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DELINEATING LEGAL VOIDS IN FINTECH REGULATORY FRAMEWORK USING THE PROPOSED "IMPACT TRIPLE TEST"

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DELINEATING LEGAL VOIDS IN FINTECH REGULATORY FRAMEWORK USING THE PROPOSED "IMPACT TRIPLE TEST"

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[Abstract: *The legal and academic discourse surrounding the regulatory framework pertaining to the fintech industry primarily focuses on the lack of a targeted regulation and the growing data processing and privacy concerns. This is attributed to the recent exponential expansion and infiltration of advanced technologies like Artificial Intelligence in different fields. However, there is no consensus on the method to be adopted to identify the particular legal gaps and the target vulnerable population that is presently suffering due to a lack of specialized legal framework. In the process of formulating rules and regulations for any industry, the most crucial step is the very first step—it is the identification of the problems and the most vulnerable and effected parties, because the laws must ultimately be tailored towards protecting them. In this regard, this paper aims to provide a three step 'Impact Triple Test' that will help one delineate the legal voids in the fintech industry. The test is a dynamic yet objective approach that will help the policy makers determine which problems need to be addressed and with how much urgency. Alongside an objective framework, it is important to understand the workings and functioning of the expanding digital markets since the fintech industries largely operate with the help of growing platform economies (digital platforms). Hence, the paper will also discuss certain important concepts that must be taken as pre-requisites that must be considered before formulating any policy.*]

I

Introduction

Technology and its exponential expansion have taken the world by storm. The recent growth and developments in the capabilities of technology has allowed it to leave an impact on different unrelated industries as well. One such industry that has witnessed an increased involvement of technology over the years is the financial services industry. The outcome of this amalgamation of technological development and the financial service providers is the birth of 'FINTECH' and one of the most

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prominent services associated with it is the e-payment systems. The e-payment systems have become popular after the growth of e-commerce, platform economies and internet banking services[1] in the previous few decades. Another recent brainchild of the fintech sector that is developing rapidly is the system of 'digital wallets', the biggest name in the global industry being US based PayPal. These remain only a few examples among the many other branches and products of fintech, some of them being the digital currency payment systems, peer-to-peer lending opportunities, smart contracts and more. However, as we are blinded by the array of new, efficient and effectively more convenient than before products of fintech, their frequency and unmatchable growth rate present another problem that needs to be addressed – can the regulations keep up with the fintech pace?

With this backdrop, this paper will discuss the approach that should be adopted to identify the problems and challenges faced by the fintech sector, specifically with regards to its regulation. The paper is divided into six broad chapters for better understanding. **Part I** will be the introduction which will lay out the structure of the paper and briefly discuss about what 'fintech' is. **Part II** will then talk about the need, urgency and importance of devising a mutually accepted and dynamic approach for identification of the gaps in the regulatory framework. In this regard, it'll also discuss the role of fintech with respect to financial inclusion. **Part III** will then delve into the lacunas in the current regime. To resolve the need for an acceptable problem identification process, this part will then explain the proposed Impact Triple Test – what it is, its elements, how it can be applied and why it should be adopted. The author will discuss at length how the different elements of the proposed method of an impact test will help bring flexibility and provide a dynamic, yet, largely objective framework for evaluating different situations. This test will in turn help the policy makers and the legal fraternity identify the most vulnerable parties and the legal lacunas that need to be addressed with utmost urgency. Further, its dynamic nature will allow it to stay relevant and continue to help stakeholders as new technology develops, impacts the financial sector, and new challenges arise. However, simply identifying the target population of a potential regulatory framework through an objective test is not sufficient. There are certain concepts and novel features of the modern digital market that must be considered by the policy makers as pre-requisites while devising a framework for the fintech industry. For this purpose; **Part IV** will expound three key concepts as prerequisites that ought to be taken into account. Post this, **Part V** will conclude the paper.

What is Fintech?

Though there is no universally agreed definition of what fintech constitutes of, the Financial Stability Board gives it the broadest scope, describing fintech as something

[1] Brigitte Dekker, Maaike Okano-Heijmans. *Business: e-commerce, the platform economy and digital payments*, Clingendael Institute 15 (2020).

that "*technologically enables financial innovation that could result in new business models, applications, processes or products with an associated material effect on financial markets and institutions and the provisions of financial services.*"[2] In short, fintech is simply the combination of finance services and information technology i.e., financial technology. The term was originally coined in 1972[3] and can refer to several institutions. Dortfleitneret proposed four elements of fintech – (i)Financing, which includes crowdfunding, and credit and factoring;[4] (ii)Asset Management, which includes social trading, robo-advice, personal financial management and, investment and banking;[5] (iii)Payments, which includes alternative payment methods, blockchain and cryptocurrencies, and other fintechs;[6] and (iv) Other FinTechs, which includes insurance, search engines and comparison sites, technology, IT and infrastructure and other fintechs.[7] Hence presently, the fintech industry has four broad branches – payments (which include the online/digital payment services), lending, wealth management & financial advisory, and, distributed ledger technology (digital currency).

II

The Need for a Mutually Accepted and Dynamic Approach of Identification

The literature surrounding the regulations and policies concerning the fintech sector are largely focused on the possible solutions for the legal void that we have i.e., the lack of a targeted fintech specific law. Parts of the existing literature also highlight the growing data privacy concerns, however, there is a lack of literature on the methodology that should be adopted to identify these challenges in regulating Fintech. The question remains – *how* and *what* exactly are the data processing or privacy concerns in the fintech industry and how did we reach them? *Where* and *concerning which stakeholders* is there a regulatory void, and *how* do we identify these stakeholders? Most importantly, since the pace at which technology and as a

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2 FINANCIAL STABILITY BOARD *available at* https://www.fsb.org/work-of-the-fsb/financial-innovation-and-structural-change/fintech/#:~:text=The%20FSB%20defines%20FinTech%20as,the%20provision%20of%20financial%20services, (last visited Aug. 15, 2023).

3 FINTECH, *What is Financial Technology,* (Dec. 27, 2021) *available at* https://blog.cfte.education/financial-technology-fintech/ (last visited Nov 30, 2023).

4 C. Vijai, *Fintech in India—Opportunities and Challenges,* 8(1) SAARJ J. ON BANKING & INSU. RES. 42 (2019).

5 *Id*.

6 *Id*.

7 *Id*.

consequence fintech is growing has not yet been – and may not be anytime soon – matched by the pace at which policy makers or legislatures can produce a regulation, it becomes imperative for us to identify and then distinguish the concerns that need to be targeted with urgency and those that may be worked upon at a later stage.

Role of Fintech & Financial Inclusion

A uniform approach to prioritize the vulnerable populations becomes even more important since presently, one of the primary policy goals of the Indian government is financial inclusion. Financial inclusion refers to extending the access of financial services to the public,[8] often to those in the rural areas who have previously not had the access to the organized financial services sector. As the government focuses on inclusive development, it promotes services and products that facilitate the expansion and outreach of financial services. The expanded fintech industry in this context allows for easier connectivity with least requirement of logistics, infrastructure, investment and an overall low demand of social overhead capital. In 2005, the Reserve Bank of India (RBI) issued its Annual Policy Statement[9] where it familiarized the nation with the concept of financial inclusion. The need for a greater use of technology in the banking and financing sector was felt as early as 2008 when the report by the Committee on Financial Inclusion by the Government of India suggested the constitution of two dedicated funds focused on technology as well as development.[10] In 2016, IIMB under the RBI Chair Professor Charan Singh also published a working paper dealing with a 20 year Financial Inclusion Plan (FIP)[11] where it highlighted the need for greater use of technology as well as the risks associated with increased use in technology such as monetary loss, data theft, breach of privacy etc. One of the major policy recommendations of the paper was exploring the aspect of mobile banking systems and its potential to provide incredible benefits of mobile commerce, which in turn, would enhance banking penetration. Thus, it is evident that the government is pushing for increased financial inclusion and outreach, and this is possible through increased digitalization or use of modernized technology in the financial and banking sector, which in turn makes it more important for us to set up proper regulatory frameworks. An absence of proper policies addressing the growing fintech landscape may lead to adverse impacts on the rural population who were initially intended to benefit from financial inclusion.

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8 Sergey Belozyorov. Olena Sokolovska. Young Sik Kim, *Fintech as a Precondition for Transformations on Global Financial Markets,* 14(2) FORESIGHT AND STI GOV. 23 (2020).

9 RBI, ANNUAL POLICY STATEMENT 65 (2005) *available at* https://rbi.org.in/scripts/BS_ViewMonetaryCreditPolicy.aspx?Id=2217 (last visited Dec. 23, 2023).

10 Charan Singh, *20-Year Financial Inclusion plan – Milestones, Field Feedback and Monitoring*, (May 5, 2016) IIM BANG. RES. PAP. NO. 514 (2016).

11 *Id*.

III

Lacunas in the Current Regime

Though India is one of the fastest growing fintech landscapes, there are several problems that still plague the sector. Now that a revolutionary new form of technology, Artificial Intelligence (AI) is also in the picture, the technological aspect of the sector becomes more volatile. Technological growth is reaching new and previously unachievable growth rates. This makes it urgent for the regulators and policy makers to identify, analyze and fix the gaps and challenges faced by the current fintech sector. To identify the problems faced by the fintech sector, the author proposes adopting the Impact Triple Test as discussed in detail below. Different academicians use different approaches to determine the development scenarios for financial technologies. For instance, Belozyorov, Sokolovska and Young Sik Kim in their paper[12] used a scenario approach and determined three main development scenarios – "domination of traditional financial companies", "segmentation of market of new financial technologies", and "domination of digital financial companies." Their approach is largely focused on the distinction between the traditional financial sector and the newer digital financial sector. Their division itself serves several purposes, however, such a bifurcation is more evolutionary and functional in nature and does not lead us to the determination of the method of identification of legal lacunas. Notably, their determination was with respect to the probability and the possible consequences for the global financial markets, and the proposed Impact Triple Test extends this aspect of *consequences* in the form of an impact-based assessment to build a more comprehensive identification system.

III.A. Impact Triple Test – The Approach to Identify Problems

The idea behind having an impact-based assessment is to locate the participants who are the least protected, which in turn will help us determine the urgency with which a targeted legislation towards them should be worked upon. With respect to this idea, the Impact Triple Test or the ITT can be understood with a 3-2-2 formula (*three-two-two*) – **Three** types of participants; **Two** types of Impacts and; **Two** parameters to determine how and for whom to frame the law for and in what order.

First, there are those who are impacted directly and those indirectly. Within these, we have three categories of participants or parties. These are as follows –

1. Directly Impacted:
    a. <u>Service Providers</u>
    b. <u>Service Receivers</u>
2. Indirectly Impacted:

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[12] *Supra* 8, Sergey Belozyorov. Olena Sokolovska. Young Sik Kim.

a. <u>Third Parties</u>

Service providers or the 'source' participants are the organizations that render the digital financial services such as robo-advisory options, digital wallets, electronic payment options etc. These will thus include companies like BharatPe, PhonePe, PayTM, PayPal, Wealthfront etc. Service receivers or the 'destination' participants include the customers, or in a broader sense any entity that purchases, rents or subscribes to the service for any agreed quantum of consideration. This will widen the ambit of the 'customers' to include the wholesalers, retailers or any other type of intermediary. Third parties, as the name suggests, includes all other residuary individuals or entities which may be impacted indirectly. For example, if A uses B's device, say their laptop, to conduct a transaction through an e-payment gateway and while doing so, there is a breach of data on B's device, then in this instance B becomes a third party while A is the service receiver i.e., the original customer.

Determining the participants for which we need to measure the impact is a crucial first step. This is, in fact, largely analogous to determining the relevant market in case of abuse of dominance under competition law. In the latter, we determine two forms of relevant markets in terms of the product and the territory, while in the former, we shall be ascertaining the relevant people or entities impacted by the concerned issue at hand. These individuals or entities are of three types as explained above, and each need not be considered in every circumstance. For example, in certain situations the impact of a service on the service provider may simply be contrasted against that of the service receiver. In other situations, we can take the example of the customer and the third parties, or all three participants together. Choosing the type of participant depends on the fintech developments we are concerned with, for instance if we talk about e-contracts, then considering the impact on all three categories of participants becomes necessary. Another instance may be considering cryptocurrencies or financial advisory services where considering only the service providers and consumers may be sufficient.

Second, there are two factors of impact on each of the three types of participants. These are –

1. Nature
2. Magnitude

Firstly, we determine the magnitude of impact on the companies that provide the services. In measuring the magnitude, we must take help of verified statistics and data collected from credible sources regarding the number of users using such services, the customer base of the company providing such service, the net profit earned by the company through the sale of such services, the demographic of users, the frequency of use of e-payment gateways etc.

Additionally, with respect to the nature of the impact of the fintech services or products offered by a company, there are broadly two possibilities – either the impact is a positive one or it is an adverse one. There is a need to ensure proper disclosure in case of positive magnitude of impact on the source participants in the form of, for instance, increased profits or increased customer base. This ensures compliance since a due disclosure of the profits gained provides a system of keeping a check on the companies, also effectively discouraging them from tax evasions or manipulating data for the fear of being penalized. Adverse impacts include negative consequences or unforeseen events such as losses, breach of data, misuse of personal data etc. Such adverse impacts may be viewed from the point of view of the company as well as the consumer. So, if the data concerning the company such as its trade secrets are leaked, it is an adverse consequence for them that does not directly have an impact on the consumers, however, if any personal data collected by the payment gateway systems is stored in local archives and is leaked on the internet, it would directly affect the consumers whose personal data is now published worldwide. In such a situation, the adverse impact is worse for the service receiver (customers) than the provider.

Another example may be a situation where the service provider is under a cyberattack and the its data as well as its employees' personal records are compromised. In such a situation, the adverse impact is worse on the service provider. Hence, the adverse impact assessment is largely subjective and can be performed best by experts of the field. Which impact is to be valued more will change depending on the facts and circumstances of the case. The examples discussed are not limited to fintech industries and may extend to any company offering services online through digital market spaces, however, it is more import to discuss such examples in the context of fintech industry. This is because the data that fintech deals with on a daily basis largely comprises of the consumers' credit card, debit card and bank account details, Permanent Account Number (PAN), Aadhar number or the consumers' plans of future financial investments. Such data itself is of sensitive nature and constitutes personal or identifiable data of the customer, thereby dealing with such data is a matter of incredible precision and requires strict regulation.

After determining the nature and magnitude of impact on each of the types of participants, these must be contrasted with each other. This is followed by the final analysis –

Lastly, by ascertaining the nature and magnitude of the participant and pitching it against that of another participant, we get a picture of who is the more vulnerable party which is presently being harmed more than the other due to the lack of fintech regulations pertaining to them. For the purpose of this test and for the time being, our concern is limited to adverse impacts only. We then use the impact on the participant to decide two things: how *important* it is to regulate the identified adverse impact, and; how *urgent* it is to regulate the identified adverse impact –

1. Importance
2. Urgency

In such a structure, we successfully identify the places that need regulation by measuring the impact of the fintech industry on three participants and hence, the impact and its nature becomes the yardstick to measure the need and urgency of regulating that specific lacuna.

IV

Concepts & Prerequisites to be Considered

The world is now globalized, digitalized and modernized. This in effect means that every new scientific discovery or technological invention or policy change or natural disaster, in turn, has far reaching impacts transgressing its domains. One can understand this as the butterfly effect that is a culmination of the globalized, digitalized and modernized world. In the context of fintech industries and their policy aspects, this would mean that developments in other sectors will impact it and vice-versa. The butterfly effect of developments in the different sectors is often overlooked by policymakers while formulating regulations for one specific sector. This is largely rooted in their traditional approach which is acquired by working with the physical market systems. The digital market spaces where the fintech entities actually operate have a different system than the traditional markets with new concepts and principles governing it. When designing a policy for such a platform, knowledge and understanding of the foundational pillars of the digital marketplace is crucial and for this very purpose, it is important to keep certain prerequisite concepts in mind while framing regulations for the fintech sector. Some of these are as follows –

i. Platform Economies

There is a largescale transition of business from the conventional business model to a more efficient and high-tech digital business system. This new business model that a majority of well performing companies are shifting to is platform based. Platform economies or business models use digital platforms to enhance and expand their business outreach. In recent years, we've witnessed an incredible rise in platform-based business models, some of the most prominent examples are Amazon, Flipkart, Myntra etc. Here, the word 'platform' can be understood as an online system that provides comprehensive and standardized solution to bridge the gap of interaction between the consumers or users and the producers. These include commercial transactions and innovation solutions as well.[13] Currently, platforms are omnipresent. A lion's share of the ecommerce websites are platforms that make day-to-day work convenient. These platforms are not merely a product by themselves but a catalyst to expand an established business. They're a framework connecting people and can be both unilateral or multilateral in the way they allow interactions.

Another umbrella term recently introduced is "platform capitalism" which entails a broader transformation of how products are produced, shared and delivered. The earlier traditional market system with individual firms competing for market space, influence and customer is now gradually being substituted with a new participatory model. Now customers and producers engage directly with one another. This shift encompasses many sectors of economies. Uber connects taxi drivers with passengers, Airbnb connects hotels with guests and Amazon connects an array of consumers with producers. In all these examples though, the one common element is that of the payment process. As platform economies grow, different companies in the fintech industry offering e-payment services also expand. This is because platform economies are a direct fruit of the technological innovation and digitalization. They are now a popular mode of doing business because of the many advantages they provide. Hence, as more businesses shift to adopt a platform framework, the need for payment gateways that are compatible with these emerging e-commerce sites increases. These e-payment gateways must be secure, credible, and fast for a smooth and safe transaction experience for the customers. In the current digitalized market space, platforms exercise large market power, and its impact are felt across industries, be it directly or indirectly. Thus, when devising policies and regulations pertaining to the e-payment gateway services provided by the fintech industry, it is important to have a grasp of the increase in demand and the consequent supply of e-commerce sites [with a platform model] and its impacts.

ii. Big Data & Network Effects

Generally, the digital market systems where the new fintech industries operate are called two-sided markets. Traditional markets are different from digital markets because the latter allow more participants to connect with each other. Such markets can have two or more sides which are linked by the intermediary or platform. On the one side of the market are users who are looking for particular goods or services on the platform and on the other side of the market are businesses and sellers who seek to sell their goods or services to consumers. One of the most valuable assets for businesses operating on digital platforms is what we know as 'Big Data'.

Big data in the simplest terms is data when collected and collated in large volumes. The difference between 'data' and 'big data' is primarily concerned with quantity

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[13] E. Bryndin, *Formation of Platform Economy of Necessary Needs Based on Energy Economic Equivalent*, 9.9 Intl. J. of Curr. Res. and Acad. Rev. 85 (2021).

only. Whenever any user signs up to a platform, the user provides multiples data-sets to the platform such as, device information, IP Address, location, name, age, gender, preferences, etc. Such targeted information is then used by the platforms to attract same-side participants (Direct Network Effects) or other-side of the participants (Indirect Network Effects), i.e., sellers/service providers or advertisers. Herein, network effects refer to how the businesses use the big data they've amassed to expand their network of customers and/or suppliers in case of platform economies.

In digital markets, big data is an important asset and the accumulation of personal information enhances the market power of the entity. Network effects thus behave as entry barriers to the market. Any potential new entrant would need to collect large volumes of data i.e., "big data" to be able to become a viable alternative. In the context of fintech industries, this poses two key issues – (i) there is a possibility for established fintech industries that have already amassed large volumes of data to become dominant and then abuse their dominance by engaging in exclusionary practices, effectively disallowing new entries into the sector. This presents an overlap with the prohibition on abuse of dominance under the competition laws in India. (ii) Secondly, as has been stated previously in the discussion of the Impact Triple Test, the data that fintech industries deal with on a day-to-day basis is more sensitive compared to e-commerce sites that often collect data pertaining to the likes, dislikes and preferences of the customers. Fintech industries deal with data concerning bank accounts, passwords, net banking details etc. Such data is sensitive and there is a need for carefully thought of regulations pertaining to data collection, storage, processing and erasure by such companies.

iii. Resilience & Vulnerability of the Participants

One of the most important factors to consider is the resilience of the participant. Resilience here refers to the ability of a participant which has been adversely impacted to push itself back to its original position i.e., it is the ability of an injured party to bounce back. Vulnerability as a term must be understood with reference to a participant's susceptibility to injuries, post this, resilience as a term should be understood with reference to the already injured participant's ability to overcome those injuries in a short time frame at a reasonable cost. For instance, if we contrast the vulnerability and resilience of service providing companies and the service receiving consumer, some may argue that the vulnerability of the company is more because the adverse impact gets amplified due to the companies' large size and scale of operation. Any adverse impact may impact all its members, directors, promotors, investors, employees and more, thus, the negative consequences cascade from the company's image and goodwill down to the levels of its operating staff. However, in terms of resilience, it is hard to disagree that service providing companies are much more resilient that an individual consumer. No matter how adverse the impact on a company may be, individuals in comparison almost always lack the kind of resources, contacts, capitals and assets that a company has and consequently exhibit lesser resilience after being injured. Large scale companies or Multi-National Companies (MNCs) can otherwise utilize their capital and market power to continue their operations and eventually overcome their losses.

Within the participants, an important parameter to be considered is thus the vulnerability or susceptibility to be harmed, and consequently the resilience of the injured participant. This parameter itself is difficult to be quantified or given a value to, however, it can still be derived or gauged out through indirect means and expert analysis.

V

Filling the Regulatory Gaps & Moving Forward

The biggest void is the lack of a targeted fintech legislation itself, and this lacuna has been analyzed, criticized and discusses heavily by the legal fraternity in the recent years during the expansion of financial services. Now as RBI releases even more advanced services such as online payments through Near Field Communication (NFC), it is evident that the industry will keep on expanding as more innovations flow in and the demand for services grow. The truth is undeniable - the technological revolution is here; it is happening and it cannot be reversed. There is a clear need to work towards formulating a proper regulatory framework for the fintech industry, the question is how? The answer to this remains simple – we must do it step by step, and the very first step is to locate those who are the most vulnerable, it is to ascertain the problems that need to be targeted with urgency. For this very purpose, the Impact Triple Test provides an objective, dynamic and systematic approach to prioritize the actions that we need to take. Ultimately though, the tests along with the pre-requisite conditions are only tools that will have substantial impact when wielded by the experts in the concerned field.