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GLOBAL BANKING: WHETHER BANKING IS IN CONCEPTUAL CRISES AND WHAT REFULATORS CAN DO

Summary: *The world of banking and finance, with the new fourth industrial revolution, in addition to the previous turn to regulations and legislation conditioned by the last financial crisis, is entering a new stage and / or epoch of development. Modernizing banking and new services is a global process and certainly a challenge for many financial systems. The key is the scope of regulatory initiatives, the comprehensiveness and scope of the central regulator with regard to supranational and national forms of action in the growing internationalization of banking, on the one hand, and the very dynamic relationship of conflict between innovation and regulation.*

Key words: *bank, functional transformation, regulation*

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INTRODUCTION

Banks, like all other companies or institutions, are participants and drivers of global economic globalization and cannot be immune to all the changes of the new age. There are several global trends influencing the redefinition of banking: demographic, social, economic and technological changes (Mihovilić and Hunjet 2021,17).

The phase in the development of banking (1900s) is characterized by a process of restructuring and major financial innovations. Dramatic and strong changes in the world of banking are leading to major changes in the innovation of financial instruments, with a new concept of banking. Enterprises are becoming financial institutions that provide financial and credit services, which until now were considered exclusively banking. The longstanding trend in banking, related to the process of globalization, deregulation and internationalization, is complemented by the restructuring of banks. The unit of merging the interests of large financial capital in the increasingly fierce competition with each other. The development of the economy and the banking systems in them in recent times are increasingly characterized by a new strategy of banking operations.

Banking industry development can also be determined from a functional and an institutional point of view. Functionally means the range of financial services and includes the banking and insurance services. The institutional approach is based on the organisational cooperation between banks and non-bank institutions. (Tran and Lin and Nguyen 2016, 99).

Banks are adapting to deep changes in production, trade and financial structure of the economy, ie changes in financial markets. Banks have often become institutions that pull, initiate or direct the processes of global economic restructuring. Inflation, as a general process, changes in

fluctuating exchange rates, indebtedness of the economy, changes in the capital management system, increased risks, changes in the capital structure of banks, etc., are processes that take place very quickly in all economies. The business strategy of banks comes down to the fact that in the conditions of these changes, with increasing competition from non-banking financial institutions, the efficiency, profitability and competitiveness of banks are preserved trade and financial structure of the economy.

1. GLOBAL FINANCIAL TENDENCIES

When we talk about financial globalization, it is important to note that one of its most important components is certainly the international movement of capital, which as a process is made possible by its liberalization. On the other hand, when it comes to banking systems in developed countries, they have entered the new century in parallel with many processes of technological innovation, strong market competition, consolidation and deregulation. The innovations that followed involved the creation of new banking "products", adapting to banking processes and new technologies, management methods and risk measurement techniques.

Deregulation has also encouraged the development of non-transparent forms of banking. The introduction of virtual financial operations, as centers of joint mechanisms of economic and financial globalization, has enabled the dominance of a significant amount of speculative capital. Currency trading, internationalization of financial markets, with continuous opening of new markets, currency futures and options, development of hedging and risk management mechanisms, have enabled the free movement of huge funds across national borders, but also to change the function of money in the global economy.

In this way, derivatives have created new opportunities for speculation based on changes in exchange rates, shares and other financial assets. The notion of globalization is declared as a directed, organized process, through which international networks are networked through international and institutional intermediaries. It follows that this is in fact a simultaneous process of deterritorialization and interaction of international trade in labor, services and capital, with the inevitable support of the global information and communication strategy

The globalization of financial markets, carried out in several phases, implies the loss of national borders achieved by financial transactions and trading at the global level. The first, key phase, which took place in the 1960s, led to the formation of a number of economic integrations, the rapid growth of international trade and the liberalization of financial regulations.

In the eighties of the last century, a greater degree of integration on European soil, deregulation of banking activities, mass implementation of information technologies in banking and the like became more noticeable. The result of the obvious dynamics of development-oriented banks is certainly the accelerated growth of international financial transactions. National markets, too narrow and small for the notion of large banks, remained in the shadows, and banks intuitively turned to the international market in search of higher profits. However, the accelerated development of international finance has been influenced by factors that have their roots in the changes that have occurred, primarily in national banking systems.

The logic of banking, ie. intermediation of the banking system, is a traditional and complex form of centralized hierarchical system. The foundation of a decentralized hierarchical system (financial logic), created by financial globalization, can also be recognized in financial markets. With the introduction of non-bank lending, the practice of financial engineering began. The diversification of the assets of institutional investors has become conditioned by the wide range of assets and the depth of secondary markets.

The global characteristics of the financial system and in the functional sense of financial liberalization have influenced the entry of German, French and other financial institutions into the American and financial services markets and vice versa. Quite diverse development of the so-

called. "New" credit products and other financial innovations had a huge impact on the mentioned processes. Derivative instruments, as new financial products, are designed to be adaptable to the circumstances of the time and the markets in which they are traded. Strategies that primarily use these financial products are designed to present an effective risk redistribution mechanism, as well as a tendency to circumvent regulations and find so-called "holes" in laws. Among the basic postulates of the manifestation of financial globalization, one can certainly single out the number and diversity.

Deregulation of banking activities, which is seen as a process of gradual liberalization of financial flows at the national and global levels, has also affected the development of international banking.

This was especially seen through the possibility of capital transfers across borders, without restrictions. Until the end of the eighties of the last century, the so-called informal deregulation was carried out, until when banks used possibilities that were not prescribed by law, and then formal deregulation of regulations followed. Shortly afterwards, a law was passed in the United States that abolished the division into investment and commercial banks, and thus liberalized the formation of interest rates, both in the United States and in Europe. With the expansion and introduction of information technologies in the banking sector, it has significantly improved. The application of information technologies has also enormously accelerated the processing of a large number of data (Ristić and Živković 2020, 98).

Thanks to this application, the tendencies of banking, as a global market, have become a reality, because the placement of information takes place without geographical and time constraints. The manifestation of global financial integration can certainly be attributed to the former and still valid concept of denationalization of financial flows, the introduction of transnationalization in economic activities, global competition and clustering of the economy. According to (Ristić and Živković 2020, 100) the essence of financial liberalization can be found in the elimination of the state's influence on the direction of loans, interest rates, ownership of bank capital and the free movement of international capital. The thesis is based on the theory that the economy, in which the state directly influences the direction of credit and thus limits interest rates on deposits, results in a decline in savings and investment, as well as inefficient distribution and allocation of funds. The scientific discussion, initiated on these theses, was based on the macroeconomic theory of suboptimal economic behavior. When we talk about freer capital flows, their contribution is based on establishing a price mechanism on a more objective international basis, greater allocative efficiency, competitive discipline, optimizing aggregate savings and investment management, opening capital accounts, and enabling international portfolio diversification. In this way, there is a significant reduction in existing risks, which can be attributed to the positive aspects of financial liberalization and globalization.

The process of financial liberalization, which was joined by a large number of countries in the mid 1970s, had the intention to take advantage of the financial benefits of greater financial integration into the global capital market. However, not all countries have approached the process in the same way. The strategy of rapid financial liberalization applied by one group of countries was treated as shock therapy, while other countries approached this process gradually, relying on a gradualist strategy. The neoliberal turn of economic ideas pointed out and proved that state intervention is a problem, not a solution, and that a stable monetary policy and radical tax cuts certainly produce a healthy economy.

Central banks, under pressure from competitive generators of the global economy, the monetarist direction and the Maastricht Treaty were to follow, establishing a broad neoliberal framework. Unregulated financialization with foreign exchange speculators has forced almost all European governments to loosen the European exchange rate mechanism and look away from the foggy and unexplored role of hedge funds. Deregulation of banking has produced speculative bubbles in the

allocation of loans in the real estate market, as well as the fiscal policy of reducing personal and corporate taxes (in order to encourage investment) (Ristić and Živković 2020, 101). Although banking regulation and supervision are being rewritten and restructured in response to the global financial crisis, their implementation requires complex steps depending on each country's national policy, which could have different effects on bank risk-taking, depending on the financial and institutional environment in which banks operate. (Alihodžić 2021, 56).

2. FUNCTIONAL TRANSFORMATION OF BANKING

In the context of transformational tendencies in banking, we primarily focus on distribution channels (technologies and services) as new ways of establishing contact with clients and in that sense new fields of banking business. The major challenge for traditional banks is to find an ideal balance amongst financial regulations and financial innovations, i.e. between market stability and efficiency. In addition, banks who want to innovate and transform their business model by means of technology and digital communications are facing problems (Krstić and Tešić 2016, 31). The traditional distribution channel, which is basically personal contact, is understood as the basis of banking, but bearing in mind that every contact with the client implies incurring high operating costs so that today's client profile increasingly differentiates personal preferences, banking abandons traditional marketing mix concepts and its business is made more efficient by applying the concepts of digital business transformation. It used to seem that the economic justification of reducing operating costs makes the banking business more profitable, but today's digital tendencies in the financial industry in general make business more competitive and thus more sustainable.

Some authors point out that in the past decade, dramatic improvements and cost-effective networking have enabled a far greater possibility of communication. These technologies have enabled banks to deploy services through all available channels, whereby the need to provide a single corporate network, of adequate capacity, without interruptions in work and delays in data flow is a condition for technology adaptation.

Changes in customer behavior pose both a chance and a threat to a bank. Every bank that has started migrating to digital channels, transforming its physical distribution network and constantly working on improvement of its market strategies, has the opportunity to significantly improve its efficiency ratio (Ristić and Miljković and Klinec 2020, 120).

In this sense, in order to meet the growing number of customer requirements, creation of new distribution models is based on the following imperatives:

- *“a transition must be made from a linear funnel approach (sales funnel approach) to a multichannel approach in rendering services;*
- *it is necessary to re-design the business network in order to achieve the optimal offer through the use of different types of formats and channels;*
- *Banks must improve and amplify direct communication of high quality with clients, because this is so-called “front line”.*
- *follow the trend of multi-channel integration, with the aim of acquiring clients who will be able to use each individual channel, without exclusive choice (so-called channel-agnostic).*
- *differentiate clients*
- *ensure the security of transactions”*

Former alternative channels take the initiative and become direct and primary channels. Banks are increasingly migrating their products to the digital arena. This reduces costs, increases the speed of distribution and the reach of offers, and users have more and more advantages and benefits because prices are lower and the possibilities of using banking products are greater.

However, the tendency of digital transformation of business based on innovation represents an additional challenge of adjustment for many financial and banking sectors, in terms of the volume and dynamics as well as a dilemma about the depth and comprehensiveness of digitalization of certain operational activities. For some systems, innovation is the key to success, for others it may be a path to wider macroeconomic asymmetries and distortions.

Therefore, at this moment, certainly the key issue is regulation, which is the *sine qua non* of the global tendencies that we have mapped. The problem gets even bigger since all the relevant financial innovations and initiatives "operate on the bottom up principle", thus they start from the market and needs or represent the result of following the trends on a diffuse basis. If we were to apply such services at later stages it could create problems that we cannot always fully anticipate and thus necessarily create conditions for financial vulnerability and intervention of the central regulator.

In the following overview, we will provide the framework for the regulation of initiatives and innovations in the field of digitalization of banking services that currently exist in certain banking systems.

3. DIGITAL BANKING IN THE EU: REGULATORY FRAMEWORK

The existing institutional mechanisms, in the conditions of the global financial crisis, but certainly in the period after, have proved insufficient and inadequate for solving the problems of banks that have faced serious difficulties in their operations. Given that they did not provide opportunities for sufficiently fast and efficient intervention, nor did they provide optimal conditions for maintaining critical functions in the bank's operations, the concrete conclusion is that there was no framework, draft or plan to preserve the financial stability of the system as a whole (Ristić and Živković 2020,78).

European banking as well as the general market of financial services is one of the highly regulated areas of economic and financial functioning of this package. However, despite these regulations, the capacity, depth and breadth of the EU financial market, the level of development of European society and economy generates innovations that exist in and out of the regulatory framework, in correlation with the latest trends in financial innovation and contribute to further development in general. The above primarily refers to the world of digital services and services in the field of finance honoring the latest technologies, as well as the increasingly sophisticated concept of consumerism of financial services.

In this context, and based on extensive public consultations and discussions on digital finance, the EU Commission adopted a digital finance package late last year, including a digital finance strategy and legal proposals on crypto-assets and digital resilience for a specific financial sector of the EU that gives consumers access to financial products, while ensuring consumer protection and financial stability.

The package supports the EU's ambitions for a recovery that encompasses the digital transition. This strategy "lies" in the view that digital finance can help modernize the European economy in all sectors and turn Europe into a global digital player. This strategy supports a set of measures and steps that anticipate the dynamics, speed and guidelines of the digital transformation in the coming years, including risk analysis and consumer protection in the first place. The strategy defines four main priorities in the field of supporting the digital transformation of financial operations, namely:

1. removing fragmentation in the single digital market,
2. adapting the EU regulatory framework to enable digital innovation,
3. promoting data-driven financing and addressing the challenges and risks of digital transformation, and
4. increase the digital financial resilience of the financial system.

Acceptance of digital finance would free up additional space for further financial innovation, greater social compatibility, possible reduction of potential market asymmetries and moral hazard, and greater social inclusion.

The biggest effect would be in the field of financing small and medium enterprises, which are the focus in the concept of development of the EU economy defined by the Europe 2030 strategy, support the idea of "greening" EU finances and expand the scope of EU industrial development strategy.

As digital finance accelerates cross-border operations, they also have the potential to improve the integration of the financial market into the banking union and the capital market union, and thus to strengthen the European Economic and Monetary Union. Digitalisation is rapidly changing how business is done, transforming capital markets and making financial services more easily accessible and more easily executed (Ahern 2021, 430).

A strong and vibrant European digital finance sector would strengthen Europe's ability to strengthen our open strategic autonomy in financial services, and thus our capacity to regulate and supervise the financial system to protect European financial stability and our values. Legislative proposals on using the opportunities offered by cryptocurrencies serve to mitigate investor risk and maintain financial stability. In this regard, the Commission therefore proposes a framework for cryptocurrencies to enable innovation in a way that preserves financial stability and protects investors.

Crypto-assets are digital representations of values or rights, which are transmitted and stored electronically. They can serve as a key to accessing the service, could facilitate payments or can be designed as financial instruments.

The Commission distinguishes between those crypto assets that are already regulated by EU legislation and other crypto assets. The former will remain subject to existing laws, but the Commission is proposing a pilot regime for market infrastructures that opt to trade and settle transactions by means of such financial instruments in the form of crypto assets. This should allow market participants and regulators to gain experience in using DLT exchanges to trade or record shares or bonds on a digital book.

For previously unregulated cryptocurrencies, including "stable coins", the Commission is proposing a tailor-made regime. The proposed regulation sets strict requirements for cryptocurrency issuers in Europe and cryptocurrency service providers wishing to apply for authorization to provide their services in the single market. Safeguards include capital requirements, safekeeping of assets, mandatory complaint procedure available to investors, and investor rights vis-à-vis the issuer. The EU aims to further develop the European payments market so that Europe can fully benefit from the innovation and opportunities offered by digitalisation.

The strategy focuses on creating conditions to enable the development of current payments and payment solutions across the EU; consumer protection and providing secure payment solutions; and reducing Europe's dependence on major global actors in this field.

Digital transformation in the banking sector is a continuous process that affects both the external and internal environment by redesigning internal processes and existing methods. There are many reasons that digital transformation takes place, such as servicing remote areas without physical branches, differentiation from competitors or reduction of operating costs. In any case, there is a lot of doubts about the acceptance of digital technologies (Fotis and Giatsidis and Kamariotou 2021, 204).

Digital banking options and decentralized payment systems are appearing everywhere and offering investors, travelers, freelancers, small business owners a completely different experience in money. As a result, the number of banks they can choose from has become huge, and many people are at the crossroads of choice, trying to decide what is best for them. European challenger banks differ in terms of fees, security and support for different funds and investment services.

Given the initiatives are always first ratified by the EU Commission, the impression is that the ECB does not play any role formally or substantially in the regulation of these matters. Such practice is evident throughout the entire history of the functioning of the ECB, which almost always appears in the final phase as the mere "last reactor". However, it is also possible to defend the neoliberal bastion in the functioning of the ECB as a "last resort" bank.

4. QUANTUM FINANCE IN USA: AN INITIATIVE

Some authors said that in addition to the controversies that are still going on academically in the United States, we can state that a new world of finance is "blooming" in parallel (Sonnenfeld 2021). A new system is emerging which, with the appropriate structure, returns financial control to the hands of the people. The Quantum Financial System (QFS) is building a Virtual Private Network (VPN) for the Cross-Border Interbank Payment System (CIPS).

It is a network based on sovereignty and trade. To coordinate national research efforts involving federal agencies, academia, and industry leaders that are already underway, the National Office for Quantum Coordination at the White House released the Strategic Vision of U.S. Quantum Financial System Networks in February last year (2020). In short, QFS provides "inviolable integrity" in the movement of funds from central bank sources to destination accounts.

This means that the key benefit of QFS is to protect all parties from corruption, loan-sharking and manipulation within the banking system and to ensure that banks are supervised and protected with respect to the agreed transfer agreement.

As this author also stated, the whole system can support economic development that does not include banks, speaking of the so-called global financial sovereignty (the predecessor is found in the system of "open banking" (Sonnenfeld 2021).

It is crucial to note that with an appropriate accounting system, national banks, regional banks and umbrella banks (banks that provide all types of financial services) can play a key role in large infrastructure projects (design of roads, schools, towns and villages, etc.), while independent groups can incorporate their own components into vital infrastructure that are not burdened by financial intermediaries, such as small agricultural cooperatives, alternative energy networks, and alternative supply chains (Sonnenfeld 2021).

Quantum finance is an interdisciplinary field, in which theories and methods developed by quantum physicists and economists are applied to solve financial problems. It represents a branch known as econophysics. Although quantum computational methods have been around for quite some time and use the basic principles of physics to better understand the ways to implement and manage cash flows, it is mathematics that is actually important in this new scenario (Bagarello and Gargano 2014, 30).

In the case of an interest-free system, it must be established that an appropriate "reset" means that there is no dependence on credit or debt that results in the excessive conversion of assets into financial instruments ("overfinancialization") (Sonnenfeld 2021).

In other words, we do not have to add unnecessary units and zeros to our transactions or the ways in which we create or produce the assets that we want to redistribute and from which we independently generate income (Sonnenfeld 2021). This brings us back to the use of artificial intelligence (AI). AI-applied automation can be used to more efficiently use cost-saving gains in supply chain production, and AI calculations can be used to amortize the risk of adverse effects (externalities) arising from assets created, converted into financial instruments and distributed for market needs.

In short, financial assets are treated in such a way that they are not separated from their sustainable real-world utilities, in order to cover all the changing environmental values that ultimately determine its value.

As the author pointed out, there is a potential lack of tokenized digital currencies in this monetary ecosystem, and that is that they generally have to be designed to be entirely quantum tolerant. In other words, the goal is to monitor and preserve the natural value of each asset by amortizing the risk in real time (Sonnenfeld 2021).

At this point, it is not clear how exactly QFS is booked and in which specific book-keeping system. Meanwhile, the institutional redemption of bitcoin stocks is a signal that a real battle is taking place to control the financial system.

Regardless of how this will play out, it is clear that there are many options for booking and structuring assets that are commensurate with the changing conditions we face around the world. The author believes that the set of emerging global currencies may respond to these socioeconomic and socioecological variants. QFS is claimed to be the "undisputed ruler" in photon technology at 3.5 trillion frames per second. This replaces the outdated dynamic IP routing with real physical authentication using GPS between sender and receiver, while maintaining "100% financial security and transparency for all currency holders" (taken from Sonnenfeld 2021).

CONCLUSION

Functional transformation is certainly a global process, making this "pathway" inevitable. The pace along this pathway and adaptation to change will depend on the capacity of national economies, the stability of the financial system and the capacity of institutions. Digitization is based on the mechanisms of inclusion, innovation and efficiency and thus allows the assumption of impact on the broader context of economic and sustainable development, but reviewing certain institutional solutions, practices and proposals in this paper we find different approaches based on different opportunities and macroeconomic diversity. It is obvious that such conditions are inevitable, unavoidable and increasingly present in the future will have to have a global tone, given that in a real context we live in a world of integrated financial systems.

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