RDMF | REVISTA DE DERECHO DEL MERCADO FINANCIERO

Working paper 2/2021 **Septiembre 2021**

How to find a way out of Sandbox trap: The Spanish case[*]

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Abstract

Sandboxes are the mechanism chosen in many jurisdictions to convey the message of offering a market open to innovation. This paper begins with an introduction on innovation facilitators adopted in the European Union. After this introduction, it analyzes Act 7/2020 for the digital transformation of the financial system, by which a regulatory sandbox for Fintech projects is incorporated into Spanish Law, as an example to improve future EU regulations. The antecedents are studied, highlighting the consensus in their approval. It is a mechanism that combines the testing space with the innovation hubs under the principles of proportionality and technological neutrality, in order to guarantee legal certainty in a market open to fair competition. It follows the Anglo-Saxon models, with project selection and monitoring by the financial authorities. After analyzing its content, some general proposals are made to take advantage of this regulatory experiment. It is important to provide the innovation facilitators bodies with resources and integrate the regulatory sandboxes into large-scale financial innovation portals. It must ensure coordination between the financial authorities with those of the data protection and competition.

Keywords: Regulatory Sandbox, Innovation Hubs, Innovation Facilitators, Fintech, Technological Neutrality.

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[*] Destinado para su publicación en *Journal of International Banking Law and Regulation*, ISSN 1742-6812, Nº 8, 2021, págs. 348-357.

I. INTRODUCTION

In the field of Fintech, the term "sandbox" identifies the possibility of testing innovations without being subject to all financial discipline. It acts as a safe harbour for the industry, which can operate without the legal risk of breaking the rules and being penalised. The financial authorities see sandboxes as one of the ways to maintain contact with the Fintech industry and understand its business models.

Banks always test their innovations before launching them on the market. The novelty here consists in being able to offer the public products and services during the testing stage. In order to do this, a controlled testing environment called a “Regulatory Sandbox” is regulated.[1] This framework exempts operators from complying with certain rules, making it easier for them to access the market. It is an exemption framework, which is useful for the authorities to be able to understand Fintech and its risks so they can adapt financial regulations to digital finance. It arose in the United Kingdom through a collaboration between the competition and financial authorities.[2] It then spread to certain common law jurisdictions that are more open to the industry and has become widespread as an innovation-friendly mechanism.[3] There is also criticism of the financial authorities'

[1] In addition to regulatory sandboxes, there are those that encourage competition by testing technological innovations that allow data sharing. See VEZZOSO, Simonetta (2019): “A pro-competition data sandbox for the digital world”, 6 May 2019.

[2] See FCA (2015), Regulatory sandbox, available at www.fca.org.uk/publication/research/regulatory-sandbox.pdf

[3] See ALLEN, H. J. (2019), “Regulatory sandboxes”, *Geo. Wash. L. Rev.*, 87, pp. 579-645.

involvement in selecting the companies that can access the market and the risks that sandboxes pose to the consumer and to financial stability.[4]

The European Union classifies sandboxes as financial "innovation facilitators" alongside innovation hubs.[5] These facilitators create bridges between the Fintech industry and the supervisors. They encourage the incorporation of Fintech products and services in the market through a process that allows the supervisors to learn. Through these initiatives, innovators familiarise themselves with the financial regulations and the supervisors learn about technological developments. In fact, the European Commission includes them in its Digital Finance Strategy as "innovation supervision facilitators".[6] This strategy has announced a procedure, to be launched in 2021, for cross-border tests and the creation of an EU Digital Finance Platform to perform tests, in conjunction with national facilitators.[7]

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[4] According to B. KNIGHT and T. MITCHELL, "by their very nature sandboxes pose a risk to market competition by conferring advantages to some firms over others", in "The Sandbox Paradox: Balancing the Need to Facilitate Innovation with the Risk of Regulatory Privilege", *South Carolina Law Review*, Forthcoming, *CSAS Working Paper*, 2020, pp.1-21. "Given that regulatory sandboxes require significant financial contributions, and sometimes new legislation, we conclude that regulators should focus their resources on developing effective innovation hubs rather than sandboxes" (BUCKLEY, Ross P., et al., "Building FinTech ecosystems: regulatory sandboxes, innovation hubs and beyond", *Washington University Journal of Law & Policy*, 2020, vol. 61, no 1, pp. 55-98). "Regulators do not need to take on the impossible task of deciding what products and services will win over consumers", SEC Commissioner Hester M. Peirce, in "Beaches and Bitcoin: Remarks before the Medici Conference", Los Angeles, CA, May 2, 2018, available at https://www.sec.gov/news/speech/speech-peirce-050218, who notes: "I am entirely in favour of finding ways to make appropriate regulatory allowances that clear the way for innovation to flourish. What troubles me about sandboxes, however, is that the regulator is typically sitting right there next to the entrepreneurs."

[5] ESAs, *FinTech: Regulatory sandboxes and innovation hubs*, JC 2018 74, p. 28, report that define «innovation hub» as "a scheme whereby regulated or unregulated entities can engage with competent authorities on FinTech-related issues and seek non-binding6 guidance on the conformity of innovative financial products, services, business models or delivery mechanisms with licensing, registration and/or regulatory requirements" (p. 7), and «regulatory sandbox» as "a scheme set up by a competent authority that provides regulated and unregulated entities with the opportunity to test, pursuant to a testing plan agreed and monitored by a dedicated function of the relevant authority,innovative products or services, business models, or delivery mechanisms, related to the carrying out of financial services" (p. 16). Available at https://esas-joint-committee.europa.eu/Publications/Reports/JC%202018%2074%20Joint%20Report%20on%20Regulatory%20Sandboxes%20and%20Innovation%20Hubs.pdf.

[6] *Communication from the Commission on a Digital Finance Strategy for the EU*, Brussels, 24.9.2020, COM(2020) 591 final, p. 8.

[7] This strategy also includes a Proposal of Regulation on Markets in Crypto-assets, COM(2020) 593/3, 2020/0265 (COD)] and a proposed Regulation on a pilot regime for market infrastructures based on

Fintech aids access to new low-cost products and services. It contributes to financial inclusion. It simplifies payments and the granting of loans. In this frame, Regulatory Sandboxes are the main mechanism chosen in many jurisdictions to convey the message of offering a market open to innovation. That is the case in Spain, where regulatory sandbox has been used as a hook to attract investment.[8] The Spanish Association of Fintech and Insurtech (Asociación Española de Fintech e Insurtech - AEFI) has fought for the approval of a sandbox framework as a necessity,[9] and has gained the support of the traditional banks and the authorities.[10] It is against this background that Act 7/2020 of 13 November on the Digital Transformation of the Financial System (*Ley 7/2020, de 13 de noviembre, para la transformación digital del sistema financiero*) was unanimously passed in the Spanish Parliament.[11]

distributed ledger technology DLT, COM(2020) 594/3, 2020/0267 (COD)] as a temporary tool. A decision will be taken on whether to make it permanent after it has been in force for five years.

[8] The Report Analysing the Regulatory Impact of the Act points out the economic impact of "increasing investment as a consequence of identifying Spain as a country in the vanguard of the new financial context".

[9] See AEFI, *Propuesta de implantación de un Sandbox en España* (Proposal for the Implementation of a Sandbox in Spain), March 2018.

[10] AEFI's communication strategy has focused on getting a Sandbox Act passed. In its opinion, this "will encourage the creation of new jobs, competitiveness and technological development" and "make it possible to create around 5,000 new jobs in the Fintech ecosystem in two years and attract 1,000 million in additional investment" (in "*La aprobación del Sandbox sitúa a España como uno de los países más avanzados en el ámbito de la regulación Fintech*" (The approval of the Sandbox puts Spain among the most advanced countries in the field of Fintech regulation), 22 February 2019, available at https://www.asociacionfintech.es/noticias-del-sector/la-aprobacion-del-sandbox-situa-a-espana-como-uno-de-los-paises-mas-avanzados-en-el-ambito-de-la-regulacion-fintech/). These arguments were taken up by Javier Alfonso Cendón, a Member of Parliament from the Socialist Parliamentary Group, in the session that passed the bill in the lower house (*Diario de Sesiones del Congreso de los Diputados, Comisiones*, No. 143, 17 September 2020, p. 6). Also the Spanish Banking Association applauds the creation of the regulatory sandbox https://www.aebanca.es/noticias/articulos/la-aeb-aplaude-la-creacion-del-sandbox-instrumento-necesario-para-fomentar-la-innovacion-en-los-servicios-financieros/. Also see "El Sandbox y la transformación digital de la economía" (The Sandbox and the digital transformation of the economy) in which the Bank of Spain presents the Sandbox as a regulatory response to the challenge of digital transformation, available at https://clientebancario.bde.es/pcb/es/blog/El_Sandbox_y_la_93c3333bb4f8961.html. In the words of Governor Pablo Hernández de Cos, it is: "an agile framework that allows institutions to analyse whether business models based on new technologies are viable" in "Participación en la mesa redonda "Regulación de las fintech" (Participation in the "Fintech Regulation" roundtable), 30.04.2019, p. 7, available at https://www.bde.es/f/webbde/GAP/Secciones/SalaPrensa/IntervencionesPublicas/Gobernador/Arc/Fic/hdc300419.pdf.

[11] Published in the Official State Gazette on Saturday 14 November 2020. Approved unamended in the Plenary Session of the Senate on 3 November 2020. This unanimity does not extend to the parliamentary groups' different conceptions of the nature and functions of the Sandbox: "a testbed for innovation", according to Ferran Bel from the Plural Parliamentary Group; or "making the regulatory framework more

However, as with any structural modification of a regulation, it is worth carefully examining its advantages and disadvantages, since sandboxes also pose risks. The World Bank has assessed financial innovation facilitators and concluded that Innovation Hubs are cheaper and may be more effective in teaching the authorities lessons allowing them to adapt the legal framework to rapidly incorporate safe digital finance in the market.[12] Regulation must not be an obstacle to innovation; but under the pretext of facilitating innovation we cannot dismantle financial regulation, which protects savings and the system's stability. It is a matter of guaranteeing "responsible innovation".[13]

Regulatory sandboxes have proven to be effective in mature markets with well-established authorities that are defenders of competition. However, it is not always the most appropriate innovation facilitator. In Spain, the financial authorities' mandate does not include encouraging competition in the market. Neither the Bank of Spain[14] nor the Spanish Securities and Exchange Commission,[15] nor the Directorate-General of Insurance and Pension Funds,[16] include promotion of the market among their mandate. They are authorities that ensure transparency, customer protection and operator solvency. They apply the principle of technological neutrality, according to which no preference should be given to one technology over another. They have created innovation hubs for

flexible […] with the ultimate aim of deregulation", according to Miguel Ángel Castellón Rubio of the People's Party Parliamentary Group (Official Gazette of the Congress of Deputies, Series A, Number 3-3, 15 September 2020). The speeches in the Plenary Session of the Senate also celebrated the consensus concerning an experiment that acts as an "investment catalyst", according to Ruth Goñi Sarries (GPCs); a bill that "puts Spain in the technological vanguard", according to Olivia María Delgado Val (GPS); and, in short, a bill that we have to "make visible", in the words of Javier Puente Redondo (GPP).

[12] WORLD BANK; CAMBRIDGE CENTRE FOR ALTERNATIVE FINANCE, *Regulating Alternative Finance: Results from a Global Regulator Survey*, 2019, according to which "sandbox programs are highly selective and resource intensive compared to the typical innovation office and cannot reach the same number of firms", p. 67.

[13] According to Gabriel Bernardino, the president of EIOPA, "in a way where the risks and opportunities are balanced. Where we take a sound approach ensuring a balance between enhanced financial innovation and well-functioning consumer protection and financial stability frameworks", in *Financial innovation for the benefit of consumers*, 3 July 2020, available at https://www.eiopa.europa.eu/content/financial-innovation-benefit-consumers_en.

[14] Art. 7 Ley 13/1994.

[15] Art 17 TRLMV, approved by Real Decreto Legislativo 4/2015.

[16] Arts. 70-71 TRLOSSP, approved by Real Decreto Legislativo 6/2004.

learning purposes.[17] They publish guidelines to guide Fintech companies and facilitate their access to the market in accordance with the legal framework.[18]

The new legal framework for the digital transformation of the financial system is an exception framework that affects the supervisors' mandate. It converts them into monitors of business projects. This circumstance was not debated during the process of developing and approving the regulation. In any case, as a result of parliamentary consensus, the Sandbox is now a part of the financial system. From this perspective, we will analyse the contents of the new legal framework introducing the Sandbox into Spanish law.

II. SPANISH SANDBOX ACT

Ley 7/2020 para la transformación digital del sistema financiero (referred to below as "Act 7/2020" or the "Spanish Act") has 26 articles, grouped into four titles, two additional provisions and three final provisions.[19] The act is poorly drafted and full of references that make it hard to understand.[20]

The Spanish Act defines a "Regularly Sandbox" (referred to below as the "Sandbox") as a controlled, delimited environment for experimental tests or trials of a pilot project based on technological and financial innovation, which is sufficiently advanced and brings added value, applicable to the financial system.[21] For these purposes, "financial

[17] The Spanish Securities and Exchange Commission has created an Innovation Portal and the Bank of Spain has created an Associate Directorate General of Financial Innovation and Market Infrastructures, which is open to consultations and contact with the Fintech industry.

[18] The Spanish Securities and Exchange Commission has produced a FAQ for FinTech companies, available at http://www.cnmv.es/docportal/Legislacion/FAQ/QAsFinTech.pdf.

[19] Regarding the bill, see JARNE MUÑOZ, Pablo (2018), "El espacio controlado de pruebas (regulatory sandbox) en el Anteproyecto de Ley de medidas para la transformación digital del sistema financiero" (The Regulatory Sandbox in the Measures for the Digital Transformation of the Financial System Bill), *Actualidad civil*, Number 11, 2018, via Smarteca, pp.1-9.

[20] There are 49 references between articles in Act 7/2020. Title I of the Act describes its purpose with a list of definitions. Title II is about the Regulatory Sandbox. It contains three chapters, one devoted to tests, another to guarantees – in particular, protection of the participants – and the third to the post-test stage. Title III contains other measures concerning innovation hubs and title IV is devoted to the authorities and accountability.

[21] This concept is deduced from the definitions of "Regulatory Sandbox", "pilot project" and "tests" in art. 3 of the Act. The reference to "trials" is taken from the field of pharmaceuticals in which the "clinical trials" mentioned in the Act's preamble are common. The Act defines a "test" as each of the trials with a limited scope performed with or without participants, i.e. "users" participating in the tests.

innovation with a technological basis" is considered to be that which may give rise to new applications, processes, products or business models that affect the financial markets, including public functions known as RegTech or SupTech. They are innovations that must provide added value or potential usefulness to improve regulation or supervision, regulatory compliance, the efficiency of institutions and markets, or imply a possible benefit for users. It is sufficient to provide usefulness in any of these aspects for it to be considered to contribute added value.

The tests performed do not imply the performance of an activity reserved for financial institutions. “Under no circumstances will [tests] involve the performance of services on a professional and regular basis, nor will they be indefinite”.

This delimitation divides the scope of financial activity subject to administrative authorisation and to regulatory and disciplinary rules from tests within the Sandbox. In principle, the Sandbox is the meeting place between promoters and the authorities in order to conduct tests of products and services that, due to their unusual nature, do not require administrative authorisation.

This division of scopes between reserved activities and tests in the Sandbox is muddied by that stipulated in art. 4.3 of the Act, according to which: “if institutions that are already authorised to perform an activity participate in the pilot project, they will only be exempted from compliance with the applicable regulations for the activities within the limits of the pilot project. Under no circumstances will this exemption be extended to ordinary activities outside of the Sandbox”. According to this rule, the activities of authorised institutions that fall within the pilot project are exempted from the financial market's regulatory and disciplinary rules. In line with the principle of non-discrimination stipulated in art. 1 of the Act, this means that activities that fall within the pilot project performed by promoters that do not have administrative authorisation for financial activities are also exempted from the financial market's regulatory and disciplinary rules. This provision makes the Sandbox framework an exception framework.[22]

[22] The drafter of the Act justifies this in art. 3, which was included through amendment 36 by the Popular Party Parliamentary Group, which stated: “The amendment is intended to clarify that all institutions, whether or not they hold authorisation, may not be subject to specific legislation as envisaged in article 4.2, which is the foundation of the new testing framework.” (Official Gazette of the Congress of Deputies,

Art. 2 of the Act states that the new legal framework "will not imply, under any circumstances, alteration of the powers attributed to the public authorities by their specific legislation". In spite of what this paragraph states, the Act does alter the powers attributed to the financial authorities by their specific legislation. The appointment of monitors to monitor pilot projects alters those powers.[23] Their powers are also altered by issuing instructions for compliance with that stipulated in the protocol,[24] performing inspections of pilot projects[25] and deciding on whether to suspend or conclude pilot project tests.[26] Other functions, such as reaching conclusions on the development and results of a pilot project for the purpose of advising the government or improving supervision can be considered included within the powers attributed to the financial authorities by their specific legislation.

In short, it is an act that "strengthens the necessary instruments to guarantee the objectives of financial policy within the context of digital transformation" and "better understand the implications of digital transformation, in order to increase efficiency, the quality of services and, in particular, safety and protection in relation to the new financial technological risks";[27] and in order to comply with these objectives, it introduces exceptions to the application of sectoral regulations and alters the supervisors' powers.

III. LAW-PROTOCOL STRUCTURE

The Spanish Act establishes and regulates an intermediate space between free enterprise and financial activity subject to authorisation. It is a public law act. However, it also establishes the rights and obligations of those entering into a contract in that space

Series A, Number 3-2, 30 April 2020, p. 23). Hence the interest of the Fintech industry, both new institutions and traditional banks, in promoting the adoption of a Regulatory Sandbox.

[23] See art. 15.1 of Act 7/2020.

[24] See art. 15.2 of Act 7/2020.

[25] See art. 15.3 of Act 7/2020.

[26] See art. 16.1 of Act 7/2020.

[27] See art. 1 of Act 7/2020. According to the Report Analysing the Regulatory Impact of the Act: "The act is aimed at facilitating technology-based innovations that are applicable in the financial system and strengthening the instruments that the public authorities have to guarantee the objectives of financial policy within the context of digital transformation" (p. 10).

and, by regulating contracting between promoters and users, it is also a private law act. In this respect, it follows the legislation on clinical trials, applying a Law-Protocol structure, i.e. a legal framework completed by the promoter signing up to the protocol approved for each pilot project.

The Sandbox is a new administrative procedure that allows any person who complies with certain requirements to test financial innovations in a controlled space. Projects concerning activities that do not require administrative authorisation, as well as projects that do require it, can access the Sandbox.[28] It is a privileged space with official monitors; a space for performing an activity safe from the legal risk of being accused of carrying out financial activities without authorisation.

The Act regulates access to the Sandbox through a restricted administrative procedure.[29] Every six months, the authorities invite interested parties to submit applications and, once they have been received, after verifying that they comply with the requirements stipulated in the Act, they decide whether to allow them, based on their usefulness, the efficiency of the financial regulation, regulatory compliance and the possible benefit for users. It is worth pointing out that acceptance may be justified by meeting any one of these objectives, and that consumer benefit is one of them. In fact, if this requirement is used as the basis for acceptance, it is sufficient for it to have "a possible benefit for users".[30]

It is a dynamic adjudication system that uses electronic means. The public authorities draft the protocol without negotiating the contents with the promoter.

[28] It is an authorisation process that has some similarity to the procedure in articles 160 et seq of the Public Sector Contracts Act 9/2017 of 8 November (*Ley 9/2017, de 8 de noviembre, de Contratos del Sector Público*).

[29] Art. 19.1 of Act 7/2020 defines "authorisation" as the activity performed by the public authorities concerning access to the Sandbox.

[30] Act 7/2020 does not require a project to include a benefit for users within its scope, unlike other jurisdictions that do condition access to the Sandbox on the innovative project having a benefit for users, such the United Kingdom, Malaysia and Singapore. See Baker McKenzie, *International Guide to Regulatory Fintech Sandboxes*, 2018, available at https://www.bakermckenzie.com/en/-/media/files/insight/publications/2018/12/guide_intlguideregulatorysandboxes_dec2018.pdf.

IV. REGULATORY SANDBOX PRINCIPLES

The Sandbox is intended as a tool to adapt legislative reality to digital innovations that have been useful in improving the efficiency of the financial market "in accordance with the principles of need, effectiveness, proportionality, legal certainty, transparency and efficiency", according to article 25.4 of the Act. In addition, the Sandbox is governed by the principle of non-discrimination,[31] which arises from the principle of technological neutrality.

The principles of need and efficiency are part of the general principle of efficiency in which they can be framed. "Need" in the Act refers to the "need to better calibrate the connection between activities, risks and regulation in the context of digital transformation".[32] And the Act seeks to address this need, which makes the Sandbox something that is necessary. But there are alternatives.[33] In fact, innovation hubs are less costly, easier to set up, and their results are the same as or better than regulatory sandboxes. In this sense, the Act complements the Sandbox with "specific communication channels" concerning financial innovations[34]and for queries about the application of the financial regulations to Fintech initiatives.[35] The supervisors' responses provide a safe harbour for innovators, although it is not generally established that they are binding on the authorities.[36]

[31] Beginning of Art. 1 of Act 7/2020.

[32] Preamble.

[33] From a technical legal perspective, Reyes PALÁ LAGUNA considers that "in Spain it is possible to resort to mechanisms already known in our positive law, such as a responsible declaration, prior communication or conditional authorisation, and there is no need to import legal categories from outside", in "La licencia sandbox para las Fintech: ¿es necesario un nuevo derecho para estos nuevos hechos?" (The sandbox licence for Fintech: is new law necessary?), *Revista de derecho del mercado de valores*, 2018, no. 22, p. 4 et seq.

[34] See art. 20, which requires the supervisory authorities to establish "specific direct communication channels to handle queries about new applications, processes, products, business models and other questions related to technological innovation applied to the provision of financial services" and coordinate with one another.

[35] See art. 21.1 of Act 7/2020.

[36] See art. 21.3 of Act 7/2020. The authorities' responses are informative in nature. They are not administrative acts that can be appealed (art. 21.4).

Such channels are what characterise innovation hubs. They allow the authorities to familiarise themselves with innovations and form an opinion.[37] The Act also refers to the "need for the cultural change that digital transformation requires among all institutional actors[38] to be accompanied by the necessary internal reorganisation".[39] This mention calls upon the authorities to use the lessons learned from the Sandbox to modernise their internal regulations. In fact, this call takes the form of ordering them to devote the material and human resources they deem appropriate, "and they may decide in accordance with their respective legal framework on the internal organisational model that is most appropriate".[40]

In turn, the allusion to transparency is more a response to the principle of transparency and accountability of the public authorities[41] than to transparency as an objective of financial regulation.[42]

We will use this approach to examine the principles of efficiency, proportionality, technological neutrality and legal certainty behind the system created by the Act.

Efficiency is a traditional principle of financial regulation that is being strengthened in these times of digital transformation. The traditional banking model is giving way to the efficiency of digital finance. Increasing the system's efficiency is one objective of Act 7/2020 and the way it does this is by regulating a Sandbox to promote digital transformation. One of the reasons for accepting a pilot project in the Sandbox is its usefulness in "increasing the efficiency of institutions or the market".[43] The system created by the Act is a response to the "need to provide the public authorities with

[37] See art. 21.2 of Act 7/2020.

[38] This should be understood as mainly referring to the financial authorities.

[39] See the preamble of Act 7/2020.

[40] See article 24 of Act 7/2020.

[41] Report Analysing the Regulatory Impact of the Act, p. 10.

[42] So that investors can make an informed decision. See arts. 17.2, 208 and 209 of Royal Legislative Decree 4/2015 of 23 October, approving the Consolidated Text of the Stock Market Act (*Texto Refundido de la Ley del Mercado de Valores* - TRLMV).

[43] Art. 5.2.c) of Act 7/2020.

instruments that ensure their functions within the financial system can continue being performed with the utmost effectiveness in the new digital context".[44]

The proportionality principle governs the authorities' actions[45] and is very well established in the statutes of national and European financial authorities.[46] The application of the principle of proportionality may, by itself, achieve many of the objectives established for the Sandbox, such as easy access to the market and learning by supervisors. This principle must be applied by the financial authorities in order to increase flexibility and adapt the requirements for access to the various financial activities to each specific case.[47] The Sandbox is simply an additional mechanism to facilitate access by the Fintech industry to the market. The proportionality principle is also applied in the framework that governs the Sandbox. The competent national authorities must take into account the European authorities' guidelines and recommendations and, if those criteria have been accepted, they must apply them.[48] This sets the limits of their discretionary

[44] The Report Analysing the Regulatory Impact of the Act, p. 9.

[45] Art. 19.1 of the Act confirms that the proportionality principle stipulated in art. 4 of the Legal Framework of the Public Sector Act 40/2015 of 1 October (*Ley 40/2015, de 1 de octubre, de Régimen Jurídico del Sector Público*) also applies to the Sandbox. According to this principle, the public authorities must "choose the least restrictive measure, based on the need for it to protect the public interest and justify its suitability to achieve the purposes sought, which under no circumstances may give rise to discriminatory differences in treatment".

[46] See JOOSEN, Bart; LEHMANN, Matthias (2019): "Proportionality in the Single Rule Book", CHITI, Mario P.; SANTORO, Vittorio, *The Palgrave Handbook of European Banking Union Law*, Palgrave Macmillan, Cham, p. 65-90; according to whom "An indiscriminate enforcement on all financial actors irrespective of their size, complexity and risk profile would not be proportional and contradict primary law" (p. 86).

[47] Principle mentioned in art. 98.5 TRLMV.

[48] Unlike the confusing reference in art. 19.1 of the Act, which states that the Spanish authorities "may" take the European authorities' guidelines into account, the European guidelines are addressed to the competent national authorities that may confirm their application or state the reasons behind them deviating from compliance with the guidelines. Once they have been confirmed, their application is compulsory. The national authorities usually confirm the application of the European guidelines. For all, see art. 16.3 of Regulation (EU) No 1095/2010 of 24 November 2010 establishing a European Supervisory Authority, according to which: "The competent authorities and financial market participants shall make every effort to comply with those guidelines and recommendations. […] Within 2 months of the issuance of a guideline or recommendation, each competent authority shall confirm whether it complies or intends to comply with that guideline or recommendation. In the event that a competent authority does not comply or does not intend to comply, it shall inform the Authority, stating its reasons."

scope. It is technical discretion that, in accordance with the good supervisory practices issued by the European authorities, must apply similar measures to similar cases.[49]

The European Commission's Action Plan on FinTech establishes the application of the technological neutrality principle.[50] Act 7/2020 does not mention the technological neutrality principle but does refer to the principle of non-discrimination, which fulfils an equivalent function. Its purpose is to "guarantee equal conditions among all intermediaries that perform the same activity".[51]

Fintech presents problems in terms of how it fits within the legal system. Act 7/2020 is intended to provide legal certainty to both the industry and its customers so that they may "know, with certainty, the contents and scope of financial regulations and their foreseeable application in a digital context".[52]In particular, promoters' industrial and intellectual property rights and business secrets that could be threatened by being included in the Sandbox are protected.[53]

V. SANDBOX AUTHORITIES

The Sandbox is an area subject to the control of certain administrative authorities that act collectively. The competent authorities are the Secretariat General of the Treasury and International Financing, the Bank of Spain, the Spanish Securities and Exchange Commission and the Directorate General of Insurance and Pension funds.[54] These

[49] The European authorities shall have a legally binding mediation role to resolve disputes between competent authorities, with the power to take supervisory decisions directly applicable to the financial market participant concerned (for all, see art. 21 of Regulation (EU) No 1095/2010 of 24 November 2010 establishing a European Supervisory Authority).

[50] It states this as follows: "EU rules should be more technology neutral and innovation friendly, and should be able to adjust to innovations more rapidly, while continuing to respect all the rules ensuring their safe and secure functioning and user protection", *Communication from the Commission on a Digital Finance Strategy for the EU*, Brussels, 24.9.2020,COM(2020) 591 final, p. 9.

[51] Preamble of Act 7/2020.

[52] Report Analysing the Regulatory Impact of the Act, pp. 9 and 10.

[53] Non-disclosure clauses are part of the protocol and the single document. See arts. 8.2. f), 10.1. d), 14 and 17.1 two of Act 7/2020.

[54] Art. 3.a) of the Act extends it to "any other authority that, in accordance with the legislation in force, has specific powers over financial activity attributed to it", which is devoid of content. The presence of the Ministry of Economic Affairs and Digital Transformation, which has specific powers over financial

authorities make up the "Coordination Committee" for the Sandbox,[55] a body entrusted with facilitating coordination between the competent authorities, presided over by a representative of the Secretariat General. This strengthens the principle of cooperation between the public authorities,[56] which is very well established among the financial authorities.[57] The competent authorities must cooperate to ensure that digital transformation takes place with full guarantees of financial stability and customer protection. With this aim in mind, they must collaborate to achieve adequate operation of the Sandbox.

In each pilot project, the Secretariat General of the Treasury and International Financing is the competent authority, together with the supervisor or supervisors involved due to the scope of innovation,[58] which play monitoring roles. The Secretariat General may invite other authorities as observers.[59] When there are several supervisory authorities, they must agree on coordination guidelines.[60] The Coordination Committee must ensure the correct application of the proportionality principle, the homogeneity of

activity, is channelled through the Secretariat General of the Treasury and International Financing, an undersecretariat of said ministry.

[55] Regulatory development is envisaged for the organisation and operation of the Coordination Committee (Final provision three of the Act). The Act orders that the Committee be set up within three months from the Act's entry into force (see art. 23.1 of the Act), which must be complied with in the regulatory development framework approved. The Act entered into force on 15 November 2020, the day after it was published in the "Official State Gazette" (Final provision four).

[56] In accordance with that stipulated in art. 143 of the Legal Framework of the Public Sector Act 40/2015 of 1 October, they must cooperate in the service of the public interest and may enter into cooperation agreements.

[57] See *Memorandum of understanding on cooperation between the financial supervisory authorities, central banks and finance ministries of the European Union on cross-border financial stability*, 1 June 2008. See, in domestic law, the Collaboration Agreement between the Bank of Spain and the Spanish Securities and Exchange Commission for the promotion and development of the Financial Education Plan of 2 October 2017 and, with a different scope, the Assignment of the Management of the Spanish Securities and Exchange Commission to the Bank of Spain for the Performance of Support Tasks in Supervising Internal Creditworthiness Models for Investment Services Companies of 31 July 2018.

[58] "[T]hey are competent in view of the project's subject matter" art. 7.1 of Act 7/2020. The authorities in the autonomous communities with powers over financial supervision are also competent authorities.

[59] For example, it may invite the Spanish Data Protection Agency and, although the Act refers to authorities "in a sectoral scope other than finance", the Spanish Securities and Exchange Commission, from which it may request reports (art. 7.3 two of Act 7/2020).

[60] Art. 22.2 of Act 7/2020.

the coordination guidelines and that they all arise from the same principles.[61] It has powers over the general operation of the Sandbox, in particular over the projects allowed within its scope. It takes note of the entire administrative procedure, from the application for admission of the project in the Sandbox, to its assessment, approval of the protocol and assessment of the test results. It uses this information to participate in producing the report containing the assessment of the test results and establishes guidelines for the contents of protocols. It is also aware of the activity of innovation hubs. The Coordination Committee should have an ethics committee to examine project governance and avoid financial exclusion.[62]

The Secretariat General, as the party principally responsible for the Sandbox, is accountable to Parliament, issuing an Annual Report on the Digital Transformation of the Financial System containing regulatory recommendations arising from the results of the Sandbox in order to adapt legislation to financial innovations.[63] Due to its relevance in weighing up regulatory recommendations, the Annual Report may contain a section devoted to the proportionality principle.[64]

Due to the cross-border nature of Fintech activities, the national authorities must collaborate with their foreign counterparts, with which they may sign agreements.[65] In the European Union there is a contact forum to promote coordination between authorities.[66]

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[61] See art. 23.2.c) of Act 7/2020.

[62] It may follow the model of EIOPA, which has created a Consultative Expert Group on Digital Ethics in Insurance. See press release dated 17 September 2019, available at https://www.eiopa.europa.eu/content/eiopa-establishes-consultative-expert-group-digital-ethics-insurance_en

[63] See art. 25 of Act 7/2020. In turn, the supervisory authorities shall include a sub-report in their Annual Report on the application of finance-based technological innovation to the supervisory role (see art. 26 of Act 7/2020).

[64] See art. 19.4.

[65] See art. 22.3 of Act 7/2020. These international agreements tend to take the form of a Memorandum of Understanding (MOU).

[66] The European Forum for Innovation Facilitators (EFIF), established in January 2019, as a "platform for supervisors to meet regularly to share experiences from engagement with firms through innovation facilitators (regulatory sandboxes and innovation hubs)". Its creation was proposed in the European financial authorities' joint report on *FinTech: Regulatory sandboxes and innovation hubs*, JC 2018 74, p. 28, available at https://esas-joint-

VI. ACCESS TO THE SANDBOX

Under Spanish Act, the Sandbox is a privileged area that is accessed through an administrative application. The promoters of pilot projects included in the scope of the Act may request access to the Sandbox. The promoter may be any person with their own pilot project.[67] Applications must be made using a standardised form.[68] They must be accompanied with a report providing proof of compliance with the legal requirements to access the Sandbox. They must be submitted to the Secretariat General of the Treasury and International Financing for forwarding to the competent supervisory authority.

The Secretariat General must publish six-monthly calls for applications and state the deadline for acceptance of applications.[69]

For innovations whose application is not an activity subject to authorisation, the application is an option for access to the privileged area. If they are applications for performing activities subject to authorisation, it is a way of accessing an exemption system that allows the tests to be carried out in a sandbox. In addition to having monitors and official assessments, it allows applications to be made, at any time, for authorisation to perform the reserved activity or to expand an existing authorisation through a privileged gateway, permitting a simplified analysis and reduced deadlines.

In order for projects to be favourably assessed, two requirements must be met: they must be "sufficiently advanced" innovations and provide "added value".[70] Projects are

committee.europa.eu/Publications/Reports/JC%202018%2074%20Joint%20Report%20on%20Regulatory%20Sandboxes%20and%20Innovation%20Hubs.pdf. For arguments in favour of creating a European Regulatory Sandbox as a privileged place for proactive monitoring, see PARACAMPO, Maria Teresa (2019): "Dalle regulatory sandboxes al network dei facilitatori di innovazione tra decentramento sperimentale e condivisione europea", *Rivista di Diritto Bancario*, Fascicolo II, Sezione I, pp. 219-236.

[67] See art. 1.h) of Act 7/2020, which includes, in an open list, "tech companies, financial companies, credit administrators, associations representing interest groups, public or private research centres and any other interested party."

[68] It must be approved by the Secretariat General of the Treasury and International Financing within one month from the Act's entry into force (Additional Provision One).

[69] Applications must be submitted within thirty days prior to said deadline (art. 6.3 of Act 7/2020).

[70] According to the preamble: "Projects may receive a favourable assessment if they are sufficiently advanced and they may contribute added value to aspects ranging from improvement of regulatory compliance or customer protection instruments, to increasing efficiency and improving the provision of financial services."

considered "sufficiently advanced" when they are viable due to presenting functionality in accordance with the prototype or original model.[71] There is "added value" when the project provides potential usefulness in any of the four aspects listed in art. 5.2 of the Act.

As for other aspects, in order to access the Sandbox, it is necessary to justify how it is expected to comply with guarantees to protect customers participating in the tests.

The competent supervisory authority must assess each application as "favourable" or "unfavourable" in a reasoned report.[72] This report will identify the promoter, contain a description of the project and analyse compliance with the legal requirements. Both favourable and unfavourable reports must state well-founded reasons that take into account the legal requirements that applications must meet and their impact on the Spanish financial system. The authorities have a wide margin to decide on how to apply indeterminate legal concepts. However, there is technical discretion since the authorities may opt for the criterion that best meets the legal provisions. In any case, applications will receive an unfavourable report if they do not comply with the legal requirements or do not use the official form.[73]

In order to correctly assess the project, the Secretariat General is authorised to request the promoter to provide additional information or documents. This indicates that in the stage prior to acceptance of applications and assessment of the projects, relations between the promoters and the authorities are channelled through the Secretariat General. During this preliminary stage, the supervisory authorities maintain a certain distance from the promoters and may not request any additional information they consider necessary for assessment. They may contact the Secretariat General and ask it to request the additional information.

Once the six-monthly deadline for applications has been reached, the competent supervisory authority has one month to send the Secretariat General the list of

[71] See art. 5.2 of Act 7/2020.

[72] When there are several authorities, they will coordinate with one another to submit a single report.

[73] Such projects will arrive at the Secretariat General with an unfavourable report from the supervisory authorities and, consequently, the application may not be accepted. It is unlikely for a situation to arise in which the Secretariat General has to assess whether it rejects such applications (a case referred to in art. 7.4 two of the Act 7/2020).

applications for projects with a favourable assessment report.[74] Act 7/2020 says nothing about a maximum six-monthly quota for projects that may access the Sandbox. From an operational point of view, due to the limited resources available,[75] it must be considered that, for each six-month period, a maximum quota of projects that may access the Sandbox will be established, so the competent authorities must coordinate with one another to send a list without exceeding the quota set in the call for applications.

After the Secretariat General has received the list, the chairman of the Coordination Committee will call a meeting of that body in order to acknowledge receipt of the assessments performed.[76] Acknowledging receipt means it receives the information and records the fact that it has been received. The Coordination Committee does not have any role in assessing the projects. Within five days following that meeting, the Secretariat General will publish the list of projects accepted into the Sandbox and state the authority or authorities responsible for monitoring them. Projects that have received a prior unfavourable assessment will not be admitted.[77] The decision not to admit them is the final stage in the administrative procedure. It may be appealed through an appeal for reversal of the decision or an administrative appeal.[78]

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[74] This deadline may be extended by an additional month when "the number of applications or the complexity of the procedures makes it advisable" (art. 7.2, paragraph two, of Act 7/2020).

[75] According to additional provision two of Act 7/2020, its application "must not cause an increase in public expenditure" with a "redistribution of existing resources" (Report Analysing the Regulatory Impact of the Act, p. 29). One should bear in mind that while Innovation Hubs are easy to implement, regulatory sandboxes make intensive use of human and material resources. "Sandboxes do offer benefits but are complex to set up and costly to run", UNSGSA FinTech Working Group/CCAF, *Early Lessons on Regulatory Innovations to Enable Inclusive FinTech: Innovation Offices, Regulatory Sandboxes, and RegTech*, 2019, p. 7. See APPAYA, Sharmista, JENIK, Ivo (2019): "Running a Sandbox May Cost Over $1M, Survey Shows", 1 August 2019, available at https://www.cgap.org/blog/running-sandbox-may-cost-over-1m-survey-shows.

[76] The meeting must be held within ten days from receipt of the list by the Secretariat General (art. 7.3 of Act 7/2020). The Act envisages negative silence, since once three months have elapsed from the deadline for acceptance of applications, if the Committee has not acknowledged receipt, the Secretariat General must notify the persons concerned that their applications are deemed rejected (art. 7.4 three of the Act).

[77] It is superfluous for art. 7.4 one of the Act to state that the application will be rejected when "any of the supervisory authorities competent due to the subject matter has issued an unfavourable report" since when there are several authorities they must issue a single favourable or unfavourable report as stipulated in art. 7.1. No personal votes are allowed here.

[78] See art. 7.5 of Act 7/2020.

The effects of admission into the Sandbox are conditional upon signing the relevant protocol.[79] The "Protocol" is the "document that contains the terms in which the tests will be performed".[80] The promoter must sign the protocol in order to be able to access the Sandbox. The promoter has three months from publication of the admission of its project to sign the protocol. Failure to sign the protocol within the stipulated term[81] cancels its admission.

The protocol is drafted by the competent authority and the promoter must sign up to it if it wants to access the Sandbox. It is an adhesion contract.[82] It is the competent authority that determines the contents of the protocol. So it is surprising that Act 7/2020 stipulates that the protocol must include any other question that may be relevant for its development in the promoter's view.[83] The contents of the protocol are not the result of negotiation between the promoter and the competent authority. It is the competent authority that decides on the contents of the protocol in view of the specific features of each project. The promoters have no right to require the authority to include questions they consider relevant in the protocol. What is relevant or ceases to be relevant is determined by the competent authority. As stated in the Act, the protocol will contain "any necessary precautions to ensure the performance of the tests will not affect financial stability, the integrity of the financial markets or third parties not participating in the tests".[84] The competent authority's power over the protocol is confirmed by regulating that it may be modified on its own initiative, or at the promoter's initiative, but only with its approval.

[79] The authorisation is "provisional" until the protocol has been signed (see art. 7.3 final of Act 7/2020).

[80] Art. 3.g) of Act 7/2020.

[81] It must be produced within three months, unless it is extended by the authority itself or at the promoter's request, when the circumstances make it advisable and that does not harm third-party rights [see art. 8.1 of Act 7/2020].

[82] It is similar to the adhesion contract that institutions participating in IBERCLEAR must sign. See Circular 1/2020 of 28 January on the procedure for the adhesion of institutions to the security settlement system managed by Iberclear (*Circular 1/2020, de 28 de enero, sobre procedimiento de adhesión de entidades al sistema de liquidación de valores gestionado por Iberclear*).

[83] See art. 8.2.g) of Act 7/2020.

[84] Art. 8.3 of Act 7/2020.

However, the protocol can only be modified with the promoter's agreement.[85] The modification cannot be imposed but it must always be approved by the authority.

Act 7/2020 determines the minimum contents of the protocol. For each project, the protocol must set the number of users and the transaction volume, the stages, the objectives and the resources the promoter will use to perform the tests. Just as in the Stock Market Act, offerings considered "private" are excluded from the framework for public offerings,[86] in the same way, in relation to the innovations covered by the Act, the protocol defines which activities are excluded from the general framework for financial activities, as they are not considered to constitute regular professional provision of services. The Sandbox is excluded from the general framework that has its own administrative control framework, which is why it is described as a "Controlled Testing Space" or Sandbox.

In accordance with the legal framework, the protocol must specify how monitoring of the project, the system of guarantees for user protection and confidentiality will be performed. In addition, it must include the way in which participants will be compensated for any damage the promoter may cause them.[87]

VII. SANDBOX GUARANTEES

The promoter may be liable for damage arising from breach of the protocol. Act 7/2020 specifies that this may be due to wilful misconduct or negligence. Obviously "[l]osses that arise from fluctuation in the markets will not be considered damage", unless no warning of that risk was provided in accordance with the protocol.[88]

In accordance with the protocol signed, the promoter must provide financial guarantees to cover any liability for damage and losses it causes within the Sandbox.[89]

[85] Arts. 8.4 final and 15.2 of Act 7/2020.

[86] Art. 35.2 Spanish Securities Market Act.

[87] See art. 12.3 of Act 7/2020.

[88] See art. 12.2 of Act 7/2020.

[89] See art. 13 of Act 7/2020.

Regulatory development must determine the manner in which these guarantees will be implemented. Insurance or bank guarantees are acceptable forms.

Although the Act excludes the authorities "from any damage and losses that may arise",[90] the authorities are liable due to fault arising from choice ("*in eligendo*") or lack of vigilance ("*in vigilando*"). Consequently, state liability may be claimed for failures by the authorities in assessing the projects or monitoring the tests.[91] This risk is one of the most relevant aspects of the Act. By extending the mandate supervisors have and making them the selectors of companies that can access the market, with the added function of monitoring the tests, State liability is expanded.

VIII. START AND FOLLOW-UP OF THE TESTS

Once the protocol has been signed, the participants' informed consent has been given and the guarantee system has been activated, the competent authority will allow the promoter to start the tests.[92]

Participation in the test will be by invitation by the promoter, which must first provide a "Single Informative Document"[93] that sets out the risks and responsibilities arising from participating in the tests. The invitation must be accepted by signing the document, as a way of giving informed consent to the risks associated with participating in the tests.[94]

Participants are entitled to withdraw and end their participation in the tests in the terms accepted in the single document, in accordance with the test protocol.[95] "Under no

[90] See art. 12.1 final and 15.1 of Act 7/2020

[91] The participants may file claims but one cannot rule out, *a priori*, promoters also filing claims, in spite of that stated in art. 12.2 of Act 7/2020.

[92] See art. 9 of Act 7/2020.

[93] It is envisaged that an official form will be published with the contents stipulated in art. 10.1 of Act 7/2020.

[94] Signing informed consent documents is already common practice in financial markets in spite of the criticisms expressed by ESMA (in *MiFID Suitability Requirements Peer Review Report*, ESMA/2016/5847, April 2016, which considers that "the existence of the handwritten note could be used by firms to protect themselves", p. 34 and 35). See art. 214.6 TRLMV and art. 15.6 and the Property Loan Contracts Regulation Act 5/2019 of 15 March (*Ley 5/2019, de 15 de marzo, reguladora de los contratos de crédito inmobiliario* - LCCI).

[95] See art. 11.1 of Act 7/2020.

circumstances [will such withdrawal] give rise to any indemnity or compensation for the promoter of the tests".[96] The Single Informative Document may be used to delimit the responsibility of those participating in the tests, which stands in contrast to the spirit of the rule protecting the user.[97]

Each competent authority will appoint one or more monitors to monitor the pilot project and a coordinator. They will decide together on the action guidelines.[98] In this way, "continuous dialogue between the promoter and the authority" can be maintained, always under the authority's instructions, in order to guarantee compliance with that stipulated in the Act and the protocol. The monitor acts as a watchdog to ensure regulatory compliance. The competent authority may request information or perform inspections with the monitor's collaboration. Breach of the Act or the protocol will bring the tests to a halt. When the promoter is a supervised institution and the breach is an infringement of the regulatory and disciplinary rules for the financial market, the sectoral system of penalties will apply.[99] However, there is no system of penalties for breaches by promoters that are not classified as authorised institutions. This circumstance implies unequal treatment of promoters and calls the effectiveness of the legal framework into question. The system of penalties should apply to all promoters, either by reference to the system of penalties for financial institutions or inclusion in the Act of an *ad hoc* system of penalties for all promoters.

The competent authority may suspend the tests when there is breach of "the promoter's duty of good faith". This breach must be based on a specific mention of the actions that go against the legal framework. For example, due to "manifest or repeated deficiencies, or possible risks to financial stability, the integrity of the financial markets or customer protection".[100] Discretional halting without stating the reasons would go against the principle of legal certainty.

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[96] See art. 11.2 of Act 7/2020.

[97] See art. 10.3 of Act 7/2020.

[98] See arts. 15.1 and 22.2 of Act 7/2020.

[99] See art. 15.4 of Act 7/2020.

[100] See art. 17.1 two of Act 7/2020.

In turn, the promoter may halt the pilot project tests for any reason that prevents them from continuing or when it has achieved the objectives stated in the protocol. It may halt them without the participants being entitled to indemnity unless "they suffer financial losses directly arising from said suspension". Whenever possible, advance notice of the suspension of the tests must be provided, stating the reasons for it.[101]

IX. EXITING THE SANDBOX

Once the tests have been completed, either because the objectives have been achieved or their term has expired, the promoter must draw up a report, in accordance with that stipulated in the protocol, setting out the self-assessment of the project and the tests performed in order to send it to the competent authority which, in turn, must send it to the Coordination Committee.

The promoter may request an extension to the tests, stating the reasons for it. There is no maximum length for the tests and the corresponding extensions. The regulations developing the Act should stipulate the maximum length of the tests and allow a single extension of the same length. The Sandbox does not cover regular provision of financial services.[102] "[U]nder no circumstances will [pilot projects] imply the provision of services on a professional and regular basis, nor will they be indefinite".[103]

Promoters may request authorisation, at any time, to perform financial activities or request an extension to them when they already have authorisation. Such access or extension is provided through a gateway that simplifies procedures and may shorten the deadlines for obtaining or extending authorisation.[104]

[101] This could be the general two-month term for *ius variandi* applicable to financial institutions. For all, see art. 33 of Royal Decree-Law 19/2018 of 23 November on payment services and other urgent financial measures [*Real Decreto-ley 19/2018, de 23 de noviembre, de servicios de pago y otras medidas urgentes en materia financiera*].

[102] See art. 4.2 of Act 7/2020.

[103] Art. 3.j) of Act 7/2020.

[104] See art. 18 of Act 7/2020.

X. CONCLUSIONS

In the absence of European Unión standards on innovation facilitators, national solutions have proliferated. The Spanish Regulatory Sandbox Act is a legislative policy option, presented as something that is necessary, which transfers the experience of clinical trials in the health sector to the financial sector. This option expands the mandate of financial supervisors to include assessment and monitoring of business projects. It is a structural change that imposes a cultural change and necessary reorganisation. It creates a Regulatory Sandbox with a complementary Innovation Hub but does not provide it with the necessary resources.

The Spanish Act establishes the principles for the Sandbox and develops how it is organised and how it operates in line with UK sandbox. But it is very regulatory in nature by setting the deadlines for processing applications, which makes it more difficult to adapt to circumstances. It is a novel approach in financial regulation, which does not fit easily alongside the regulatory and disciplinary rules for the financial market. It is a measure to encourage digitalisation in which financial supervisors participate. It is a regulatory experiment that is intended to facilitate digital transformation. It may be a good tool to develop data-driven finance and make way for data-based supervision.[105] This is the view of the European Commission, which has announced a pilot project for financial infrastructure based on distributed ledger technologies, better known as blockchain.[106]

Now that we have entered the arena, we should take the opportunity that sandboxes offer to open up the market and its regulation to new technologies. We should provide the new bodies with resources. We should integrate the Regulatory Sandboxes into large-scale financial innovation portals. We should coordinate the financial authorities' actions with those of the data protection and competition. We should make way for infrastructure

[105] TSANG, C. Y. (2019), "From Industry Sandbox to Supervisory Control Box: Rethinking the Role of Regulators in the Era of FinTech", *U. Ill. JL Tech. & Pol'y*, pp. 355-404, according to whom: "Regulators should also embrace and lever SupTech to transform industry sandboxes into supervisory control boxes [to] promote not only financial innovation and inclusion but also enhance regulatory capacity and capability", p. 404.

[106] See Proposal for a Regulation on a pilot regime for market infrastructures based on distributed ledger technology, COM/2020/594 final.

based on blockchain under the standards issued by industry associations as Alastria in Spain. We need to successfully find our way out of the sandbox trap.

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