

Research article

UDC 34:004:347.73:336.02

EDN: https://elibrary.ru/bybieo

DOI: https://doi.org/10.21202/jdtl.2024.10

Legal Approaches and Regulatory Methods for Fintech in the Guangdong – Hong Kong – Macao Greater Bay Area

Yaroslava Kuchina

University of Macau, Macau SAR, China

Keywords

digital technologies, financial innovation, financial law, financial technologies, fintech regulation, GBA, Hong Kong, law, Macau, Mainland China

Abstract

Objective: To look at the fintech regulatory policy and regulatory system in the Greater Bay Area through the lens of the Trilemma of Innovation doctrine in order to identify the applicability and extrapolation of existing legal models in the zone of accelerated economic and innovation development in Guangdong, Hong Kong and Macau.

Methods: The article is based on the comparative legal research of the regulation regarding models, existing within the regulatory framework for fintech. For that matter we conduct a generalization, introducing the classification of methods and systems that, in our opinion, can be recognized as the Lego-like systems of instruments.

Results: The research evaluates difficulties that may be faced by the participants within GBA on the way of legal harmonization regarding fintech. Special attention is paid to Hong Kong SAR, being one of the best-known examples of successful fintech regulation, and to comparing fintech regulation in Mainland China and in SAR (Macau, in particular). The author states that the last amendments to the financial law of Macau SAR also add an element of uncertainty, even though they aim to develop the situation within the framework. The author compares a technocratic approach, according to which fintech regulation is completely national (created only for the domestic market and reflects its structure) and traditional approach to regulation, a part of which is the Trilemma of Innovation. The latter implies the possibility of over-national (international) standardization, including in the form of soft law, which may eliminate the difference in understanding the fintech characteristics, its concepts and scope. Besides, the author analyses the correlation between the concepts of financial regulatory system

© Kuchina Y., 2024

This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (CC BY 4.0) (https://creativecommons.org/licenses/by/4.0), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

and financial system of fintech regulation, extrapolation of the existing regulatory framework to the developing market of innovative technological solutions and their various models. The author highlights the regulatory response method, changing during the fintech market evolution, and applied, as a rule, together with other approaches.

Scientific novelty: the article presents a comprehensive review of the different systems of fintech legal regulation in the Guangdong – Hong Kong – Macau Greater Bay Area, whose unique experience demonstrates various trajectories of the fintech market development in southern China within the "One Country – Two Systems" concept.

Practical significance: the main conclusions and proposals resulting from the study are of significant interest for further research, regulatory policy and fintech regulatory system, as Mainland China and the special administrative regions of the Greater Bay Area use different approaches and methods of legal response that have no analogues in the modern world.

For citation

Kuchina, Y. (2024). Legal Approaches and Regulatory Methods for Fintech in the Guangdong – Hong Kong – Macao Greater Bay Area. *Journal of Digital Technologies and Law*, 2(1), 181–199. https://doi.org/10.21202/jdtl.2024.10

Contents

Introduction

- 1. Trilemma of Innovation and Regulatorily Initiatives
- 2. Approaches and Methods: Regulatory Lego for Fintech
- 3. Regulation and Financial Systems
- 4. Methods of Regulatory Reaction
- 5. Greater Bay Area and Fintech: Introduction to the GBA

Conclusion

References

Introduction

Fintech is a hype topic. Some different approaches and terms can be used to describe fintech: disruptive technology, financial innovation, revolutionary services, or technology of paradox. In the law of technology, there is a term «paradigm shift» or «paradigm shift technology", which is often interpreted solely as a revolutionary turn in the IT sector.

The main aim of fintech development is to be implemented in the market of financial services, where fintech seriously competes with banks, the "traditional financial services providers" (Romanova & Kudinska, 2016). This has a great impact on the market and society, because, as Blakstad and Allen wrote, fintech's reshaping ability is significant (Blakstad & Allen, 2017). Comparison of fintech with other technologies shows that its

quantitative estimates multiply every year¹ when other paradigm shift technologies spend years just to become the topic of discussion. Fintech spread has "spurred the progress and popularity of other technologies associated with it" (Gabor & Brooks, 2017), such as cryptocurrencies and distributed ledgers, or Al-based analyzing systems. The reason for this is the area, where it occurs – the highly and globally consumed financial sector.

At the same time, there is an objective reason why the fintech market is so hard to evaluate clearly from the legal point of view – and these reasons are also legal. First, the ability to gather reliable information in this area belongs to the private actors, not a regulator, as private actors (fintech providers) are more proactive in fintech than the actors of traditional finance (Omarova, 2020). Second, it is "too global to be estimated reliably enough" (Sarhan, 2020) and there is no single collector of statistics for technology and the sector. The rapid growth of fintech makes it almost impossible the consider the numbers. National statistics greatly vary because of different understandings of the fintech's scope. All that creates difficulties in regulation and, technically, makes it impossible to have the scheme for harmonized regulation with a unified regulatory approach. Because of this, almost all recommendations on regulation within a particular area consist of two main parts: the lists of methods and regulatory tools, and the evaluation of a particular market's core characteristics and features.

1. Trilemma of Innovation and Regulatorily Initiatives

In 2019, Y. Yadav published a work that became a cornerstone for the theory of innovation. Considering the fintech market, Yadav and co-author stated the Trilemma of Innovation (Brummer & Yadav, 2019). They argue that in innovative market conditions, achieving a regulatory balance is impossible due to the nature of the innovations. In other words, the nature of regulation and its practices are contrary to the modern fintech market. Exploring the evolution of the Trilemma, they show that fintech represents the case, the solution of which requires an individual approach.

The approach that regulation of fintech is only national-based – which means it can be created only for the domestic market as a reflection of its structure – is common. It can be found in almost every academic paper regarding fintech and is normally called technocratic (Omarova, 2020). Regarding Trilemma, Yadav and Brummer (2019) points out that effective regulation is possible only when the regulator has a complete understanding of the object and scope of regulation. The same conclusions are made by E. Mik (2022) and C. Twigg-Flesner².

Sánchez Herrera, N. (2017). What's all this talk about fintech? an analysis of media conversations around fintech in 2016 (Order No. 11016244). Available from ProQuest Dissertations & Theses Global.

Twigg-Flesner, C. (2016). Disruptive technology – disrupted law? How the digital revolution affects (contract) law. https://clck.ru/39Yta7

Yadav and Brummer argues that the regulation of fintech has three points between which the regulator seeks to strike a balance: technical, market, and legal. So, the regulator when planning a regulatory system for fintech, seeks to:

- 1) provide clear rules,
- 2) maintain market integrity,
- 3) encourage financial innovation (Brummer & Yadav, 2019).

However, the balance of all three is impossible, and «regulators can achieve, at best, two out of these three objectives» (Brummer & Yadav, 2019). A rule-based approach has the potential to cause a decline in the market of innovations, as innovations barely contribute with strict legal boundaries. At the same time, a facilitating principle-based regime is usually accompanied by higher risks for the market, as the low-intensity regulatory framework increases them in the financial sector. The rate of investment is higher for fintech startups that are in non-regulated territory (Schwartz, 2017; Pomerol, 2018), so market integrity and innovation facilitation need a very low level of regulation.

The Trilemma of Innovation allows us to evaluate the regulatory system and regulatory policy concerning fintech in a completely different way. Yadav and Brummer (2019) points out that a simple solution exists only where, within the framework of the three goals of the Trilemma, the regulator chooses to establish traditional construction features. Even within the same range of related technologies, each service on the market can be completely different in its architecture and this will not allow it to meet non-external regulatory requirements.

It is obvious that with such systematic risks emanating from fintech, its regulation requires the construction of an individual solution. Yadav and Brummer (2019) and some of the proponents consider the necessity to build international standards that will eliminate the difference in understanding the characteristics of fintech, its concept, and the scope of its phenomena. They also point out that only achieving this level will create a sufficient platform for cooperation between markets, as well as for the exchange of data between states, minimizing the risks that fintech represents in the share of the entire global financial sector.

2. Approaches and Methods: Regulatory Lego for Fintech

Trilemma is a part of the traditional regulatory approach that contradicts the so-called technocratic approach of national regulation of fintech. That approach is the most applicable one in the current situation and it has approved methods of regulation and even systems. In academic papers, it is sometimes called the domestic or micro approach as it doesn't include in the framework the possibility of over-national (international) standardization, even in the form of soft law. Within this approach, several regulatory methods could be identified. But first, we should conclude that not-regulation is not a solution. As it was proven regarding the Indonesian fintech market, not-regulation (regulatory ban) is not even a regulatory possibility (Kharisma, 2020). It is impossible to prohibit the development and fintech means the development of a market, not a solid technology (Reed, 2018). The regulatory bans that are normally applied in a particular fintech area or on a type of service don't stop the activity, as

the case of cryptocurrencies shows to us. The theory of innovations contradicts this regulatory desire. Being banned, fintech moves to the gray area, creating an illusion of regulatory success.

So, if we talk about regulatory systems, two approaches can be evaluated: rule-based and principle-based. The differentiation between rule-based and principle-based regulatory approaches can be found in the D. Arner et al paper (Arner et al., 2016). Arner, like most of the authors after him, stresses the main bullet point on fintech – for the first time since the era of financial technologies started (means since 1862) financial technologies aim to ignore traditional financial services and systems, and do not support their development. This is the main reason why the regulatory issue is the key among all challenges fintech gave birth to.

The UK Financial Services Authority (FSA) identified three key elements that differed the FSA's principle-based regulatory approach in finance from the others, that time discussed in scholars' papers and experts' opinions (Ferran, 2015). According to FSA, three elements at the minimum should be identified within the scope to call the approach "principal-based":

- 1) broad-based standards in preference to detailed rules,
- 2) outcomes-based regulation,
- 3) and increasing senior management responsibility.

These strategies "may be related and may be used together, but they are different and, importantly, they are therefore likely to raise different practical issues for regulators and regulated" (Amstad, 2019).

On the contrary, the principle-based approach is more desirable for fintech because it reflects the "spirit" (Amstad, 2019). As the "presence of a high degree of mutual trust between participants within the regulatory regime" (Nicolaidis, & Shaffer, 2005) is the point that makes the principle-based approach so desired, it, at the same time, almost reflects the practices of project development existing in fintech.

It also reflects the main difference between financial services provided by banks and fintech. Banking services are built on the base of fixed requirements, which makes a customer sure of the immutability of all-consuming services. A change in its procedures is detected by regulatory acts and standards, usually approved by law or any related act, announced in advance and approved by an agreement or amendments to the agreement, that is signed between the bank and a customer. Predictability and clear process combined with the fact that the content of banking processes and services is traditional. It interacts well with the rule-based approach of national regulation because of this.

In the case of fintech, any changes appear as technical changes, when the amendments are replaced by updates, and the contracts change differently, sometimes (depending on the technology, provider, jurisdiction, and many other obstacles) in an unnoticeable or unclear for a customer. It is worth recognizing that the technical side of a financial service turns it in the eyes of the consumer into an analog of the next virtualized product – and the consumer agrees (sometimes unintentionally) to a softened process of changing the financial part of this service through the practices inherited from its technical component.

This means, for the principle-based regulatory approach the same conditions are needed that exist between providers and consumers in self-regulation and contractual practices.

It is based on mutual trust between the parties – regulator and regulateer, and the close engagement between them. At the same time, it should be noted that the principle-based approach doesn't automatically mean the freedom of market behavior. As some scholars highlight, in practice, a lack of clarity over what enforcers will accept as compliance might cause enterprises to adopt quite conservative behavior. The principle-based approach can enable flexibility, allowing businesses to innovate in the ways that they comply (Amstad, 2019). According to the analyses made within this research, those occur in the areas where the regulator performs other activities outside the principle-based approach which creates the other model of behavior for the regulator. In the case of fintech that can be a Central Bank entity, that provides the rule-based model of compliance for banks, which makes fintechs behave like banks as much as possible.

The analyses of papers on the research-based approach help to make two important conclusions. The first is about the perception of when and where this approach is applied. From the research, one might get the impression that all the approaches that are considered in this part, and that – further, are applied separately, depending on the state and its preferences. However, it is not. As a rule, the fintech regulatory framework is built from a combination of approaches, divided according to the system of regulation of the financial sector adopted in the country.

3. Regulation and Financial Systems

The next level determines the system of fintech regulation is the system of financial regulation existing within a state. Sometimes it refers to a "financial system of regulating fintech" but this is not so. The analyses we provided show that there are no practical cases when the financial regulation system and financial system of regulating fintech alter each other. The state can (like in the case of South Africa) change the system of financial regulation to facilitate the development of the fintech market, but it will be the changing of the whole system.

This scope is known as the four models' approach or the approaches of traditional financial regulation methods (Cunningham & Zaring, 2009). It was developed after the 2008 Global Financial Crisis, and it is not a fintech-specialized one. However, it is a good example of the method that allows extrapolation of the existing regulatory framework to the emerging market of innovative technological solutions.

The four methods, according to the literature, are the following:

- 1. Institutional or traditional approach (China, Mexico, and Hong Kong SAR) which is sometimes also called the sectoral approach,
 - 2. Functional approach (Brazil, Italy, and France),
 - 3. Integrated approach (Japan, Singapore, Germany, and formerly in the United Kingdom³),

The statistics on Singapore and the UK, that allow to suggest the difference in numbers within one regulatory method, can be found here: Fintech Innovation: Perspectives from Singapore and London. (2018). Icaew. https://clck.ru/39FaTz

4. "Twin Peaks" approach (The Netherlands, Switzerland, Qatar, Australia, South Africa, Spain).

4. Methods of Regulatory Reaction

The next group of methods we suggested to be called the "reaction method". They answer the question "When should we start regulating fintech?" (Setiawan & Maulisa, 2020). This group is directly interconnected with the Innovation Trilemma. Within it, three models of regulation are distinguished:

- 1. Regulate (including Case-by-Case),
- 2. Wait-and-See,
- 3. Test-and-Learn.

These methods are from those regulatory methods that can be changed during the evolution of the fintech market, it is usually combined with other approaches. The previous group of methods is based on how fintech regulation is built as a derivative of financial regulation. This one considers from what moment the previous models should be applied. In the first case, the regulator is fully convinced that fintech activities should be within its competence and has no reason to doubt.

If the current structure of financial regulation does not allow to start regulating fintech immediately, the regulator either reviews the regulatory system and makes the necessary changes to it, or completely reforms it, based on the accumulated experience, including comparative.

Options (ii) and (iii) are taken when there is regulatory uncertainty around fintech activities, when there is a need to study the market, and, most importantly, when building supervisory capacity on the technology before a regulatory response. The second approach is shown when there is no evidence that the activity should be regulated and should ideally be supplemented by some supervisory monitoring. When the situation is such that perceived risks are potentially significant, but market penetration is still low, the authorities may decide on the Test-and-Learn option and implement some form of innovation facilitator (regulatory sandbox, incubator, innovation office, and/or hub) to help gradually fill the regulatory gap.

These methods are easily combined with the previous. For example, China is famous for its Wait-and-See approach to technologies (Xu et al., 2020), which is combined with its institutional method of financial regulation and rule-based preferable approach to regulation in total. At the same time, for some technologies, related to trade, economics, and finance, China prefers to first implement the principle-based approach in combination with the Test-and-Learn method, and only then move to the Regulate method and, consequently, to the rule-based approach of regulation⁴.

World Bank. (2020). How regulators respond to Fintech: Evaluating the different approaches—sandboxes and beyond. Retrieved December 8, 2023, from the official website of the World Bank. https://clck.ru/39FaXs

So here it is possible to conclude that the opinions, that understand all mentioned approaches as the single options for regulators, are not particularly right. Building a fintech regulatory system is not a choice of one method, but a combined system where the regulatory financial model seems to be the most stable - at least, moving from one to another requires serious reform.

As for the other two methods, they deal with completely different regulatory aspects. The first is a system for constructing legislation, namely the choice of an approach in the form of an immediate statutory reaction or in the form of building a system of guidelines. The rate of this reaction is determined by the third of the considered methods. Moreover, in this case, there are no requirements, and in general, the last two are purely national ways of resolving the situation.

5. Greater Bay Area and Fintech: Introduction to the GBA

The Guangdong-Hong Kong-Macao Greater Bay Area (Greater Bay Area or GBA in short) includes the two Special Administrative Regions of Hong Kong and Macao as well as Guangzhou, Shenzhen, Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen and Zhaoqing in Guangdong province. The Area covering a total area of 56,000 square meters had a combined population of about 70 million at the end of 2017.

The Guangdong-Hong Kong-Macao Greater Bay Area Outline Development Plan⁵ seeks to create an international first-class bay area that is perfect for living, working, and traveling by strengthening ties between Guangdong, Hong Kong, and Macao through the development of the Special Administrative Regions and nine cities in the Pearl River Delta (Meulbroek et al, 2023). It also seeks to facilitate deep integration within the region by fully utilizing the combined advantages of the three locations and encouraging coordinated economic development in the area. This integration requires, among others, digital integration, where fintech plays an important role.

From the legal point of view, GBA is a territory of three jurisdictions that are organized just in the middle of the "One Country – Two Systems" concept. Here we have three systems within one state – Mainland China, Hong Kong SAR, and Macau SAR, and three regulatory frameworks. It is one of the most interesting examples of fintech. According to the Outline, the GBA is arranged among others, as an international innovation and technology hub, a platform for in-depth cooperation between the Mainland's nine cities in the Pearl River Delta, Hong Kong SAR, and Macao SAR.

Why it is interesting? First, because of the duality in regulation, these three systems – the Mainland's civil law model, Hong Kong's common law, and Macau's civil law based on Portuguese legal experience and legal interpretation. From the position of fintech and

⁵ 人才發展委員會 - Positioning and Guiding the Development of Macau in the Greater Bay - Advantages and Opportunities for the Population Of Macau. (2023). Retrieved December 8, 2023, from Macao Special Administrative Region (MSAR) Government website. https://clck.ru/39FabM

the importance of the market's particularities, the GBA combines three different domestic fintech markets – e-commerce of China, highly-developed Hong Kong, and Macau, which attracts less attention within the fintech.

And here we should start from the fact that one of the most famous definitions of fintech was created in Hong Kong SAR. Hong Kong is named among the most rapid development markets of the sector and the interest in fintech and GBA comes, first, from its experience and the combination of Hong Kong's regulation and regulation of fintech in China (mainland) itself. The second is the difference that can be found even with the brief analyses.

The financial regulation method of all three parts makes the evaluation easier, as all of them belong to a so-called traditional system of regulation, according to the different academic opinions. However, if we consider it closely, we will see that Hong Kong, regarding fintech, creates the unique, almost only example of the "Twin Peak" system of regulation, when one is higher than the other.

Also, the approach and understanding of fintech within the three is different. The Mainland's legislation doesn't have the definition of fintech. China's first comprehensive regulation, Guiding Opinions on Promoting the Healthy Development of Internet Finance, suggests the definition of "Internet Finance". According to the scholars, this refers to the promotion of the "Internet Plus" strategy in all relevant sectors of the market⁶. At the same time, the Internet Finance concept is comparable to the fintech concept, and both can be used as synonyms to describe innovative financial services technologies. According to Guiding Opinions, Internet Finance includes:

- 1) internet payment;
- 2) online lending;
- 3) equity crowdfunding;
- 4) Internet fund sales;
- 5) online insurance services;
- 6) Internet consumer finance.

The other view on fintech comes from the highest peak of fintech regulation of Hong Kong SAR, the Hong Kong Monetary Authority (HKMA). It is the term that is "commonly considered to cover the application of artificial intelligence, blockchain, cloud computing, and big data in areas such as payments, clearing and settlement, deposits, lending and capital raising, insurance, investment management, and market support" (Au, 2021).

Hong Kong policies related to fintech are among the most developed. HKMA is one of the peaks that supervises Fintech Supervisory Sandbox launched in 2016. In 2017 it also launched seven Smart Banking Initiatives. In June 2021 a strategy called «Fintech 2025» was introduced to drive fintech development in Hong Kong. As can be seen fintech of Hong Kong is not equal to the fintech of China, however, both are significant policymakers in the area,

See: Hong Kong Innovation and Technology Development Blueprint (2021) Innovation, Technology and Industrial Bureau. Itib.gov.hk. https://clck.ru/39Fafy

especially in Asia. Unfortunately, we cannot say this about Macau SAR, moreover, Macau's fintech regulation is, technically, underdeveloped.

So, from the position of the market, the three areas greatly vary. On the one hand, we have Hong Kong which actively facilitates fintech by offering incentives to fintech businesses operating in the SAR and by establishing guidelines for the application and evaluation of fintech solutions. On the other – the Mainland, the cradle of e-commerce, implements not technological neutrality, but the technological equality approach, staying mostly on the position of an "information-orientated" regulatory system, not "technology-based". Such kind of approach is not unique, it is common in states that have highly developed and digitalized markets. For them, separate fintech regulation, like in Hong Kong, will lead to the duplication of legal rules.

Moreover, in some cases the legal views on the reaction methods within the areas are different. An example is cryptocurrencies, banned in the Mainland (regulatory ban as a method imposed), which, instead, has the first and the most prominent experience with CBDC, which is now on the stage of "Test-and-Learn". On the contrary, we have the example of Hong Kong, whose recent experience in cryptocurrency raises academic and practical discussions all over the world. Like the case in February 2023, when the Hong Kong SAR Supreme Court recognized that "cryptocurrency is "property" and is capable of being held on trust" and thus gave rise to an incredible number of questions and doubts regarding legal interpretations and amendments.

As for Macau SAR, the Legislative Assembly approved a law on August 2023, that empowered the 1st of November of the same year. The act permits the registration of banks with restricted operations and expanded usage of financial technology or fintech. The present law, which has been in force for thirty years and regulates the SAR's financial system, was replaced by the new law.

According to the law, banks with limited scope are those that are only allowed to provide a small number of banking services. Regarding fintech, the new law gives the government the authority to grant digital companies, academic or research organizations, and financial institutions temporary permits for fintech projects to be operated as trials. That became the moment of fintech's visibility – the starting point that will allow us to evaluate the market and understand the possible reaction of a regulator.

Or the local method that allows to avoid a complete regulatory ban, when the regulator decides to "share the license", allowing banks and other financial organizations to become co-founders and co-providers of fintech services. In Hong Kong the Fintech Supervisory

⁷ The text of the judicial decision can be found here: HCCW 18/2019 [2023] HKCFI 914. (2023). https://clck.ru/39Faib

Sajnani, S., Knight, S., & Chen, M. (2023, May 10). Hong Kong Court Confirms Cryptocurrency is "Property." Lexology; King & Wood Mallesons. https://clck.ru/39Fak6

Restoy, F. (2021). Fintech regulation: how to achieve a level playing field. Financial Stability Institute, Bank for International Settlements. Piie.com. https://clck.ru/39Fank

Sandbox (FSS), launched by the HKMA in September 2016, allows banks and their partnering technology firms (tech firms) to conduct pilot trials of their fintech initiatives. This process includes involving a limited number of participating customers without the need to achieve full compliance with the HKMA's supervisory requirements¹⁰. So, the ignorance that most of the anonymous fintech services have cannot be explained as a "shadow ban"¹¹ as some authors call this method of regulation (Chapin, 2020).

From here we can conclude that the differences within the markets and regulations are significant. At the same time for the lawyers, it may mean that the understanding of what is fintech and how it should be regulated – the cross-border transboundary virtualized services and products – also varies. The GBA as a hub may face difficulties, especially if fintech starts "melting" through the legal borders, the tendency we can see in the case of some African fintech technologies and markets.

First, the differences in market and regulation are the differences in interpretation. At the current moment, there is no possibility to distinguish fintech services from non-fintech services using just the regulatory policy papers without the list of fintech services authorized as it is. Moreover, during the research examples were found when the same service was defined as fintech and non-fintech within one jurisdiction, so it is highly possible within three legal systems. In some cases, it even leads to the conclusion that if a service is not called a fintech by the developers there is no possibility to define it as fintech on its own.

Moreover, fintech creates a lot of challenges for both academic research and legislation initiatives. It strictly links to the concept of disruptiveness, and also explains why so much attention is paid to the regulatory frameworks and their concepts and models. At the same time, there are no full statistics on how the service, especially complex, may influence the market. In some cases, in the Mainland and both SARs fintech regulator adopts the concept and recreates the one-way of regulatory behavior with same-aimed services like WePay, MPay, and Alipay. But what can be the same concept at first glance may be very different in depth.

The institutional or sectoral approach, also called traditional, focuses on the form of a legal entity and assigns a particular regulator to it (Cunningham & Zaring, 2009). So, the market is divided into sectors, regulated by the institution, responsible for the supervision. Usually, the sectors are those, related to depositary financial institutions, securities and futures market sectors, and sectors of other entities. They can be sharded into more subsectors, or have a smaller number of supervisors, as in the case of the Mainland. The most successful and classic organization within this method is Hong Kong SAR, which shows less failure and provides a good balance between the protection of the traditional system and the facilitation of innovations. However, as it was said, in every method all the particularities of a state should be evaluated, so what suits Hong Kong may not be relevant (and, surely, is not relevant) to Macau and the Mainland.

¹⁰ Fintech Supervisory Sandbox (FSS). (2023, May 25). Hong Kong Monetary Authority. https://clck.ru/39Faqv

Kumar, R. (2023, August 29). SEC's sealed motion against Binance and CEO CZ. The Crypto Times. https://clck.ru/39Fat6; The note on Motion see here: https://clck.ru/39Fav2

The boundaries between sectors in such a model can be blurred – and this happens very often even without challenges like fintech – so it can cause confusion and potential conflicts, especially when the regulated entity is not so-called "brick-and-mortar" or traditional. Technically, traditionality seems to be the main problem of such a method if it fails when it meets something not traditional or contradictive.

Conclusion

All the challenges cannot be solved in any of the approaches. First, it is what to regulate and what to not. Concerns on that matter go from the conflict of form and nature. The form, from the legal point of view, is familiar – fintech is financial services. But the nature of them is technological, what makes fintech so competitive and so customary attractive. This freedom from the past, as it was described regarding the tendency among Zoomers to prefer fintech to banking (Evdokimova, 2020), this the biggest challenge all the regulators face.

The second one is the deployment of fintech – for now, the market development brings two types of players on the field: pure fintech providers, which are called fintechs by some of the authors¹², and traditional actors, who try to be competitive, and start launch fintech services and products (Wonglimpiyarat, 2017), especially during a pandemic (Tut, 2023). The first one is not covered by financial regulation – the second is the object, the subject, and the producers of financial law and politics.

That is the main challenge that can be found in every fintech market. But, within the GBA, there are special ones, that should be mentioned. First, the issue is that the development of all three fintech markets followed completely different trajectories – and within the framework of the "one country, two systems" principle, three different fintech markets emerged. This situation is unique and no state, not even the United States with its federal and state legislation, has encountered such an experience.

Further, we are talking about the fact that within China and the two SARs there are three different legal systems and, most importantly, legal interpretations. This leads to significant differences in understanding of what the fintech problem is. Having conducted research in this area, not only within the framework of the GBA, but we can also say that the difference in fintech regulatory approaches in civil law states and common law states exists and in some aspects it is significant. Moreover, even with its preference for the "Test-and-Learn" reaction method, the Mainland, as a civil law state (so, possibly Macau is the same) prefers the rule-based approach as a state of civil law. Hong Kong SAR, as a common law area, is a principle-based and, at the same time, "Case-by-Case" territory.

Eickhoff, M., Muntermann, J., & Weinrich, T. (2017, December). What do Fintechs Actually Do? A Taxonomy of Fintech Business Models. In ICIS.

Well, the last, important difference is that fintech regulation does not focus only on the regulation of fintech. It is formed from norms that already exist, and here, since fintech is "located" in the territory of technology law and financial law at the same time, the differences are even more dramatic. Technology law as such, where we can also include data law, is more general; it focuses on a huge sector and cannot be allocated a separate "untouchable" territory. The difference in approaches in these areas, even if it is not visible now, will one day manifest itself in one way or another. And, following the issues highlighted in the Trilemma of Innovation, depending on which two aspects dominate it, the impact on the market can be unpredictable. In the case of GBA, when the Mainland and the SARs have their own Trilemmas, it may affect not only the one but all three markets at the same time – but which area will be the initiator of that affection, is, at least for now, unpredictable.

References

- Amstad, M. (2019). Regulating Fintech: Objectives, principles, and practices. *Asian Development Bank Institute Working Paper Series*, 1016. https://doi.org/10.2139/ssrn.3541003
- Arner, D. W., Barberis, J., & Buckley, R. P. (2016). The Evolution of FinTech: A New Post-Crisis Paradigm? Georgetown Journal of International Law, 47, 127. http://dx.doi.org/10.2139/ssrn.2676553
- Au, A. (2021). Fintech Innovation and Knowledge Flows in Hong Kong's Financial Sector: A Social Network Analysis Approach. *Journal of Asia Business Studies*, 16(2), 294–307. https://doi.org/10.1108/JABS-09-2020-0381
- Chapin, Ch. F. (2020). The Long Shadow of Prohibition. In In P. Baker, & D. T. Critchlow (Eds.), *The Oxford handbook of American political history*. Oxford University Press.
- Blakstad, S., & Allen, R. (2018). *FinTech Revolution*. Springer International Publishing. https://doi.org/10.1007/978-3-319-76014-8
- Brummer, C., & Yadav, Y. (2019). Fintech and The Innovation Trilemma. *The Georgetown Law Journal*, 107, 235. https://doi.org/10.2139/ssrn.3054770
- Cunningham, L. A., & Zaring, D. (2009). The Three or Four Approaches to Financial Regulation: A Cautionary Analysis Against Exuberance in Crisis Response. *The George Washington Law Review*, 78, 39.
- Evdokimova, Y. (2020). Digitalization of the Financial Sector: Background and Specifics. In *Proceedings of the 2nd International Scientific and Practical Conference on Digital Economy (ISCDE 2020)* (pp. 179–183). https://doi.org/10.2991/aebmr.k.201205.029
- Ferran, E. (2015). The Break-up of the Financial Services Authority in the UK. In *Institutional Structure of Financial Regulation* (pp. 127–154). Routledge.
- Gabor, D., & Brooks, S. (2017). The Digital Revolution in Financial Inclusion: International Development in the Fintech Era. *New Political Economy*, 22(4), 423–436. https://doi.org/10.1080/13563467.2017.1259298
- Kharisma, D. B. (2020). Urgency of Financial Technology (Fintech) Laws in Indonesia. *International Journal of Law and Management*, 63(3), 320–331. https://doi.org/10.1108/IJLMA-08-2020-0233
- Meulbroek, C., Peck, J., & Zhang, J. (2023). Bayspeak: Narrating China's Greater Bay Area. *Journal of Contemporary Asia*, 53(1), 95–123. https://doi.org/10.1080/00472336.2021.1998579
- Mik, E. (2022). Smart Contracts: Tales of Trust and Certainty. *Technology and Regulation*, 100–112. https://doi.org/10.26116/techreg.2022.010
- Nicolaidis, K., & Shaffer, G. (2005). Transnational Mutual Recognition Regimes: Governance without Global Government. *Law and Contemporary Problems*, *68*(3/4), 263–317. https://doi.org/10.2307/27592113
- Omarova, S. T. (2020). Technology v technocracy: Fintech as a regulatory challenge. *Journal of Financial Regulation*, 6(1), 75–124. https://doi.org/10.1093/jfr/fjaa004
- Pomerol, J. C. (2018). Business Uncertainty, Corporate Decisions and Startups. *Journal of Decision Systems*, 27(sup1), 32–37. https://doi.org/10.1080/12460125.2018.1460162
- Reed, C. (2018). How Should We Regulate Artificial Intelligence? *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 376(2128), 20170360. https://doi.org/10.1098/rsta.2017.0360

- Romānova, I. & Kudinska, M. (2016). Banking and Fintech: A Challenge or Opportunity? In *Contemporary Issues* in Finance: Current Challenges from Across Europe (Contemporary Studies in Economic and Financial Analysis, Vol. 98, pp. 21–35). Bingley: Emerald Group Publishing Limited. https://doi.org/10.1108/S1569-375920160000098002
- Sarhan, H. (2020). Fintech: An Overview. *ResearchGate*: Berlin, Germany, 1–34. https://doi.org/10.13140/ RG.2.2.17196.28804
- Schwartz, J. (2017). Should Mutual Funds Invest in Startups? A Case Study of Fidelity Magellan Fund's Investments In Unicorns (And Other Startups) And The Regulatory Implications. *North Carolina Law Review*, 95(5), 1341–1402.
- Setiawan, K., & Maulisa, N. (2020, March). The Evolution of Fintech: A Regulatory Approach Perspective. In *Proceeding of the 3rd International Conference on Law and Governance (ICLAVE 2019)* (pp. 218–225). Atlantis Press. https://doi.org/10.2991/aebmr.k.200321.029
- Tut, D. (2023). Fintech and the Covid-19 Pandemic: Evidence from Electronic Payment Systems. *Emerging Markets Review*, *54*, 100999. https://doi.org/10.1016/j.ememar.2023.100999
- Wonglimpiyarat, J. (2017). FinTech banking industry: a systemic approach. *Foresight*, 19(6), 590–603. https://doi.org/10.1108/FS-07-2017-0026
- Xu, D., Taylor, C. J., & Ren, Y. (2023). Wait-and-See or Whack-a-Mole: What Is the Best Way to Regulate Fintech in China? *Asian Journal of Law and Society*, 10(3), 433–462. https://doi.org/10.1017/als.2022.7

Author information



Yaroslava Kuchina – Cand. Sci. (Law), Assistant Professor, PhD Candidate, Research

Assistant, Faculty of Law, University of Macau

Address: E 32 Avenida da Universidade, Macau SAR, China

E-mail: yakuchina@gmail.com

ORCID ID: https://orcid.org/0000-0003-1681-1038

Scopus Author ID: https://www.scopus.com/authid/detail.uri?authorId=57191665336 WoS Researcher ID: https://www.webofscience.com/wos/author/record/K-4849-2017 Google Scholar ID: https://scholar.google.hu/citations?user=wBNuZRwAAAAJ

Conflict of interest

The author declares no conflict of interests.

Financial disclosure

The research had no sponsorship.

Thematic rubrics

OECD: 5.05 / Law **PASJC**: 3308 / Law **WoS**: OM / Law

Article history

Date of receipt – December 8, 2023

Date of approval – December 20, 2023

Date of acceptance – March 15, 2024

Date of online placement – March 20, 2024



Научный обзор

УДК 34:004:347.73:336.02

EDN: https://elibrary.ru/bybieo

DOI: https://doi.org/10.21202/jdtl.2024.10

Правовые подходы и методы регулирования финтеха в регионе Большого залива Гуандун – Гонконг – Макао

Ярослава Кучина

Университет Макао, Макао, Китай

Ключевые слова

Гонконг, Китай, Макао, право, регион Большого залива, финансовое право, финансовые инновации, финансовые технологии, финтехрегулирование, цифровые технологии

Аннотация

Цель: через призму разработанной в доктрине трилеммы инноваций взглянуть на регуляторную политику и систему регулирования финтеха в регионе Большого залива с тем, чтобы выявить применимость и экстраполяцию существующих правовых моделей в зоне ускоренного экономического и инновационного развития, объединяющей Гуандун, Гонконг и Макао.

Методы: в основе работы лежит сравнительно-правовой метод исследования моделей правового регулирования финтеха, в связи с чем обобщаются имеющиеся данные и вводится классификация методов и систем, представляющих собой инструментарий по принципу лего.

Результаты: в исследовании представлена оценка трудностей, с которыми могут столкнуться члены региона Большого залива на пути гармонизации законодательства в области финтеха. Особое внимание уделяется Гонконгу, являющемуся одним из самых известных примеров успешного регулирования сектора финтеха, а также сопоставлению регулирования финтеха в материковом Китае и специальных административных районах (в частности, Макао). Отмечается, что недавно принятые поправки к финансовому законодательству специального административного района Макао также вносят элемент неопределенности, хотя и направлены на развитие ситуации в рамках этого законодательства. Сопоставляются технократический подход, согласно которому регулирование финансовых технологий является исключительно национальным (создается только для внутреннего рынка и отражает его структуру), и традиционный подход к регулированию, частью которого является трилемма инноваций, предусматривающий возможность наднациональной (международной) стандартизации, в том числе в форме мягкого права, способный устранить разницу в понимании характеристик финтеха, их концепции и масштабов этого явления. Кроме того, проводится анализ соотношения понятий

© Кучина Я., 2024

Статья находится в открытом доступе и распространяется в соответствии с лицензией Creative Commons «Attribution» («Атрибуция») 4.0 Всемирная (СС ВУ 4.0) (https://creativecommons.org/licenses/by/4.0/deed.ru), позволяющей неограниченно использовать, распространять и воспроизводить материал при условии, что оригинальная работа упомянута с соблюдением правил цитирования.

системы финансового регулирования и финансовой системы регулирования финтеха, экстраполяция существующей нормативной базы на развивающийся рынок инновационных технологических решений, их разные модели. Внимание акцентируется на методе регуляторного реагирования, изменяющегося в процессе эволюции финтехрынка и применяемого, как правило, вместе с другими подходами.

Научная новизна: представлен комплексный взгляд на различные системы правового регулирования финансовых технологий в регионе Большого залива Гуандун – Гонконг – Макао, уникальный опыт которого демонстрирует разные траектории развития финтехрынка на юге Китая в рамках принципа «Одна страна — две системы».

Практическая значимость: основные выводы и предложения, полученные в результате проведенного исследования, представляют значительный интерес для дальнейших исследований, регуляторной политики и системы регулирования финтеха, поскольку в материковом Китае и в специальных административных районах региона Большого залива применяются разные подходы и методы правового реагирования, не имеющие аналогов в современном мире.

Для цитирования

Кучина, Я. (2024). Правовые подходы и методы регулирования финтеха в регионе Большого залива Гуандун – Гонконг – Makao. *Journal of Digital Technologies and Law*, 2(1), 181–199. https://doi.org/10.21202/jdtl.2024.10

Список литературы

- Amstad, M. (2019). Regulating Fintech: Objectives, principles, and practices. *Asian Development Bank Institute Working Paper Series*, 1016. https://doi.org/10.2139/ssrn.3541003
- Arner, D. W., Barberis, J., & Buckley, R. P. (2016). The Evolution of FinTech: A New Post-Crisis Paradigm? Georgetown Journal of International Law, 47, 127. http://dx.doi.org/10.2139/ssrn.2676553
- Au, A. (2021). Fintech Innovation and Knowledge Flows in Hong Kong's Financial Sector: A Social Network Analysis Approach. *Journal of Asia Business Studies*, 16(2), 294–307. https://doi.org/10.1108/JABS-09-2020-0381
- Chapin, Ch. F. (2020). The Long Shadow of Prohibition. In In P. Baker, & D. T. Critchlow (Eds.), *The Oxford handbook of American political history*. Oxford University Press.
- Blakstad, S., & Allen, R. (2018). *FinTech Revolution*. Springer International Publishing. https://doi.org/10.1007/978-3-319-76014-8
- Brummer, C., & Yadav, Y. (2019). Fintech and The Innovation Trilemma. *The Georgetown Law Journal*, 107, 235. https://doi.org/10.2139/ssrn.3054770
- Cunningham, L. A., & Zaring, D. (2009). The Three or Four Approaches to Financial Regulation: A Cautionary Analysis Against Exuberance in Crisis Response. *The George Washington Law Review*, 78, 39.
- Evdokimova, Y. (2020). Digitalization of the Financial Sector: Background and Specifics. In *Proceedings of the 2nd International Scientific and Practical Conference on Digital Economy (ISCDE 2020)* (pp. 179–183). EDN: https://www.elibrary.ru/lkgbax. DOI: https://doi.org/10.2991/aebmr.k.201205.029
- Ferran, E. (2015). The Break-up of the Financial Services Authority in the UK. In *Institutional Structure of Financial Regulation* (pp. 127–154). Routledge.
- Gabor, D., & Brooks, S. (2017). The Digital Revolution in Financial Inclusion: International Development in the Fintech Era. *New Political Economy*, 22(4), 423–436. https://doi.org/10.1080/13563467.2017.1259298
- Kharisma, D. B. (2020). Urgency of Financial Technology (Fintech) Laws in Indonesia. *International Journal of Law and Management*, 63(3), 320–331. https://doi.org/10.1108/IJLMA-08-2020-0233
- Meulbroek, C., Peck, J., & Zhang, J. (2023). Bayspeak: Narrating China's Greater Bay Area. *Journal of Contemporary Asia*, 53(1), 95–123. https://doi.org/10.1080/00472336.2021.1998579

- Mik, E. (2022). Smart Contracts: Tales of Trust and Certainty. *Technology and Regulation*, 100–112. https://doi.org/10.26116/techreg.2022.010
- Nicolaidis, K., & Shaffer, G. (2005). Transnational Mutual Recognition Regimes: Governance without Global Government. *Law and Contemporary Problems*, 68(3/4), 263–317. https://doi.org/10.2307/27592113
- Omarova, S. T. (2020). Technology v technocracy: Fintech as a regulatory challenge. *Journal of Financial Regulation*, 6(1), 75–124. https://doi.org/10.1093/jfr/fjaa004
- Pomerol, J. C. (2018). Business Uncertainty, Corporate Decisions and Startups. *Journal of Decision Systems*, 27(sup1), 32–37. https://doi.org/10.1080/12460125.2018.1460162
- Reed, C. (2018). How Should We Regulate Artificial Intelligence? *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 376(2128), 20170360. https://doi.org/10.1098/rsta.2017.0360
- Romānova, I. & Kudinska, M. (2016). Banking and Fintech: A Challenge or Opportunity? In Contemporary Issues in Finance: Current Challenges from Across Europe (Contemporary Studies in Economic and Financial Analysis, Vol. 98, pp. 21–35). Bingley: Emerald Group Publishing Limited. https://doi.org/10.1108/S1569-375920160000098002
- Sarhan, H. (2020). Fintech: An Overview. *ResearchGate*: Berlin, Germany, 1–34. https://doi.org/10.13140/ RG.2.2.17196.28804
- Schwartz, J. (2017). Should Mutual Funds Invest in Startups? A Case Study of Fidelity Magellan Fund's Investments In Unicorns (And Other Startups) And The Regulatory Implications. *North Carolina Law Review*, 95(5), 1341–1402.
- Setiawan, K., & Maulisa, N. (2020, March). The Evolution of Fintech: A Regulatory Approach Perspective. In *Proceeding of the 3rd International Conference on Law and Governance (ICLAVE 2019)* (pp. 218–225). Atlantis Press. https://doi.org/10.2991/aebmr.k.200321.029
- Tut, D. (2023). Fintech and the Covid-19 Pandemic: Evidence from Electronic Payment Systems. *Emerging Markets Review*, *54*, 100999. https://doi.org/10.1016/j.ememar.2023.100999
- Wonglimpiyarat, J. (2017). FinTech banking industry: a systemic approach. *Foresight*, 19(6), 590–603. https://doi.org/10.1108/FS-07-2017-0026
- Xu, D., Taylor, C. J., & Ren, Y. (2023). Wait-and-See or Whack-a-Mole: What Is the Best Way to Regulate Fintech in China? *Asian Journal of Law and Society*, 10(3), 433–462. https://doi.org/10.1017/als.2022.7

Сведения об авторе



Ярослава Кучина – кандидат юридических наук, доцент, соискатель степени PhD, младший научный сотрудник, факультет права, Университет Макао

Адрес: Китай, САР Макао, Авенида да Универсидаде, Е 32

E-mail: yakuchina@gmail.com

ORCID ID: https://orcid.org/0000-0003-1681-1038

Scopus Author ID: https://www.scopus.com/authid/detail.uri?authorld=57191665336 WoS Researcher ID: https://www.webofscience.com/wos/author/record/K-4849-2017 Google Scholar ID: https://scholar.google.hu/citations?user=wBNuZRwAAAAJ

Конфликт интересов

Автор сообщает об отсутствии конфликта интересов.

Финансирование

Исследование не имело спонсорской поддержки.

Тематические рубрики

Рубрика OECD: 5.05 / Law Рубрика ASJC: 3308 / Law Рубрика WoS: OM / Law

Рубрика ГРНТИ: 10.21.91 / Финансовое право отдельных стран

Специальность ВАК: 5.1.2 / Публично-правовые (государственно-правовые) науки

История статьи

Дата поступления - 8 декабря 2023 г.

Дата одобрения после рецензирования – 20 декабря 2023 г.

Дата принятия к опубликованию – 15 марта 2024 г.

Дата онлайн-размещения – 20 марта 2024 г.