



**ISCTBL 2023**  
INTERNATIONAL SCIENTIFIC CONFERENCE

Универзитет „Гоце Делчев“ –  
Штип

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Факултет за туризам и бизнис  
логистика

**Faculty of Tourism and  
Business Logistics**

**Шеста Меѓународна Научна Конференција  
Sixth International Scientific Conference**

**ПРЕДИЗВИЦИТЕ ВО ТУРИЗМОТ И БИЗНИС  
ЛОГИСТИКАТА ВО 21 ВЕК  
CHALLENGES OF TOURISM AND BUSINESS  
LOGISTICS IN THE 21ST CENTURY**

**ЗБОРНИК НА ТРУДОВИ  
CONFERENCE PROCEEDINGS**



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19 мај 2023 г. / May 19, 2023

**Издавач:**

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Тел: +389 32 550 350  
[www.ftbl.ugd.edu.mk](http://www.ftbl.ugd.edu.mk)  
[www.ugd.edu.mk](http://www.ugd.edu.mk)

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**Организатор на конференцијата:** Факултет за туризам и бизнис логистика

**Уредник:** д-р Татјана Бошков, декан

**Тираж:** 146

**Година на издавање:** 2023

**Publisher:**

Faculty of Tourism and Business Logistics  
Goce Delchev University of Shtip  
“Krste Misirkov” no.10-A P.O. Box 201 Shtip 2000, North Macedonia  
Tel: +389 32 550 350  
[www.ftbl.ugd.edu.mk](http://www.ftbl.ugd.edu.mk)  
[www.ugd.edu.mk](http://www.ugd.edu.mk)

**For the Publisher:** Tatjana Boshkov, Ph.D. – Dean

**Conference Organizer:** Faculty of Tourism and Business Logistics

**Editor:** Tatjana Boshkov, Ph.D. – Dean

**Print circulation:** 146

**Year of publication:** 2023

CIP - Каталогизација во публикација  
Национална и универзитетска библиотека "Св. Климент Охридски", Скопје

338.48(062)  
658.6/.8:164(062)

МЕЃУНАРОДНА Научна Конференција (6 ; 2023 ; [Штип])

Предизвиците во туризмот и бизнис логистиката во 21 век : зборник на трудови / Шеста меѓународна научна конференција, 19 мај 2023 ; [уредник Татјана Бошков] = Challenges of tourism and business logistics in the 21st century : conference proceedings / Sixth international scientific conference, May 19, 2023 ; [editor Tatjana Boshkov]. - Штип :

Универзитет "Гоце Делчев"- Штип, Факултет за туризам и бизнис логистика = Shtip : University "Goce Delchev" -Shtip, Faculty of tourism and business logistics : Факултет за туризам и бизнис логистика = Faculty of Tourism and Business Logistics, 2023. - 260 стр. : илустр. ; см

Фусноти кон текстот. - Трудови на мак. и англ. јазик. - Библиографија кон одделни трудови. - Abstracts

ISBN 978-608-244-977-7

а) Туризам -- Собири б) Синцир на снабдување -- Логистички системи -- Собири

COBISS.MK-ID 60512517

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**ШЕСТА МЕЃУНАРОДНА**  
**НАУЧНА КОНФЕРЕНЦИЈА**

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19 мај, 2023, Скопје / Skopje, May 19<sup>th</sup>, 2023







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**СЕСИЈА: БИЗНИС ЛОГИСТИКА И БИЗНИС АДМИНИСТРАЦИЈА**

**SESSION: BUSINESS LOGISTICS & BUSINESS ADMINISTRATION**

## **FINANCIAL DIGITALIZATION AND ECONOMIC GROWTH: RECENT DEVELOPMENTS IN BANKS AND FINTECH**

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### **Abstract:**

High technology enables payment evolution and global competition. The ambiguity surrounding the digital currency still leaves ample room for analysis of its unreserved acceptance, trust and anticipation, which are the main drivers of the network's spread. Bitcoin and other cryptocurrencies have the potential to replace traditional and new forms of payment. But to achieve this and become a dominant force in the global payments system, they must provide distinctive individual value, address and overcome a number of critical challenges, such as formal regulatory issues. Banks should take a close look at the technology underlying these cryptocurrencies as a potential generic new way to transfer ownership of value in the long term.

The objective view is that the future of digital currency is currently still an open question due to the existence of a "critical mass". The research showed that the future of cryptocurrencies can be bright if some institutional-formal conditions are met due to the fact that the successful evolution of e-money requires building security payments through three criteria – standardization, compatibility and innovation.

Also, the partnership between Fintech companies and banks is an already implemented formula that bears fruit, but we must not leave out the fact that all developed countries in their platforms, in addition to connecting banks, implement the platforms with the direct participation of e-Government and the concept of interoperability.

*Keywords: digital currency, banks, Fintech, economy.*

### **1. Introduction**

Electronic money is not a new phenomenon. Online commerce has increased the use of new technologies, thereby increasing the demand for new electronic payment methods. What is really new is electronic payment in retail and the use of the Internet as a new monetary market. Today money becomes ready information on the microprocessor or in the database. Without a doubt, the purpose of such an instrument is to improve the efficiency of the traditional payment method. At this moment, there are still no clear standards in the Blockchain mechanism and therefore we do not know the boundaries, so participants can easily communicate without the presence of a regulator. Behind Blockchain technology is the universal Internet currency, which in turn raises many questions about the use of advantages and risks/damages that would arise from the application.

High technology enables payment evolution and global competition. However, the ambiguities surrounding the use of the digital currency leave enough room for analysis of its unreserved acceptance, trust and anticipation, which are the main drivers for the spread of the network. Specifically, network expansion requires demand interdependence, meaning that the Network must reach a minimum required volume before reaching equilibrium. The minimum volume of the network is called "critical mass". Therefore, the objective view is that the future of digital currency is currently still an open question due to the existence of a "critical mass".

Furthermore, the paper explores financial privacy which is a very sensitive issue when using digital currency (or cryptocurrency). The successful evolution of e-money requires building secure payments through three criteria – standardization, compatibility and innovation.<sup>1</sup>

The diffusion that digital currency brings in the modern era amplifies antitrust issues related to network externalities and global competition between the world's most researched currencies. This is the reason to include in further analyzes an overview of social costs and benefits, as possible risks of using digital currency. This means that in order to remain compatible with each other, all users must use software that meets the same rules. Therefore, all users and developers have a strong incentive to protect this consensus and set up a regulator.

Finally, the paper considers the question – is there any prospect of taking the technological revolution and the monetary evolution hand in hand without risks in the real world?!

## **2. The general regulation on data protection and digital banking**

After one year has passed since the implementation of the General Data Protection Regulation (GDPR), an analysis has been made of how the transition to a new data protection regime was marked in the past period and what are the consequences for digital banking.<sup>2</sup> It is no coincidence that the General Data Protection Regulation has created a bigger and more challenging regulatory landscape, which opens up new opportunities for the digital banking sector.

While the legislation has undoubtedly resulted in a more demanding regulatory landscape, many of the initial fears, such as maximum fines for data breaches, are not evident. Also, regulation is largely well integrated into the financial services sector.

But what is more significant is that the increasingly digitized banking sector is more dependent than ever precisely on consumer trust - especially, with the advent of open banking, which makes it even more critical to ensure the right to data privacy and cyber security. In that context, opportunities have arisen in five key areas as a result of the General Data Protection Regulation and the rise of data protection.

The General Data Protection Regulation has improved the already high standards of European financial firms in handling customer data. As a result, this regulation has helped foster greater confidence in financial institutions. Also, this situation has set a useful example for other countries looking to integrate additional privacy and data protection measures into their financial systems. With jurisdictions such as California, Brazil and India seeking to adopt laws that offer similar protections to the General Data Protection Regulation (GDPR), such as California's Consumer Protection Act, banks in England and financial technology (Fintech) firms are leading. This is likely to have a global impact, feeding into the standards being assessed around the world and encouraging the growth of digital banking, fueled by high levels of consumer trust in technology and data protection.

A year after the General Data Protection Regulation (GDPR) came into effect, banks and fintechs have the resources and expertise to turn regulatory compliance into an advantage.

The General Data Protection Regulation has prompted compliance to strengthen data use and management practices and security procedures. At the same time, he emphasized the control of personal data from customers, transferring the power to consumers. Open banking has just come into force at the time of the implementation of the General Data Protection Regulation, which has opened the way for many new digital banking products and services from non-traditional providers.

Under the General Data Protection Regulation, consumers can choose which service providers have access to their data, the extent of information shared and the time period for which the data can be accessed. Therefore, the dual push of the General Data Protection Regulation and open banking puts digital banking customers in an enviable position, enabling them not only to protect their data, but also

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<sup>1</sup> Cohen, B. J., 2004. *The future of Money*, chapter seven. Princeton: Princeton University Press.

<sup>2</sup> Buffard, Sally, *The General Data Protection Regulation – a practical guide for trade unionists*, Labour Research Department Booklets, March 2018

an intermediary in the exchange of goods and services. An e-money card is a different payment method that enables the electronic transfer of value from card to terminal or from card to wallet, both in real time and over networks.<sup>9</sup> E-money is considered to be the most important development that transfers the predetermined monetary value so that it can be used for more transactions of lower value. "E-pocket" consists of a microcomputer that contains information about the monetary value that can be used. It is a higher level of technological development compared to magnetic stripe cards. Also, an e-purse is more secure, which can reduce fraud because chip cards can be more difficult to abuse than magnetic stripe cards.

### **5. The role of central banks and the emergence of central bank digital currency**

How should central banks and monetary policy be positioned towards the newly designed service economy?

The rise of crypto-assets and the wider adoption of Distributed Ledger Technology (DLT) point to opportunities for wider access to payment services. If crypto-assets gain a leading role, the demand for money from central banks is likely to decrease. Will this change reduce the CB's ability to control short-term interest rates? Central banks normally conduct monetary policy by setting short-term interest rates in the interbank market for reserves, so ceasing to be a monopoly supplier of such reserves would deprive them of the ability to conduct monetary policy. In finding a solution for how central banks should respond to the competitive pressure from cryptocurrencies on fiat currencies, it would initially be to strive for better and more stable units of account. No less important are the government authorities that have to regulate the use of crypto-assets due to regulatory arbitrage that usually results from easier regulation. This implies rigorous application of measures to prevent money laundering, strengthening consumer protection as well as effective taxation of crypto transactions. Also, central banks should make money user-friendly in the digital world by issuing digital tokens on their part to complement physical cash and bank reserves.<sup>10</sup> Such central bank digital currency can be exchanged "peer to peer" in a decentralized manner. This is actually the new current experiment with central banks.

Central banks around the world are experimenting with the Central Bank Digital Currency. A CBDC is a digitized version of a domestic currency where a central bank issues new money equivalent to, and redeemable for, its domestic currency, using DLT technology. There are "retail" CBDCs for peer-to-peer payments and payments from consumers to merchants. This form should encourage participation in the banking sector, improve KYC/AML functionalities and prevent illegal activities. CBs in the Eastern Caribbean, the Bahamas and Cambodia are experimenting with it. There are also "wholesale" CBDCs for use by commercial banks and clearing houses for more efficient interbank payments that occur outside of traditional correspondent banking and other payment systems. CBs experimenting with this version include South Africa, Canada, Japan, Thailand, Saudi Arabia, Singapore and Cambodia, while Sweden is evaluating both forms of CBDC, according to BIS research.<sup>11</sup> The Bank of Thailand and the South African Reserve Bank are examples experimenting with CBDCs for efficient interbank payments and settlements. The Eastern Caribbean CB is exploring the suitability of DLT for a number of purposes, from financial inclusion and payment efficiency to payment system resilience in shocks and crises. The National Bank of Cambodia in the second half of 2019 will be one of the first to use blockchain technology in its national payment system for use by consumers and commercial banks and will test financial inclusion.

Another incentive for the implementation of the CBDC is the preservation of the independence of the central bank. Namely, CBDC can help counter monopoly power where strong network externalities can

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<sup>9</sup> Chakravorti, S. and Victor, L., 2006. "Payment instrument choice: The case of pre-paid cards". *Economic Perspectives*, 2Q, 29-44.

<sup>10</sup> Tapscott D, McQueen R. *The Digital Economy: Promise and Peril in the Age of Networked Intelligence*. New York, NY: McGraw Hill (1996).

<sup>11</sup> BIS. 2020. Central Bank Digital Currencies : Foundational Principles and Core Features. Bank of International Settlements. <https://www.bis.org/publ/othp33.pdf>



money is being used for such purposes. This is most evident in climate change regulation where an impressive array of EU rules, including taxonomy and disclosure requirements, is becoming a huge compliance challenge for many firms operating in the European Union. Analyzes show that England is pursuing its own agenda and developing an ambitious approach where divergence from EU rules creates its own challenges.

The change in regulation in the European Union and England will create risks, burdens and opportunities for the firms that fall within the scope. The new disclosure requirements are likely to be difficult to meet, but the change in investment rules may play to the strengths of certain businesses. Firms need to get to know and convince policy makers to understand what is practical and effective for them. One focus for regulators will be on how to reduce levels of financial crime and keep investors safe. Investor losses caused by the fall in cryptocurrency prices have been part of the story, but there have been a number of scandals of lapses that have gone against regulators and thereby shaken investment confidence. In the EU, there is a package of measures under development that refers to the prevention of money laundering. The aim is to ensure a more harmonized approach across the single market and also to create a new EU-wide regulator to improve supervision. This will likely mean increased compliance costs and deeper analysis for those affected.

## 8. Conclusion

Advances in information and communication technology have enabled the development of new forms of electronic payment, both in the real world with cards and in the virtual world (software products). The reason for the increasing prevalence of these products is precisely their great perception in relation to the traditional method of payment. However, statistics confirm that the evolution of e-money is in its infancy and that cash is still the most important payment method for retail transactions. Cash has not yet been replaced by any form of electronic payment. One of the reasons is precisely the fact that e-money is a rather sophisticated payment method that requires some investment in new technology among retailers, as well as developing new experiences among users. Therefore, the use of electronic money does not extend significantly.

Considering the success of cryptocurrencies, there is an opinion that consumers, consortia or large financial institutions will not be successful in launching cryptocurrencies. Furthermore, it is believed that its success will be greater if digital currencies are launched by central banks. So, we should think about using this tool for greater efficiency for the world economy, support rather than understanding them as an opportunity to disrupt the financial system. In detail, the central bank has the power to bring participants together and will increase the attractiveness of fiat money for exchange in clearing, payments and settlements. At this point, some experts have raised two questions according to cryptocurrencies and central banks. The first is related to the depth and precision of the policy and economic implications of launching a central bank-issued cryptocurrency. The second edition is focused on the impact of central bank-issued cryptocurrencies on the banking system.

The events of 2022 have shown that energy security and costs are Europe's top priority. In that direction, politicians reacted quickly to support markets and consumers. When it comes to financial services, there are three main concerns. First, whether investments can be increased to reduce dependence on fossil fuels in general, and Russian gas in particular. Second, markets to be delivered efficiently for European consumers. Third, could turbulence in the energy market lead to turbulence in financial markets, as seen in markets such as the London Metal Exchange.

The first concern has increased the urgency around creating a regulatory framework to increase investment in non-fossil fuels. Regarding the second point, the effort for direct intervention of the authorities in the markets is increasing, especially in the EU. This is undesirable for those firms active in energy markets where price caps and publicly produced financial instruments (such as price benchmarks) are likely to distort markets and may undermine confidence if not properly matched.

As for the third concern - about the risk of shifting from energy markets to financial markets - it is likely to be a challenge. This is meant especially for those firms that prefer to avoid operating under the burden of financial regulation. Without proper calibration, the new measures are likely to increase the cost of operating energy markets and lead to higher energy costs.

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