investors and entrepreneurs respectively to meet and share their business needs and aspirations. This is how social trading networks have been established (Doering&all, 2015). They provide transparency and dialogue in terms of information sharing (Pan&all, 2012; Ayondo markets Ltd 2016), on entrepreneurs' trading and investments, tracking down types of investors, types of transactions and traders' experiences gained from their activities, all of which allow for the accumulation of at least theoretical knowledge and expertise for all those interested.

Obviously, there are also advantages for the users of these networks who popularise their business schemes, as it is a place, albeit virtual, where the various investors meet the beneficiaries of their investments and are able to diversify their activities or take on new business strategies that generate future profits, as the agreements between the two players are not just about profits in the form of interest received but can also be in the form of co-ownership of capital with shares.

Then, the interest rate policy and the bank's hegemony over the costs and conditions of repayment of loans after 2010 generated abuses in Romania, as everywhere else in the world, which in many cases were settled in court (see the case of Volksbank mortgage loans). These issues and phenomena impacting society have given a boost to the FinTech financial paradigm. Thus, start-ups as well as banking companies that have appreciated the financial opportunity and of course even for survival reasons have implemented these digital platforms, where the investor meets the entrepreneur, to the benefit of both.

In this context, traditional banks are gradually becoming providers of Digital Finance through packages of financial services and tools such as cash accounts, savings accounts, cash management, business administration, portfolio management or online lending and related advice.

The benefits, from the FinTech investor's perspective, are about the reward system created such as profit, retention of market position and last but not least a veiled form of advertising, which also helps other businesses if they exist. It is also possible that the FinTech investor is co-interested in getting a share of the profits of the companies being funded.

Analysing the processing of a digital loan, accessible on a digital platform, we find that the benefits are easier to calculate, the operation is carried out without staff employed for this purpose, through online cooperation with rating agencies, so minimal or zero administration costs. Then, information about potential customers, their requirements and needs are more accessible and direct, without classical market prospecting directly from social platforms such as Facebook (Auxmoney, 2015; Berger&Gleisner, 2009) or the Chinese WeChat platform. Just the other day (06.10.2023), for example, the media headlines the intention of the X/Twitter platform to negotiate with a financial data giant to implement a trading HUB within the app, currently looking for providers to make

proposals for financial content, real-time stock market information and probably other services that have not yet been made public.

Social platforms can prove their effectiveness not only for the traditional business environment, based on profit-making, but in extenso can be the meeting place and creation of public-private partnership by covering and generating public utilities in the field of public health, public administration, education, culture or art. Obviously, both sides benefit and ultimately the members of society, i.e., those who meet on these platforms. Here, people and therefore businesses meet, ask questions about stocks and goods, learn not only about how to raise funds or how to run a successful business plan but even how they can buy goods online, pay for them online or find out about utilities they didn't know existed that can meet different needs.

Not least, they can change or refine their taste for one product or another, changing their investment behaviour but also the volumes traded. Various studies (Wysocki, 1998) carried out to date have highlighted these aspects. Online business and investment forums are already well-known such as Yahoo Finance, Google Finance, aktienboard.com or ragingbull.com. These ensure that users connect and exchange information with each other. They can be described as "web-based services that allow individuals to build a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and browse their list of connections and those made by others within the system" (Boyd&Ellison, 2007).

An analysis of digital trading methods leads us to the conclusion that this is done through online trading, mobile trading on phones, crowdfunding social trading or if we refer to stock exchanges then we are talking about online brokerage. Mobile trading is carried out using smart phones, tablets, which, due to the size of the screen, provide better viewing, with special financial applications, of course based on software created for this purpose. At the same time, mobile phones also have their specific shortcomings, resulting from their relatively small size, generating difficulties in performing quick calculations while entering their results in the databases created and used, which are not to be neglected, an aspect highlighted by studies conducted for this purpose (Kim&all, 2007; Tai&Ku, 2013), desktop PCs maintaining in this context the advantages of use. The same tools are used in online brokerage activities, as they provide unlimited and instant access to capital markets activities without the intermediation of professional human brokers (Zhang et al, 2020).

In the following lines, we will analyse the FinTech phenomenon, manifested in the investment process of Romanian companies. First, because this is the topic on which our study focused, and second because Romanian banks remain in the front line of financiers of economic activities in Romania, with the Bucharest Stock Exchange covering an unfortunately narrow range in this regard.

Why are Romanian banks the leading financiers even in this sophisticated and globally integrated system? The answer is simple and lies in the fact that they offer services that are within the reach of firms in the country, given the aversion that investors have to cultural differences or to collaborators located at great geographical distances (Paravisini&all, 2012; Burtch&all, 2014).

In Romania, banks active on the financial market have already initiated lending activities on online platforms, and it is obvious that they want to align themselves with the digitization of their activity, such as the parent banks, or simply, an adaptation necessary for the survival and diversification of the means and tools specific to their activity. Obviously, last but not least, the related costs have been calculated and there is no longer any need for staff costs, who until now have been analysing the file, establishing the risks, managing and calculating all the related costs and of course socialising with the client. The client-entrepreneur is now less transparent, physically speaking, but ultimately this is also true for the investor.

Such platforms have been opened this year by ING Bank Romania, which offers entrepreneurs loans up to 500,000 lei over a period of 5 years, granted from the bank's web platform. This means no trips to the banks, documentation is signed electronically, the file is analysed in 10 minutes and access to funds is immediate. As mentioned above, the loans are aimed

at small and micro-entrepreneurs operating in construction, transport, manufacturing, consultancy and services, commercial activities or unforeseen activities or new business ideas (start-ups).

Banca Transilvania provides digital financing for start-ups, SMEs, specialised sectors such as the medical one or small agricultural producers, trade or corporate. Entrepreneurs apply online to access a loan and the time required for file verification and money transfer is maximum 4 days. What is interesting for the Romanian market is that it also accepts direct investment partnerships for those interested. Among the offers of the financial operator is the one called IMM Invest PLUS, which is a credit program in partnership with the Romanian state for SMEs and large companies in Romania. The financing is guaranteed by the Romanian state and it is opened on 6 lines as follows: IMM Invest PLUS, Agro IMM, Garant Construct, IMM Prod, Innovation and Rural Invest. The economic sectors targeted by this programme are obvious. The financing goes up to 10.000.000 lei respectively in Euro up to 2.000.000 Euro. The intention with which this public-private partnership of Digital Finance was set up, was to support the Romanian firms to bear more easily the negative effects of Covid-19 to which are currently added those of the war in Ukraine, respectively the perspectives of the Israel/Hamas conflict.

Raiffeisen Bank Romania in partnership with Qualitance opened in 2020 an online platform aimed at SMEs that offers them loans in an 100% digital system. The time required from the submission of the offer to the actual granting of financing with the entire flow of operations done, amounts to just a few minutes. Presumably, the general financial context undergoing digitisation has required the modernisation of the bank's activities but no doubt the Covid-19 context has also had a say. Of course, the struggle to retain and identify new customers had its effects, but it is commendable that the bank also openly expressed on this occasion its desire to ensure the comfort of its customers, one of its stated imperatives was to reduce their "financial stress". In 2020, the bank provided financing of over 50 million lei to 200 Romanian SMEs and has participated in the last 2 years in financing Romanian SMEs through a public-private partnership for the implementation of government grants.

This financing for Romanian entrepreneurs was facilitated by the bank's digital platform. The partnership with Qualitance was timely, as the company brought its expertise in experience design, rapid prototyping or behavioural psychology and emerging technologies, a successful example in the Romanian financial market, an example of a start-up partnership (Qualitance was founded in 2007) that brings innovation and the traditional banking actor that provides financing. The winner is the entrepreneur and, ultimately, the Romanian state through the creation of new value and the citizen who benefits from it.

BCR Romania has not opened yet a platform for digital financing, but provides Romanian entrepreneurs with the George application, which offers online payments including SEPA, digital assistance in managing card, cash or credit accounts, digital factoring services.

ProCredit Bank will also offer financial services on the open online platform from 2023, but in this first phase it will not offer financing services to businesses, only account opening, management and digital transactions.

Among the non-banking platforms operating in the Romanian financial space, we mention Omnicredit, which is a fast-moving FinTech platform with online, real-time financing, addressed to the business environment. The request is processed in a maximum of one hour and access to the money is made in a maximum of 8 hours. It targets small entrepreneurs and specializes in factoring, discounting and microfinancing. The major shareholder of the platform is the Reconstruction Capital II Limited investment fund, listed on the London Stock Exchange and present on the Romanian market since 2005. Starting with this year, the platform also offers microcredits for paying suppliers, salaries or debts with the consolidated budget. It is clear that this type of digital financing helps save small businesses from bankruptcy in an increasingly uncertain business climate amid regional conflicts or risks of conflict, establish collaborations with other crowdfunding platforms that have been active on the global market for several years, such as SpeedInvest, Occident Group, Xista Science Ventures or Gate-way Ventures.

In Romania, the SeedBlink platform has financed 49 companies from 2020 until now. Last year, 10 Romanian companies benefited from funds, among which there were creative startups or technology producers. The associated risks are analysed by specialized collaborators such as 3TS, Eleven VC, SpeedInvest or DayOne Capital. A point of reference at a European level was the period 2017-2018, when crowdfunding increased in one year by 95%, from approx. 3.5 billion euros to 6.5 billion Euros, i.e., they almost doubled. In 2018, approximately 800 crowdfunding platforms were active in Europe, most in the UK and the best investment returns were recorded in Norway and Italy (<https://health-inequalities.eu/ro/financing-e-guide/crowdfunding/>).

Regarding the settlements made by Romanian companies, we must state that they are partly carried out through the classic channels and instruments, with the deposit of the settlement instrument at the approved commercial bank, but in recent years the semi-automatic and the online settlement instruments have gradually expanded. Debit or credit card payments for various services or payments with the mobile application on smart phones being common in Romanian corporations at the moment. Settlements with partners located abroad have determined Romanian entrepreneurs to use even more sophisticated means such as the Revolut application. Therefore, this financial technology has also conquered the Romanian business area, Revolut being used for various settlement operations, payments in local currencies, from yuan to pound sterling, euro or dollar, share trading on international stock exchanges, currency exchange required in transactions with foreign companies.

The operations on the Revolut platform are limited not only in Romania, to those detailed above, until now the financial institution has not received a banking license. This state of affairs does not allow the Revolut application to host specific investment operations required by companies. However, it provides comfort to its users through the facilities it offers regarding settlements without physical presence and without the need to gather information regarding currency rates and the most convenient conversions.

Along with the benefits, the risks associated with Revolut cannot be neglected, Romanian users are also subject to them, among them mentioning the defects regarding the application of Revolut's algorithms in the event of triggering the automatic suspension. The problem reported by several card users was that their funds were blocked for long periods of time, going up to several months. Attempts to contact the support team via chat have been blocked. The company justified the delays by insufficient staff, but the complaints to the company in 2020 had already reached 500 on this topic. It is well known the unpleasant experience of a French company (Prorite Energie) whose business account of 300,000 euros was closed, preventing the payment of its employees.

Nevertheless, business people from all over the world carefully weigh both the benefits and the risks associated with the different aspects of their business, such as the means and financial instruments used, which is natural for Romanian entrepreneurship.

## **ASPECTS REGARDING THE IMPACT OF RELATIONSHIPS WITH FINTECH PLATFORMS ON COMPANIES' ACCOUNTING**

Regarding the impact of the collaboration of Romanian companies with FinTech platforms from the point of view of the former's accounting, it is felt in the use of new accounting tools for the quantification and recognition in the companies' accounting of these new types of operations. These tools must be thought of in terms of applying the commitment accounting principle, specific to the Romanian accounting system, to satisfy the need for speed and financial-accounting credibility (Nicolaeescu, C., Risti, L., Bija, M., 2023).

We analysed this impact by following the way of recording in the accounting of Romanian companies the following categories of digital financial operations: digital financing (Digital Financing), digital investments (Digital Investments), the use of digital money (Digital Money), online payments (Digital Payment), insurance digital (Digital Insurances) and digital financial advice (Digital Financial Advice).

Digital financing involves obtaining funds by companies using various FinTech platforms. In this situation, the forms of financing can be: crowdfunding, loan, leasing, or others, and it involves the involvement of three entities: the applicant for the amount, the offeror and the FinTech platform through which the operation is carried out.

In the accounting of the company requesting the financing, we have to register a liquidity entry, and, depending on the nature of the financing, the appearance of a debt to the offering company (if the financing is assimilated to a loan) or a capital increase (if the financing is an investment that transforms the company providing the amount into a shareholder of the requesting company). Interest will also be involved for financing similar to loans, which will be recognized by companies as an expense.

Digital investment is another business function that FinTech platforms can cover. They involve the placement of an entity's liquidity in such a way that it obtains as much profit as possible from that placement and human advisors or brokers (Zhang et al. 2020), or access to platforms that combine social media networks with investment strategies (social trading described by Doering et al. 2015; Pan et al. 2012). In Romania, an example of such a platform is Seedblink.

In the accounting of companies that use their liquidity in this way, the fact that the placements are made through real/virtual brokers or directly will not influence the way these transactions are recognized, the placements being recognized as outflows of liquidity, respectively increases in the portfolio of securities. Depending on the intention of the investing company to hold the securities for the short or long term, they will be recognized in the accounting as cash equivalents (quasi-liquids/short-term investments) or as financial assets.

If the transaction takes place through a broker (virtual or not), the expense generated by the commission paid to him will be recognized in the company's accounting. Digital money (digital currency, virtual currency, electronic currency, or cryptocurrency) describes a type of currency that performs (more or less) all the typical functions of money, but it exists only electronically and it is primarily used on the Internet. Such digital money serves as a medium of exchange, unit of account, and store of value, but unlike traditional money, it only exists digitally (Dodgson et al. 2015).

For the record of these structures at the company level, the international accounting rules propose two options: using the provisions of IAS 38 Intangible assets and recognizing them as intangible assets, due to their non-physical nature, or using the provisions of IAS 2 Inventories and treating them as elements of the nature of stocks, due to the high degree of liquidity and the possibility of being traded (bought/sold). Company accounting must offer solutions for recording the following situations (Nicolaescu, Risti, Bija, 2023): companies that use cryptocurrencies in their current activity (as a means of payment or collection), companies that purchase cryptocurrencies to place their availability (for investment purposes), companies that mediate cryptocurrency transactions, companies that "create" cryptocurrency, basically by validating blockchain-type processes based on validation protocols.

In accounting, the problems that need to be solved are both related to the value at which these assets are recorded in accounting and to the actual accounting structures, respectively the records used to record transactions with virtual currencies in accounting.

For the first problem, the solution would be to evaluate them at their fair value, which would then be influenced by their value fluctuations. Favourable differences in value can be recognized as income and unfavourable ones as expenses.

As for the accounting flows generated by the economic operations carried out with digital money, depending on the role of the company in these transactions, they will be able to be used to settle a debt, by using them as a means of payment, to settle a claim by using them as means of collection, or as investments, when used for investment purposes.

For the registration of debt settlement operations using cryptocurrencies, in addition to debt settlement and the exit of cryptocurrencies from the patrimony, the difference in value between the moment they are highlighted in the company's patrimony and the moment they are used to settle the debt must also be taken into account.



As a result, in addition to the intermediate account used, a receivables account (such as various debtors) will be used and an expense account where we will record the accounting value of the currencies used to pay the debts, respectively an income account where we will record the amount from the time of transaction of these coins.

In the event of the collection of a claim in virtual currency, in addition to the settlement of the claim against customers, which is treated as a separate operation, the entry of the intangible asset of the nature of virtual currencies will be recorded, also separately. In both cases, in addition to the corresponding receivables and cryptocurrency accounts, an intermediate debt account, for example sundry creditors, will be used.

Where companies purchase cryptocurrencies from specialized platforms as financial investments, the cryptocurrencies are kept in an electronic wallet until the entities decide to exchange them for real currency in order to make a profit.

As a result, the operations that will be recorded in the company's accounting will be: the purchase of coins, the update of the value of the coins in the entity's portfolio at the end of each financial year and the sale of coins.

The purchase involves increasing the value of the virtual assets of the entity, either stocks, if the purchase is made for speculative purposes, in the short term, or intangible assets (intangible assets) if the investment is made in the long term (more than one year) and the decrease of liquidity by paying these assets.

The sale is recognized as a decrease in the value of virtual assets and the generation of an expense equal to their acquisition cost, as well as an inflow of liquidity equal to the sale price of these coins and the recognition of an income at the level of the sale price.

If cryptocurrencies are received for which real coins are paid, we will record the increase in intangible assets of the nature of virtual money, at the same time as the decrease in liquidity, usually from the bank account.

For the companies that generate cryptocurrency, it must be established whether those who obtain new virtual currencies by validating blockchain-type processes (also called "miners" in practice, a term also taken over in specialized literature), provide a service (validating for the benefit of the network certain information/processes) or not (Eigelshoven et al. 2020; Sedlmeir et al. 2020, Jorgensen and Beck 2022).

Secondly, it is worth underlining the fact that in order to do mining the "miners" bear significant costs, among which the most important ones are those with computing technology, with the necessary applications and with the electricity consumed. Some of the accounting problems that arise in connection with virtual currency mining are (Păunescu et al. 2020): the initial cost of registration in accounting and the classification of the currency obtained through mining

One of the difficulties that has arisen is the distribution of production costs on the virtual currencies obtained. In these companies, the problem of the impossibility of using the standard production cost may arise. In addition, virtual coins can be obtained in time, not at a specific moment during the month. Thus, it is necessary to spread the costs incurred (for example, if you spread the monthly costs over the coins obtained in that month, or you can spread the quarterly costs over the number of coins obtained in the respective quarter). Another problem may be related to the notion of production in progress, which in the case of cryptocurrencies cannot be identified (concretely, the costs incurred in May might also partially refer to coins obtained in June, the mining process being continuous).

If the obtained coin is intended for further sale, it will be classified as stock. If the currency obtained is used (in whole or in part) for the needs of the company in terms of payments (such as the payment of salaries, suppliers or other purposes), it will be classified as an intangible asset.

Taking into account these aspects, the acquisition of virtual currencies can be assimilated to the acquisition of finished products, with the appropriate accounting records.

## **ASPECTS REGARDING THE BEHAVIOUR OF COMPANIES AS USERS OF PRODUCTS/SERVICES OFFERED BY FINTECH PLATFORMS**

In order to form an opinion regarding companies' appetite for the services offered by FinTech platforms and which are the most requested services, we designed a questionnaire. This was structured online, self-administered, and was designed to collect data from companies that use the financial products/services offered by FinTech platforms (Nicolaescu, Risti, Bija, 2023).

The survey was designed based on items and scales already used in previous studies, adapted and adjusted to fit the context of this study (Oliveira et al. 2014, Xie, J.; Ye, L.; Huang, W.; 2021).

The questionnaire was divided into two distinct sections, the first analysing the current behaviour adopted by respondents regarding FinTech platforms, and the second, targeting possible scenarios for the evolution of these platforms.

In the first part of the questionnaire, we analysed constructs such as perceived value, perceived risk and ease of use. Other aspects analysed were the respondents' behaviour in terms of prudence and expectations when talking about investors and capital raising or digital advice.

From the applied questionnaire, we found out that on the first place in the ranking of the services used by the companies in the Western area of Romania, the most used service is that of digital payments. A relatively more modest score was achieved by financing on digital platforms. Our explanation would be that the activity of banks in Romania is strongly regulated, which gives more confidence to the client. However, what we believe will make the difference in Romania and guide customers towards choosing FinTechs are the high costs involved in the collaboration of Romanian companies with banks, the interest rates charged on the Romanian banking market being among the highest in the EU.

This can be a reasonable reason for Romanian customers to choose something else, as it also resulted from the responses of company respondents to the question regarding the willingness to switch to the provision of digital financial services. The majority of respondents responded favourably, the reasons being primarily lower costs and increased speed of operations.

From the analysis of the answers to the questionnaire, it emerged that there are few companies that place their capital using mobile trading technologies or devices for profit. However, a favourable intention of the analysed Romanian companies regarding the digitization of financial activities resulted from the questioning of the respondents regarding their opinion regarding the future of FinTech platforms. To this question, the majority expressed their confidence in their future existence, over a third even appreciating that in the future specialized FinTech companies will absorb traditional financial services.

In conclusion, Romanian companies are interested in accessing FinTech technology, but there is a slowdown in the pace of their development, generated on one hand by insufficient investments in this area, but also by the administrators' insufficient financial education.

Another impediment identified by us seems to be of a psychological nature, with respondents showing some reluctance regarding the associated risks of data confidentiality, security of traded funds, possible discontinuity of services (frequent internet outages in rural areas) or even inappropriate marketing practices.

### **CONCLUSIONS**

Taking into account the objectives and questions of the topic under study, it has been possible to draw some conclusions, which are summarised below.

First of all, it is noteworthy that the literature review in the field of digital finance is rich in works, most of which were published between 2010-2020, out of which we have highlighted only a few that we have noticed as being content appropriate to the topic addressed in this study. However, the Romanian literature is less important in terms of the number of works, since the FinTech phenomenon in Romania occurred later, around 2016, and the literature follows the trend.

The development of the FinTech paradigm was driven by the effects of the 2008 financial crisis. The impact on the stock markets was devastating and prevented the raising of funds through this channel. Then the same crisis hit the banking system, as stock exchanges and banks are interconnected. The inability of both of them to continue financing investment and savings led to the creation of financial start-ups based on the digitalisation of activities as an alternative to traditional ways of financing businesses.

After about ten years of rapid development, with an advance in the United Kingdom, the United States and the emerging countries of Southeast Asia (we refer to the period 2010-2020), against the background of the COVID-19 crisis, after 2020 FinTech operations experienced a worldwide expansion, regardless of the level of economic development of a state, that of financial sophistication or the aspect of cultural customs. Companies have turned to digital financing all over the world, and this is also true for Romania in the 2020s.

Banks, as the main stabilising factor and investment intermediary, have acted quite pragmatically and understood that they cannot stay outside the FinTech perimeter, so for the practical reasons of survival or for reasons related to the advantages of business opportunities, they have moved to the massive digitisation of their business offers all over the world, including in Romania.

In the context described above, and taking into account the objectives of our topic, which is related to the digital financing of companies with a special focus on Romania, the research carried out on the basis of a questionnaire highlighted aspects specific to the Romanian business environment. For example, among the legal entities surveyed, the vast majority of respondents (81%) still prefer to raise funds from banks to the detriment of the stock exchange. This aversion of Romanian companies to the stock exchange can be explained by the fact that business in Romania is not yet sufficiently transparent, or that listing on the stock exchange requires transparency, as these companies are obliged to publish their financial statements.

Therefore, companies in our country prefer to do business with the traditional bank financier, which in recent years has taken measures to diversify its services, almost all the major banks on the Romanian market offer online financing service packages, on digitalised platforms, with access to funds in a time interval from a few minutes to a maximum of 2 or 3 days.

The advantages of a credit that a company accesses online are mainly related to the time component, i.e., the access to funds is extremely fast. Then there is the convenience factor, in a world where this term is taking on an increasingly diverse meaning: there is no need to go to the bank, and therefore no travel costs, consumption of consumables or payment of staff to provide the service. Obviously, the costs related to the analysis and management of the credit file are reduced or eliminated, this information coming from the field of rating agencies.

In addition, digital financing accessible to companies can be addressed to business development plans through the digital platforms of banks or other financial institutions or crowdfunding, but also to the current needs of the activity, an area successfully covered in Romania by factoring.

As we have seen from the survey of our respondents, legal entities, there is still a reluctance on the part of Romanian entrepreneurs to collaborate with start-up companies specialised in the provision of financial services, still showing a preference for the traditional bank collaborator, but able to provide digitised services. Perhaps one explanation for this situation is that in Romania, there are still too few non-bank financial operators specialised in companies operating on the financial market, which would imply a more significant volume of capital. On the other hand, if we think about the crowdfunding alternative, perhaps the Romanian reality also has a subjective component, a kind of specific Romanian slowness and lack of initiative, against a social and political background that is discouraging for the business environment, which shows instability, tax legislation that is unfriendly to them, with frequent, unpredictable legislative changes and usually with measures that curb initiative or reduce capital for investment in favour of larger levies to the state.

Obviously, despite the many advantages offered by digitalised financial operations, they also entail risks that we have identified in our research. One area of risk, regardless of the geographical or national context, relates to the inadequate regulation of these operations, with the platform managers somehow taking advantage of the fact that the legislator, whoever it may be, is not yet paying enough attention to this source of revenue for the State, considering that its impact on society and the economy is not yet significant, which could turn out to be a mistake in time, generating all kinds of fraud, from tax evasion to disputes between participants on the platforms. The fact that these administrators are not physically visible may, in certain circumstances, constitute an additional risk in this respect.

Another risk relates to the manipulation of the resources available on these platforms; a failure due to mismanagement is always possible in the context of insufficient regulation of the digital market. In such a scenario, investors could find themselves without the money they have invested and without the percentage of the profit, or, for example, in the case of factoring, the beneficiary could also find himself in the situation of not having collected his debt. Concluding the advantages and risks of FinTech at the global and Romanian level, it is obvious that it is an important alternative to the traditional financing of companies. It also guarantees a better return on invested capital of around 10%, which is currently better than the banking market. Furthermore, compared to the capital market, it is currently characterised by a great deal of instability, as the process of reconstituting and bringing shares to their real value is almost complete. We believe that international events, wars or the reconfiguration of geostrategic influences will reconfigure stock market portfolios and rules, at least for the next few years.

On the other hand, the digitalisation of finance, with its forms of crowdfunding or peer-to-peer, is an inspired form of socialisation of money, of collective participation in wealth and, last but not least, of profitable placement of capital. That is, through regulation to reduce the opportunities for some to profit unethically or unprofessionally from FinTech opportunities.

One last aspect that we would like to mention is that of the FinTech public-private partnership, because we must never forget the fact that any resource, including this one, should create well-being for all, and not just for some social categories.

This could be done by issuing treasury bills or other types of government bonds to finance the consolidated budget in Romania, or to finance the activities of national companies. Nonetheless, there are also shortcomings in terms of the inefficient use of funds raised in this way in public utilities that do not create added value. In this case, the funds should be used to finance Romanian companies that produce goods for export, i.e., on the one hand the processing of material resources and on the other hand the acquisition of foreign exchange to reduce the country's current account deficit.

As far as the accounting of FinTech operations is concerned, it is necessary, on the one hand, to think about customised management models adapted to the information-financial flows specific to digital finance and, on the other hand, to create specific tools for the evaluation and recognition of these new patrimonial structures, based on accrual accounting.

These aspects, which pose challenges to the Romanian information accounting system, are imposed in a context within which there will be more and more companies approaching digital financial activity schemes, such as the use of cryptocurrencies as a means of payment, as an investment instrument, or companies specialised in the brokerage of the blockchain type. How will these companies recognise their activities? It is clear that a specific account will have to be created to describe, on a committed basis, all the realities and patrimonial legitimacies in the FinTech sphere, just as it was created to reflect financial operations on the stock exchange.

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