



FINTECH AND CBDC - MODERN TRENDS IN BANKING

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Abstract:

Financial Technologies, or abbreviated FinTech, is the name used for companies that develop or use the latest information technology in order to improve financial services. Their development requires considerable experience and knowledge from the existing financial market and banking. These companies focus on the end user in order to develop the best technological solutions for providing financial services by observing and studying their needs and habits, with the help of rapid technological development in the IT sector, on the one hand, and on the other hand, the slowness and imposition of strict conditions for the banking sector and its corresponding regulations. The emergence of such companies lately and their rapid penetration into the market has begun to threaten the position of traditional banks and even induce customers to leave the traditional financial institutions such as banks. Banks are becoming aware of the growing competition from Fintech companies and are trying to find satisfactory solutions to keep their customers. At the same time, in the era of general currency digitization and the development of crypto-currency, banks also face the challenge on the other side, which comes from the Central Banks. Central banks have begun to consider issuing their digital currency CBDC - the central bank digital currency, or the digital form of existing money as a legal means of payment, such as current banknotes and coins. This changes the direction of supply of money for the new digital economy from the state, that is, from the level of the Central Banks, which would change from different forms of crypto-currency, such as bitcoin etc. at CBDC. These banks are facing new challenges because the Central Banks can become competitors to commercial banks in the segment of deposit and payment transactions. This sets new tasks and regulatory challenges to the banking system in terms of carefully regulating the relationship of the Central Banks as regulatory institutions and systems of commercial banks in the future.

Keywords:

fintec, cbdc, banking, central banks, crypts

INTRODUCTION

The term FinTech mainly connects with companies that implement IT services to banks and other financial institutions. Today, this term is being extended to a growing number of companies that integrate modern technologies such as blockchain, which is the technological basis of Bitcoin and other cryptocurrencies, and is also applicable in many areas of data management, access to information, etc. Currently, around the world, about 42% [2] of banks have some form of partnership with one of the FinTech companies or are thinking intensively about that partnership. According to one study by PWC consulting firm, the level of investment in FinTech companies over the last four years has grown exponentially at an average annual rate of as much as 41% with over \$40 billion in cumulative investment [3].

Blockchain, as one of the new technologies, has the potential to eliminate financial intermediaries such as banks, thus facilitating trade and payment transactions. It is about the fact that the basic functions of money do not change, but the form of functioning that evolves by monitoring the needs of users of financial services is changing.

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The digitization of many aspects of economic activity, and the digitization of currencies, encourages central banks to seriously consider the introduction of the CBDC and thus maintain control over cash flows in the new, changing conditions of the digitalized world. The fact that the high costs of private cryptocurrencies such as bitcoins make the current concept unsustainable [Todorović & Tomić, 2019] is also a good idea for central banks.

FINTEC TREND

The constant modernization of the IT sector has created the need for companies whose job it is to assist other firms in the process of making their IT sector move forward. It is very rare for companies to be able to follow the IT revolution without such outside help. New information technologies are changing the way they do business in different economic fields, and thus have become one of the main influencing factors in the changes in the banking sector. As it is common in the IT sector, these are most often startup companies run by aspiring young developers with a new vision of the future way of doing business that focuses on the end user. However, in creating FinTech companies, it is not only sufficient to observe and study the habits of end users of financial services, but also requires the involvement of experts with extensive experience and background in the existing financial market and banking to find the technologically best solutions. New information technologies are also significantly changing the behavior of today's bank clients, and when added to the banks' conservative stance and stringent banking regulations, nowadays banks are not fast enough to pursue technological innovations to be a relevant competitor in the financial market. This may initiate bank customers to leave these traditional financial institutions. FinTech companies are using this space for their own development and development and acquisition of individual jobs and clients from banks. In an era of expectation of fast service delivery and different customer behavior, FinTech companies are taking over certain segments of banking business from traditional banks with their agility, speed of service and clearer targeting of non-banking customers. This applies primarily to clients who are not tied to a particular bank and do not have the habit of going to a bank, as well as a specific generation of millennials who are prone to advanced IT solutions. FinTech companies primarily bring significant innovation to the credit business. By applying the latest technology, they significantly increase the speed of operation and thus significantly reduce their operating costs. Due to the high transparency of the business, they do not keep these cost reductions entirely for themselves, but generally pass it on to the customers, which means that the customers have double benefits - both the speed

of the service received and significantly better conditions of service use, i.e. lower costs.

Investing in FinTech companies is growing exponentially, so e.g. in 2008, it was \$ 1.2 billion, just 6 years later, in 2014, it was \$ 12 billion, and as early as 2015 it reached as much as \$ 23 billion. According to one survey conducted by PWC in 2016, 76% of banks at the time felt that their business was being threatened by various FinTech projects. It can even be said that there is currently no financial area of business in which some FinTech companies are not already present. For example, in the UK, FinTech companies have already largely taken the lead in lending to banks, while in Germany, banks have launched a new service aimed at stopping the outflow of savers by offering their clients the opportunity to invest quickly through their online FinTech platforms, they remain their depositors with the savings interest offered to them by the competition, which suits the clients themselves. Thus, the awareness of both banks and their clients and their conservative thinking about bank deposits is gradually changing.

A reasonable solution to bridge the growing gap between banks and FinTech firms could be to collaborate, associate and exploit synergistic effects by recognizing one's chances in each other's characteristics. There are advantages to both financial institutions. Combining experience in finance and modern technology, innovative financial services can be created that are tailored to the next generation of clients who make life and financial decisions in a completely different way. Banks are strong, stable financial institutions with a large customer base and proprietary data, they know how to manage risks and manage collection. FinTech companies, on the other hand, have faster and better solutions for specific services, are profiled in specific segments of the specialization, are more flexible and have a greater ability to make savings. Banks that recognize this cooperation in a timely manner as their chance can improve their competitive position in the market, which should result in increased profits for both banks and their clients.

The implementation of the Payment Services Directive 2, PSD2 (Payment Services Directive 2), has been launched in the European Union in September 2019, enabling third parties to provide financial services, be it FinTech companies or corporate giants. In doing so, banks will need to allow third parties to access their clients' accounts through Application Programming Interfaces (APIs). Thanks to this directive, banks are forced to enable their competitors to shape their financial services based on banks' data and infrastructure. Thus begins a major competition in mobile payments between banks and technology companies as licensed payment service providers. In addition, some FinTech companies directly access end users of financial



services and bypass banks. Hence, the opinion of a good part of bankers that the main threat to banks today are neither bad loans nor low interest rates, but rather the development of financial technologies that brings them a loss of market share and pressure on the margin. The advantage of FinTech companies lies in their focus on customer needs and finding the right solutions, while still being the weak point of traditional banks that are lagging behind in speed of service improvement. Hence, the need, primarily for banks, to focus more on direct collaboration with FinTech companies instead of competition, and to begin streamlining their products and services to enable them to compare with the equivalent offerings of their high-tech competitors. It is not to be expected that the banking sector will disappear due to the growing importance of FinTech companies, but that many preconditions for their cooperation will be created. The interest is not only on the side of banks, but is mutual, which is supported by the fact that banks are highly regulated financial institutions that apply all legal obligations that the regulator prescribes for the functioning of a bank. Regulations related to the capital of financial institutions, primarily banks and many regulations affecting the level of return on invested capital, hinder the entry of FinTech companies into the banking sector and encourage their interest in cooperating with banks. On the other hand, the ability of FinTech companies to adapt quickly and easily to the new circumstances and challenges of information technology arouses the interest of banks to cooperate, without which they would remain in a subordinate position if they chose to develop IT solutions themselves. Hence, the conclusion is drawn about the need for a future partnership between banks and FinTech companies through the creation of new ways of serving clients to survive and thrive in the financial market.

CBDC TREND

Another significant trend in banking is occurring within the Central Banks with significant potential implications for the commercial banking system. Some central banks such as the CB in Canada, Sweden, China and Uruguay are considering issuing their central bank digital currency (CBDC). These are digital forms of existing money as legal tender, currently represented by paper notes and coins. The International Monetary Fund (IMF) regards this process as an evolution of money, where one day digital money could replace the existing form of money. In this way, States through their Central Banks could become suppliers of money for the new digitized economy. All kinds of payments could be made with the new digital money, and the implementation of the new payment systems can be made through different technologies.

Also, all possible implications of such changes on the monetary policy, financial integrity and financial stability of each individual country must be carefully considered beforehand. All current cryptocurrencies are currently controlled by private entities, so the question of their impact on the monetary system becomes very important. Autonomous decisions by private entities on money supply could impair the ability of central banks to effectively implement monetary policy. Therefore, the development of national cryptocurrencies created by central banks would ensure retention of seniority as revenue from the printing of money by monetary authorities, i.e. central banks, but would also prevent the possibility of further use of private cryptocurrencies for the purpose of various criminal activities.

One should not lose sight of the cost component of the whole process, which is currently considered to be the main advantage of this trend. Namely, this process eliminates costs that are mainly borne by banks, companies and households, and are related to the issuance and management of cash [Jović & Kunjadić, 2018], which, for example, is used estimated at around 0.5% of GDP in the euro area (about \$ 113 billion in 2018 [1]). Through the process of implementing their own digital currencies, this strengthens state influence in the FinTech industries enabling new forms of private e-money and payments such as bitcoins and other cryptocurrencies. The FinTech industry did not expect such a rapid and efficient response from the public financial sector, the process of digitization and the extinction of cash dominance.

Although deposits in commercial banks are already in digital form today, the difference is that the CBDC would be the responsibility of the state, as is the case now with cash rather than private firms. The FinTech revolution has questioned the physical form of money and deposits with commercial banks, while also jeopardizing the role of the state in the function of money supplier, and the CBDC trend is a response to this vulnerability.

The CBDC trend directly threatens the position of commercial banks. Digital money issued by the Central Bank would directly reduce retail deposits with commercial banks, since in that case the commercial bank account would be redundant. Payment with the CBDC is secure and can be made without restriction to the amount available, and it is possible for the Central Banks to offer a certain interest rate depending on the monetary policy. This is a big blow to the competitive position of commercial banks and the introduction of a completely new competitor in the banking market, that is, bringing the current regulator, i.e. Central banks and in a position of direct competitor to banks. Therefore, the IMF proposes a solution to this situation by sending commercial banks to market competition and offering higher interest rates and better services.



A solution to this trend, which potentially threatens their position and survival, may be sought in partnerships between the Central Bank and the private sector of banks and other financial institutions. For example, banks could organize and maintain customer contacts, store their digital wallets, provide advice, interest on deposits and offer loans, while payment transactions would take place through the Central Bank. So banks, as they distribute cash today, would manage digital money. Failure to establish a partnership between commercial banks and the Central Bank could result in banks competing with the Central Bank, which is not an equal struggle. With the addition of many cryptocurrencies that are gaining market share thanks to blockchain technology, commercial banks may find themselves in an unenviable situation.

The CBDC trend towards cash also carries with it the issue of payment anonymity. It remains an open question to what extent it is possible to preserve the anonymity of payments, i.e. how much information on customer identity and transactions must be disclosed to third parties or authorities. On the one hand, there are legitimate reasons why clients may prefer a degree of anonymity. These are the desire to avoid client profiling and any other commercial use of personal information, as well as limiting the risk of hacking. In addition, anonymity is part of the privacy that has been recognized as a human right through the UN Declaration. On the other hand, it is quite clear that complete anonymity of digital payments will not be possible as it would directly open the way for criminal abuses of all kinds.

CONCLUSION

According to Article 5 of the Law on Banks in Serbia, no one other than banks can engage in the granting of loans and the issuance of payment cards, unless authorized to do so by law [6]. Regulations for the FinTech companies' market in Serbia are just emerging, so the banking sector in Serbia is not currently directly influenced by these companies, but most banks are in the process of implementing their own digital solutions in the field of electronic and mobile banking services, cashless operations, electronic document generation, remote account opening, etc. The banking sector in Serbia is expected to adapt to the latest FinTech trends in a very short time, while monitoring the CBDC trend will most likely await analysis of results in other countries and different approaches of the Central Banks in financially developed countries.

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