



Jean Monnet Network VISTA Teaching Case Study

FinTech and Regulatory Approaches at the EU Level:

The Case of a 'Regulatory Sandbox'

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Summary: This teaching case study was developed in the framework of the Jean Monnet Network VISTA dedicated to the study of EU single market integration. It outlines and contextualizes recent developments in FinTech and the emerging EU regulatory approach in this rapidly evolving area of the single market in finance. The aim of the case study is to enhance students' understanding of the possibilities and limitations of a regulatory sandbox as a new policy instrument in the toolbox of EU regulators. Furthermore, it sheds light on how the EU institutions could support the effective implementation of regulatory sandboxes across the member states. The assigned readings examine the regulatory challenges and tensions in this area, considering the (current) absence of a comprehensive EU-wide regulatory single market strategy for the FinTech sector.

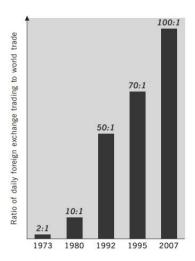
Student level: upper undergraduate, postgraduate

Implementing the case study: This teaching case can be conducted in two discussion seminars of approximately 90-120 minutes.

Keywords: FinTech governance in the EU; regulatory sandboxes; stakeholder dialogue; soft law

Introduction

Finance can be regarded as one of the most globalized phenomena. There have been dramatic changes in the operation of financial markets in the past decades. International financial flows and foreign currency transactions have reached unprecedented levels, as money has been moving electronically round the world at unprecedented speeds, generating enormous repercussions for national and local economies (Dicken, 2011).



The growing disparity between foreign exchange trading and world trade, 1973–2007

Source: based on Dore, 2008: 3; Eatwell and Taylor, 2000: 3-4

Highly integrated financial markets can be observed in the EU countries as well. In the extreme example of Estonia, foreign-owned banks controlled over 95% of the banking market in terms of total loans issued and share capital by 2014 (Finantsinspektsiooni, 2014).

Finance plays a central role in the global economy, given the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies – labelled as the process of *financialization* (Epstein, 2005). Financial systems are conventionally associated with banking and securities markets with a variety of different types of financial institutions, each of which has a specific set of core functions.

Financial services

| Туре | Primary functions |
|--------------------------------------|--|
| Commercial bank | Administers financial transactions for clients (e.g. making payments, clearing cheques). Takes in deposits and makes commercial loans, acting as intermediary between lender and borrower. |
| Investment bank/ securities house | Buys and sells securities (i.e. stocks, bonds) on behalf of corporate or individual investors. Arranges flotation of new securities issues. |
| Credit card company | Operates international network of credit card facilities in conjunction with banks and other financial institutions. |
| Insurance company | Indemnifies a whole range of risks, on payment of a premium, in association with other insurers/reinsurers. |
| Accountancy firm | Certifies the accuracy of financial accounts, particularly via the corporate audit. |

Source: Dicken (2011, p. 370)

However, the boundaries between these activities and institutions have become increasingly blurred. This trend has been further amplified by the emergence of a **FinTech** industry. FinTech is generally seen as a post-2008 Global Financial Crisis phenomenon. The wave of FinTech has emerged rapidly and exponentially by historical standards. In terms of definitions, FinTech can be regarded as an umbrella term that generally refers to 'technology-enabled innovation in financial services with associated new business models, applications, processes or products, all of which have a material effect on the provision of financial services' (Financial Stability Board, 2022). There is, understandably, a great deal of variation in how the term 'FinTech' is defined and used. Irrespective of semantic squabbles, FinTech as such has had revolutionizing effects on finance in terms of undermining the underlying foundations of the conventional financial regimes by introducing new technological solutions such as real-time payment systems, distributed ledger technologies, lending marketplaces, etc. (González-Páramo, 2017).

The growth of the FinTech industry has presented new challenges for the regulators and supervisors at the national level as well, especially in the context where financial markets in general are among the most heavily regulated (and supervised) markets at the EU level. There are new challenges for both national and supranational policy-makers in terms of the regulatory fit and the changing roles or mandates of regulators. For instance, blurring jurisdictional and market lines have led to lower transparency and governability. At the same time, on a personal level, financial regulators are struggling with cognitive and managerial challenges in understanding and targeting the limitations as well as vulnerabilities of various complex technologies (Omarova, 2020). In other words, due to substantive, legal and other uncertainties for financial regulators, the tackling of FinTech is problematic (Smoleńska et al., 2020). Likewise, the regulation of FinTech at the EU level is complicated, given a varying degree of

market penetration of novel financial solutions as well as diverging extent of internationalization and maturity (sophistication) level of FinTech industry in different member states.

That said, one of the recent (common) initiatives among many EU member states has been the adoption of a 'regulatory sandbox' instrument that implicitly is supposed to address the most pressing challenges FinTech industry poses to regulators – comprehending the working of new technologies, addressing systemic risks, protecting consumer/investor interests, and promoting competition and innovation, all at the same time.

Hence, the case to be explored for understanding contemporary developments in the single market (in the area of finance) deals with a FinTech industry and in particular, regulatory sandboxes. **The aim of the case study** is to increase your understanding of possibilities and limitations of a regulatory sandbox as a new policy instrument in the toolbox of EU regulators and the potential avenues for the EU institutions to support the effective implementation of regulatory sandboxes across the EU member states.

1. Context

2.1 Current approaches to FinTech regulation in the EU

A comprehensive and credible regulatory single market strategy for FinTech has not yet emerged. At the EU level, rather than being wide-ranging and in force, the development of legal frameworks for the spectrum of FinTech activities is either absent, at a policy discussion stage, or embryonic. The European Securities and Markets Authority and the European Banking Authority had both been collecting relevant data in a purely monitoring and advisory capacity in fields such as cryptocurrency and crowdfunding since 2013–2014. Only in 2018 did the European Commission publish its more comprehensive 'Fintech Action Plan', where it views FinTech as a domain where the themes of financial services and digital single market meet. Fintech Action Plan established some progressive objectives for EU institutions, while also concluding that "the case for broad legislative or regulatory action or reform at EU level at this stage is limited" (European Commission, 2018). As such, the proposed actions in the plan largely eschewed the establishment of new specific regulations or institutions in favor of a process of mapping the private and regulatory landscape, establishing best practices, and reviewing the impact of related regulatory frameworks such as the General Data Protection Regulation (GDPR) and Digital Single Market strategy in the context of FinTech. In line with

the plan, the European Supervisory Authorities (ESAs) have been asked to map the current authorizing and licensing approaches for innovative FinTech business models, and issue, where appropriate, guidelines on such approaches and procedures. The action plan also refers to other issues to be addressed such as the development of common EU standards for FinTech solutions, the need to enhance interoperability, removing obstacles to the use of cloud computing services by means of EU guidelines, cross-sectoral self-regulatory codes of conduct or standard contractual clauses, strengthening the cyber-resilience of the financial sector, etc.

Thus, what the competent EU institutions and the ESAs are doing is addressing different issues arising from the penetration of FinTech in the relevant markets by setting up mainly expert working groups and fora, but also by issuing communications, announcements and guidelines, and in general, by proposing new policies for the EU Single Market to reap the benefit from the technological boost. The groups and fora include the EU Blockchain Observatory and Forum (EUBOF), EU FinTech Lab, the European Forum for Innovation Facilitators (EFIF), FinTech Knowledge Hub etc.

The aim of **EUBOF** is to accelerate blockchain innovation and development within the EU to establish the EU as a global leading blockchain forum. It monitors blockchain initiatives in Europe, gathers knowledge on blockchain solutions, constitutes an attractive and transparent forum for sharing information and opinions, and recommends actions to be taken at EU level. **EU FinTech Lab's** aim is to raise the national regulators' level of capacity and knowledge on FinTech innovations in particular and, on the new technologies in general. **EFIF**, in turn, facilitates dialogue among supervisors and encourages discussion on common approaches within the EU and with third countries on the regulatory treatment of technological innovation. Finally, **FinTech Knowledge Hub**, established by the EBA, aims to enhance the cooperation between the competent authorities, and with FinTech firms, technology providers and regulated entities about the monitoring of financial innovation and knowledge sharing.

So far there are two key pieces of bespoke FinTech legislation adopted at EU level. 2020 saw the adoption of the **Crowdfunding Regulation**, providing an authorization and passporting regime for equity-based crowdfunding and loan-based crowdfunding platforms. **A Proposal for a Regulation on Markets in Crypto-Assets** is still to be enacted. This would regulate and enable passporting for certain crypto-asset issuers and crypto-asset service providers (such as crypto-asset currency exchanges) in the EU capital markets.

Thus, in light of an absent legal framework for FinTech at the EU level, several EU member states have established national facilitator programs such as regulatory sandboxes that seek to encourage public–private interaction and information sharing and reduce uncertainty. To some extent, the adoption of the regulatory sandbox by regulators can be characterized as a stopgap measure in the absence of a *sui generis* regulatory regime tailor-made for FinTech.

1.2. Regulatory sandbox: definition and use in the member states

The UK's Financial Conduct Authority (FCA) set up the first FinTech regulatory sandbox in June 2016. In the EU, regulatory sandboxes are in operation or on the way pursuant to national legislative frameworks in Austria, Denmark, Hungary, Latvia, Lithuania, Malta, the Netherlands, and Spain.

The term 'regulatory sandbox' covers a wide variety of programs run by national financial regulators in order to allow for controlled testing of innovative financial products and services by private firms. In general, sandboxes provide a 'safe space' for FinTech businesses and financial firms to offer real products to real customers with the benefit of a waiver, or a significant relaxation, of otherwise applicable regulations. They are typically justified as a means of supporting consumer-benefitting financial innovation, facilitating financial inclusion, improving the efficiency and competitiveness of domestic financial institutions, and advancing regulators' own understanding of the emerging innovative technologies.

There are common attributes in all of the sandboxes that have already being released or are being planned. First of all, the project accepted into a sandbox should be innovative. Secondly, while in the sandbox, there is a strict monitoring by the authority in charge, which will be closely following all the improvements and helping when required. Another key element in the sandboxes is to allow regulatory exceptions while the project is being tested and is still unsure what its impact will be in the current framework. However, there are different views among authorities regarding who should participate in the regulatory sandbox (González-Páramo, 2017).

The adoption of regulatory sandboxes is hoped to imply a 'win-win' strategy. First, companies are expected to be keener on trying out new products and services that could potentially improve competition and ultimately benefit consumers. Secondly, the regulatory framework can also benefit from the use of these sandboxes, as they permit a better understanding of the costs, benefits and risks of new ideas. And, lastly, consumers will enjoy

the benefits of efficiency gains and obtain access to more competitive financial services (González-Páramo, 2017).

In spite of high expectations placed on regulatory sandboxes, the instrument has not escaped criticism due to its various shortcomings such as its potential for regulatory arbitrage¹ between countries (Allen, 2020). There are also several criticisms from the political economy and methodological perspectives (Brown & Piroska, 2021), leading to a cautious stance on sandboxes in several member states (e.g. Germany). Likewise, Knight and Mitchell (2020) have pointed out concerns about the soundness of regulatory sandboxes in terms of the regulatory "race to the bottom" tendencies, risks posed to consumers, and potential costs associated with a government-granted economic privilege to selected FinTech companies that could lead to distorted markets and cronyism.

2. Exploring the 'regulatory sandbox' scenarios at the EU level: a multi-layered puzzle

Different states pursue different agendas with respect to FinTech. Some jurisdictions act in ways that signal concerns about the potential risks of various FinTech applications and hence, are willing to impose regulatory constraints on them. Examples of such jurisdictions include Japan, Korea, China, Russia, and to some extent the US. Others are enthusiastically embracing FinTech as an opportunity to raise their revenues and international profile as regional or global FinTech centers. This group includes, for example, Singapore, Lithuania, and to some extent the UK (Omarova, 2020).

That said, the bulk of regulatory responses to FinTech disruption to date seem to follow a cautious technocratic pattern of passive observation followed by piecemeal adjustments, where 'smart' regulation calls for a constant 'contextualizing' and 'customizing' of legal rules to match individual market developments (Omarova, 2020). This, in turn, implies that regulatory progress at EU member state level is uneven, resulting in a patchy regulatory framework in the internal market across member states for FinTech that creates both regulatory friction and regulatory fragmentation (Ahern, 2021). The testimony of a regulatory friction is adversarial attitudes of member states on the issue of a regulatory sandbox and heterogeneous adoption of this tool across EU member states.

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¹ Meaning market participants weighing between different jurisdictions and opting for the one that provides a more favorable regulatory treatment for doing business.

The financial rulebook appears to be both over- and under-inclusive, as many categories used by it are difficult to match to the activities of this new type of financial player. There is a patchwork of different rules and requirements that apply to FinTech industry, depending on which EU member state they are operating in, creating great uncertainty not only among market players, but also for the regulators. Furthermore, such a widely disparate national regulatory landscape for FinTech models inevitably fuels regulatory arbitrage (Ringe & Ruof, 2020).

Fragmentation and friction could be alleviated by the above-mentioned 'FinTech Action Plan' of the European Commission that mandates the European authorities to monitor national initiatives and perform a coordinative role, but at present this amounts to an 'interested observer' status rather than that of an active participant shaping national strategies. Hence, thus far, ESAs have mapped FinTech facilitators, such as regulatory sandboxes, in member states and identified best practices on these facilitators.

In light of these regulatory challenges, the question arises: should the EU continue giving a way to a fragmented landscape of sandboxes, or should there be a more harmonized approach at the EU level (e.g. following the suggestion of Ringe and Ruof (2019) to design an EU-guided sandbox to be operated by member states)? Thus, from the EU's strategic perspective the quest for a common European approach on regulatory sandboxes currently revolves around **four distinct options** which you will examine in the case study seminars, namely:

- (i) keep to facilitating stakeholder dialogue;
- (ii) issue soft recommendations or guidelines for operation of national regulatory sandboxes;
- (iii) fully harmonize rules on sandboxes across the member states;
- (iv) adopt an EU-wide, cross border regulatory sandbox (Ahern, 2021; Ringe & Ruof, 2019, 2020).

Implementing the teaching case study

Session 1

Please read the assigned materials below and prepare to discuss with the other students in the group in light of the overarching case study task. The first set of readings will provide you with an overview of what regulatory sandboxes are in the context of the European FinTech sector as well as a summary of the four distinct options of how regulatory sandboxes can be designed and supervised by national and European regulators.

Assigned readings

- European Supervisory Authorities. (2018). *FinTech: Regulatory sandboxes and innovation hubs*. [Report JC 2018 74]. https://www.esma.europa.eu/sites/default/files/library/jc_2018_74_joint_report_on_regulatory_sandboxes_and_innovation_hubs.pdf
- Ringe, W. G. & Ruof, C. (2019). *Keeping up with Innovation: Designing a European Sandbox* for Fintech. [Commentary]. European Capital Markets Institute. http://aei.pitt.edu/95830/1/Keeping_up_with_Innovation_ECMI_commentary.pdf
- Ringe, W.G. & Ruof, C. (2020). Regulating Fintech in the EU: the Case for a Guided Sandbox. *European Journal of Risk Regulation*, 11(3), 604-629.

Study task: Present and analyze the main tenets of each of the four possible options outlined in Ringe and Ruof (2019; 2020) for dealing with regulatory sandboxes in the EU single financial market. Particularly, how will the member state (national level) and EU (supranational) regulators interact with each other in each of the four options?

Session 2

Please read the assigned materials below and prepare to discuss with the other students in the group in light of the overarching case study task. The second set of readings will provide you with insights into the limitations of the existing regulatory approaches to FinTech governance and challenges for developing a coherent overarching regulatory approach at the EU level.

Assigned readings

Ahern, D. (2021). Regulatory Lag, Regulatory Friction and Regulatory Transition as FinTech Disenablers: Calibrating an EU Response to the Regulatory Sandbox Phenomenon. European Business Organization Law Review, 22, 395-432.

Brown, E. & D. Piroska. (2021). Governing Fintech and Fintech as Governance: The Regulatory Sandbox, Riskwashing, and Disruptive Social Classification. *New Political Economy*, 27(1), 19-32. DOI: 10.1080/13563467.2021.1910645

Study task: Considering the four options you read about and outlined in Session 1, now we focus on the implications and consequences of each option. Examine the advantages and challenges (or shortcomings) that each option brings. Please analyze these systematically both from a member state and the EU (supranational level) perspective. What is your overall assessment, is a more centralized or a more decentralized regulatory approach to FinTech sandboxes preferable and why?

Additional recommended readings:

- Ahern, D. (2021). Regulatory Lag, Regulatory Friction and Regulatory Transition as FinTech Disenablers: Calibrating an EU Response to the Regulatory Sandbox Phenomenon. European Business Organization Law Review, 22, 395-432.
- Allen, H. J. (2020). Sandbox Boundaries. *Vanderbilt Journal of Entertainment & Technology Law*, 22(2), 299-322.
- Brown, E. & D. Piroska. (2021). Governing Fintech and Fintech as Governance: The Regulatory Sandbox, Riskwashing, and Disruptive Social Classification. *New Political Economy*, 27(1), 19-32. DOI: 10.1080/13563467.2021.1910645
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- Knight, B. R. & Mitchell, T. E. (2020). The sandbox paradox: Balancing the need to facilitate innovation with the risk of regulatory privilege. *South Carolina Law Review*, 72(2), 445-476.
- Omarova, T. S. (2020). Technology v Technocracy: Fintech as a Regulatory Challenge. *Journal of Financial Regulation*, *6*, 75-124.
- Ringe, W. G. & Ruof, C. (2019). *Keeping up with Innovation: Designing a European Sandbox* for Fintech. [Commentary]. European Capital Markets Institute. http://aei.pitt.edu/95830/1/Keeping up with Innovation ECMI commentary.pdf
- Ringe, W.G. & Ruof, C. (2020). Regulating Fintech in the EU: the Case for a Guided Sandbox. *European Journal of Risk Regulation*, 11(3), 604-629.
- Smoleńska, A,. Ganderson, J. & A. Héritier. (2020). The impacts of technological innovation on regulatory structure: Fintech in post-crisis Europe. In A. Héritier & M.G. Schoeller (Eds.), *Governing Finance in Europe*, (pp. 164-189). Edward Elgar Publishing.