Critically Analysing the Hype of Sandbox in the Context of Fintech

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doi:10.56397/SLJ.2023.12.03

Abstract
The UK’s financial market is under severe pressure as its proportion in the international financial market is steadily decreasing. Intending to alter this phenomenon and “encourage the development of its FinTech ecosystem,”¹ so that the UK can keep pace with global financial developments, “closing the gap which has opened up between the UK and other global centres,”² the Financial Conduct Authority (FCA) proposed the regulatory sandbox in 2015, which is “an environment in which FinTech businesses can test innovative products, services, business models and delivery mechanisms that stem from engaging in regulated activities.”³ Due to its ability to encourage FinTech innovations in companies while preventing consumer disruption, “since its launch in 2016,”⁴ it has rapidly gained popularity and taken the world by storm. However, some have contended that such a hype of the regulatory sandbox contributes to the failure in seriously assessing the benefits and the potential downsides of the instrument. As a result, the regulatory sandbox has now become a controversial topic. Based on these controversies, this essay analyze the regulatory sandbox and the Hype surrounding it and take the stance that the hype about sandbox may not take into account the conditions under which it has been successful and exaggerates the advantages of sandbox, which is not conducive to an objective evaluation.

Keywords: sandbox, fintech, FCA, financial regulation

1. Introduction
The regulatory sandbox can be defined as “a ‘safe space’ in which businesses can test innovative products, services, business models and delivery mechanisms without immediately incurring all the normal regulatory consequences of engaging in the activity in question.”¹ First introduced by the UK’s Financial Conduct Authority (FCA), a sandbox is a structured form of experimentation, in which a company’s innovative financial product can be used on a small group of consumers in the real market.² This allows both regulators and innovators to observe how this new financial product operates in the real world, and innovators can get advice on how to implement

the financial product from the FCA. Therefore, the regulatory sandbox has achieved global popularity and played an important role in balancing fintech innovation while maintaining the stability of financial markets.

However, the prevalence of the regulatory sandbox has also given rise to hype, which is not based on an objective assessment but rather on a one-sided promotion of its advantages while ignoring its potential challenges. Furthermore, regulatory approaches used to balance the development of fintech and financial regulation, including innovation hubs and innovation accelerators, go far beyond the regulatory sandbox. Unfortunately, the hype around regulatory sandbox has prevented the market from seriously assessing the effectiveness of these tests, which is detrimental to the development of a financial regulatory system.

Therefore, the essay argues that the hype surrounding regulatory sandbox has led to a lack of serious evaluation of its advantages and disadvantages. It also hindered the evaluation of other methods of testing new fintechs.

This essay will be divided into three parts. Section 1 introduces the advantages and disadvantages of regulatory sandbox and the reasons for the surrounding hype; Section 2 introduces how this hype has one-sidedly emphasises the advantages mentioned above of regulatory sandbox while ignoring the potential disadvantages, making it difficult to assess the regulatory sandbox properly; Section 3 introduces how this hype has led to the failure in assessing the effectiveness of alternative mechanisms for testing new fintech, and what impact this has had on financial regulation.

2. The Pros and Cons of Regulatory Sandbox and the Reasons for the Hype

2.1 The Pros and Cons of Regulatory Sandbox

The regulatory sandbox is beneficial for both regulators and sandbox participants. First, it allows innovators to test their products with real customers, in a space with fewer regulatory constraints, and can observe guidance from regulators. This helps innovators to understand how to improve their products based on practical feedback. Secondly, the regulatory sandbox helps prevent the uncertainty and insecurity caused by the initial entry of new technologies by allowing regulators to understand the operations of new fintech in advance and avoid potential damage to consumers if it enters the real market. In addition, applying a regulatory sandbox can reduce the financing risk for both innovators and investors. By analysing the performance of a product under the sandbox, investors are able to gain a clearer understanding of the product’s potential and increase their confidence in investing. This is evidenced by the FCA’s report which shows that regulatory sandboxes can partially mitigate investors’ concerns about uncertainty and increase the valuation of products by 15%, which will benefit fintech companies interested in securing funding. Finally, using a sandbox can reduce the cost of time to market for innovative companies, as financial regulators can adapt regulatory rules to the actual situation and relax restrictive conditions as appropriate, enabling fintech to be implemented as soon as possible. According to the FCA: “sandbox can reduce time to market by 33%.” This is significant in the current context of rapid technological development.

In addition to the above-mentioned advantages,

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1 Financial Conduct Authority, (n 1) para 2.3.
6 Lauren Fahy (n 7); Hilary J Alle (n 7).
10 Ibid.
the regulatory sandbox also has some shortcomings. Firstly, the experience provided by the regulatory sandbox is of limited relevance to large-scale fintech, due to it functioning more like a case-by-case model. For example, the FCA assigns “dedicated case officers” to sandbox firms, and sets the regulatory framework according to their circumstances, leading questionable conclusions when applied in a larger context. Secondly, regulatory sandboxes are only available to businesses authorised to engage in activities that the FCA has the power to regulate, which means that regulatory sandboxes can only regulate a certain range of financial products. The result is that some financial activities may be conducted without any oversight, which poses a significant economic risk. In addition, the cost of using a regulatory sandbox is high, with a recent survey suggesting that the cost of using a sandbox can exceed $1 million, meaning the cost of using a sandbox is likely to outweigh the benefits. Finally, one of the key reasons why firms choose to apply a regulatory sandbox is the desire to obtain legality or compliance advice from the FCA. However, this essay argues that the FCA’s compliance with the “Financial Services and Markets Act 2000 (Regulated Activities) Order 2001 (RAO)” is inherently imperfect and in practice the regulatory sandbox faces many legality challenges.

2.2 The Reasons for the Hype

This essay argues that the regulatory sandbox can be seen as a response to the increasingly stringent and burdensome regulatory requirements and the rapid development of fintech after the 2008 financial crisis. Specifically, after the 2008 financial crisis, financial regulators became more cautious and set stricter regulatory requirements. For example, Basel III substantially increased capital adequacy requirements. These regulatory measures helped to protect the stability of financial markets, but also made it difficult for small and medium-sized enterprises (SMEs) to obtain loans from traditional banks, giving rise to decentralised finance, such as P2P and other new fintech. In addition, the financial crisis damaged the credibility of traditional financial services and provided the conditions for new financial services to enter the market, which has given rise to the current fintech. The problem, however, is that current stringent regulations are “a barrier to entry for many fintech innovations.” Therefore, the creation of innovative regulatory models such as the regulatory sandbox is a solution to the current phenomenon, which seeks to create a ‘safe space’ for companies to innovate and develop.

In summary, the regulatory framework offers great security and flexibility, and has been seen as the optimal solution to the conflict between innovation and financial stability. As a result, there has been hype about the regulatory sandbox.

3. How the Hype Contributes to the Failure in Seriously Assessing the Benefits and Drawbacks of the Regulatory Sandbox

This essay agrees that the hype surrounding regulatory sandbox contributes to the failure in assessing the benefits of the instrument, because the hype now not based on an objective assessment of regulatory sandbox, but rather a blind following that ignores the conditions of the sandbox’s success and the objective advantages of the UK market.

One issue with the hype surrounding regulatory sandbox stems from paying too much attention to the theoretical aspects, with little research evaluating “when and why they are effective” in

1 Financial Conduct Authority (n 10)
2 ibid
5 Lauren Fahy (n 7)
6 Walter G Johnson (n 8); Dirk A Zetzche and others (n 10); Financial Services and Markets Act 2000 (Regulated Activities) Order 2001.
7 Hilary J Alle (n 7)
10 Hilary J Alle (n 7).
11 Hilary J Alle (n 7)
13 Walter G Johnson (n 8)
sandbox is that the UK market’s objective advantages are usually overlooked. Specifically, this essay argues that the successful practice of sandboxes in the UK is conditional. Firstly, “one potential explanation for the UK’s sandbox’s success is the reputation of its hosting agency.”9 The FCA is independent of government and has a good reputation. As Fahy’s research shows, the majority of firms participating in a sandbox consider the FCA to be objectively credible and transparent.10 This has largely encouraged firms to use the sandbox, because the FCA’s good reputation is seen by these businesses as having a high “PR value”.11 These companies see being selected for sandbox testing by the FCA as strong evidence that they are operating well, and will use this as a basis for advertising.12 This is also supported by market, the companies selected to participate in the use of the sandbox tend to be perceived as having a higher level of credibility.13 For example, around 40% of the start-ups that use the sandbox receive investment after the project.14 Therefore, the success of the regulatory sandbox in the UK is largely based on the objective advantages of the FCA’s reputation and the “PR value” it brings.

However, not every country has a financial regulator with a reputation similar to the FCA. As Lauren FAHY stated: “simply transplanting a successful sandbox from the UK may not necessarily lead to success, as other financial regulators may not have the same reputation as the FCA.”15 Therefore, if the important role the FCA plays in facilitating the success of regulatory sandboxes in the UK market is ignored, it is likely that the advantages and disadvantages of regulatory sandboxes will not be properly assessed.

Some scholars have suggested that although the success of the regulatory sandbox in the UK has objective conditions, other countries can develop their own sandboxes by following this model.16

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1 Lauren Fahy (n 7) p. 140
2 ibid
3 Ibid p143
4 ibid
5 ibid
6 Hilary J Alle (n 7)
7 Walter G Johnson (n 8)
9 Lauren Fahy (n 7)
10 ibid
12 Jemima Kelly (n 36); Lauren Fahy (n 7)
13 Lauren Fahy (n 7)
14 Jemima Kelly (n 36)
15 Lauren Fahy (n 7)
However, there are many cases where sandboxes are actually introduced blindly, without considering whether they are suitable for the current situation in the country. For example, China is considering the introduction of a sandbox in 2019, with a formal pilot in 2020. However, this essay argues that introducing a sandbox in China is not entirely necessary. Firstly, as mentioned above, regulatory sandboxes emerged largely as a response to the overly strict financial regulation that followed the 2008 financial crisis, which was not conducive to financial innovation. Conversely, fintech in China was almost unregulated initially, so China needs more strict regulation rather than relaxation. Secondly, regulatory sandbox is more suitable for countries with a mature and centralised financial market. China’s financial system is less mature and more fragmented, and the introduction of regulatory sandbox may make it difficult for institutions to cooperate.

The last reason is related to the motivation of companies to participate in regulatory sandbox. This essay argues that when companies’ motivation to participate in sandboxes is satisfied, they are more inclined to promote the advantages of sandboxes and the potential flaws are ignored.

According to Fahy, one of the primary motivations for UK companies to apply to the sandbox is to reduce risk. Specifically, the regulatory sandbox allows companies to enter the real consumer market under limitations, which helps innovators improve their products, meet the needs of their customers and minimise risk. When this motivation is met, the businesses are tended to promote the benefits of the sandbox, the regulatory sandbox has the disadvantage of providing highly individualised experiences that are not universally referenced is overlooked.

In addition, disruptive technology and innovation in recent years created legitimacy challenges in using regulatory sandbox. Specifically, disruptive technology development has increased public demand for regulatory action. However, the current development of the relevant regulatory laws is not sufficient. Furthermore, the close relationship between firms and regulators in using regulatory sandboxes also poses the risk of firms influencing regulators’ decisions. If this leads to regulatory failure or a harm in consumer benefits, the legitimacy of the regulatory sandbox may be undermined.

These issues affect the effectiveness of regulatory sandbox, making their use uncertain and potentially more regulatory inertia and risk-averse tendencies in decision making to provide efficient regulation and guidance to companies using sandboxes.

In summary, this essay argues that based on the above-mentioned reasons, the current hype for regulatory sandboxes is more like a blind following, leading to the market’s inability to properly evaluate sandboxes’ benefits and potential drawbacks.

4. How the Hype Surrounding Sandboxes Contributes to the Failure in Assessing the Effectiveness of Other Tests of the New Fintech

The rapid development of fintech and technology has changed the regulatory structure of financial markets. With the development of new fintech, innovation facilitators have also developed and can be broadly divided into three categories: “innovation hubs, innovation accelerators and regulatory sandboxes.” Innovation hubs provide a platform or scheme through which companies can engage with regulators, ask questions about fintech, and seek clarification or binding guidance. Innovation accelerators are projects in which the private department provides innovative solutions to

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2 ibid
3 ibid
4 Lauren Fahy (n 7) p 138
5 Lauren Fahy (n 7) p 149
6 ibid
7 Chang Tsai, Ching-Fu Lin and Han-Wei Liu, (2019). The Diffusion of the Sandbox Approach to Disruptive Innovation and Its Limitations, SSRN Electronic Journal, 53.
8 Walter G Johnson (n 8) p 9
9 ibid
10 Walter G Johnson (n 8) p 11
11 ibid
12 Chang Tsai, Ching-Fu Lin and Han-Wei Liu (n 48)
14 ibid
regulators and carries out regulatory tasks, mainly by promoting the development of Regtech and Supertech tools to enable regulators to achieve better regulation.¹

However, the current hype surrounding the regulatory sandbox has led the market to see it as the optimal solution and failure in assessing the effectiveness of other testing methods, which may lead to further “peer effects”: According to the World Bank-CCAF survey, over 90% of jurisdictions look to other jurisdictions when designing their own sandboxes.² Furthermore, “by 2020, there were already 73 regulatory sandboxes in operation in 57 jurisdictions worldwide in the fintech sector.”³ This trend suggests countries that initially set up innovation hubs are increasingly turning to regulatory sandboxes, ⁴ which leads to a market-based failure in assessing the effectiveness of alternative mechanisms for testing new fintech. However, regulatory sandbox “is not a panacea to all challenges”,⁵ but only a “flexible regulatory toolbox”.⁶ As Professor Johnson observed, a regulatory sandbox “follow[s] in the footsteps of various “flexible” forms of regulation”.⁷ This essay argues that one serious consequence of this trend is that regulators may overlook ways in which regulatory sandboxes and other regulatory instruments can be integrated and thereby better address the regulatory issues of new fintech. Specifically, the hype emphasis the advantages of sandboxes in providing the opportunity to test products in the real market, while ignoring their high costs and difficulty setting up.⁸ However, innovation hubs are cheaper and easier to set up than regulatory sandboxes because they can be set up under existing regulatory mandates.⁹ Furthermore, compared with regulatory sandboxes, innovation hubs are much less limited in use,¹⁰ because the effectiveness of regulatory sandboxes is mainly felt in markets with a significant focus on innovation, for less developed markets, regulatory sandboxes can play a minimal role.¹¹ As some studies have found that in regulating new fintech, compared with regulatory sandbox, “similar results may be more affordably achieved through innovation offices and other tools.”¹²

Similarly, the hype for sandboxes has also led regulators to overlook the advantages of innovation accelerators. Specifically, regulatory sandbox may prioritise attracting fintech and investors to the sandbox rather than taking adequate measures to protect consumers.¹³ However, innovation accelerator has advantage because it allows private institutions with expertise to work with regulators to better regulate financial markets.¹⁴ Furthermore, innovation accelerator highlights the development of Regtech and Supertech, these technologies can help regulators to improve their monitoring capabilities.¹⁵ Therefore, The combination of regulatory sandbox and innovation accelerator provides a better balance between encouraging innovation and maintaining market stability.

A frequently highlighted point in the hype about regulatory sandboxes is that they provide an opportunity for fintech companies to experiment and help protect consumers’ benefits.¹⁶

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¹ Radostina Parenti (n 54); The Basel Committee on Banking Supervision (BCBS), Sound practices: Implications of FinTech developments for banks and bank supervisors, Feb 2018 (hereinafter ‘BCBS 2018, Sound practices’)
⁵ Lara Cornaro (n 57)
⁶ Walter G Johnson (n 8)
⁷ ibid
⁸ Walter G Johnson (n 8)
⁹ Radostina Parenti (n 54)
¹¹ Radostina Parenti (n 54)
¹² Radostina Parenti (n 54); UNSCGSA FinTech Working Group and CCAF 2019, Early lessons.
¹³ ibid
¹⁴ The Basel Committee on Banking Supervision (BCBS), Sound practices: Implications of FinTech developments for banks and bank supervisors, Feb 2018 (hereinafter ‘BCBS 2018, Sound practices’)
¹⁶ Chang Tsai, Ching-Fu Lin and Han-Wei Liu (n 65)
However, this essay argues that what this view favours is actually the concept behind regulatory sandboxes. Specifically, this advantage of regulatory sandboxes actually comes from the “adaptive financial regulation” to “disruptive innovation,” i.e., when disruptive technology like fintech enters the market, a new approach different from traditional regulatory models is needed to adapt to these new technologies; regulatory sandbox is one of these innovative regulations. Therefore, this essay argues that regulatory sandboxes combines with innovation hubs and innovation accelerators can better promote the development of financial regulation.

In summary, this essay argues that the hype surrounding regulatory sandbox has led regulators to place too much emphasis on it, leaving other tests without effective assessment. A comprehensive assessment of other regulatory methods may be a better regulatory model.

5. Conclusion

By analysing the advantages and disadvantages of regulatory sandbox and the hype surrounding it, this essay argues that the current hype of regulatory sandbox is not based on an objective evaluation, but is more like a kind of blind pursuit with a one-sided focus on its advantages, and this hype also hinders the evaluation of the effectiveness of other new fintech testing methods.

One reason is that the current research on regulatory sandboxes is mainly theoretical and therefore fails to identify many of the practical difficulties in implementation; Furthermore, many of the current hypes are based on the success of regulatory sandboxes in the UK market, but ignore its objective strengths, creating the illusion that the use of regulatory sandboxes is simple and efficient.

Finally, the essay argues that a comprehensive assessment for alternative mechanisms for testing new fintech is needed. This will better contribute to the development of the financial regulatory system.

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2 ibid


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