

Legal certainty and regulatory sandbox: critical evaluation and recommendations¹

Seguridad jurídica y sandbox regulatorio: evaluación crítica y recomendaciones

Segurança jurídica e a caixa de areia regulatória: avaliação crítica e recomendações

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Artículos

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Abstract

This document focuses on analyzing legal certainty as a determining factor in the implementation of a regulatory sandbox, exploring its influence as a barrier to the application of such a sandbox from a legal perspective. The study is based on a theoretical review and a detailed analysis of the background of regulatory sandboxes and legal certainty, as well as on the practice of interviewing officials and citizens with experience in the implementation and use of the controlled testing space. Subsequently, a methodology is applied to define the prioritization of problems and identification actions for implementation. Through this exercise, it was concluded that legal certainty represents a significant obstacle in certain constitutional frameworks. There is a legal need to constitutionalize legal experimentation to overcome the detected obstacles and achieve an implementation that adapts to the legal framework in future sandbox initiatives.

Keywords: sandbox, legal certainty, barriers, la Arenera.

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Resumen

Este documento se centra en analizar la seguridad jurídica como un factor determinante en la implementación de un *sandbox* regulatorio, explorando su influencia como una barrera en la aplicación de dicho *sandbox* desde la perspectiva del derecho. El estudio se basa en una revisión teórica y en un análisis detallado de antecedentes del *sandbox* regulatorio y la seguridad jurídica, así como en la práctica de entrevistas a funcionarios y ciudadanos con experiencia en la implementación y uso del espacio controlado de pruebas. Posteriormente, se aplica una metodología para definir la priorización de problemas y acciones de implementación e identificación. Al llevar a cabo este ejercicio, se llegó a la conclusión de que la seguridad jurídica representa un obstáculo significativo en ciertos ordenamientos constitucionales. Existe la necesidad jurídica de constitucionalizar la experimentación legal para superar los obstáculos detectados y lograr una implementación que se adapte al ordenamiento legal en futuras iniciativas de *sandbox*.

Palabras clave: *sandbox*, seguridad jurídica, barreras, la Arenera.

Resumo

Este artigo se concentra na análise da segurança jurídica como um fator determinante na implementação de uma *área* restrita regulatória, explorando sua influência como uma barreira na implementação de tal *área restrita* a partir da perspectiva da lei. O estudo baseia-se em uma revisão teórica e em uma análise detalhada dos antecedentes do *sandbox* regulatório e da segurança jurídica, bem como em entrevistas com funcionários e cidadãos com experiência na implementação e no uso do espaço de teste controlado. Posteriormente, é aplicada uma metodologia para definir a priorização de problemas e ações para implementação e identificação. Ao realizar esse exercício, concluiu-se que a segurança jurídica representa um obstáculo significativo em determinados arranjos constitucionais. Há uma necessidade legal de constitucionalizar a experimentação jurídica para superar os obstáculos identificados e obter uma implementação em conformidade com a lei em futuras iniciativas de *sandbox*.

Palavras-chave: *sandbox*, segurança jurídica, barreiras, la Arenera.

Introduction

In 2019, during my role as a research assistant at the Law Faculty of the University of the Andes, I came across a publication by the Financial Superintendence of Colombia (SFC) that presented a space for conducting regulatory tests in a controlled and supervised manner. This tool, known as a regulatory sandbox, aims, according to the SFC itself, to help regulatory agencies strike a balance between appropriate regulation and support for technological advancements in financial services (Financial Superintendence of Colombia, 2021). This initiative is part of governmental policies for competitiveness and innovation in regulated industries and the economic reactivation policy for the period 2018-2022, serving as a public

policy intervention instrument to promote the economic and social development of the country, with emphasis on competitiveness, integration, and the development of productive sectors, including industry and micro, small, and medium-sized enterprises (Decree 1732, 2021).

This regulatory sandbox, known as “la Arenera,” introduced by the SFC, is the first reference to such testing spaces in Colombia. However, from its announcement to its implementation, four years elapsed while refining the scope of tests conducted in “la Arenera.” The task of implementing the first controlled testing space in Colombia has faced difficulties related to various issues, with the most significant challenges being linked to regulatory fragmentation. In this sense, “la Arenera” has provided valuable lessons that must be analyzed to prevent future sandbox initiatives from encountering the same implementation barriers experienced by the SFC.

The experience accumulated by the SFC during the implementation of the regulatory sandbox is undoubtedly valuable for future initiatives. Therefore, this document aims to address the following question that has been overlooked in various legal analyses: To what extent is legal certainty an obstacle to the implementation of a regulatory sandbox in Colombia, and, if so, how can it be addressed from a legal standpoint?

An examination of Sofia Ranchordás’s article “Experimental Regulations for AI: Sandboxes for Morals and Customs” (2021) demonstrates that the emergence of tools such as the regulatory sandbox has introduced novel elements to the regulation process. However, an experimental approach to regulation breeds distrust due to its potential to disrupt existing legal principles and paradigms of legal certainty.

Research methodology

To address the extent to which legal certainty can act as a barrier to implementing a regulatory sandbox in Colombia, and if so, how these obstacles can be tackled from a legal standpoint, various methodological tools were employed. For example, the practical guide for designing qualitative interviews by Turner and Hagstrom Schmidt (2022) and the methodology for identifying implementation barriers of public policies by USAID were utilized. This research focuses on understanding the legal barriers to implementing a regulatory sandbox, particularly by examining the perception and interpretation of the principle of legal certainty within the country. The analysis proceeded in the following structure.

i) Elaboration of a characterization of regulatory sandboxes: This section provides a theoretical approach to regulatory sandboxes based on the main theoretical references in the field.

ii) Interviews with key stakeholders, systematization, and analysis of results: Interviews were conducted with direct stakeholders in the sandbox implementation by URF and the

Financial Superintendence, along with an innovator from the financial sector who participated in “la Arenera”. Interviews with officials from the DataSandbox of the Ministry of Information and Communication Technologies of Colombia were not conducted due to their unrelated nature to regulation. However, these testimonies and the identification of barriers can be expanded in future research by interviewing academics such as Sofia Ranchordas, decision-makers in international entities like the Financial Conduct Authority, and officials from entities expressing interest in implementing a sandbox, among others.

In this section, a series of semi-structured interviews were analyzed with key actors in the regulatory framework of the Colombian financial sector who were directly involved in implementing “la Arenera” by the Financial Superintendence of Colombia. Specifically, officials from the Financial Superintendence of Colombia and the Financial Regulation Unit, along with an innovator who presented their project to “la Arenera”, were interviewed. An instrument was developed to understand the opinions and experiences of the actors in the implementation process of “la Arenera” and the formulation of Decree 1234 of 2020, as well as the user experience of the sandbox.

Initial contact with the interviewees was made via email, where they were briefed on the study’s purpose and interview questions. Informed consent for the study was obtained and approved by the interviewees. Ethical considerations were taken into account. The interviews were conducted using Zoom.us at the interviewees’ request, facilitating remote conversations and enabling the collection of audiovisual material for subsequent review. Four interviews were conducted: one as a pilot test and three for data management and analysis, which were subsequently examined. The collected interview data were processed and coded to identify patterns, approaches, and temporal comparisons, while also integrating the theoretical framework of the study and its relation to the policies under examination (Turner and Hagstrom Schmidt, 2022).

iii) Identification of legal barriers from the perspective of legal certainty: This section presents the legal barriers related to legal certainty for implementing a regulatory sandbox. It considers the steps used in the methodology designed by USAID in its research “Policy Implementation Barriers Analysis: Conceptual Framework and Pilot Test in Three Countries”, including program selection, team development, informant selection, data collection, data analysis, dissemination, and follow-up.

iv) Identification of preliminary alternative solutions: After addressing the research question, legal recommendations are proposed to prevent regulatory fragmentation and ensure legal certainty in the implementation of a regulatory sandbox in future initiatives.

Theoretical framework

This research delves into the critical analysis of legal certainty as a determining factor in the implementation of a regulatory sandbox in Colombia. The concept of a regulatory sandbox has emerged as an innovative tool aimed at fostering experimentation and the development of new ideas in a controlled environment, thus facilitating the adaptation of regulations to the changing dynamics of technology and the economy. However, the question arises regarding the feasibility of this initiative in a legal context where legal certainty is paramount.

In the first section, we will delve into the understanding of legal certainty and legitimate expectation as essential pillars for the stability and development of any legal system. We will explore how these concepts interact and how their presence or absence can directly influence the effective implementation of a regulatory sandbox.

The second section will focus on the intersection between Law and Economics, examining how the principles of Law and Economics can offer valuable insights into the relationship between legal certainty, legitimate expectation, and the implementation of regulatory innovations. We will address key issues related to economic efficiency and the optimization of legal resources in the context of a regulatory sandbox, outlining legal strategies that could mitigate potential obstacles to legal certainty. Together, these sections will provide a comprehensive approach to understanding and addressing the relationship between legal certainty and the successful implementation of a regulatory sandbox in Colombia.

Legal certainty and legitimate trust

The principle of legal certainty undoubtedly constitutes a structural element and a substantive value of any legal system built upon the rule of law clause (Cortés Campos, 2008). Put simply, according to Josefina Cortés Campos, this principle guarantees citizens a “status of certainty” regarding their relationships with public power in any of its branches (executive, legislative, and judicial); hence, this principle is considered by some authors to be “almost the *raison d’être* of the law itself” (2008).

Legal certainty, in the words of Norbert Lösing, is the reliability and predictability of the legal system; that is, the citizen’s expectation, based on reasonable grounds, to know or predict the actions of public authorities in the application of the law (2002). The same author adds that legal certainty is a guarantee of freedom within a society, which also demands the reliability of the legal system (Lösing, 2002). Consequently, legal certainty exists only when there is reliability in the legal system through predictability and the consequent acceptance.

In summary, the principle of legal certainty implies a relative certainty of the law, in terms of predictability, so that individuals can anticipate the law applicable to their actions (Portuese et al., 2017). In this sense, according to Juha Raitio, it can be said that the principle of

legitimate trust corresponds to the “predictability” element of the principle of legal certainty (2011). In fact, Paul Reynolds has considered legal certainty and legitimate trust to be closely related (2010). In this regard, the Colombian Constitutional Court refers to the principle of legitimate trust as the predictability element of the principle of legal certainty, as follows:

The principle of legitimate trust thus functions as a limit to the activities of the authorities, which seeks to address eventual untimely modifications in their traditional way of proceeding, a situation that can also jeopardize the principle of legal certainty. It is therefore an ethical ideal that is legally enforceable. Therefore, that trust that citizens have in the stability expected from state entities must be respected and protected by the constitutional judge. (Constitutional Court, T-453, 2018)

Also, as a clarifying element, Josefina Cortés Campos has stated that the principle of legitimate trust is built upon three elements. The first of these elements is the objective or generative fact, the second is a subjective element, and the third is a finalistic element. Regarding these, it can be said that the objective element and the subjective element respond to different dimensions of legitimate trust; however, the central element is the subjective element or justified trust of the legal subject regarding the stability and predictability of the current legal framework and its application by different institutionalized legal operators (Cortés Campos, 2008).

In this sense, this particular element seeks to address the objective element (Cortés Campos, 2008), understood as the scenarios in which regulatory authorities have a broad margin of decision-making. In this regard, Felipe De Vivero (2004), cited by Henrik López (2009), has pointed out that:

legitimate trust arises from the need to protect situations that are halfway between the concepts of acquired rights and mere expectations, it arises from the need to protect situations from which a right could never be consolidated because they may even be qualified as illegal, but deserve state protection due to the good faith action of the one who finds himself in this situation as well as to external signs.

On the other hand, doctrinally speaking, the idea that expectations based on a system of law and legal rights are important and must be protected is present in Jeremy Bentham’s security doctrine. According to Alexander Brown, in his text “A Theory of Legitimate Expectations” the doctrine begins with what Jeremy Bentham considers the uncontroversial observation that “expectation, insofar as law can keep itself present in men’s minds, renders law unalterable” (2017). In other words, it points out that having the right to “x” invariably creates in the individual’s mind an expectation of “x” (Brown, 2017).

In this sense, Alexander Brown, analyzing Jeremy Bentham, considers that we must adopt as a guide for public action the “principle of security” which “requires that events, to the extent that they depend on laws, conform to the expectations that the law itself has created” (Brown, 2017). This principle implies, among other things, that if the legal rights and legal

system ever change, that change must only apply to future determinations of rights and not retrospectively to existing rights. Otherwise, someone who has a legitimate expectation of “x” based on a legal right to “x” would find themselves in a state of insecurity (Brown, 2017).

Law and Economics, legal certainty, and legitimate trust

Legal certainty arises primarily in the face of factual uncertainty; new situations lead states to regularly adjust the law in response to these facts and, more frequently, to interpret the law in light of these new facts. In this sense, Portuese et al. (1997), citing Georgakopoulos, have pointed out that it is intuitive to think that, concerning judicial adjustment to social changes, the higher the rate of social changes, the more superior customary law systems are, due to their greater capacity for incremental and rapid changes in the law.

However, the lack of legal change leads to economic inefficiency whenever discrepancies with social changes become excessively significant (Portuese et al., 2017). In fact, according to David Slawson, “reliance on existing rules must be sacrificed to some extent to the need for change” (1960). Consequently, Portuese et al. (2017) indicate that civil law systems may allow for complete legal changes; however, these changes are carried out less frequently. If the costs of reliance increase with legal uncertainty and the loss of acquired assets due to subsequently repealed laws, excessive adherence to the law leads to the entrenchment of rules that, over time, may become inefficient due to social change (2017).

In this regard, according to Portuese et al. (2017), citing Louis Kaplow, legal change should occur not only when there are some net benefits (benefits minus costs) to be enjoyed from the new legal outcome, but it should occur efficiently only when the net benefits of the new legal situation outweigh the net benefits of the current legal situation and are expected to generate benefits after accounting for the expected harm to those frustrated by this legal change (1986). Therefore, concluding that expected benefits outweigh current costs does not constitute sufficient justification for legal change (Portuese et al., 2017).

Regarding this, Portuese et al. (2017) state that the principle of legal certainty can be analyzed economically from the following three points.

i) Transaction costs contribute to determining the effectiveness of legal certainty: Transaction costs consist of the costs incurred by institutions in drafting, monitoring, and enforcing legal changes. Portuese, citing Van Alstine, notes that “legal transaction costs” are the costs of learning new laws, the costs of uncertainty arising from the loss of legal knowledge, adjustment costs for individuals, and costs associated with interpretation errors (Van Alstine, 2001). In economic terms, the costs of change associated with legal modifications create a “law dependence”, whereby beneficial legal changes do not occur due to excessively high change costs. Continuously and appropriately attempting to align the legal environment with the social environment consumes many resources (Portuese et al., 2017). Lastly, the transaction costs of

legal uncertainty also refer to the costs of errors in producing these continuous legal changes: while the effects of current laws are well-known (and it is precisely because of their effects that laws are desired to be changed), there is a high possibility that new laws may not produce the desired effects, and it is even less certain that they will do so in a timely manner (Portuese et al., 2017).

ii) The principle of legal certainty and the costs incurred by economic agents when investing in assets given the prevailing positive laws: Legal changes often result in an economic loss concerning investments previously committed by individuals and companies that acted as if the law were perpetual (Portuese et al., 2017). Indeed, optimal investments in legally guaranteed rights generate dependency costs for individuals; if these investments are lost due to abrupt legal changes, dependency costs turn into an economic loss of property (Portuese et al., 2017). This induces parties to invest less when considering the dynamic perspective; moreover, legal uncertainty due to legal inconsistency or legal unintelligibility increases trust costs (legitimate trust) (Portuese et al., 2017). In fact, Michael Van Alstine notes that when laws are poorly written or are hardly understandable, economic actors refrain from optimally trusting these laws and thus bear some ex post interpretation costs that are higher than the saved drafting costs (2001).

iii) The principle of legal certainty creates cost risks in the sense of risk aversion: people's risk aversion regarding unpredictable legal changes increases the costs for society to insure against unforeseen changes, thereby increasing the overall social cost concerning economic interactions in the current legal framework, which individuals negatively perceive (Portuese et al., 2017). Therefore, the cost risks of legal certainty arise both from the costs created by insuring against unpredictable legal changes and from the active reluctance to adopt legal changes, even though such changes are desirable from an efficiency standpoint (Portuese et al., 2017).

The regulatory sandbox in colombia

Latin America has emerged as a strategic territory for the development of FinTech, as revealed by a report from the Inter-American Development Bank (IDB). In recent years, venture capital investments in Information Technology (IT) in the region have been characterized by the growing presence of FinTech, representing a significant 25% of the total, as noted by Lavalleja in 2020. This upward trend is further consolidated when observing the CB Insights report on FinTech trends in 2018, which highlights that Latin America surpassed markets like Africa and Australia in the number of FinTech deals closed in 2017, reaching 38 deals in just one year (CB Insights, 2018).

The boom of FinTech startups in the region is palpable. The first edition of the joint report from the IDB and Finnovista identified 703 FinTech startups in 15 Latin American

countries. One year later, this figure soared to 1,166 in 18 countries, marking an impressive 66% increase over the last year, according to Hernández in 2018. This means that there are currently 463 more FinTech startups in Latin America and the Caribbean compared to the previous year.

Within this regional landscape, the distribution of these startups spans extensively across the 18 countries of Latin America. However, 86% of FinTech activity is concentrated in just five countries: Brazil leads with 380 operational FinTech startups, followed by Mexico with 273, Colombia with 148, Argentina with 116, and Chile with 84 (Hernández, 2018). This geographical concentration highlights the disparity in FinTech development within the region.

The increasing presence of FinTech projects has led the Communications Regulation Commission (CRC) to present, in 2017, the Regulatory Roadmap for the development of the Digital Economy in Colombia. This roadmap, part of the broader strategy to drive digital transformation in the country, establishes guidelines and methodologies for the development of the FinTech sector (CRC, 2017).

Among the key actions to address challenges in strengthening the digital economy in Colombia, the CRC has deemed it essential to promote a sandbox regulation scheme, particularly focused on FinTech financial services, and to develop a market for digital investors and entrepreneurs. In 2019, the Financial Superintendence opened a space to provide support for FinTech creation processes. Additionally, in 2018, it introduced “Innovasfc”, a space led by the Financial and Technological Innovation Group of the entity, designed to facilitate innovation processes in the financial industry.

Innovasfc positions itself as a driver of innovation not only for entities supervised by the Financial Superintendence of Colombia but also for those innovating in other areas. This space offers three mechanisms to achieve responsible innovation: i) The Hub, which serves as a point of contact with the Financial Superintendence for those interested in the FinTech environment. After applying for the service, the Superfinanciera’s FinTech Team evaluates whether the project meets the eligibility requirements and schedules an initial meeting in approximately two weeks; ii) LaArenera, a framework through which the Financial Superintendence facilitates the innovation of products, technologies, or business models in a controlled and real-time environment. At this point, supervised and unsupervised entities venture into financial innovation, adapting to the regulatory or supervisory framework as necessary; iii) RegTech, an innovation space created by the entity to address technological developments aimed at supporting adaptation to technological requirements (Financial Superintendence of Colombia, 2018).

The application for these mechanisms is carried out through the Innovasfc website, where the Evaluation Committee determines if it meets the requirements related to innovation and the need to operate under a supervised environment. During the structuring phase, working sessions are scheduled with the Supervisor to establish safeguards, a dismantling plan, and the form and

frequency of information reports. Subsequently, operations begin in La Arenera with periodic monitoring of pilot test progress, risk management, and information reporting.

Despite these regulatory efforts, the Ministry of Finance enacted Decree 1234 of 2020, which regulates the Controlled Test Space (CTS), a temporary space for implementing information technology (IT) in the activities of entities supervised by the SFC. This decree defines the CTS, establishes the applicable legal regime, outlines its purpose, scope, and objectives, and determines the operating stages.

In response to the powers and competencies granted by Decree 1234 of 2020, the SFC issued External Circular 016 of 2021, which regulates various aspects for the proper functioning of the CTS: (i) admission requirements; (ii) application for establishment and issuance of the Temporary Operation Certificate (TOC); (iii) procedure for the evaluation of requests; (iv) monitoring, evaluation, and supervision scheme during the development of the temporary test; (v) process for completing the temporary test; and (vi) requirements for advertising information.

With the aim of ensuring the effective operation of this tool and facilitating understanding for interested parties, the SFC has enabled a section on its website that describes the different stages of the process. Additionally, it provides links to request meetings with the SFC, along with checklists containing the documents required for verifying minimum entry requirements and the establishment of the TOC.

Regarding this, in an interview with an official from the Financial Superintendence of Colombia, they were specifically asked about the barriers they had faced when implementing this experimentation space. The findings obtained from their responses were revealing and motivating. Apparently, “La Arenera” is not a regulatory sandbox as such, but an initiative that is limited by the regulatory fragmentation of the financial sector in Colombia. More specifically, it was pointed out that currently, “La Arenera” may allow exceptions to compliance with its circulars, but not to the general regulatory framework, as is appropriate in these experimentation spaces.

Policy makers and users in “La Arenera”

Below, we will outline the main issues expressed by the interviewees, derived from their experiences in implementing a regulatory sandbox or participating as innovators in this space. These issues, upon analysis, reveal significant barriers to the successful implementation of a regulatory sandbox in Colombia, especially concerning legal certainty.

Firstly, it is important to note that a crucial aspect in this case is the normative calibration required by “La Arenera”, from the moment the temporary operation certificate is granted and exceptions are made, to the end of the trial period. Due to the existing regulatory fragmentation,

specifically in the process of exiting and dismantling operations supervised for two years, a situation of legal uncertainty is created on various fronts. In summary, there are two situations of legal uncertainty in the implementation of supervised trial spaces: firstly, the temporary suspension of a norm of any rank, and secondly, the unpredictable normative outcome that may occur in the form of repeal, modification, or issuance of norms once the trial period is completed.

As pointed out by the interviewed SFC official (No. 2, personal communication, December 29, 2021a), after Decree 1234 of 2020 was issued in accordance with Article 166 of the National Development Plan, the SFC began to make more flexible exceptions to norms of higher rank than the circulars and resolutions of the Superintendence. She states the following:

A sandbox that allows for exceptions to laws and decrees to enable this potential regulation; an article came out in the National Development Plan stating that these, and what's this called, these regulatory excuses, these exceptions in regulation could be given when applying it. And that was what enabled us to issue the decree regulation for the sandbox. Why this one in particular? You know, you probably already know, financial activity is a supervised, monitored, and regulated activity in a particular way and must have legal authorization for the activities. So, if it's not legally authorized, well, the activity cannot proceed, and that's why it was necessary to have that article in the National Development Plan to be able to move forward with the regulation. (No. 2, personal communication, December 1, 2021)

However, neither in the aforementioned article of the National Development Plan nor in Decree 1234 of 2020 is the Financial Superintendence granted the authority to allow regulatory exceptions for controlled testing environments. Only the following is mentioned in the paragraph of article 2.35.7.1.1 of the latter-mentioned decree:

The regulatory exceptions granted by the Financial Superintendence of Colombia in the controlled testing environment do not imply the modification of the current regulation applicable to financial, stock market, and insurance activities. In any case, they may be taken into account for reviews that are subsequently made of the regulatory framework. (Decree 1234, 2020)

On this point and particularly regarding the legal review of Decree 1234 of 2020, the SFC official stated the following

[...] So, we shared the document with those authorities. We also received some feedback from them. Of course, the Superintendence, for us, is vital because ultimately they are the ones who bring to life what we do through the decree. And, of course, the vision of the Ministry of Finance in the country is absolutely necessary, considering that the policy line, economic policy, and financial policy come from there, from what we are working on. So, these two perspectives come together, we review again if there is a need to make adjustments, we make adjustments, and then we have a solid draft decree, we put forward a draft decree, a normative project in decree format, where we put it up for consideration again within the regulatory time frame, fifteen days, which is established for our documents; and we accompany it with that same adjusted technical document, as we adjust the draft decree and that's it. It's already a more administrative process,

only if there are perhaps some very significant comments or something like that, something we had overlooked and need to reconsider. In general, it's a relatively simple process and it's a bit long because we have several filters, we receive those comments, we adjust again if necessary, if not, we don't send it back, and then we present it again to our council as the final version. If they approve it and give us the green light, they say 'okay, go ahead'. It goes to the General Secretariat of the Ministry of Finance, the General Secretariat performs its respective filter, on issues such as constitutionality, ensuring compliance with the competencies of the Ministry of Finance to issue such regulations, so there is a thorough legal review, not so much from the financial regulatory side, but from the other part of the regulation, ensuring compliance with the general regulatory framework, and after that, it is signed by the minister. It goes to the Legal Secretariat of the Presidency, where again we have a filter, the Presidential legal area, they merge the two perspectives. They have a vision from the regulatory standpoint, which is what we are doing for the financial system, but they also review the legal form, and if we pass that filter, the decree goes to the president's signature and that's when the numbered decree is issued. (N.º 2, personal communication, November 29, 2021b)

However, the only legitimate and constitutional way to grant the Financial Superintendence the authority to grant such exceptions would be through a legislative act or any other mechanism for amending the Political Constitution, as the French government did with the amendment of Article 7212 of its Political Constitution (Organic Law 467/2021). Taking all of the above into account, and considering the presumption of legality in this case, it can be said that the institutional framework has omitted these types of evaluations, creating a potential scenario of legal uncertainty if the Constitutional Court declares it unconstitutional.

On the other hand, due to the regulatory fragmentation in the process of concluding the controlled testing space, supervised entities are exposed to being in a "limbo", as described by the interviewed innovator (N.º 2, personal communication, December 1, 2021). In other words, a situation of legal uncertainty is created, given that regulatory exceptions now extend to a broader regulatory framework. Therefore, they depend on the legislative process, which is processed in other entities or in cooperation with them, and which must begin at least, according to the interviewed URF official, six months before the conclusion of the testing space. It is important to note that this must occur no more than a year and a half after the issuance of the temporary operation certificate.

In that regard, and in the words of the URF official, the following should be taken into account:

So, this calibration seems to me to be a calibration that will require a lot of finesse because if I think that I should issue a regulation, for example, at the decree level, at least [...] at least I should start processing a decree, I would say, about six months before. Because the decree must go through the same rigorous process that we have in other types of activities. If we find evidence that the channel they are testing there in the sandbox is a channel that serves the market, that is reaching underserved populations or reaching new users, or that it has a different methodology

and is indeed selling more insurance than we were accustomed to being sold through that line, then regulation must come and study the issue. (N.º 2, personal communication, November 29, 2021b)

Additionally, as mentioned earlier, in Colombia, the regulatory sandbox “la Arenera” serves both as a product-testing and policy-testing environment. In other words, since the entire process involves reciprocal feedback and the outcome depends on the success of both the product and the regulatory policy being tested, the entire regulatory framework is exposed. In short, the circulars, resolutions, decrees, and laws that regulate the financial operation being tested are subject to an outcome that could affect the balance of the financial system, potentially impacting the rights of innovators and even consumers.

Legal certainty is often talked about, but people tend to forget about it

Legal certainty is a concept that cannot be identified as univocal; that is, it cannot be understood from a single dimension. The same situation arises when attempting to identify the multiple scenarios in which the regulatory sandbox represents a risk to legal certainty. Therefore, the following are a series of categories through which some specific and identified situations are presented and analyzed throughout this investigation, which, in some way, represent a threat to legal certainty and, therefore, a barrier to the implementation of this tool.

Exceptions as a crossroads for certainty, stability, and predictability. On this point, two things previously raised in this document should be remembered when discussing the regulatory sandbox and the multiple ways in which legal certainty can be understood. Regarding the sandbox, it should be noted that these controlled testing spaces are characterized by allowing temporary exceptions to compliance with specific rules. Concerning legal certainty, it materializes as the certainty and predictability of the rules, as a constitutional principle and as a value of the legal system, and as the stability of law.

Thus, we can start by discussing exceptions versus the certainty and predictability of rules, understanding the latter as the ability to make accurate predictions about the legal results and implications of a law. There is no certainty that the exempted norm, on the occasion of the entry of an innovation into the sandbox, will ultimately be modified in general terms. This translates into parallel legal spaces where specific individuals enter, which may ultimately have repercussions for individuals in general, who would find themselves in a scenario of uncertainty regarding the regulatory framework with which they are complying.

On the side of constitutional principles, and recalling that the Colombian Constitutional Court, through judgment T-502 of 2002, stated that legal certainty holds constitutional rank,

considering it a principle that runs through the structure of the Rule of Law and encompasses several dimensions (Constitutional Court, 2002). On the other hand, according to Norberto Bobbio, legal certainty is part of a system of values that legitimizes a political system (1958). In this sense, faced with exceptions and a potential violation of legal certainty as a principle and as a value, this would represent a threat to the stability of the political system and a scenario in which the legitimacy of the Constitutional State would be called into question.

In summary, exceptions represent a barrier to the implementation of a regulatory sandbox because theoretically it is difficult to exempt compliance with the law.

The mechanisms used by the State to allow exceptions

If we discuss the mechanisms used by the State to exempt compliance with the law, we must remember the mechanisms that have been employed in Colombia, as described in the background and references throughout this document. Specifically, we can mention “la Arenera” of the Financial Superintendence of Colombia, which has undergone multiple normative developments. However, it is Article 166 of the National Development Plan, or Law 1955 of 2019, that establishes that supervised entities will be temporarily constructed by the Financial Superintendence of Colombia to implement innovative technological developments. It is this article that the URF official states allowed the inclusion in Decree 1234 of 2020 to authorize the sandbox, permitting exceptions to the rules by stating the following.

[...] sandbox that allows exceptions to law and decree to enable this possible regulation came out in the National Development Plan where it said that they could be given as such and what is this called, as these excuses for regulation, as these exceptions in the regulation when applying it. And that was what enabled us to include the decree regulation of the sandbox. (N.º 2, personal communication, November 29, 2021b)

In this regard, as defined in that law, there is no explicit authority to grant exceptions to compliance with the law. In addition to the above, there is a potential problem of constitutionality, considering that the Colombian legal system has recognized legal certainty as a constitutional principle, which in this case should be excepted by a norm of the same hierarchical level. All of this should be eventually known and declared by the Constitutional Court, meanwhile the legality of the sandbox’s powers is presumed.

In that case, a declaration of unconstitutionality could have repercussions for those who have gone through the SFC sandbox and effects on future sandbox initiatives in the country, based on the court’s interpretation. In judgment C-507 of 2020, the Constitutional Court stated that the modulation of the effects of its judgments, from the point of view of temporality, generally has effects going forward or *ex nunc*, by virtue of the principles of legal certainty and good faith (Constitutional Court, C-507, 2020). However, the court stated that there are special cases in which:

recognizing only future effects to judgments of unconstitutionality would consolidate legal situations openly incompatible with the Political Charter, given that there are rules that, even though they have been expelled from the legal system, have the possibility of producing effects before the declaration of unconstitutionality occurs. (Constitutional Court, C-507, 2020)

In that sense, it depends on the court's interpretation; however, the safe space promised by the regulatory sandbox could eventually become a space of insecurity, with repercussions for the innovators who entered it.

From formulation errors to interpretation errors

Having said the above, it can be stated that there is a risk to legal certainty derived from errors made in interpretation by the Financial Regulation Unit of the National Development Plan (NDP), which led this unit to formulate a regulatory sandbox authorizing temporary exceptions to compliance with the rules, without having express authorization to do so and overlooking the very essence of legal certainty.

In this regard, it can be said that in this scenario there were errors in two areas: on the one hand, in the formulation of Decree 1234 of 2020 by the Ministry of Finance, and on the other hand, in interpretative errors by the URF when analyzing the scope of the NDP in this matter. We must remember that one of the ways in which legal certainty can be understood is as the quality and clarity of the norms or sources.

Intermittent legal certainty

Indeed, based on the assertion from the preceding paragraph, it can be pointed out that in legal systems where legal certainty is applied intermittently—meaning where temporary exceptions to compliance with regulations are authorized—spaces of confusion are created when applying principles, and therefore when obeying regulations. That is to say, when legal certainty is applied intermittently, scenarios of legal uncertainty are generated, much like what happens with the regulatory sandbox when it is not implemented correctly.

Regulatory fragmentation as a generator of risks for legal certainty

Within the identification of the regulatory framework of the financial sector in Colombia, the functions of the financial superintendent, specifically regarding the sandbox, and those of the URF were shared. In this regard, it can be summarized by stating that one manages the regulatory sandbox (SFC) and the other projects adjustments in regulations (URF). Likewise, one of the findings from the interviews was the following:

In my opinion, I believe that the most difficult thing is to calibrate the exits from the sandbox, the exits in the different lines you have, because since we are enabling exceptions in general, decrees

and laws, when you exit the sandbox, if you are testing something that is not really in the regulation, then for it to be able to continue and you can progress in the activity, if it went very well. Well, continuing in the activity will be limited by the regulation [...]. So, that calibration seems to me to require a lot of delicacy because if, if I think that I should issue a regulation, for example, at the level of a decree, at least I should start processing a decree, I would say, about six months before. Because well, the decree must go through the same rigorous process that we have in other types of activities. (N.º 2, personal communication, November 29, 2021)

Thus, there is evident regulatory fragmentation in the Colombian financial sector, where these two entities—the Financial Superintendency of Colombia and the Financial Regulation Unit—play a particular role, which in practice has created a space of uncertainty between the exit from the sandbox and regulatory adjustment. This is understood as uncertainty, and in turn, as legal uncertainty.

Legal recommendations

All circumstances presented so far reflect particular challenges for the Colombian case. However, based on this experience, a series of legal recommendations (LR) can be generated so that institutions or states interested in implementing a regulatory sandbox can do so by overcoming the barriers described in this document. With this in mind, to overcome the barriers mentioned in the previous sections, the following suggestions are made.

- i) It is necessary for specific legal systems to renew the local interpretation of the structural and substantive elements that constitute the principle of legal certainty, especially in terms of certainty and legitimate expectations (LR)

Conceptual renewal can begin with the generation of new local legal doctrine, which presents a more flexible idea of legal certainty applied to the particular legal framework. Another approach is a jurisprudential pronouncement by a court, in which a much broader concept of legal certainty is presented, as has already occurred in Germany, Spain, France, the Netherlands, and Portugal. In this regard, Sofia Rachordas has pointed out that legal provisions must adapt both to social reality and to the increasing amount of knowledge collected on a given topic. That is, legal certainty must be interpreted dynamically so that laws can remain “certain” in light of available information and the dynamic phenomena they regulate (2014).

This dynamism can be guaranteed through the adaptability of a legal system, as the more innovative and adaptable a legal order is, the easier it will be for it to respond to a changing environment and allow private actors to explore new opportunities in the market. In this context, the principle of legal certainty should not be considered “an obstacle to the reform of rules,” but rather “an instrument that consolidates the activity of the legislator,” allowing them to adapt laws

to social reality and enabling judges to interpret them in accordance with existing precedent (Ranchordás, 2014).

- ii) Considering the consecration of legal certainty as a constitutional principle, before implementing a regulatory sandbox, the constitutional framework of each case must be adjusted in such a way as to allow for temporary exceptions to the enforcement of norms (LR).

It is essential for the constitutional framework to authorize temporary exceptions to the enforcement of norms; otherwise, it would infringe upon a constitutional principle such as legal certainty, and a regulatory sandbox could be considered unconstitutional by the Constitutional Court. The mechanisms to follow in this case correspond to the methods of modifying the Constitution of each state.

Conclusions

This section focuses on presenting the main conclusions of the research. Specifically, it addresses to what extent legal certainty is or can be a barrier to the implementation of a regulatory sandbox in Colombia, and, if so, how it can be addressed from a legal perspective.

Legal Certainty

Regarding legal certainty, two barriers to the implementation of a regulatory sandbox in Colombia have been identified in this research.

The first is legal certainty as a theoretical problem, which hinders the exception to the enforcement of norms in a testing space. It should be noted that the principle of legal certainty implies that laws must be intelligible, clear, and predictable so that citizens can know which rules bind authorities and their own behavior (Ranchordas, 2013). This principle, according to Patricia Popelier, contains two dimensions: a static dimension that requires legal determination and a dynamic dimension that allows legislation to adapt to changing circumstances (Popelier, 2008). This means that regulatory sandboxes designed clearly and objectively are not necessarily contrary to the principle of legal certainty. This principle does not dictate the immutability of laws. On the contrary, it seeks to prevent situations in which citizens do not know which laws are valid. Outdated laws that do not adapt to social changes violate the principle of legal certainty; well-regulated experimentation with well-defined limits does not (Ranchordas, 2013).

Additionally, according to Sofia Ranchordas, citing Patricia Popelier, in recent decades the concept of legal certainty has evolved. It must be understood that in a rapidly changing society, laws are unable to keep pace with social and technological developments and foresee all the phenomena to which they apply (2013). Legal texts must adapt to social reality, which means that legal certainty must be interpreted dynamically (Ranchordas, 2013). In these circumstances,

experimental legislation can represent a benefit rather than a detriment to legal certainty, as experimental laws can be used to adapt the legal order to structural changes without disrupting it (Ranchordas, 2013). As the URF interviewee stated, this tool will allow for outlining the regulatory agenda of the financial sector.

I believe that if one manages to achieve those objectives and think there and review what is happening and evaluate how it is developing, then from that one could make some kind of proposal to improve and strengthen it, well, any initiative that could improve and if it is that regulation. But what I do believe is that the sandbox is going to become like a source or the new input, for the regulatory agenda, politically, as we were talking about a moment ago. (No. 2, personal communication, November 29, 2021)

Given the above, the recommendation in scenarios like the Colombian one would be to reformulate the conception of legal certainty towards a more flexible approach that adapts to the speed of regulatory changes, thus allowing regulation to effectively serve as a tool for public policy intervention.

On the other hand, regarding legal certainty as a principle and as a barrier at the constitutional level, there should be a reform in the constitutional framework that allows for legal experimentation from this instance. For instance, the case of France can be taken as a reference, where its constitution allows for the adoption of experimental laws and regulations at both the national and decentralized levels. Specifically, these articles state the following.

Article 37-1. The law and regulation may contain experimental provisions for a specified duration and purpose.

Article 72. [...] Under the conditions laid down by organic law and unless it concerns essential conditions for the exercise of a public freedom or a right guaranteed by the Constitution, local authorities or groups may, where provided for by law or regulation, derogate experimentally and for a limited duration and purpose, from the legislative or regulatory provisions governing the exercise of their powers [...]. (1958)

Considering the above, and using the mechanisms of constitutional reform defined in each state, political charters should be reformed to authorize limited legal experimentation.

In summary, based on everything mentioned throughout the text, it can be said that legal certainty is not a barrier to the implementation of a regulatory sandbox, as long as the following are taken into account: Regarding the theoretical conception of legal certainty, a shift to a dynamic interpretation is necessary so that the regulatory framework can be adjusted to the dynamic phenomena it regulates. On the other hand, in the Colombian case, legal certainty has been constitutionally enshrined, implying that there must be a provision of constitutional rank authorizing temporary exceptions to compliance with regulations; otherwise, there would be an eventual risk of being declared unconstitutional by the Constitutional Court. That is, in new

sandbox initiatives, whether in Colombia or anywhere else in the world, it must be studied whether legal certainty has constitutional rank, in which case exceptions to compliance with the rules must be authorized by a norm of the same level.

However, “la Arenera” is a particular case in which a regulatory sandbox was implemented with powers to allow extensions of compliance with the law, without considering the constitutionalization of legal certainty and through the authorization of a norm of lower rank. This generates an eventual situation of insecurity for users, which has not been warned.

Finally, there are aspects from which conclusions cannot be drawn, so they should be addressed in future research. For example, the regulatory sandbox of the Financial Superintendence of Colombia is both product-testing and policy-testing. It would be valuable to investigate whether the barriers identified in this research have a greater impact in this type of sandbox, and if so, whether it is worth implementing two regulatory sandboxes: one for product-testing and one for policy-testing.

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