

# Forum shopping in regulatory sandboxes and the perils of experimental law-making<sup>1</sup>

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## **Abstract**

*The gradual emergence of regulatory sandboxes in various jurisdictions has already triggered considerable attention of legal academia. Thus, academicians have addressed various legal frameworks, providing for regulatory sandboxes in the field of financial and energy technologies, artificial intelligence, medical products etc. In all these fields, regulatory sandboxes do currently serve as a tool for facilitating these new technologies, which could hardly emerge successfully under the rules of conventional legal frameworks. Beside identifying the advantages of regulatory sandboxes, various risks were also identified with respect to the prospective introduction of regulatory sandboxes in various fields of governance. This article aims to address the feature of 'forum shopping', that the spontaneous emergence of regulatory sandboxes might imply. The authors argue, that while such forum shopping will represent an inevitable implication of legal pluralism, one may also expect various attempts for the "passportisation" of regulatory sandboxes. At the same time, the authors aim to address a more theoretical question, to which extent are classical tenets of legal jurisprudence applicable to the experimental legislation?*

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## **1. Introduction**

In the last few years, regulatory sandboxes were adopted to facilitate the deployment of emerging technologies. These legal regimes enable, in a real-life environment, the testing of innovative technologies, products, services or approaches that are not fully compliant with the existing legal and regulatory

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framework. They are operated for a limited time and in a limited part of a sector or area. The purpose of regulatory sandboxes is to learn about the opportunities and risks that a particular innovation carries and to develop the correct regulatory environment to accommodate it. While these innovative legal regimes were originally tailor-made for emerging technologies in the sector of finances, they were gradually introduced in many other fields of regulation, such as in energy law, medical law and in the law of artificial intelligence.<sup>5</sup>

A number of potential benefits of regulatory sandboxes have been identified so far in existing literature.<sup>6</sup> Firstly, it was argued that regulators can acquire a better understanding of innovative products through regulatory sandboxes, which allows them to develop adequate rule-making, supervision and enforcement policies.<sup>7</sup> Further, a regulatory sandbox allows innovators to develop their products and services in a regulation-compliant way, avoiding potential legal risks. At the same time, regulatory sandboxes may help innovators to develop a better understanding of supervisory expectations.<sup>8</sup> Lastly, consumers benefit from the introduction of new and potentially safer products, as regulatory sandboxes foster innovation and consumer choices in the long run.<sup>9</sup>

According to a World Bank study<sup>10</sup>, more than 50 countries experimented with fintech sandboxes in 2020. Japan introduced a sandbox regime open to organisations and companies both in and outside Japan who were willing to experiment with new technologies, including blockchain, AI, and the internet of things (IoT). This occurred in fields such as financial services, healthcare and transportation as early as 2018.

In Europe, both Norway and the United Kingdom represent pioneers in introducing regulatory sandboxes to explore new technologies such as voice biometrics and facial recognition technology, as well as related data protection issues. Consequently, the newly emerging regimes have attracted considerable attention in legal academia, addressing regulatory sandboxes either as isolated

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<sup>5</sup> See Maria Teresa Paracampo, "The development and expansion of regulatory sandboxes, from FinTech to other areas in the near future", *Federalismi*, 2022, issue 18 (July 2022): 207-232.

<sup>6</sup> See eg. Jon Truby, Rafael Dean Brown, Imad Antoine Ibrahim & Oriol Caudevilla Parellada, "A Sandbox Approach to Regulating High-Risk Artificial Intelligence Applications", *European Journal of Risk Regulation*, 13, issue 2 (June 2022): 270-74.

<sup>7</sup> For instance, in the banking industry, the sandbox may result in amending the rules on identity verification without face-to-face meetings under certain circumstances.

<sup>8</sup> See Tambiama Madiaga & Anne Louise Van De Pol, "Artificial intelligence act and regulatory sandboxes", European Parliamentary Research Service, June 2022, at pp. 2-3.

<sup>9</sup> Ibid, at p. 3.

<sup>10</sup> International Bank for Reconstruction and Development (ed), "Global Experiences from Regulatory Sandboxes", FinTech Note 8, 2020, at pp. 6-7.

phenomenon<sup>11</sup>, or from a comparative perspective.<sup>12</sup> At the same time, some authors<sup>13</sup> addressed the phenomenon of regulatory sandboxes as a tool that serves the smooth transition towards a new governance of these new technologies.

The fact is, however, that experimental lawmaking in regulatory sandboxes also implies a number of concerns. Critics have identified a risk that regulators may prioritise innovation over placing adequate safeguards to protect both the public and consumers.<sup>14</sup> Also, a concern that regulators' choices might slow down genuine innovation from private actors was expressed. Lastly, such experimental lawmaking might be misused, and lead to unwanted forum shopping for the most beneficial sandbox, which may attract innovators to lower safeguards and requirements.<sup>15</sup> This article aims to address this lastly identified risk, potentially arising from the newly emerging regulatory sandboxes. The risk of forum shopping in regulatory sandboxes will be addressed in following way:

Firstly, examples of various regulatory sandboxes, which have been introduced in different jurisdictions will be presented (Part 1). In this respect, the article aims to demonstrate that regulatory sandboxes have become a feature that is recently inherent in experimental lawmaking and which became an integral part of the law of various new technologies of the 2020s.

Secondly, the common characteristic features of regulatory sandboxes will be identified (Part 2). While there is no universal definition of a regulatory sandbox, the various forms of experimental lawmaking share certain common characteristics, which react to challenges arising from emerging technologies. At the same time, this part will clearly demonstrate that there is no universal standard in regulatory sandboxes, which potentially opens the door for a "race to the bottom".

With respect to the lack of a universal standard, Part 3 aims to identify the perils of forum shopping in regulatory sandboxes. This part will outline traditional arguments that have been expressed *vis-à-vis* the practice of forum shopping in the

<sup>11</sup> See eg. Agnieszka Butor-Keller & Michal Polasik, "The role of regulatory sandboxes in the development of innovations on the financial services market: the case of the United Kingdom", *Economics and Law*, 19, issue 4 (December 2020): 620-637; Argjenta Veseli, Simon Moser, Klaus Kubeczko, Verena Madner, Anna Wang & Klaus Wolfsgruber, "Practical necessity and legal options for energy regulatory sandboxes in Austria", *Utilities Policy*, 73 (December 2021): article number 101296; Simona Heskova Bojmírová, "FinTech and Regulatory Sandbox: New Challenges for the Financial Market. The Case of the Slovak Republic", *Juridical Tribune*, 12, issue 3 (October 2022): 399-411.

<sup>12</sup> See eg. Maryam Khalid & Sherin Kunhibava, "FinTech Regulatory Sandboxes in Australia and Malaysia: A Legal Analysis", *International University of Malaysia Law Journal*, 28, issue 1 (January 2020): 1-35; Vladislav O. Makarov, "Experimental legal regimes (regulatory sandboxes): Russian and foreign practice", *Revista de investigaciones – Universidad del Quindío*, 34, issue 2 (March 2021): 71-79.

<sup>13</sup> See eg. Dirk A. Zetzschke, Ross P. Buckley, Janos N. Barberis & Douglas W. Arner, "Regulating a Revolution: From Regulatory Sandboxes to Smart Regulation", *Fordham Journal of Corporate & Financial Law*, 23 (2017-2018): 31-52.

<sup>14</sup> See Sofia Ranchordas, "Experimental lawmaking in the EU: Regulatory Sandboxes", University of Groningen Faculty of Law Research Paper No. 12/2021, at p. 9.

<sup>15</sup> See Tambiama Madiaga & Anne Louise Van De Pol, "Artificial intelligence act and regulatory sandboxes", European Parliamentary Research Service, June 2022, at p. 3.

legal scholarship. At the same time, this part will also address the question of to which extent forum shopping may be malicious in regard to the newly emerging regulatory sandboxes.

With this article, the authors aim to contribute to the ongoing debate on experimental legislation in the scholarship of law. At the same time, the authors aim to address a more theoretical question, asking to what extent are classical tenets of legal jurisprudence applicable to the experimental legislation.

## 2. A fleet of regulatory sandboxes on the horizon

In spite of the fact that the concept of regulatory sandboxing per se can be considered relatively new, a significant number of existing (and functioning) sandboxes can be found in both the EU and globally. Since this article aims to address the issue of regulatory sandboxes from a doctrinal rather than a purely technical perspective, it appears only fit to mention some of them as examples. In order to demonstrate the diversity of potential uses for regulatory sandboxing, three different types of sandboxes from various jurisdictions were selected, each representing a relatively spontaneous use-case of this concept. The first and most common use is represented by financial or fintech sandboxes, while the second type is borrowed from the healthcare sector, and the third example is designed for testing artificial intelligence.

The finance industry can be considered the environment where regulatory sandboxes have established their roots. It was reported that, as of 2022, dozens of various fintech sandboxes were introduced all around the globe.<sup>16</sup> With the first ever formal regulatory sandbox launched in 2016 and attributed to the UK Financial Conduct Authority (FCA),<sup>17</sup> a number of similar projects followed during subsequent years. Since the more established and seasoned sandboxes have already been subject to scholarly analysis, for the purposes of this article the authors selected a very recent sandbox launched by the National Bank of Slovakia (NBS).<sup>18</sup>

The NBS launched its regulatory sandbox on 1 January, 2022, thus joining the growing list of central banks and financial regulators exploring this tool to promote innovation in financial services.<sup>19</sup> Regulatory sandboxes are available to a relatively wide range innovative financial services providers, including banks, payment service providers and more start-up-like fintech companies, with the main entry barrier being the requirement that the applicant holds an existing permit from

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<sup>16</sup> See eg. Giulio Cornelli, Sebastian Doerr, Leonardo Gambacorta and Ouarda Merrouche. „Regulatory Sandboxes and Fintech Funding: Evidence from the UK“ BIS Working Paper, No 901, (June 2022). See also Thomas F. Hellmann, Alexander Montag, and Nir Vulkan, „The Impact of the Regulatory Sandbox on the FinTech Industry“ (August 2022).

<sup>17</sup> Lev Bromberg, Andrew Godwin and Ian Ramsay, „Fintech Sandboxes: Achieving a Balance between Regulation and Innovation.“ *Journal of Banking and Finance Law and Practice*, 28, issue 4 (December 2017): 314-336.

<sup>18</sup> See National Bank of Slovakia, „Regulatory sandbox“. Available from: <https://nbs.sk/en/financial-market-supervision1/fintech/regulatory-sandbox/> (Accessed on 17 March 2023).

<sup>19</sup> Ibid.

the NBS as the national regulator (eventually also an outsourcing agreement).<sup>20</sup>

In order to be admitted to the sandbox, the applicant must meet the indicators outlined in the Methodology or the assessment of the criteria, such as having analysed the legal aspects of the implementation of financial innovation, analysed the risks associated with the implementation of financial innovation and prepared measures to mitigate them, along with disposing with sufficient financial and human resources enabling the potential participant to successfully test financial innovation within the regulatory sandbox.<sup>21</sup> The program aims to support the development of new financial products and services that can improve the efficiency, safety, and accessibility of financial services in Slovakia. The sandbox is also designed to help the NBS better understand the opportunities and risks associated with new technologies and business models in financial services.

Companies willing to participate in the sandbox must first apply to the NBS, providing detailed information concerning their proposed innovation and how it differs from existing products or services. This pre-sandbox assessment stage serves the purpose of evaluation of the eligibility of applicants and their proposed projects. The NBS considers a range of factors, including the novelty and potential impact of the proposed product or service, the qualifications and experience of the team, and the adequacy of the proposed risk management and consumer protection measures.

Regulatory sandboxes per se are organized in three stages. The first preparatory stage lasts 6 months and allows the participants to consult their ideas with the NBS, which should help the participant to adjust its financial innovation in compliance with the legislation within the competence of the NBS. This stage also determines the course of the testing phase in the form of a so-called testing plan.<sup>22</sup>

The second stage is the sandbox testing phase, during which the approved applicants can test their products or services in a controlled environment, yet under real market conditions. The NBS provides guidance and support to the participants and monitors their activities to ensure compliance with relevant regulations and consumer protection standards. This phase also typically lasts for 6 months. The third stage is a post-sandbox evaluation, during which the NBS evaluates the results of the sandbox testing and determines whether the participant can proceed with a full-scale launch of their product or service. Within one month after the end of the testing, the participant is obligated to prepare and file a final testing report, which is then reacted upon either in the form of an evaluation meeting or in the form of a written supervisory statement.<sup>23</sup>

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<sup>20</sup> See Simona Heskova Bojmírová, "FinTech and Regulatory Sandbox: New Challenges for the Financial Market. The Case of the Slovak Republic", *Juridical Tribune*, 12, issue 3 (October 2022), at p. 410.

<sup>21</sup> See National Bank of Slovakia, "Methodology for the assessment of the criteria to enter into the regulatory sandbox". Available from: <https://nbs.sk/en/financial-market-supervision1/fintech/regulatory-sandbox/methodology-for-the-assessment-of-the-criteria/> (Accessed on 17 March 2023).

<sup>22</sup> See National Bank of Slovakia, "Regulatory sandbox". Available from: <https://nbs.sk/en/financial-market-supervision1/fintech/regulatory-sandbox/> (Accessed on 17 March 2023).

<sup>23</sup> Ibid.

Despite the fact that the Slovak regulatory sandbox can be considered relatively strict both in terms of entry requirements and in terms of legal regime of its operation,<sup>24</sup> the establishment of such a platform is a big step forward and is in no way axiomatic. As a matter of comparison, it is worth mentioning that the neighbouring Czech Republic has a more conservative stance to regulatory sandboxing. As noted by Petr Vybíral and Tomáš Kirner, despite the fact that the Czech National Bank generally holds a rather liberal attitude towards innovative financial services, it indicates a reserved approach to regulatory softening of any kind *vis-à-vis* for selected market participants (i.e. FinTech's as opposed to more "traditional" financial services providers).<sup>25</sup> For that reason, there is currently no regulatory sandbox nor any other comparable fintech hub operated by the Czech financial regulator.<sup>26</sup>

Whilst the fintech environment has hosted regulatory sandboxing for quite some time, the calls for regulatory sandboxes are also increasing within the field of healthcare.<sup>27</sup> Based on a systematic literature review of relevant papers and reports, Emily Leckenby et al. estimates that "*the use of regulatory sandboxes in healthcare is relatively new and primarily used in high-income countries to support the adoption of new technologies, particularly those related to digital health*".<sup>28</sup> A use-case of a healthcare regulatory sandbox can be found in Singapore, where the Ministry of Health launched a so-called *Licensing Experimentation and Adaptation Programme* (LEAP) back in 2018.<sup>29</sup> The programme established a sandbox for telemedicine and mobile medicine with the objective of developing an understanding, identifying potential risks and creating corresponding risk mitigation measures connected with the use of the new technology prior to licensing under the Singaporean *Healthcare Services Act*.<sup>30</sup>

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<sup>24</sup> See also Simona Hesecková Bojmířová, "FinTech and Regulatory Sandbox: New Challenges for the Financial Market. The Case of the Slovak Republic", *Juridical Tribune*, 12, issue 3 (October 2022), at pp. 405-410.

<sup>25</sup> Petr Vybíral & Tomáš Kirner. „Fintech Laws and Regulations: Czech Republic“, *Global Legal Insight*, 1 (2019), at p. 59.

<sup>26</sup> See also Czech National Bank. „Financial innovation“. Available from: <https://www.cnb.cz/en/supervision-financial-market/financial-innovation/> (accessed on 17 March 2023).

<sup>27</sup> See eg. Abhishek Bhatia, Rahul Matthan, Tarun Khanna, and Satchit Balsari, "Regulatory Sandboxes: A Cure for mHealth Pilotitis?" *Journal of Medical Internet Research*, 22, issue 9 (September 2020). See also Brian R. Knight, „Virginia Should Consider a Regulatory Sandbox for Healthcare“, Mercatus Center at George Mason University, State Testimony, Virginia House of Delegates, Committee on Health, Welfare, and Institutions (February 2022).

<sup>28</sup> Emily Leckenby, Dalia Dawoud, Jacoline Bouvy & Páll Jónsson, "The Sandbox Approach and its Potential for Use in Health Technology Assessment: A Literature Review, *Applied Health Economics and Health Policy*, 19 (2021): 857-869.

<sup>29</sup> See eg. Angela Attrey, Molly Leshner and Christopher Lomax, "The role of sandboxes in promoting flexibility and innovation in the digital age", *OECD Going Digital Toolkit Notes*, No. 2, OECD Publishing, Paris (2020).

<sup>30</sup> See Ministry of Health of Singapore, "Licensing experimentation and adaptation programme (LEAP) - a MoH regulatory sandbox". Available from: [https://www.moh.gov.sg/home/our-healthcare-system/licensing-experimentation-and-adaptation-programme-\(leap\)---a-moh-regulatory-sandbox](https://www.moh.gov.sg/home/our-healthcare-system/licensing-experimentation-and-adaptation-programme-(leap)---a-moh-regulatory-sandbox) (Accessed on 19 March 2023).

To meet the outlined goals, the *Singaporean Ministry of Health* established a platform for cooperation with participating providers to create a safe telemedicine and mobile medicine environment, while adopting a risk-based approach. The endgame of the regulatory sandbox was to eventually create a comprehensive regulation of telemedicine and mobile medicine as a licensed healthcare service. It was reported that this goal has been achieved as of February, 2021, which led to the closure of the regulatory sandbox.<sup>31</sup> As part of the transition to the licensing phase of the process, the *Singaporean Ministry of Health* is now listing direct telemedicine service providers who have “*demonstrated awareness of the risks and benefits of TM, put in place measures to address these risks, and agreed to comply with safe TM practice guidelines set out by the Ministry*”.<sup>32</sup>

The Singaporean example, or, more precisely, the successful resolution of the regulatory sandbox established in 2018, indicates that the phenomenon of regulatory sandboxes can be effectively implemented in the field of healthcare services. The use of regulatory sandboxes in the medicine and healthcare sector is, nonetheless, still accompanied by certain controversies and concerns which are yet to be addressed in a more complex manner.<sup>33</sup>

Another area where the use of regulatory sandboxes may be brought up as an example, is artificial intelligence (AI). Being a potentially high-risk (but arguably also high-reward) area of application of experimental technology, AI appears to have become an appropriate candidate for sandboxing, especially considering the demotivational effect of the strict liability regime.<sup>34</sup> The establishment of an AI regulatory sandbox have been recently backed *inter alia* by the UK government which hopes that the platform will facilitate the research and development of AI technologies.<sup>35</sup>

In the European context, the first AI regulatory sandbox was presented in June, 2022 at the European Commission event titled “*Bringing the AI Regulation Forward*”.<sup>36</sup> The test of the pilot version began from October, 2022 with the results promised to be published during the Spanish Presidency of the Council of the EU in the second half of 2023.<sup>37</sup> Another example of a somewhat specific AI regulatory

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<sup>31</sup> Ibid.

<sup>32</sup> Ibid.

<sup>33</sup> See eg. Jacob S. Sherkow, „Regulatory Sandboxes and the Public Health“, *University of Illinois Law Review*, 1 (2022): 357-410.

<sup>34</sup> See eg. Truby, Jon, Rafael Dean Brown, Imad Antoine Ibrahim, and Oriol Caudevilla Parellada, “A Sandbox Approach to Regulating High-Risk Artificial Intelligence Applications”, *European Journal of Risk Regulation*, 13, issue 2 (2022): 270-294.

<sup>35</sup> Ryan Morrison, „Government backs UK AI regulatory sandbox“, *Tech Monitor* (March 2023). Available from: <https://techmonitor.ai/technology/ai-and-automation/government-backs-ai-regulatory-sandbox> (Accessed on 19 March 2023).

<sup>36</sup> European Commission, „Launch event for the Spanish Regulatory Sandbox on Artificial Intelligence“. Available from: <https://digital-strategy.ec.europa.eu/en/events/launch-event-spanish-regulatory-sandbox-artificial-intelligence> (Accessed on 19 March 2023).

<sup>37</sup> European Commission, „First regulatory sandbox on Artificial Intelligence presented“. Available from: <https://digital-strategy.ec.europa.eu/en/news/first-regulatory-sandbox-artificial-intelligence-presented> (Accessed on 19 March 2023).

sandboxes can be found in Norway, where a so-called ‘sandbox for responsible artificial intelligence’ was introduced by the local Data Protection Authority.<sup>38</sup> The goal of the sandbox is to promote the development of AI solutions that are ethical and responsible from the viewpoint of data protection.<sup>39</sup>

Having presented the aforementioned examples, it appears safe to conclude that the issue of regulatory sandboxes is relevant across various social and business branches, thus creating secondary legal questions regarding the status of regulatory sandboxes as such. Despite the benefits of regulatory sandboxes, some jurisdictions (for example Germany or the Czech Republic) have adopted a rather reserved approach to the matter, which may be partly attributed to legislative barriers. After all, even in the case of the Slovak sandbox there are persisting concerns regarding its compliance with the general legal regime, including criminal liability.<sup>40</sup> In this regard, it should be further considered whether the establishment of regulatory sandboxes requires special-purpose legislation, designed either in the form of a one-off law (i.e. tailor-made law adopted specifically for a single sandbox), or in a form of a framework law for different potential uses *pro futuro*.

For instance, in 2019 the Legislature of the State of Wyoming enacted a bill related to creating a financial technology sandbox for the testing of financial products and services in Wyoming (the Financial Technology Sandbox Act), thereby establishing a specific legal regime.<sup>41</sup>

### 3. Conceptualisation of regulatory sandboxes

Although the emerging concept of regulatory sandboxes is continuously adopted in many jurisdictions, its definition and understanding differ throughout academia, international institutions, and domestic authorities.

World Bank group's *International Bank for Reconstruction and Development* emphasises the ability of the sandboxes to enable experimentation in an oversight environment to promote innovation and guide interactions with subjects of regulated products or services.<sup>42</sup> The *Council of the European Union* advocates a

<sup>38</sup> See also Kristin Undheim, Truls Erikson & Bram Timmermans, „True uncertainty and ethical AI: regulatory sandboxes as a policy tool for moral imagination“, *AI Ethics* (2022).

<sup>39</sup> Datatilsynet, „Sandbox for responsible artificial intelligence“. Available from: <https://www.datatilsynet.no/en/regulations-and-tools/sandbox-for-artificial-intelligence/> (Accessed on 20 March 2023).

<sup>40</sup> Simona Hesecková Bojmírová, „FinTech and Regulatory Sandbox: New Challenges for the Financial Market. The Case of the Slovak Republic“, *Juridical Tribune*, 12, issue 3 (October 2022), at p. 410.

<sup>41</sup> Bill No. HB0057, Enrolled Act No. 34 of the Sixty-Fifth Legislature of the State of Wyoming relating to trade and commerce; making legislative findings; creating the financial technology sandbox for the testing of financial products and services in Wyoming; authorizing limited waivers of specified statutes and rules under certain conditions; establishing standards and procedures for sandbox applications, operations and supervision; authorizing reciprocity agreements with other regulators; requiring criminal history background checks; creating an account; requiring a consumer protection bond; specifying standards for the suspension and revocation of sandbox authorization; authorizing rules and orders; and providing for effective dates.

<sup>42</sup> See International Bank for Reconstruction and Development (ed), „Global Experiences from Regulatory Sandboxes“, FinTech Note 8, 2020, at p. 2.



similar approach by identifying a regulatory sandbox as a framework that enables a controlled real-life environment for experimenting and testing innovative technologies, products, services or methods for a limited time and in a limited part of the sector under regulatory supervision.<sup>43</sup>

A similar approach is then expected to be further adopted in European legislation, more specifically in the regulation of artificial intelligence, also known as “the AI Act”. The proposal for the AI Act stipulates that the regulatory sandbox is: “(...) *controlled environment that facilitates the development, testing and validation of innovative AI systems for a limited time before their placement on the market or putting into service pursuant to a specific plan. This shall take place under the direct supervision and guidance by the competent authorities with a view to ensuring compliance with the requirements of this Regulation and, where relevant, other Union and Member States legislation supervised within the sandbox.*”<sup>44</sup>

The above-mentioned definitions share a common denominator, which is a controlled environment used primarily for testing innovations, in general, to comply with the rules. However, a slightly different approach might be perceived within the OECD’s definition of the sandbox.

The OECD concludes that regulatory sandboxes are, first and foremost, a form of waiver or flexibility with regard to the regulatory rules. Secondly, it accepts that it is an environment used for testing innovations on a case-by-case basis, with mechanisms ensuring regulatory objectives such as consumer or data protection.<sup>45</sup> The *US Treasury Department* agrees on the part of relief or waiver under applicable regulation; however, it defines sandbox as a unified solution, not specifically an environment for testing innovations. The difference between an environment and a solution is that defining a sandbox as a solution might leave open doors for other approaches, not restricted to testing environments or legislative frameworks.

The prior definitions emphasised that the sandbox is either an environment or a testing solution. Hillary J. Allen, on the other hand, sees the sandbox as a “(...) *form of principles-based*”<sup>46</sup> *regulation because it lifts some of the more concrete regulatory burdens from sandbox participants by affording flexibility in satisfying the regulatory goals of the sandbox.*”<sup>47</sup> In more simple terms, rather than providing

<sup>43</sup> See Council Conclusions on Regulatory sandboxes and experimentation clauses as tools for an innovation-friendly, future-proof and resilient regulatory framework that masters disruptive challenges in the digital age, 12683/1/20 REV 1.

<sup>44</sup> Article 53 of the Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts, COM/2021/206 final, 2021/0106(COD).

<sup>45</sup> See OECD (ed), “The role of sandboxes in promoting flexibility and innovation in the digital age”, OECD, Paris, 2020.

<sup>46</sup> Opposite approach to principles-based regulation is the rules base-regulation. Whereas the rules-based regulation is more detailed and prescriptive the principles-based regulation focuses on general outcomes and/or goals and leaves broader area for compliance purposes. See Daniel Gorfine & Chris Brummer, *FinTech Innovation: Building a 21<sup>st</sup> Century Regulator’s Toolkit*, Milken Institute: Center for Financial Markets, 2014, at p. 6.

<sup>47</sup> See Hillary J. Allen, “Regulatory Sandboxes”, *George Washington Law Review*, 87, issue 3 (October 2019), at p. 592.

a clear concept of regulatory sandboxes, the emphasis should be put on the goals and outcomes of an adoption of a regulatory sandbox, whichever jurisdiction's legislator expects.

The main purpose of providing different approaches when defining regulatory sandbox in this article is not to provide a generally accepted concept or definition, but instead to provoke thought and conclude that specific approaches create an impression that one jurisdiction provides different standards of regulatory obligations than the other. Some concepts focus more on the ability to test innovations, and others on waiving obligations, although in a supervised environment.

Referring to principles of regulation, H. J. Allen argues that one of the obstacles to implementing new principles-based regulation regimes such as regulatory sandboxes would be the jurisdictions' different (principles-based or rules-based) approaches towards regulation.<sup>48</sup> However, Brummer and Gorfine concluded that perceiving a jurisdiction's approach as either principles-based or rules-based would be an oversimplification. The approaches mentioned represent both ends of a spectrum, rather than being two different categories in one of which the jurisdiction in question falls.<sup>49</sup> Therefore, the obstacle to adopting a regulatory sandbox as a sort of principle-based framework in a rules-based leaning jurisdiction, as seen by H. J. Allen, could easily be tackled by adopting consequent legislative changes (regardless of the approach to regulation in given jurisdiction). Although the adoption of new legislation with regards to regulation of technologies is especially a challenge in itself.

Any regulation to be adopted must bear in mind that the development of technologies is a never-ending phenomenon. Strictly defined and detailed sets of rules for innovative products, services, technologies etc., would sooner or later become obsolete due to changing aspects of the regulated object.

Metaphorically speaking, the same issue could be demonstrated by an ancient paradox created by the Eleatic Greek philosopher, Zeno of Elea, called "*Achilles and the tortoise*". In this paradox Zeno explained that Achilles, no matter how fast he was, could never catch up or even outrun the tortoise. Because by the time the Achilles could reach the position of the tortoise, the tortoise would move, even an inch further from him. Therefore, the tortoise would always be at least one step ahead of Achilles.<sup>50</sup>

In our case, the legal framework is the Achilles, and the development is the tortoise. Not because the development is slow per se, but because the development would always be one step ahead, moving towards the future. A solution to this issue is not to try and "catch" the development but to try and find a way where the regulation and the development coexist, and the need to "race against each other"

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<sup>48</sup> See Hillary J. Allen, "Regulatory Sandboxes", at p. 592-593.

<sup>49</sup> See Daniel Gorfine & Chris Brummer, *FinTech Innovation: Building a 21<sup>st</sup> Century Regulator's Toolkit*, at p. 4.

<sup>50</sup> See Simplicius, *On Aristotle Physics 6*, D. Konstan (trans.), *Cornell University Press*, (1989), at pp. 14-18.

disappears. Therefore, the best way to look towards the future would be that regulation *paves the path the development walks*, not the other way around. In terms of law, regulation should focus more on its usage outcomes and the risks a new emerging technology might pose (i. e. the principles the regulator wants to secure) rather than on regulating every single aspect of a specific type of technology.

That is something regulatory sandboxes and principles-based regulation could help with.<sup>5152</sup> Because otherwise, by the time the regulation of all possible aspects is enacted, the “tortoise” is already gone.

#### 4. The perils of forum shopping

##### 4.1 What is wrong with forum shopping?

The disparaging phrase “forum shopping” has been around for several decades as a colloquial term for the practice of litigants having their legal case heard in the court thought most likely to provide a favourable judgment.<sup>53</sup> The first mention of this practice in a judicial decision dates from 1952, however, as Friedrich A. Juenger argues<sup>54</sup> in his study devoted to this practice, the term itself is much older. Currently, forum shopping is deemed as a dangerous practice by many scholars, in particular in the field of insolvency law<sup>55</sup>, tax law<sup>56</sup> etc.

In their briefing for the European Parliament, Tambiama Madiaga and Anne Louise van De Pol warn that the newly emerging regulatory sandboxes “*might be misused, and lead to regulatory arbitrage, meaning regulators may lower safeguards and requirements to attract innovators. Experts have alerted to the potential negative impacts on consumer protection brought about by this “race to the bottom” in the fintech sector.*”<sup>57</sup> The risk of the “race to the bottom”, which will lead into the unwanted forum shopping for the most favourable regulatory sandbox had been pointed out by several other authors. With respect to the emerging technologies in financial markets, Deirdre Ahern identified “*a considerable potential for calculated forum shopping by mobile FinTech entrepreneurs as they*

<sup>51</sup> See Michala Stupková, “Challenges of regulating innovative technologies“, *EUROPEUM Policy Papers* (December 2021), at p. 8

<sup>52</sup> One of such principles is often called „technological neutrality principle“ ensuring the regulation should not favor one specific technology over another and should be. See Bert-Jaap Koops, Miriam Lips, Corien Prins & Maurice Schellekens (eds.), “Starting Points for ICT Regulation. Deconstructing Prevalent Policy One-Liners”, *IT & Law Series* Vol. 9, (2006), at p. 82.

<sup>53</sup> Friedrich K. Juenger, “Whats Wrong with Forum Shopping?”, *Sydney Law Review*, 16, issue 1 (February 1990), at p. 5.

<sup>54</sup> Ibid.

<sup>55</sup> See Wolf-Georg Ringe, “Forum Shopping under the EU Insolvency Regulation”, *European Business Organisation Law Review*, 9, issue 4 (April 2008): 579-620.

<sup>56</sup> See Ana Paula Dourado, “Forum Shopping in EC Tax Law in the Context of Legal Pluralism”, *Intertax*, 36, issue 10 (January 2008): 422-425.

<sup>57</sup> Tambiama Madiaga & Anne Louise Van De Pol, “Artificial intelligence act and regulatory sandboxes”, at p. 3.

work out what opportunities are offered by available regulatory sandboxes.”<sup>58</sup> The same concern over potential forum shopping was expressed by the prospective FinTech entrepreneurs.

A very similar concern was expressed in relation to regulatory sandboxes emerging in the field of artificial intelligence. Here, Ano Pošćić and Adrijana Martinović noted that “*the promotion of innovation should never be the only or predominant regulatory goal, as it is liable to lead to a regulatory race to the bottom, attracting innovation and investment at the expense of human rights and consumer protection safeguards. Furthermore, this could amplify the danger of forum shopping. Given that the AI sandbox regime under the Draft AI Act is optional and left for implementation to Member States, AI developers might be encouraged to choose those Member States with less stringent sandbox regimes.*”<sup>59</sup> This nearly omnipresent concern over prospective forum shopping in regulatory sandboxes triggers academic interest and will be further analysed in this chapter.

In legal scholarship, several arguments have been identified as to why forum shopping is, in general, being considered as undesirable.<sup>60</sup> Firstly, it has been argued that forum shopping undermines the authority of the substantial law of the State.<sup>61</sup> This first argument is based on the fundamental tenet of consistency of decision making. From the perspective of this argument, the practice of forum shopping suggests either a distrust in the capacity of the decision system to redress wrong, or an effort to obtain more than one entitlement under the applicable rules.<sup>62</sup> Secondly, an argument was presented that forum shopping overburdens certain courts and creates unnecessary expenses as litigants pursue the most favourable, rather than the simplest and closest forum.<sup>63</sup> Lastly, it was argued that forum shopping may create a negative popular perception about the equity of the legal system.<sup>64</sup> These scholarly arguments have been reflected by the legislators in various jurisdictions by special anti- forum shopping legislation, which aims either to discourage, or harden the whole practice.

At least to some extent, the above-mentioned authors have also accepted the outlined arguments against forum shopping with respect to the newly established regulatory sandboxes. However, one may pose a serious question whether this rather stance is reasonable and whether it is based on rational calculation.

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<sup>58</sup> Deirdre Ahern, “Regulators Nurturing Fintech Innovation: Global Evolution of the Regulatory Sandbox as Opportunity-Based Regulation”, *Indian Journal of Law & Technologies*, 15, issue 3 (May 2022), at p. 347.

<sup>59</sup> Ano Pošćić & Adrijana Martinović, “Regulatory sandboxes under the draft EU Artificial Intelligence Act: An opportunity for SMEs?”, *InterEULawEast*, 9, issue 2 (June 2022), at p. 106.

<sup>60</sup> Friedrich K. Juenger, “Forum shopping, domestic and international”, *Tulane Law Review*, 63, issue 3 (February 1989), at p. 565.

<sup>61</sup> *Ibid.*

<sup>62</sup> s. a., “Forum shopping reconsidered”, *Harvard Law Review*, 103, issue 7 (May 1990), at p. 1685.

<sup>63</sup> Friedrich K. Juenger, “Forum shopping, domestic and international”, at p. 565.

<sup>64</sup> *Ibid.*

## 4.2 Towards forum shopping in regulatory sandboxes

It is a matter of fact that the emergence of various regulatory sandboxes may imply forum shopping among them in the forthcoming future. One may expect several reasons as to why innovators will endeavour towards forum shopping for the most favourable regulatory sandbox: Firstly, various jurisdictions will provide different requirements for entering a newly established regulatory sandbox. In this respect, innovators may naturally “shop” for those entry requirements, which will be deemed as more acceptable, due to economic, societal or various other reasons. Secondly, innovators may opt for a suitable forum due to the substantive content of the respective sandbox. For example, the overall time scheme for the innovatory practice, the range of exclusion from norms that would be otherwise applicable and the range of the potential immunity from potential administrative fines may be a matter open to calculation by potential innovators.

With respect to the European Union, concerns over fragmentation of the internal market were expressed with this respect.<sup>65</sup> Lastly, potential innovators may be attracted by lower financial requirements for entering a regulatory sandbox, in particular in the form of administrative fees.

Having said this, one may easily agree with those who predict forum shopping in regulatory sandboxes.<sup>66</sup> However, at the same time, one must ask for the risks of such forum shopping. The fact is that most of the arguments against forum shopping have been developed with respect to the existing rules, governing conventional legal relations. When analysing the major arguments against forum shopping, one must underline following observations:

Firstly, all major arguments against forum shopping have been expressed with established legal systems. Such conventional rules, in principle, do not disallow any activity as a whole. On the contrary, in the case of innovative practices and experiments, the conventional rules may entirely disallow potential operation of an innovator technology. From the viewpoint of the new technologies, one may easily argue that opting for a regulatory sandbox in alien jurisdictions would “*undermine the substantive authority of the State*”<sup>67</sup>, who hasn’t expressed its desire for such a new technology to be examined under his own legal framework. However, in many cases, one may more likely expect that the absence of a sandbox will be outcome of slow legislative procedures, rather than of the strict opposition to the innovatory practice.

As Michala Stupková correctly argues<sup>68</sup> in her recent brief on mutual relations between the law and new technologies, “*the regulators must deal with the underlying principle that the development will always be way ahead of the legislatures and the legislative process. The legislative process takes several months*

<sup>65</sup> Tambiama Madiaga & Anne Louise Van De Pol, “Artificial intelligence act and regulatory sandboxes”, at p. 5.

<sup>66</sup> Ibid.

<sup>67</sup> Friedrich K. Juenger, “Forum shopping, domestic and international”, at p. 565.

<sup>68</sup> Michala Stupková, “Challenges of regulating innovative technologies”, at p. 2.

up to years, during which time technologies usually change and evolve, and their new applications arise. Therefore, it is very challenging to create a future-proof regulation that might be able to stand alone for many years after enactment.” Having said this, one may also argue that the law of the State may explicitly forbid innovators in their jurisdiction to turn toward foreign regulatory sandboxes, if the State will deem such practice as harmful.<sup>69</sup> In this respect, forum shopping in regulatory sandboxes may be considered as a mere impact of the legal pluralism, which exists currently with regard to the newly emerging technologies.<sup>70</sup>

Secondly, in the case of a classical forum shopping, the “forum shopper” had always his “own”, albeit unsatisfactory legal framework at disposal. The situation would be rather different with regulatory sandboxes, which are not present in many jurisdictions. Thus, the practice of forum shopping will certainly be more a necessity, than a mere calculation. In this respect, even the argument concerning “negative popular perception about the equity of the legal system”<sup>71</sup> is not persuasive. Lastly, the arguments against forum shopping were expressed *vis-à-vis* a situation, “when a party attempts to have his action tried in a particular court or jurisdiction where he feels he will receive the most favourable judgement or verdict.”<sup>72</sup> This is, however, a rather different situation from those arising from prospective regulatory sandboxes. With respect to them, we can only barely speak about any “most favourable judgement”, as the outcome of most of the regulatory sandboxes is merely represented in the final evaluation of the innovatory practice, or experiment.

Having said this, one may not only predict forthcoming forum shopping in regulatory sandboxes, but also consider such forum shopping as an inevitable part of future developments. This is in line with those authors who have identified forum shopping in general as “a continuum of activities, many of which are integral to the legal system and may actually enhance its capacity to provide needed remedies.”<sup>73</sup> Indeed, a prospective forum shopping in regulatory sandboxes may imply not only competition among various jurisdictions, but also their mutual cross-fertilisation by the best practice developed in other jurisdictions.

Thus, this article aims to claim that future forum shopping in regulatory sandboxes does not in principle represent a threat, but rather a reality.

#### 4.3. Towards the passportisation of regulatory sandboxes

The primary thread in forum shopping for regulatory sandboxes is so much a search for the most favourable sandbox, but rather that for a certificate that will

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<sup>69</sup> See Kevin M. Clermont & Theodore Eisenberg, “Exorcising the Evil of Forum Shopping”, *Cornell Law Review*, 80 (1994-1995), at p. 1507.

<sup>70</sup> See Bertram B. Turner & Melanie G. Wiber, “Legal Pluralism and Science and Technology Studies: Exploring Sources of the Legal Pluriverse”, *Science, Technology & Human Values*, 48, issue 2 (March 2023), at p. 65.

<sup>71</sup> Friedrich K. Juenger, “Forum shopping, domestic and international”, at p. 565.

<sup>72</sup> Bryan A. Garner (ed), *Black’s Law Dictionary*, Thompson West, 11th ed., 2019, at p. 340.

<sup>73</sup> s. a., “Forum shopping reconsidered”, *Harvard Law Review*, 103, issue 7 (May 1990), at p. 1685.

acknowledge the outcomes of an experiment and then also provide legal consequences in other jurisdictions. The idea of the passportisation of regulatory sandboxes goes back to 2018, when it was presented<sup>74</sup> as the “*New England Regulatory FinTech Sandbox*”, which was proposed as a coalition between Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut. In this respect, a proposal was presented, that the “*New England Regulatory FinTech Sandbox*” will stitch together elements of the U.K. sandbox and the European Union’s “passport” model for cross-border banking operations.”<sup>75</sup>

Essentially, the New England Regulatory FinTech Sandbox was aimed to bring uniformity to FinTech regulation across the six participating New England states and allow an innovator licensed to test within one State to conduct business in any of the other five States. This endeavour was designed as “*analogous to the European Union’s passport model which allows a bank operating in one EU member state to open branches and provide services, without further authorization, in other EU member states.*”<sup>76</sup> The recently presented proposal<sup>77</sup> for an *EU Artificial Intelligence Act* also contains a provision, which may lead to prospective passportisation of regulatory sandboxes. It provides<sup>78</sup>, that “*AI regulatory sandboxes established by one or more Member States competent authorities or the European Data Protection Supervisor shall provide a controlled environment that facilitates the development, testing and validation of innovative AI systems for a limited time before their placement on the market or putting into service pursuant to a specific plan. This shall take place under the direct supervision and guidance by the competent authorities with a view to ensuring compliance with the requirements of this Regulation and, where relevant, other Union and Member States legislation supervised within the sandbox.*” Under this provision, a scheme of a “multi-jurisdictional” regulatory sandbox is foreseen, which will be under supervision of “more Member States”. Although the proposal is silent concerning results, given by such a “multi-jurisdictional” sandbox, one may assume that the States participating in surveillance will passportise the outcomes of the respective regulatory sandbox.

Since the introduction of the proposal for a passportisation, this idea gained considerable attention in the discussion on regulatory sandboxes.<sup>79</sup> Under this scheme, the outcomes of experimental operation in one particular regulatory sandbox will also be recognised in other jurisdictions, without the obligation to be became part of the regulatory sandbox of this respective jurisdiction. It is crystal

<sup>74</sup> See Luke G. Thomas, “The Case for Federal Regulatory Sandbox for FinTech Companies”, *North Carolina Banking Institute*, 22 (2018), at p. 266.

<sup>75</sup> Ibid.

<sup>76</sup> Ibid.

<sup>77</sup> Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts, COM/2021/206 final, 2021/0106(COD).

<sup>78</sup> Art. 53.1.

<sup>79</sup> See eg. Dirk A. Zetzschke, Ross P. Buckley, Janos N. Barberis & Douglas W. Arner, “Regulating a Revolution: From Regulatory Sandboxes to Smart Regulation”, *Fordham Journal of Corporate & Financial Law*, 23 (2017-2018), at p. 50.

clear, that a passportisation can be introduced only under the existence of harmonised rules which will particularly include the entry requirements, the quality of the regulatory supervision, the content of the innovatory practice, its length and the content and the form of the subsequent passport.

In this respect, any regulatory arbitrage in lowering safeguards and requirements to attract innovators may be harmful and may indeed lead to a “race to the bottom” and to malicious forum shopping.<sup>80</sup> Having said this, one may argue that the real risk of forum shopping goes hand in hand with a potential introduction of a passportisation. If a passportisation would be introduced without reaching a common standard for the regulatory sandboxes, innovators may indeed be in temptation to obtain a passport under the lowest possible requirements and consequently use such passport to enter into other jurisdictions. At the same time, if robust minimal standard for regulatory sandboxes will be provided and executed by competent authorities, one may support the scheme of passportisation as an efficient way how to cope with the emergence of sandboxes.

## 5. Conclusions

In the recent literature on regulatory sandboxes, several authors have identified the practice of forum shopping as one of the major risks. This article argues that the perception of these authors is very much influenced by a negative stance toward forum shopping, as has been presented in legal literature. In this respect, this article argues that one has to bear in mind, that this traditionally negative stance towards forum shopping derives from the practice in conventional legal frameworks, rather than with the experimental legislation. This article further argues that with respect to the newly emerging regulatory sandboxes, forum shopping for them will be an integral and understandable part of the legal reality. While one may expect forum shopping for the most favourable regulatory sandbox, the legislators are urged to avoid any future passportisation of regulatory sandboxes only after providing for a robust minimal standard in the operation of sandboxes.

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<sup>80</sup> Tambiama Madiaga & Anne Louise Van De Pol, “Artificial intelligence act and regulatory sandboxes”, at p. 3.



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