



THE 19TH EDITION OF THE INTERNATIONAL CONFERENCE  
EUROPEAN INTEGRATION  
REALITIES AND PERSPECTIVES

## Legal Implications of E-Government - FinTech Interaction. Comparative Legislative References at the European-Spanish-Romanian Level

Nicolae Pană<sup>1</sup>, Antonio Tirso Ester Sánchez<sup>2</sup>

**Abstract:** New technologies, especially those related to the FinTech phenomenon, are developing in a legal framework that is tested by the new-necessary interaction. On the one hand, it is obvious the need to face the current challenges generated using technologies, and on the other hand, the legal systems must continuously adapt to protect the parties that interact in this system. The integration of increasingly revolutionary technologies in the governmental field gave birth to what we call e-government, and FinTech comes to rank among the first priorities of society through aspects related to transparency and responsibility, compliance with financial regulations, regulation of financial transactions online, cyber security and data privacy. All these represent key points around which the European legislation is created and even more important, the transposition of this legislation into the national legislation of the European states.

**Keywords:** FinTech; financial markets; financial services; digital finance; cryptocurrency; digital law

### 1. An Approach to the Concept of FinTech

The term FinTech comes from the conjunction of the English words finance and technology. This concept refers to all those companies that, through innovative technologies, design, offer and provide financial products and services to consumers. This reality encompasses the technological advances present in the provision of financial services that have become daily, such as making a payment through Bizum (Transfond in Romania, or PicPay, Green Dot, PalmPay, PhonePe in other countries), making a bank transfer through an online application, investing in cryptocurrency, having an e-wallet, etc...

FinTech activities are not only developed by those financial entities founded with the purpose of offering multiple technological financial products and services, but also include those consolidated financial entities that are in the process of digital transformation. FinTech companies take advantage of the latest technological trends such as artificial intelligence, data analysis, blockchain, and automation to offer more efficient, accessible and personalized financial solutions.

The origin of FinTech is questioned. For some authors it is a reality that has been present since the beginnings of financial institutions themselves. Evidence of this was the installation of the first ATM in

<sup>1</sup> Danubius International University, Romania, Address: 3 Galati Blvd, Romania, Corresponding author: Nicolaepana@univ-danubius.ro.

<sup>2</sup> Universidad de Las Palmas de Gran Canaria, Spain, Address: C. Juan de Quesada, 30, 35001 Las Palmas de Gran Canaria, Las Palmas, Spain, E-mail: tirso.ester@ulpgc.es.



Copyright: © 2024 by the authors.  
Open access publication under the terms and conditions of the  
Creative Commons Attribution-NonCommercial (CC BY NC) license  
(<https://creativecommons.org/licenses/by-nc/4.0/>)

1939, which was not accepted until 1967, or the digitization of the NASDAQ in the 1970s. However, another current determines that FinTech began in 2009 with the birth of Bitcoin. In any case, this phenomenon is born from the result of the convergence of technological advances and their application within the financial sector. Its evolution has been a gradual and collaborative process that has involved numerous financial agents and technology companies from around the world. The evolution of financial technologies in recent decades has made FinTech one of the most relevant phenomena in the digital transformation of the financial sector.

According to the „Financial Technology Research Report” conducted in February 2017 by the International Organization of Securities Commission (IOSCO), the term FinTech is used „to describe a variety of innovative business models and emerging technologies that have the potential to transform the financial services sector”<sup>1</sup>. The innovative business models referred to in the report are those that „offer specific financial products or services in an automated manner through the use of the Internet”<sup>2</sup>. In this way, they disaggregate the different financial services traditionally offered by banks, stockbrokers or investment managers. In this case, crowdfunding platforms, peer to peer (P2P) lending platforms, robo-advisors offer automated investment advice.

It should be noted that the FinTech concept is in the definition phase as it is a relatively new reality. In practice, activities are included that imply technological development in the financial sector, providing value that differentiates it from the way of acting of traditional business models. By consensus, the FinTech concept is accepted as that technologically enabled financial innovation that gives rise to new business models, applications, processes, services and products, which are producing a material effect in markets and financial institutions and in the provision of financial services.<sup>3</sup>

Within the existing typology of FinTech financial products and services, we can distinguish between those that have historically been offered by traditional financial entities, and between those products and services that are recently created:

- a) financing of individuals and companies;
- b) money transfer;
- c) advice on investments and personal finances to the user;
- d) collection and payment systems through mobile devices;
- e) investment platforms: dedicated to solidarity or economic finance;
- f) personal finance systems through apps;
- g) P2P loans, crowdlending, crowdfunding;
- g) factoring; and
- h) financial comparators of deposits, mortgages and other financial products and services.

In short, the identifying elements of FinTech are „innovative technological approaches, efficiency in providing financial products to consumers, and a substantially improved experience adapted to their growing demands”.

<sup>1</sup> International Organization of Securities Commission (IOSCO) - Financial Technology Research Report: [ijibm.site666.com/IJIBM\\_Vol12No4\\_Nov2020.pdf](http://ijibm.site666.com/IJIBM_Vol12No4_Nov2020.pdf).

<sup>2</sup> Idem.

<sup>3</sup> Green Digital Finance – Mapping Current Practice and Potential in Switzerland and Beyond – september 2018 – Discussion Paper - <https://wedocs.unep.org/bitstream/handle/20.500.11822/34499/GDF.pdf?isAllowed=y&sequence=1>.

## **2. Advantages and Risks for Consumers and Users of FinTech Products and Services**

The implementation of technologies in the financial sector implies a series of advantages and a set of risks both for the financial entities that offer their products and services and for the financial users and clients who hire them. Among its advantages, it is worth highlighting the immediacy and an increase in efficiency in customer service who no longer have to travel to a branch and can be served virtually in a direct, transparent and personalized manner. You gain flexibility since FinTech allows you to carry out financial operations anywhere in the world and at any time of the day. Among other favorable factors to consider are the reduction of costs in the commissions generated using certain financial services, the increase in the creation of financial entities and with this increase's competition in the financial market, the improvement of intermediation services and strengthening financial inclusion. In this sense, we should not overlook the advantage of the democratization of FinTech by offering the possibility of investing in certain financial sectors that were traditionally limited to a small set of investors, as is the case with the rise of crowdfunding in the real estate market.

Although the multiple advantages of FinTech are indisputable, we are also aware that the use of these technologies in the financial market implicitly entails a series of risks and challenges produced by multiple causes, such as the limitations of the resources allocated to supervision and control by financial entities, and by the risks linked to the nature of the market. In short, there will be risks that directly impact the interests of consumers and users of financial services and products. Among the existing risks, it is worth highlighting first the lack of security given that the FinTech market is exposed to multiple threats and cyber-attacks. Security breaches in FinTech platforms could result in the exposure of sensitive information and loss of funds for consumers. Another risk factor related to legal certainty is the lack of uniform regulation in the FinTech financial field, which can lead to gaps in security standards and consumer protection.

This technological development present in the financial sector makes it possible for the offer of financial products and services to be accessible to all sectors of society, although it will be the “millennials” who start with a greater advantage as they are familiar with the use of the Internet and the new technologies. However, there are certain sectors of the population that are isolated from this reality as they are not in optimal vital or socioeconomic conditions, such as those groups that lack economic resources and do not have sufficient means to purchase necessities, and much more. less, to acquire computing devices. Those people who may suffer from some type of addiction or cognitive and psychological alienation are also on the margins of this reality.

It is a frequent fact that within the elderly group, attitudes of resistance, or even rejection, can be experienced in the face of these technological changes, which will lead them to develop a life far from such advances and being excluded from the benefits it offers this digital transformation. The concept of financial exclusion was defined in 2008 by the European Commission as „the process by which people encounter difficulties in accessing and/or using financial services and products that are appropriate to their needs and that allow them to lead a healthy life, normal social situation in the society to which they belong”<sup>1</sup>. Recently, and in the face of this pressing reality, financial entities are implementing financial inclusion protocols and actions focused on guaranteeing personalized attention to elderly consumers and users.

---

<sup>1</sup> Research note 3/2010 – Financial Exclusion in the EU – New evidence from EU-SILC special module, European Centre for the European Centre for Social Welfare Policy and Research (AT), ISER – University of Essex (UK) and Tárki (HU): <https://ec.europa.eu/social/BlobServlet?docId=9817&langId=en>.

To the above we should add the complexity that exists in the management of FinTech platforms, the lack of understanding of the instructions for use, the confusing legal clauses and the novel terminology produces rejection by consumers who do not see transparency or good intentions for part of financial entities to close this technological gap. It is important to promote the responsible use of these technologies by undertaking educational actions both in the field of finance and in the management of financial platforms. Only a clearly prepared and informed consumer will be able to make sound financial decisions. Another relevant negative factor is the existence of FinTech investment products with a high risk of property losses. Investment in cryptocurrency, considered a high-risk asset due to its complexity and high volatility, is not a recommended investment, as is the case with CFDs, binary stocks and other derivative financial products that can make us lose everything invested instantly.<sup>1</sup>

Consumers will have the individual responsibility to inform themselves about contracting financial products and services. Only with exhaustive knowledge will they be able to take advantage of the advantages and reduce the risks that exist in this type of product.

Based on the above, it is necessary that the client of the sector financial, take into consideration the most frequent recommendations<sup>2</sup>:

- a) understanding the legal terms and conditions of financial products and services;
- b) do not reveal passwords under any circumstances, modify them from time to time and enable various authentication measures;
- c) review bank account movements to detect fraudulent charges;
- d) compare multiple entities before choosing a financial product or service; and
- e) inform yourself about cybersecurity threats.

Balancing the benefits and risks that come with using financial technology has the potential to improve the lives of consumers, but it is essential to approach the risks cautiously and make informed and safe financial decisions. These FinTech solutions have simplified many financial operations, reducing the bureaucracy, costs and inconveniences of traditional financial systems. The convenience of carrying out financial operations from mobile devices and the personalization of services have been highlights of the adoption of FinTech technology. States have a great responsibility in adapting regulations and adapting the appropriate supervisory measures to protect the rights and interests of consumers and users of FinTech products and services.

### **3. The European, Spanish and Romanian Regulations Applicable to the Protection of Consumers and Users in FinTech Products and Services.**

The protection of consumers and users of FinTech products and services is a matter of utmost importance for the EU and states like Spain and Romania. As the FinTech industry continues to expand, regulatory authorities have implemented a series of regulations to safeguard the interests of consumers and financial users. This legislation focuses on the relationship between financial products and services and interactions with users and consumers, addressing related issues such as the right to information, the

---

<sup>1</sup> Ernst & Young Global Limited - Riscurile fiscale pentru platformele online si lucuratorii care activeaza in cadrul acestora - [https://www.ey.com/ro\\_ro/tax/riscuri-fiscale-pentru-platformele-online](https://www.ey.com/ro_ro/tax/riscuri-fiscale-pentru-platformele-online).

<sup>2</sup> European Parliament - Financial Technology REPORT: The Impact of Technology on the Future of the Financial Sector - [https://www.europarl.europa.eu/doceo/document/A-8-2017-0176\\_RO.html](https://www.europarl.europa.eu/doceo/document/A-8-2017-0176_RO.html).

payment system, payment protection, crowdfunding, abusive clauses, and others realities linked to the financial field that are directly related to the FinTech phenomenon.

In relation to the EU regulations that apply in the field of consumer and user protection in financial products and services, it is essential to highlight the following provisions:

- *Directive 2013/11/EU of the European Parliament and of the Council of 21 May 2013 on the alternative resolution of consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC*, as its object establishes, contributes, through a high level of consumer protection, to the proper functioning of the internal market, guaranteeing that consumers can file complaints against traders before entities that offer alternative resolution procedures of independent, impartial, transparent, effective, fast and fair litigation.

- *Directive (EU) 2015/2366 of the European Parliament and of the Council, of November 25, 2015, on payment services in the internal market*. This Payment Services Directive (PSD2) establishes a regulatory framework for payment services in the EU. Introduces measures to improve the security of electronic transactions and promote competition and innovation in the sector. Among other things, it requires strong customer authentication to increase transaction security.

- *Regulation (EU) 2016/679 of the European Parliament and of the Council, of April 27, 2016, regarding the protection of natural persons regarding the processing of their personal data and the free circulation of these data (RGPD)*. Although it is not specifically a specific regulation for FinTech's, this is a fundamental regulation that affects all companies that handle personal data, including FinTech's. It establishes strict rules on the collection, processing and protection of consumers personal data.

- *Directive (EU) 2016/97 of the European Parliament and of the Council of January 20, 2016, on the distribution of insurance*. It regulates the distribution of insurance in the EU, including insurance sold online. It establishes a series of requirements for transparency in the information provided to the consumer and ensures that insurance products adapt to the needs of customers.

- *Regulation (EU) 2020/1503 of the European Parliament and of the Council, of 7 October 2020, relating to European providers of crowdfunding services for companies and amending Regulation (EU) 2017/1129 and Directive (EU) 2019/1937*. The EU with this provision has implemented specific regulations for crowdfunding platforms, which are relevant for some FinTech. These regulations establish requirements in terms of information disclosure, project evaluation and protection of retail investors.

- *Directive (EU) 2021/2167 of the European Parliament and of the Council of 24 November 2021 on credit administrators and credit purchasers and amending Directives 2008/48/EC and 2014/17/EU*.

Within the Spanish regulatory framework, it is important to highlight the following list of legislative provisions that are applicable regarding the protection of consumers and users in FinTech products and services:

- *Law 22/2007, of July 11, on Remote Marketing of Financial Services for Consumers (LCDSF)*: This law, as its name establishes, regulates the remote marketing of financial products by establishing the information requirements and transparency in the marketing of financial services to consumers.

- *Law 2/2011, of March 4, on Sustainable Economy (LES)*, which establishes that the claims services of the Bank of Spain, the National Securities Market Commission and the General Directorate of Insurance and Funds Pensions will exercise their powers regarding the protection of users of financial services in

the terms provided for in article 30 of Law 44/2002, of November 22, on Measures to Reform the Social Security.

- *Law 5/2015, of April 27, on the Promotion of Business Financing (LFFE), known as the crowdfunding law.* This legislation regulates participatory financing platforms in Spain, establishing requirements for the authorization and operation of these platforms, as well as investor protection measures.

- *Law 7/2017, of November 2, which incorporates into the Spanish legal system Directive 2013/11/EU, of the European Parliament and of the Council, of May 21, 2013,* relating to alternative dispute resolution in consumer matters, whose aim is to guarantee consumers residing in the EU the possibility of accessing alternative resolution mechanisms for consumer disputes that are of high quality because they are independent, impartial, transparent, effective, fast and fair.

- *Royal Decree-Law 19/2018, of November 23, on Payment Services and other urgent measures in financial matters (DLSP):* This law incorporates PSD2 into Spanish legislation and establishes the legal framework for payment services. It regulates aspects such as the execution of payment orders, the issuance of payment instruments, as well as the rights and obligations of both users of payment services and their providers. It is a law that regulates in our legal system what is already provided at the community level, reinforcing the level of protection for consumers and users against possible fraud and abuse.

- *The Organic Law 3/2018, of December 5, on the Protection of Personal Data and Guarantee of Digital Rights (LOPDGDD):* This law adapts the European Regulation to Spanish legislation and addresses issues related to data protection and citizens digital rights.

- *Law 7/2020, of November 13, for the Digital Transformation of the Financial System (LTDSF),* for the purposes of the scope of this study, it is necessary to dedicate a more detailed analysis.

Law 7/2020 applicable within Spanish national territory has the purpose of promoting and regulating the modernization and digitalization of financial entities and the products and services they offer in Spain. Its main objective is to modernize and adapt the financial sector to current technological trends, promoting innovation, transparency and financial inclusion, while maintaining an adequate regulatory framework to guarantee the stability and security of the system. The digitalization process in the financial system involves the use of technologies such as AI, blockchain technology, cloud computing and other technological advances to transform the way financial institutions interact with their customers. This may include automating processes, creating digital platforms for service delivery, improving transaction security, and streamlining bureaucratic procedures.

The purposes that the Law for the Digital Transformation of the Financial System seeks to achieve are:

- a) encourage innovation in the financial sector through regulation that implements new technologies and business models;
- b) digitalization aims to improve the competitiveness of financial institutions by allowing them to offer more efficient and attractive services to clients;
- c) increase and strengthen the protection of financial consumers by promoting transparency in digital financial products and services;
- d) establish a regulatory framework that adapts to technological changes and ensures that financial innovation is developed safely and responsibly in terms of equity and talent acquisition. To this end, the regulation of the controlled testing space (Regulatory Sandbox) is established, which ensures the

carrying out of tests in a controlled and delimited manner on a project related to a technological-based financial innovation applicable in the financial system; and

e) facilitate financial inclusion, given that digitalization can expand access to financial services to people and companies that were excluded due to geographical and/or economic barriers.

Romanian FinTech legislation is based on the entire European legal framework transposed into national legislation, and this is meant to regulate innovative financial activities and ensure consumer protection, financial stability and market integrity. Some key highlights of the relevant legislation:

#### Authorization and Supervision of Financial Institutions:

The National Bank of Romania (BNR) is the authority responsible for the supervision and regulation of financial institutions. This includes FinTech's that provide financial services.

*Government Emergency Ordinance no. 99/2006 on credit institutions and capital adequacy* establishes the requirements for the authorization and operation of financial institutions.

#### Payment Services and Electronic Money Institutions:

*Directive (EU) 2015/2366 on payment services within the internal market (PSD2)* was transposed into Romanian legislation by *Law no. 209/2019*. It regulates the activities of payment service providers and the introduction of new types of payment services, such as payment initiation and account information services.

*Law no. 127/2011 on the activity of issuing electronic money and electronic money institutions* is the legislative framework for FinTech's that issue electronic money.

#### Data Protection Regulations:

*The General Data Protection Regulation (GDPR) (Regulation (EU) 2016/679)* is also applicable in Romania and imposes strict requirements on the collection, storage and processing of personal data by FinTech's.

#### Anti-Money Laundering and Anti-Terrorist Financing Regulations:

*Law no. 129/2019 on preventing and combating money laundering and terrorist financing, which transposes Directive (EU) 2018/843 (AMLD5)*, imposes obligations on FinTech's to implement know-your-customer (KYC) and suspicious transaction reporting measures.

#### Regulations on Credit Agreements:

*Government Emergency Ordinance no. 50/2010 on consumer credit contracts* regulates the conditions under which FinTech's can grant credit, including the transparency of contractual terms and conditions and consumer rights.

#### Crowdfunding and Participatory Financing:

Although there is still no specific regulation for crowdfunding platforms in Romania, they must comply with the general legislation on financial services, consumer protection and money laundering prevention.

#### Cryptocurrency and Blockchain Regulations.

However, as of 2004, Romania is in the process of joining the OECD, and as of January 2022, the OECD council made the decision to open discussions with Romania as a result of the progress made by the country toward fulfilling the criteria outlined in the Framework for Consideration of Prospective

Members. Romania's economy has been converging rapidly towards the OECD average income per capita over the last two decades. However, the invitation to integrate comes with a series of conditions, especially in the direction of accelerating structural reforms.<sup>1</sup>

Currently, the Romanian authorities do not have a specific regulation for cryptocurrencies and blockchain technology in Romania to intervene in the financial market. However, their use must comply with existing financial services and anti-money laundering legislation.

It is important for FinTech's operating in Romania to stay informed of legislative changes and ensure compliance with all applicable regulations to avoid sanctions and provide safe and compliant services to clients.

In short, European, Spanish and Romanian legislation have implemented specific measures to protect consumers and users in the FinTech's environment. These regulatory regulations must strike a real balance between innovation and security, ensuring that users can benefit from FinTech products and services without undermining the protection of their rights and interests. Although in the global economy, the current trend is to move towards a digital market without borders, and therefore, it will be more feasible to build solid regulation from the EU and avoid the different legislative adaptations of the States covered by their national frameworks, the result of which will be the segmentation of the digital market.

#### **4. Conclusions**

The term FinTech has not been able to reach a universal definition, some authors relate it to emerging companies and startups created to offer technological financial services, and other authors focus the definition on financial technological innovation itself that gives rise to new business models, applications, processes, services and products. At first glance there is no clear consensus among experts on the subject, but it cannot be overlooked that what stands out most about FinTech is not the companies, but the financial technology services and products that are offered.

After analyzing the advantages and risks involved in the use of FinTech technology, we can conclude that they have a high potential to improve the lives of consumers by simplifying financial operations, reducing bureaucracy, costs and inconveniences of traditional financial systems. Regarding risks, it is essential to approach them with caution and make informed and safe financial decisions. It is important to overcome the risks that FinTech entails, with important financial education that focuses on the reality of finance through clear information that shows the real risks involved in each financial product.

Having reviewed the European, Spanish and Romanian regulations that have been woven with specific measures to protect consumers and users of financial products and services that can be extended to the FinTech's environment, we have observed that these regulations seek a balance between innovation and security, guaranteeing that users can benefit from FinTech's products and services without jeopardizing the protection of your rights and interests. In the 21st century, technological expansion shows us that we are destined towards a digital market without borders, making it more feasible to build a single solid regulation from the EU, and avoid legislative adaptations of each State, the result of which would be the fragmentation of said digital market.

---

<sup>1</sup> Stronger institutions and public finances would help boost productivity, growth and incomes for Romania: <https://www.oecd.org/countries/romania/stronger-institutions-and-public-finances-would-help-boost-productivity-growth-and-incomes-for-romania.htm>



## References

- \*\*\* (2024). *European Parliament*. <https://www.europarl.europa.eu/factsheets/ro/sheet/83/politica-privind-serviciile-financiare>.
- \*\*\* (2024). *OECD*. <https://www.oecd.org/daf/competition/digital-disruption-in-financial-markets.htm>.
- Barrio Andrés, M. (2021). La revolución “FinTech”. Definición, factores desencadenantes, oportunidades y riesgos”, en M. Cuenca Casas y J. Ibáñez Jiménez (Dir.). *Perspectiva legal y económica del fenómeno FinTech*. Wolters Kluwer, Madrid.
- Blanco Sánchez, M. J. (2020). Consideraciones sobre el ajuste del fenómeno FinTech en el marco normativo actual. Recientes actuaciones de autoridades e iniciativa privada en los ordenamientos español y chileno, en B. Belando Garín y R. Marimón Durá (Dir.). *Retos del mercado financiero digital*, Thomson Reuters Aranzadi, Cizur Menor.
- Comisión Europea (2008). Financial services provision and prevention of Financial exclusion. <https://www.bristol.ac.uk/media-library/sites/geography/migrated/documents/pfrc0806.pdf>
- Cortes Borrero, R. & Castellanos Peña, M. P. (2022). FinTech: nociones generales y defensa del Consumidor iberoamericano. En L. Cotino Hueso (Dir.) y M. Bauzá Reilly (Coord.). *Derechos y garantías ante la inteligencia artificial y las decisiones automatizadas*. Thomson Reuters Aranzadi, Cizur Menor.
- IOSCO (2017). *Research Report on Financial Technologies (FinTech)*. Disponible en: <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD554.pdf>
- Ortuño Cámara, J. L. (2022). *Silver Economy, los mayores como motor de la economía del futuro: consecuencias en el sector financiero, retos y oportunidades*, en C. Parra Rodríguez, O. Lasaga y J. Barrycoa (Dir.), *Hacia una tercera edad activa. Longevidad, calidad de vida y tecnología*, J.M. Bosch editor, Barcelona.