



BANKING STAKEHOLDERGROUP

REGULATORY SANDBOXES

A proposal to EBA by the Banking Stakeholders Group

July 20, 2017

Executive summary

- **The increasing adoption of sandboxes confirms the willingness of regulators to encourage innovation in finance without any detriment to consumer protection and financial stability.**
- **As more European countries are setting up regulatory sandboxes, the risk arises of creating a fragmented ecosystem of national sandboxes with different regimes.**
- **The Banking Stakeholders Group considers that EBA should take the lead in developing some guidelines in order to achieve a harmonization in regulatory practices as well as supervisory criteria on nationally established sandboxes.**
- **At the minimum, those guidelines should try to accomplish clear and harmonized criteria for entering, staying, and exiting, the regulatory sandboxes, as well as transparency about those criteria and the authorization process to be followed.**
- **Appropriate consumer safeguards should also be an important harmonization aspect to be covered in the guidelines, as well as limiting the scale of activities to be performed in the sandboxes, on grounds of consumer protection and financial stability.**
- **BSG also recommends the EBA to explore the possibility of “cross-border sandboxes” in the EU.**

1. Background and relevance for EBA/BSG

- Regulatory sandboxes are controlled ‘safe spaces’ in which innovative products, services, business models and delivery mechanisms can be tested without immediately being subject to all of the regulatory requirements.
- At the December 2016 meeting of the BSG it was decided to create an ad-hoc working group on Regulatory Sandboxes, with the aim of producing an opinion paper which could be of interest to the EBA.
- Such an opinion paper could be especially helpful as long as the EBA is currently in the process of carrying out its own assessment of FinTech activities and estimates to publish its own Discussion Paper in the coming months
- As more European countries are expected to join the trend toward supporting regulatory sandboxes, the risk arises of creating a fragmented ecosystem of national sandboxes with different regimes. In fact, EBA acknowledges that more clear definition and characterization of innovation hubs and regulatory sandboxes is necessary.

EBA response to the EC Consultation Document on Fintech

- **“The EBA also observes that competent authorities are using different approaches in respect of ‘sandboxes’, innovation hubs, and similar regimes. This could give rise to the risk of regulatory arbitrage and level playing field issues and present risks to consumers (e.g. arising from the absence of clarity regarding the regulatory status of the FinTech entities with whom they are transacting and the benefits and risks of using one firm compared to another) and undermine the achievement of other objectives, for instance, financial stability.”**

2. Sandboxes : preserving consumer protection while fostering innovations

2.1. Importance of innovation in the financial services

- The current global economic environment is fast changing and highly competitive; the ability to innovate becomes a need for the leading financial ecosystems and technology is enabling the development of new products and services that can meet financial consumer needs more efficiently and more cheaply.
- Financial innovations have a specific character - they are unstable, easy to copy, usually risky, and do not provide a lasting competitive advantage. Financial innovation, like all kinds of innovation, can bring significant benefits, but is also connected with costs and risks. Those can be assessed at the level of individual institutions and their customers, the financial sector and the whole society and economy
- Financial innovations are not always good or always bad:
 - consumers benefit from innovations financially (better prices of financial services and lower costs of infrastructure necessary to use financial services, better finance management, new business opportunities) as well as non-financially (broader and more convenient access to services, products better suited to individual needs, more comprehensive service, better quality, time savings, easier handling of financial transactions etc.);
 - but they can carry the costs of implementing innovations (in the prices paid for financial services) and may bear the risk of new solutions, especially those that only attempt to meet the providers' objectives (e.g.: structured products designed to exploit investors' misunderstandings of financial markets).
- From the point of view of society and the overall economy, innovations could allow benefit from wider financial inclusion, as reducing the cost of providing specific services, as well as streamlining procedures and better methods for data analysis, in line with the GDPR, and screening customers translate into greater availability of financial services to customers; gain from faster billing and payment transactions, as it streamlines business transactions, allowing businesses to reduce costs, improve liquidity management, and reduce the risk of bankruptcy; may benefit from limiting the grey area, fraudulent transactions and money laundering, and better data analysis; may benefit from the financial products being innovative way of funding welfare issues (e.g. "social impact bonds");
- At the same time, innovations may also induce greater financial risk; for example financial innovations may lead to excessive credit expansion, financial exclusion of certain categories of people, generate higher banks' and financial markets' fragility; in extreme cases financial innovations can lead to financial crises or increase the severity of their effects
- The ideal policy approach is to find an appropriate balance between preserving safety and soundness of the system, and allowing financial institutions and markets to perform their intended functions. That approach entails first ensuring that the

necessary market-framing and market-perfecting rules are in place, and then establishing a proper structure for reviewing financial innovations.

- The EU and some supranational organizations such as the OECD, conceive innovation from an innovation systems perspective. This framework implies that all members of the ecosystem and their interrelation must be analyzed and understood prior to the definition of common goals. Nevertheless, this conception should be comprehensive, take into account needs of all stakeholders, and inclusive, as the behavior of each one of its members potentially affects all of them.
- As an example of this approach, the recent public consultation “Fintech: A More Competitive and Innovative European Financial Sector” provides this definition: ' "FinTech" describes technology-enabled innovation in financial services, regardless of the nature or size of the provider of the services. (...) While technological innovation in finance (...) They give rise to new services and business models by established financial institutions, technology companies and new market entrants.' Therefore, the UE approach to financial innovation is already inclusive and systemic, thus we should not foster a siloed approach.
- In this regard, it is also of interest to mention that one of the key needs for the development of this initiative is the collaboration between different authorities, as some of the requirements that should be relaxed must be under the competence of another supervisory institution. Therefore, businesses who wish to embrace this innovation policy should also adopt a collaborative approach to demonstrate that this conversation represents all stakeholders, ensuring that the resulting benefit will be profitable for the whole ecosystem.
- Regulatory framework is as important factor influencing the innovative activities. It is especially important in financial services industry, where regulations impose specific restrictions on the activities of financial institutions (eg referring to a ban on pursuing certain types of activity, imposing limits on the scale of operations, limits concerning the nature of certain transactions, setting product price limits, introducing minimum liquidity and capital requirements, etc.), introduce taxes and levies (eg mandatory reserve, deposit guarantee fees, financial activities or transaction taxes, etc.)
- In many cases, both small and groundbreaking innovations are created in small businesses (often these companies are set up to implement new ideas). It is also the case of financial innovation: usually - but not exclusively – FinTechs are small start-ups.
- At the same time, ensuring clear and efficient regulations can prevent the emergence of innovative products which may be detrimental to consumers and help the emergence of positive innovations. For instance, preventing the emergence of payday loans also prevents the drain of consumer financial resources, thereby leaving room in the market for other innovative products arguably more beneficial for consumers and society.

3.1. How can Sandboxes foster innovation

- The creative process around financial innovation implies high uncertainty for companies, as it usually enters unknown spaces. In circumstances where it is less clear whether a new financial product or service complies with legal and regulatory requirements, the innovators may err on the side of caution and choose not to implement it. An environment is desired which encourages innovation, but does not compromise the way we want the financial system to work in terms of consumers trust and confidence, as well as fair and efficient operation
- According to **EBA (2017): “an active participation of regulators and supervisors should be desirable, following the path opened by the international regulators or supervisors that have been most successful in promoting FinTech activities.** However, a balanced approach in this respect must be found.”.
- Regulatory sandboxes are controlled ‘safe spaces’ in which innovative products, services, business models and delivery mechanisms can be tested without immediately being subject to all of the regulatory requirements. It is important to note, however, that these safe spaces should be approved and supervised by the financial authorities.
- This concept comes from the computer industry where sandboxes are created to test new developments interacting with a mirrored copy of the whole operative system, including databases and other software programs but without being able to affect any elements already running. As a result, the developer is able to understand how it will interact the whole organization without any negative collateral effects. Emulating this concept, regulatory sandboxes will allow to experiment new products and services but will ensure that the whole financial system remains safe, as this process will not enter the real market.

There are other useful functions that sandboxes perform, such as improving the conversation among the different stakeholders: If adequately implemented, they can add significant value to regulators, consumers and other stakeholders by improving the relationship among them. One of the main benefits is that regulatory sandboxes should strengthen communication and empathy among all the actors boosting innovation.

- They enable innovation, as a tool to create better and more competitive products and services, as well as fostering an innovation culture among financial services providers
- They represent an iterative learning process. Currently, there is academic literature regarding the positive effects of spillovers when approaching innovation. Usually, this information is related to the positive effects of foreign direct investment and the introduction of new technologies into the market. However, there is also literature related the positive effects of spillovers for incumbents and new entrants, as knowledge is increasingly complex and fragmented. In this regard, any effort aiming to unify this dispersed information including tacit knowledge could benefit the whole ecosystem. The beneficial outcomes include the introduction of technologies that are new to some of the participants and acquiring knowledge from what other members are doing. Following this statements we can conclude that, as regulatory sandboxes are a learning process for all stakeholders, those potential spillovers could be

enhanced if this ecosystem includes more diverse members. Finally, it is important to note that a comprehensive approach could foster cross-team projects that include start-ups and incumbents together. An option that might not be available if there is a siloed approach.

2.3. Consumer protection in Regulatory Sandboxes

- As it happens with testing in any other industry, sandboxes should only be allowed under strict guarantees that they do no harm to consumer protection and financial stability.
- Consumer representatives are not opposed to regulatory sandboxes because they can help to foster **socially useful innovation**, but they must be considered an exceptional process that cannot be understood as a shortcut to avoid regulation for any given project, as this could be against the principle of creating a level playing field for all stakeholders.
- There are a number of considerations to keep in mind when setting up a regulatory sandbox to ensure that consumer protection is upheld.
 - **Safety for consumers and the stability of the financial system should be the key criteria for admission to the sandbox. Consumers should have the same protections as they usually have.** Regulators should also have the option of requesting additional protections if necessary.
 - Considering the integration of the EU financial market and to avoid regulatory arbitrage, a certain degree of homogeneity is needed in the definition of criteria to enter the sandbox, in the internal operative and interaction with regulators and, finally, in the conditions under which the exit will take place:
- Regulatory sandboxes are not part of the open market. The entrance to innovators and customers or users is limited and restricted. A sandbox should be a closed shop for private consumers, and only open to professional consumers who are well aware of the risks involved. One of most significant uses of digital technology which has emerged is the use of automated investment advice. While such services have the potential to increase access to financial advice for consumers, any measures to increase retail investor participation through such innovative distribution channels should be accompanied by appropriate safeguards and offered only to sophisticated consumers. Therefore sandboxes are only open to innovators on the one side and on the other side to private customers or institutional users who are accredited by the competent authority.
- To enter the sandbox, projects should be really innovative, demonstrate the impossibility or high unlikelihood to be developed without a sandbox and provide clear benefits for the clients, following a case-by-case assessment. Strict limits on the types and amounts of products that qualify should be adopted by the regulator: for

instance, robo-advisers, digital currency wallets could generally be able to utilise the sandbox, but not lenders and FinTechs working on pensions or life insurance.

- Once in the sandbox, the company who has entered the sandbox must accept testing conditions that ensure no detriment of consumer rights, must prove that the proposition will not affect the open economy, and must report to the regulator according to a previously agreed roadmap.
- Exiting the sandbox is a key milestone in the process, as the final objective is that the project should enter the market under clear regulatory conditions.
- Regulatory sandboxes should work in close cooperation with consumer organisations and consumers which are currently testing innovative products. Consumer organisations need to be regularly notified about new products being tested in sandboxes to be able to monitor the situation and assess whether there might be a risk of consumer detriment. Consumers need to be properly informed about the fact that the products they are subscribing to are currently being tested under the regulatory sandbox and have to be given the contact details of the regulatory sandbox to report any issues, problems or detriment.
- Regulatory sandboxes should carefully examine the underlying business models of new innovative products and monitor their development. Examining the business model can be extremely informative to assess whether a product provides good value for money, is fair and proportionate, and whether it carries inherent risks for consumers, especially given that many “new” business models emerge based on the use of consumer data, advertising, data monetization, and so forth.
- In this light, regulatory sandboxes can only approve a business model based on the observed behavior of an innovative project while under supervision in the sandbox. Should such a business model change once the innovative project has been approved by the sandbox and has been scaled to the market, the innovative project should no longer be deemed as “approved” by the regulatory sandbox and should undergo scrutiny from regulators.
- Regulatory sandboxes need to have access to quality independent expertise (in-house or external) on innovative solutions which involve highly technical products. A clear example in this sense has to do with Blockchain technology, with tremendous potential for financial innovation. Nevertheless, the technology is still in its infancy and is highly complex and risky. A poorly coded solution on top of secure blockchain technology remains vulnerable and risky.

4. Sandbox experiences around the world



- The UK was the first country to set up a regulatory sandbox, in May 2016, as part of Project Innovate, an initiative promoted by the Financial Conduct Authority to help

encourage innovation in the interest of consumers, and to promote competition among financial services providers by supporting disruptive innovation.

- According to FCA estimates, the UK hosts about 50% of total European disruptive FinTech, and creation of an appropriate regulatory framework is a necessary condition to remain Europe's leading FinTech Hub.
- Shortly after the UK, Australia pursued its own initiative by setting up a Sandbox as a natural extension of the ASIC (Australian Securities and Investments Commission) Innovation Hub. A key feature of the proposal is reducing, during a fixed period of time, some of the requirements (such as financial resource requirements, or relevant managerial experience) which might be challenging for and impede start-ups.
- There are significant differences between the UK and Australian models on which sandboxes rely, the most important one being about ease to enter the sandbox.
- The UK model rests on entry subject to approval through an application process that takes place twice a year.
 - The first cohort of applications took place by mid 2016, and 24 companies were accepted to the sandbox out of the 69 companies that applied;
 - A second cohort was called at the beginning of 2017, and 31 companies met the sandbox eligibility out of 77 submissions.
 - According to FCA, while in the first cohort the majority of firms were based in London, the range of firms in the second cohort is much more diverse in geographic origin, as well as in sectors of activities.
- The FCA bases its approval process on several factors including the ingenuity of the innovation, benefit to consumers, readiness of the product to be tested, and need of guidance for the testing process.
- At the other end of the spectrum, the Australian sandbox does not rely on the regulator selecting applicants and negotiating individual testing terms. On the contrary, it rests on a "white-list" approach whereby all companies that fit certain criteria are automatically allowed to validate their concepts without having a license. Companies in the sandbox are, however, required to let it clear to customers that they are not authorized/licensed and are operating under temporary licensing exemption.
- Many financial centers have followed the lead open by the UK and Australian initiatives, among them Singapore, Indonesia, Malaysia, Thailand, or Hong Kong in Asia; while in Europe initiatives have been recently launched in Switzerland and the Netherlands. Next table, taken from a recent IMF report, summarizes the main operational aspects of them

Figure IV.1. The Sandbox Approach in Selected Jurisdictions

General Information		Type of Applicant		Benefits for Businesses			Safeguards			
Country	Regulator	Authorized/ Licensed/ Incumbents	Unauthorized/ Unlicensed/ Startups	Regulations relaxed or waived	Licensing requirements relaxed or waived	Clarifications on regulatory expectations	Limits on customers, value and/or duration	Additional reporting obligations/closer monitoring	Additional consumer protections/risk mitigation	Specified regulations that cannot be waived
Australia	ASIC	✗	✓	✗	✓	✗	✓	✓	✓	✓
Canada	CSA	✓	✓	✓	✗	✓	✗	✗	✓	✗
Hong Kong SAR	HKMA	✓	✗	✓	✗	✗	✓	✓	✓	✗
Malaysia	BNM	✓	✓	✓	✗	✗	✓	✓	✓	✗
Singapore	MAS	✓	✓	✓	✗	✗	✓	✓	✓	✓
Switzerland	FDJ	✓	✓	✗	✓	✗	✓	✗	✓	✓
United Arab Emirates	ADGM	✓	✓	✓	✗	✗	✓	✓	✓	✗
United Kingdom	FCA	✓	✓	✓	✓	✓	✓	✓	✓	✓

 Explicitly mentioned in the regulatory authority's disclosure, staff analysis.
 Either not required or not mentioned in the regulatory authority's disclosure.

Source: IMF staff.

Source: International Monetary Fund: Fintech and Financial Services: Initial Considerations, IMF Staff Discussion Note 2017/05. Additionally to pure regulatory sandboxes sponsored by regulatory and supervisory authorities all over the world, it is also noteworthy **the emergence of an alternative version of sandboxes promoted by the own industry**, as shown in a recent consultation report led by Innovate Finance, under auspice of FCA.

- In this consultation, an Industry Sandbox was defined as a shared off-market development environment where developers of FinTech solutions can access data, technologies, and services from different providers in order to validate innovative ideas or address common industry challenges
- While this type of sandboxes fall outside the scope of the regulatory sandboxes, they give an opportunity to supplement regulatory support of innovation and market competition by enabling industry to self-organize and support regulatory efficiency in providing a knowledge-sharing channel, a communication forum, and a certification facility as part of the regulatory process

5. Regulatory Sandboxes : Operations requirements

- To avoid discretionary decisions, a clear and harmonised criteria framework for experimentation has to be defined and made publicly available to all potential participants. Moreover, the main objective of these tools is to reduce uncertainty, therefore the process should not be ambiguous.
- Nevertheless, after receiving the information from the company, the competent authority should select which are the projects accepted, following its own priorities related to the potential final benefits. In this regard, a clear definition of the priorities will be of interest, so businesses focus their creation process in projects that are more likely to be accepted.
- Operations requirements should be set covering at least the following phases:
 - Entry requirements
 - Requirements while in the Sandbox
 - Exit conditions and learning process

5.1. Entry requirements:

- **Only genuine innovations** as products already introduced do not suffer from legal ambivalence. Furthermore, this will ensure that the introduction of this tool does not result in the creation of asymmetries among the different players, who might use a shortcut for the creation of already existing services while reducing new unnecessary risks.
- **Delimitation of the market** where the innovation is being introduced. Businesses willing to enter a sandbox should know in advance whether innovation is being defined as new to the market or new to the entity.
- **Information required by the authorities**, in order to ensure a correct due diligence of the project, the competent authority requires some documents to understand the potential project. This includes the objectives, expected benefits, legal requirements, technical requirements, underlying business model, milestones and why it requires a Regulatory Sandbox.
- **Formal approval** from the authorities to start the testing, explaining the basic requirements and what companies could expect from the process.

5.2. Requirements while in the Sandbox

- **Testing parameters** to limit risks to the financial system and for the consumers, while allowing an effective testing.

- **Consumer protection safeguards** must be set, in order to ensure customer protection (see 2.3)
- **The process** must include the scale and duration of the project, the milestones achieved, penalties and any reporting information that ensures the correct use of the sandbox.
- Depending on the company reasons to enter the sandbox, the authorities can provide regulatory flexibility and/or certainty through different tools, like the following:
 - Individual guidance on how to interpret and apply the existing regulatory framework.
 - Commitment to not take enforcement actions during testing as long as the firm follows some previously agreed conditions.
 - Temporary approvals for testing. This option should be used when the solicitor requires further licensing but needs to prove in advance that the final product is worth starting this process.
 - Temporary waivers or modifications to non-critical rules if testing activities would otherwise breach them.
 - Temporary moratorium or termination of the testing process if there is a clear risk of consumer detriment or if consumers have been harmed.

Consumers participating in the testing phase need to be made aware of their rights and especially, be provided with information and contact details of the sandbox to report any complaint or problem they experience.

The regulatory sandbox should also continuously monitor the activities of admitted projects to prevent or detect consumer detriment. The regulatory sandbox should have the power, if there is proven risk or proven consumer detriment, to end the testing phase temporarily or permanently, providing thorough justification and clear guidance to allow current and future initiatives to learn from such a case.

4.3. Exit conditions:

- **Enter the market:** a clear final report must state how the project should meet all current regulatory requirements before being accessible to the public so as to ensure that it preserves the whole financial system and does not add new risks.
- **Discontinue the project:** unfortunately, not all projects would be successful. However, as this is a learning process, it is important to register success but, also, failure. This input could help new ideas to avoid making the same mistakes and facilitate the improvement of future projects.

- **Regulatory change:** the development of these Sandboxes contributes to a better regulatory framework by allowing authorities to make evidence-based decisions. In the case that it is proved that the benefits are important enough, this can be used to start a regulatory change, with the adaptation of existing rules and policies.
- Finally, it is important to enable a process about how should the authority retain and apply the knowledge obtained through this process and how this information can be used for future projects. Nevertheless, this information can be used as a feedback to all stakeholders.

6. Summary and recommendation to the EBA

- Regulatory sandboxes are increasingly being developed in many countries as an attempt to encourage innovation in finance without any detriment to consumer protection and financial stability.
- The Banking Stakeholders Group considers that EBA should take the lead in developing some guidelines in order to achieve a harmonization in regulatory practices as well as supervisory criteria on nationally established sandboxes. This would minimize the risk of creating a fragmented ecosystem of national sandboxes with different regimes
- Those guidelines should try to accomplish clear and harmonized criteria for entering, staying, and exiting, the regulatory sandboxes, as well as transparency about those criteria and the authorization process to be followed.
- An important harmonization aspect to be covered in the guidelines refers to the appropriate consumer safeguards, as well as limiting the scale of activities to be performed in the sandboxes, on grounds of consumer protection and financial stability.
- As regulatory sandboxes are not part of the open market, the entrance to innovators and customers or users must be limited and restricted. Customers or users must be well aware of the risks that come into existence. Therefore, it would be advisable that sandboxes are only open to innovators on the one side, and on the other side to private customers or institutional users who are accredited by the competent authority.
- It would also be advisable to explore the possibility of “cross-border sandboxes” in the EU.

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