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Innovation in Fintech - Moving Towards a "Sandbox" Approach

INNOVATION IN FINTECH — MOVING TOWARDS A 'SANDBOX' APPROACH

by
Ayushi Mishra

ABSTRACT

India has been swift to adapt to the needs of changing times and has continued to implement latest technological inventions for upgradation of its markets. However, the Indian market regulators have regularly felt the need for new technological interventions in financial products and services to further upgrade or revamp the markets which increase customer benefits and ensure fair and transparent working of the markets.

Mindful of adopting the best global standards for operation, RBI, SEBI and IRDAI decided to implement the 'sandbox' approach for the Indian financial, securities and insurance market, respectively. The sandbox approach of technological invention was first introduced in the United Kingdom in 2016 and has been vastly successful so far. The primary objective of introducing the sandbox approach is to remove any unnecessary barriers to innovation of financial products and services and provide maximum benefit to the customers.

In this paper, the author discusses the new approach adopted by the market regulators in India to enhance technological invocation in payments and settlement systems, securities market and the insurance sector. By introducing the new approach of operating in 'sandboxes' before launching them in real markets, the regulators allow innovators to test disruptive business ideas and technologies in a live environment with a few relaxations/waivers from a regulatory and compliance perspective. This



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causes minimal damage and disruption to the normal functioning of the markets.

The paper is broadly divided into three parts. The first part establishes India's position on adopting new the approach and experimenting with sandboxes. The second part provides a brief overview of the payments and settlement sector, securities market and the insurance sector along with the legal framework governing the sandbox approach proposed by the market regulators. The last fragment of the paper highlights the discrepancies and gaps in the guidelines issued so far and proposes methods of further refining the same. The author highlights the best international practices on data privacy and confidentiality which must be adopted and advocates for a more open legal framework for holistic meeting of objectives envisioned by the market regulators.

Keywords: Regulatory Sandbox, RBI, SEBI, IRDAI.

I. INTRODUCTION — INNOVATION IN FINTECH

In a 2019 report on 'Global FinTech Adoption Index' released by Ernst & Young ("EY Report"), India and China emerged as leading markets with financial technology ("FinTech") adoption rate of 87%, while the global average rate was at 64%.¹ The survey records how FinTech services have expanded its offerings around the world and accelerated change across the financial services sector making financial services more accessible for both consumers and businesses. According to the EY Report, 99.5% of consumers in India are aware that there are FinTech services available to transfer money and make payments which is rooted in government's drive to promote a cashless economy and introduce digitization in payments and settlements systems in India.²

FinTech is broadly understood to be a combination of two words- 'finance' and 'technology' and refers to technology driven start-ups challenging the traditional methods of banking and established financial players. Despite not having a universally acceptable definition, 'FinTech' was defined by the Financial



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Stability Board of the Bureau of Indian Standards (BIS) as "*technologically enabled 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 provision of financial services.*"³

FinTech has the capability of providing large scale benefits in relation to improvement of efficiency and reduction of costs and can lead to financial inclusion by changing the manner in which people approach financial services. The innovation in FinTech can be broadly categorized under: (i) payments clearing and settlement; (ii) deposits lending and capital raising; (iii) market provisioning; (iv) investment management; (v) data analytics and risk management.⁴

The mounting global importance given to FinTech to promote innovation in industries has encouraged primary market regulators in India to introduce a 'sandbox' approach for innovation and advancement of financial markets, securities markets and insurance sector. Sandboxes allow the firms to innovate and test products, services or business models in live environment with appropriate safeguards, thereby bringing innovations that reduce time, enable more products/services to be tested and allow regulators to work with innovators to ensure consumer protection.⁵ Reserve Bank of India ("RBI"), Securities and Exchange Board of India ("SEBI") and Insurance Regulatory and Development Authority of India ("IRDAI") have introduced a 'sandbox' approach to encourage innovation in financial services/markets, securities market and insurance sector in India.

In this paper, the author would discuss the global evolution of FinTech innovation following 'sandbox' approach, the legal framework of innovation sandbox introduced by RBI, SEBI and IRDAI and the existing gaps/irregularities in the extant legal regime.

II. RESERVE BANK OF INDIA-REGULATORY SANDBOX

Growing digitization and online commerce made RBI redirect its efforts towards building a state of art national payments infrastructure and technology



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platform.⁶ RBI has been constantly pushing for digitization in the payments and settlement systems and one of the recognized primary methods for digitization of payments system in India is innovation through 'regulatory sandbox' ("RS")⁷ which has become synonymous with 'regulatory innovation'. As emphasized in RBI's vision document ("RBI Vision Document 2021")⁸, creation of regulatory sandbox will help achieve the four 4 Cs- competition, cost, convenience and confidence, envisaged by RBI. It will generate "competition" in payments and settlements systems by bringing multiple players who will innovate and generate optimal "cost" for customers and bring "convenience" by promoting access to multiple payments systems thereby fostering the "confidence" of the customers.⁹

Testing in sandboxes have helped innovators to have access to funding¹⁰ and help evolve technologies which are used to provide payment services The concept of RS maybe new to India, however, the global interest in sandboxes has been robust with over fifty jurisdiction having RS either at live or at planned stages.¹¹ Sandboxes have the capability of connecting financial institutions with financial start-ups around world. For example, *Fin Conecta*, sponsored by the Inter-America Development Bank integrates financial institutions in Latin

America and Caribbean with FinTech companies around the world.¹² Sandboxes can also be used by market regulators for promoting financial inclusion by pursuing market development activities. Inclusion linked sandboxes have been launched in Bahrain, Malaysia and Sierra Leone while others are in various stages of planning in India, Jamaica, Kenya, Mexico, Sri Lanka and Uganda.¹³

Sandboxes could be broadly discerned into three models¹⁴:

- i. Product testing sandboxes which tests products in a safe environment before their formal licensing or registration;



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- ii Policy testing sandboxes which evaluate the rules and regulations based on specific usage of products and advises if the rules or regulations impede the beneficial use of new technologies or business models and hinder financial innovation; and
- iii Multi-jurisdictional sandboxes which enable innovators to conduct tests on both products/services across jurisdictions to bring cross-border harmonization and expansion through shared testing programs and scale rapidly on regional and global scale. Some famous examples of multi-jurisdictional sandboxes are 'Global Financial Innovation Network' and the 'API Exchange'.

A. Legal Framework

In July 2016, an inter-regulatory working group ("WG") was constituted by RBI under the chairmanship of the Executive Director, Department of Banking Regulation, the Reserve Bank of India, to evaluate the growing significance of FinTech innovations and their interface with the financial sector as well as financial sector entities. One of the primary goals of WG was to formulate a framework for RS. A report titled 'Report of the Working Group on FinTech and Digital Banking' was released in the public domain on February 8, 2018 inviting comments and suggestions till February 28, 2018. Pursuant to the RBI Report, RBI released the 'Draft Enabling Framework for Regulatory Sandbox' on April 18, 2019 ("Draft RBI Framework")¹⁵ which was replaced with 'Enabling Framework for Regulatory Sandbox' on August 13, 2019 ("RBI Framework").¹⁶

RS is a live testing space for new products and/or services in a controlled environment under the supervision of the market regulators. The regulatory authorities may permit regulatory/supervisory relaxations to the entities testing products in a sandbox.¹⁷ The users of RS can test the viability of the products/services without a formal rollout thereby leading to a beneficial outcome for consumers through increased range of products and services, reduced costs and increased access to financial products/services.¹⁸



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B. Key Aspects of RBI Framework

- i. Eligible Participants— The RBI Framework provides an eligibility criteria for the applicants. The concept of RS has been introduced to encourage innovations in FinTech sector where: (i) there is absence of governing regulations; or (ii) there is need to temporarily ease regulations for enabling the proposed innovation; or (iii) the proposed innovation shows promise of easing/effecting delivery of financial services in a significant way.¹⁹ RS under the RBI Framework is based on thematic cohorts focusing on financial inclusion, payments and lending, digital Know Your Customer ("KYC"), etc. Such cohorts may run for varying time period but should ordinarily be completed within six months.²⁰

The RS should begin with 10-12 selected participants who should satisfy the 'fit and proper' criteria. The applicant entity must: (a) be a FinTech company including a startup registered as a 'startup' under the DIPP Notification dated April 11, 2018²¹ by being incorporated as a private limited company, partnership firm or limited liability partnership firm no older than seven years; having turnover not exceeding INR 25,00,00,000; working towards innovation, development or improvement of products or processes or services or if it is a scalable business model with high prospects of employment generation and wealth creation and not formed after splitting up or reconstruction of business²² or banks or financial institutions or any other company partnering with or providing financial support to financial services business; (b) have minimum networth of INR 20,00,000 as per latest audited balance sheet; (c) have promoters/directors which satisfy the 'fit and proper' criteria basis various documents submitted by them; (d) conduct of bank accounts of the applicant entity and its promoters/directors should be satisfactory; (e) have satisfactory CIBIL or credit score; (f) demonstrate that their products/services are technologically ready for deployment in broader market; (g) demonstrate arrangements to ensure compliance with existing regulations/laws on consumer data protection and privacy; (h) have adequate safeguards in the IT systems to protect against unauthorized access, alteration, destruction, disclosure or dissemination of records and data; and (i) have robust IT infrastructure and managerial resources.²³

ii. List of products/services/technology- The RBI Framework provides for an indicative list of innovative products/services/technology which can be considered for testing in a RS such as retail payments, money transfer,



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marketplace lending, digital KYC, financial advisory, wealth management, digital identification, smart contracts, etc., and products such as financial inclusion and cyber security products.²⁴

The RBI Framework further allows innovative technology such as mobile technology applications (payments, digital identity, etc.), data analytics, application program interface ("API"), applications under block-chain technologies, artificial intelligence and machine learning applications.²⁵

The RBI Framework also provides a list of products/services/technology which cannot be considered for testing such as, credit registry, credit information, crypto currency/crypto asset services, trading/investing/settling in crypto assets, initial coin offering, chain marketing services or any other products/services which has been banned by the regulator/government of India.²⁶ This negative list is in light of the notifications issued by RBI in 2013²⁷ and 2018²⁸ prohibiting dealing in virtual currencies due to various associated risks.

iii. Mandatory compliances- RBI may provide case by case authorization or regulatory relaxations by ensuring transparency and following well defined principles of decision making²⁹ during the length of the RS. However, RBI cannot provide any legal waivers.³⁰ Notwithstanding the waivers, the RS applicants are required to follow customer privacy, data protection, secure storage of and access to payment data of stakeholders, security of transactions, KYC/AML/CFT requirements and statutory restrictions.³¹

iv. Additional prerequisites-The applicants must also show (a) boundary conditions should appropriately protect the customer's privacy³²; (b) provide an acceptable exit and transition strategy³³; (c) share results of proof of concept/testing of use cases including any relevant prior experience³⁴; (d) define space, duration and target audience for the test run of proposed eligible products/services/technology.³⁵



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v RS processes and timelines- The Framework provides for a five-stage process, which shall be supervised by a specialized FinTech Unit under the overall guidance of Inter-Departmental Group of the RBI with the participation of domain experts (“FTU”) of the RBI.³⁶ The stages are: (a) preliminary screening for four weeks; (b) test design for four weeks; (c) application assessment for three weeks; (d) testing for twelve weeks and (e) evaluation for four weeks.

vi Completion of RS process- Upon successful approval by FTU, the applicant entity becomes responsible for operating the RS while the RBI will provide appropriate regulatory support/relaxations. However, RBI will bear no liability arising from RS processes and any liability will be borne by the applicant entity operating the RS. Further, at the end of the RS period, the participant must exit the RS.

III. SECURITIES AND EXCHANGE BOARD OF INDIA- INNOVATION SANDBOX

Capital Market Fintech is about data — leveraging the multitudes of data sources that are resident or available to create alternative business models for disrupting the capital markets. Accessing, processing, and analyzing data is the essential undertaking of capital market fintech firms.³⁷

The growth of any economy is dependent on the capital available at the micro and macro levels. The Indian securities market moved away from open outcry system to online based electronic trading, in line with best international practices.³⁸ However, over the years, SEBI has continuously felt the need to overhaul and upgrade the technology governing trading, payment and settlement systems in the securities and exchange market. In light of such requirement, SEBI introduced the concept of ‘innovation sandbox’ to allow technological revamping in the securities and exchange market.

A. Legal Framework

To promote innovation in securities market and adapt to technological advancements in global securities markets, SEBI released a circular on



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Framework for ‘Innovation Sandbox’ on May 20, 2019 (“SEBI Framework”).³⁹ The key components and structure of the SEBI Framework is divided into three categories- design, legal and administrative categories.⁴⁰ The objective is to allow FinTech to act as a catalyst to further develop and maintain an efficient, fair and transparent securities market ecosystem.⁴¹

B. Key aspects of SEBI Innovation Sandbox

i Eligible Participants— Any FinTech firms or entities not regulated by SEBI including individuals may use Innovation Sandbox (“IS”) to test their proposed solutions offline in isolation from the live market based on the market related data made available by the stock exchanges, depositories and qualified registrars, and share transfer agents (“ORTAs”).⁴² The idea is to cause minimal financial loss to the consumers while simultaneously looking for means to innovate and pass on the benefits to the consumers.

The eligibility criteria to be included in the IS includes: (a) applicant intends to innovate on products/services/solutions for securities and commodities market in India; (b) applicant has genuine need for testing the solution using resources available under IS and a solution cannot be developed otherwise; (c) applicant has necessary resources to support testing in IS with testing plans having clear objectives, parameters and success criteria; (d) applicant hypothesizes post testing plans; (e) applicant's solutions should offer direct/indirect benefits to consumers, Indian markets and Indian economy at large; and (f) applicant's solution should be validated for cyber security parameters for which applicant is required to submit cyber-security compliance certificate as per SEBI's Cyber Security Guidelines.⁴³

ii Implementation Body— A Steering Committee comprising of representatives from

inter alia, intermediaries/Market Infrastructure Institutions (“MII”), QRTAs, FinTech start-ups, academia and angel investors along with representatives from SEBI as permanent invitee in the initial stage, would develop operational guidelines towards components and structure of IS.⁴⁴ Post issuance of operational guidelines, the Steering Committee will carry out administrative functions such as: (a) receiving, evaluating and/or rejecting applications; (b) communicating with applicants; (c) assisting the governance body; (d) maintaining infrastructure of IS;



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(e) supervising testing in IS; (f) addressing grievances of applicants; (g) formulate rules to regulate rights and obligations of parties; (h) ensure that IS fulfills states objectives; and (i) ensure governance of IS is neutral and does not favour any particular participant or category of participants.⁴⁵ The Steering Committee will also register the applicant post approval and monitor the applicant throughout the lifecycle of the product.⁴⁶

iii Availability of data to participants— Securities market related data such as depositories data, stock exchange data and mutual funds transaction data would be made available to IS participants to test and improve the FinTech solutions.⁴⁷ Data will be historical and anonymized containing episodic market events⁴⁸ provided in a phased manner starting with limited amount of data and based on validations, more exhaustive data will be provided to the participants.⁴⁹ Live data will not be made available to IS participants.⁵⁰

The data provided to the participants will be shared through API which will be published and made available to the eligible participants.⁵¹ Further, IS will have a policy to restrict misuse of data from the stated purpose.⁵²

iv Legal Components— The SEBI Framework envisages a confidentiality agreement including an end user agreement restricting the selling or subletting of data shared by SEBI with the participant, to any third person in any manner.⁵³

Further, the IS: (a) may be set up as not-for-profit entity which enhances the impartiality of IS⁵⁴; (b) makes it mandatory to comply with KYC norms, investor protection and data privacy⁵⁵; (c) must define rights/obligations of stakeholders and applicants to be contractually bound⁵⁶; (d) must have provisions to protect applicant's intellectual property rights (“IPR”) resulting from collaboration and subject to use once the IS period is over⁵⁷; (e) must have provisions for restricting development of any product/solution for fraudulent/



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manipulative purposes⁵⁸; and (f) should be secured from cyber threats or unauthorized access.⁵⁹

An Objective and Key Result Areas (“OKRA”) document must be maintained by the Steering Committee for an effective oversight of the entire process.⁶⁰

v Miscellaneous— Each MII and QRTAs would develop their own interface and APIs and the approved IS applicant can gain entry to the APIs of any MII or QRTAs.⁶¹ Upon completion of the testing in IS which shall not be for a period of more than twenty-four months including applying, tracking, on-boarding, monitoring, reporting, etc., the participant must exit the IS.⁶²

IV. INSURANCE REGULATORY AND DEVELOPMENT AUTHORITY OF INDIA- REGULATORY SANDBOX

The insurance penetration in India is one of the lowest in the world hovering at 0.7% from 2011 to 2015 despite generous tax exemptions provided to the sector.⁶³ India's share in the

growth of global insurance market was 2% in 2017 and the growth in the past sixteen years was 1%, increasing from 2.71% insurance penetration in 2001 to 3.69% in 2017.⁶⁴

IRDAI in the last two years has urged the insurance companies to encourage digitization and launch of customer friendly and easy to understand products to bring more customers under the insurance coverage.⁶⁵ The low levels of insurance penetration call for an immediate need for innovation in the insurance sector and adopting a RS approach has been one of the methods of fostering innovation and introducing technological advancements in the otherwise sluggish sector.



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A. Legal Framework

IRDAI on September 18, 2018 set up a committee under the chairmanship of Mr. Randip Singh Jaspal on regulatory sandbox in insurance sector.⁶⁶ On February 5, 2019, the committee released its report titled, '*Report of the Committee on Regulatory Sandbox in Insurance Sector in India*' ("Draft IRDAI Report").⁶⁷ Pursuant to the report of the committee, IRDAI released the Draft IRDAI (Regulatory Sandbox) Regulations, 2019⁶⁸ ("IRDAI Framework")⁶⁹ which was replaced with IRDAI (Regulatory Sandbox) Regulations, 2019 on July 26, 2019 ("IRDAI Framework").⁷⁰

The primary objective of IRDAI Framework is to accelerate growth of the sluggish insurance sector, protect the interests of the policy holders and facilitate innovation in the insurance sector in India.⁷¹ The sandbox method enables insurers to create comprehensive, innovative, personalized and affordable suite of healthcare solutions.⁷²

India First Life Insurance Company Ltd. was the first company to launch '*Insurance Khata*' under the regulatory sandbox approach on April 12, 2017 and received the consent of IRDAI on November 27, 2017. The insurance seeks to target the financially weaker sections of the society who can pool multiple single insurance plans into a single account and a pay a single premium whenever convenient.⁷³

B. Key Aspects of IRDAI Framework

i. Eligible Participants— The eligible applicants under the IRDAI Framework are: (a) insurers; (b) intermediary or insurance intermediary; (c) any person other than an individual with minimum networth of less than INR



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10,00,000 for last one financial year; or (d) any other person recognized by IRDAI.⁷⁴

The applicant may apply to IRDAI for promoting innovation in: (a) insurance solicitation or distribution; (b) insurance products; (c) underwriting; (d) policy and claims servicing; or (e) any other category recognized by IRDAI.⁷⁵

ii Grant/revocation of permission by IRDAI— IRDAI may grant its permission to the applicant who makes an application to encourage innovation in insurance sector for a period of six months⁷⁶ subject to an extension of another six months on request of the applicant submitted with a performance analysis of the proposal.⁷⁷ The permission may be granted provided if: (a) the innovation is beneficial to the insurance sector, policy holders and growth of the industry; or (b) increases insurance penetration; or (c) otherwise meets the requirements specified by IRDAI.⁷⁸

The permission granted by IRDAI may be revoked after giving the applicant an opportunity of being heard, if it does not meet the requirements laid down under Regulation 6 or there is a violation of the Insurance Act, 1938, Insurance Regulatory Development Authority Act,

1999 or other applicable laws.⁷⁹

The IRDAI Framework also envisage an early termination/discontinuance of the applicant's proposal if the proposal is unable to meet the desired objectives.⁸⁰

iii Obligations of the applicant— The applicant under the IRDAI Framework is required to ensure that: (a) integrity of systems is maintained; (b) confidentiality of policyholders is maintained; (c) adequate internal mechanisms are in place for reviewing, monitoring and evaluating its controls, systems, procedures and safeguards⁸¹ and (d) give a confirmation that it has deleted all the personal data of the participants.⁸²



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The applicant must also inform IRDAI in case of any deviation in the proposal⁸³ which will be monitored and guided by IRDAI at regular intervals.⁸⁴

iv Powers of IRDAI— IRDAI may provide relaxations/exemptions to the applicant from any regulations notified by IRDAI for a maximum period of one year.⁸⁵

Further, IRDAI has the right to call, inspect, or investigate any document, record or application from the applicant⁸⁶ and suspend or cancel the permission granted if the operations of the applicant are not in the interests of the insurance market or policyholders.⁸⁷

v Completion of RS process— On completion of the RS time period, the applicant must submit a report to IRDAI along with a plan of action. The report must specify how the proposal has/has not met the proposed objectives along with a feedback from the policy holders and the plan of action must state how the proposal should be brought under regular regulatory supervision.⁸⁸ If IRDAI is satisfied that the objectives of applicant's proposal has been met, it may accord permission to the applicant to adopt the proposal under regular regulatory supervision.⁸⁹ However, IRDAI will direct the applicant to discontinue the proposal if the objectives of the proposal are not met.⁹⁰

V. CONCLUDING PROPOSAL & REMARKS

A number of lessons emerge from the community of market regulators across the world which have experimented with sandboxes in emerging and developed countries. Many such lessons can be applied by RBI, SEBI and IRDAI in further refining the guidelines or bringing more lucidity in the guidelines already issued.

For example, the SEBI Framework is more vibrant and nuanced as compared to the RBI Framework and differs from it in many aspects. The SEBI Framework is more inclusive and allows all FinTech players with an intention to innovate, to participate. Further, the SEBI Framework provides more clarity on the requirement to enter into a comprehensive confidentiality agreement; recognizes and protects IPR of the applicants; and prescribes a time bound constitution of the steering committee and release of operational guidelines⁹¹.



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However, the SEBI Framework must conspicuously elaborate upon a few issues which have either been left unaddressed or have been partly touched upon.

The IRDAI Framework on the other hand, is much detailed as compared to the RBI Framework. The IRDAI Framework clearly identifies the role of IRDAI as a 'guide' to the applicant; envisages a concept of early termination of the proposal; provides an opportunity of being heard to the applicant before revocation of his permission and imposes a duty on the applicant to erase all personal data of all the participants and intimate IRDAI.

A detailed analysis of various clauses under the RBI Framework, the SEBI Framework and the IRDAI Framework is discussed below.

A. Contradictory Clauses under the RBI Framework

Clause 4.3 of RBI Framework provides that, *"The RBI or its RS cannot provide any legal waivers"*. However, Clause 6.2 states that, *"The RBI may consider relaxing, if warranted, some of the regulatory requirements for sandbox applicants for the duration of the RS on a case-to-case basis"*.

Clause 6.6 of RBI Framework also recognises that RBI may grant relaxations which will expire at the end of RS period. Broadly the RBI cannot provide regulatory exemptions or waivers which fall outside its jurisdiction. However, these clauses are clearly conflicting in nature and do not provide any clarity on whether the RBI can consider granting exemptions or waivers during the RS. Such clauses should be drafted more carefully for regulatory clarity in the RBI Framework.

B. High financial threshold for entry

Clause 6.5.1(b) of the Draft RBI Framework provides that, *"the entity shall have a minimum net worth of Rs. 50 lakh as per its latest audited balance sheet"*. This threshold was considered very high since, the eligible entities are only start-ups. Pursuant to such considerations, the RBI Framework has now reduced the financial threshold of entry to INR 25 lakhs.⁹² However, the ancillary requirements to be fulfilled by the applicant entities still remain high. Meeting of conditions such as: (a) demonstration that the products/services are technologically ready for deployment in the larger market; (b) placing adequate IT safeguards to prevent unauthorized access, alteration, destruction, disclosure, or dissemination of records and data; and (c) maintenance of robust IT infrastructure and managerial resources require a heavy amount of capital and resources to be invested. Such conditions may impose financial constraints in terms of capacity of the applicant entities to innovate.



The IRDAI Framework also has a financial threshold for entry wherein an applicant with minimum individual networth of INR 10,00,000 for last one financial year is not eligible to apply for innovation under the insurance RS.⁹³

The SEBI Framework on the other hand, does not have any financial barriers to entry and allows any FinTech firms/entity, not regulated by SEBI including individuals to use the RS environment subject to these entities displaying an intention and need to innovate using resources under the SEBI Framework.

Applicants which are entirely driven by passion and intent to innovate for introduction of better products and services in the markets, should be encouraged under both the RBI Framework and the IRDAI Framework, by lifting restrictions in terms of financial thresholds.

C. Leak of confidential information and affixing responsibility

Clause 6.5(e) of the RBI Framework provides that, *"The applicants shall be required to share the results of Proof of Concept (PoC)/testing of use cases including any relevant prior experiences before getting admission into RS for testing, wherever applicable"*. This will give rise to concerns about leak of confidential information and result in disputes pertaining to trade secrets and know-how.⁹⁴ It is pertinent that a well-rounded confidentiality agreement is entered into between the RBI and the applicants at the start of the RS period. Clause 8.1 of the RBI Framework which provides that, *"The RBI shall bear no liability arising from RS process and any liability arising from the experiment will be borne by the applicant as a sandbox entity"* should also be amended to affix RBI's accountability for divulgence of confidential information during the RS period.

The SEBI Framework on the other hand, provides for a comprehensive confidentiality agreement including an end user agreement to be entered into to protect the data sets shared with the participants by SEBI.⁹⁵ It further envisages clearly defining the rights and obligations of the stakeholders⁹⁶ and contain provisions for protecting the IPR of the applicants.⁹⁷ The RBI

Framework is silent on dealing with an IPR violation.



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The IRDAI Framework only envisions the applicant to ensure that confidentiality of data of policy holders is maintained⁹⁸ and a responsibility to erase all personal data of the participants.⁹⁹ This is not sufficient from the perspective of data protection or the protection of interests of policyholders at only one place i.e. in the objective clause.¹⁰¹ While the IRDAI Report placed the responsibility of *data preservation, confidentiality, integrity and availability of the same, irrespective of whether the data is stored/in transit within themselves or with customers or with the third party vendors*¹⁰² with the applying entities who may be collecting this data, the IRDAI Framework does not contain any such provision.

Further, the IRDAI Report envisaged taking consent of the customers for their participation in the testing phase by issuing disclaimers explaining their state, compensation, structure (in case of any loss) and duration of testing.¹⁰³ However, the IRDAI Framework does not mention taking the consent of the customers.

Regulation 9 of IRDAI Framework provides for an applicant to ensure the integrity of the systems, confidentiality of the policyholder data and adequate internal mechanism. However, the IRDAI Framework do not envisage an internal control mechanism to be adopted by the applicant, to mitigate risks associated with the experiment, which includes risks associated with money laundering, terrorism financing risks and technology risks as is provided in the Consultation Paper on Sandbox Express issued by Monetary Authority of Singapore.¹⁰⁴

The IRDAI Framework also contains provisions which grants massive powers to IRDAI to call, inspect or investigate any document, record, or communication from the applicant¹⁰⁵ which will definitely give rise to concerns of data leak and confidentiality breaches. Further IRDAI is only a guiding authority and the applicant is solely responsible for all actions taken in respect to the proposal and is liable to discharge all legal obligations.¹⁰⁶



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With the commencement of Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011 and a comprehensive data protection regime in form of Draft Personal Data Protection Bill, 2018, it must be a priority to add data protection, data privacy and accountability provisions under the IRDAI Framework.

D. Limited applicability

Under the Draft RBI Framework, only FinTech firms which meet the eligibility criteria prescribed for startups in India were allowed to enter the RS.¹⁰⁷ This requirement meant that only start-ups were allowed to enter into a RS which could have been counter-productive to the intent and purpose of RBI Framework. Many start-ups which collaborated with experienced companies in the industry, could have been rendered ineligible from participating in the RS. Hence, the RBI Framework allowed all FinTech companies including start-ups, banks, financial institutions and any other company partnering with or providing support to financial services business, to be eligible to entry into RS. Such an amendment will encourage both start-ups as well as experienced companies to participate in the RS since the intent of RBI Framework is to encourage innovation in the financial sector and not only to encourage start-ups.¹⁰⁸

The RBI Framework still has limited applicability when compared to the SEBI Framework which is applicable to all entities including individuals with an intent and need to innovate on products/services/solutions. SEBI Framework is more inclusive in that sense and seeks to solely promote innovation in securities and exchange market by not restricting the entry to only certain entities such as FinTech companies or start-ups as is the case with the RBI Framework.

IRDAI Framework also envisages a wide range of insurance sector entities to apply to IRDAI, either singly or jointly to promote innovation in the insurance sector.¹⁰⁹

E. Duration of RS period

Clause 7 of the RBI Framework has prescribed a time period of approximately six months for each cohort of the RS subject to an extension of the sandbox period vide an application by the applicant, with valid reasons to support the extension. This time period may not be enough to gauge the benefits and risks of the new innovation. Hence, the time period for testing an



innovation in a RS must be suggested by the participant itself¹¹⁰ which may be evaluated through an objective criterion set out by the RBI.

For example, SEBI Framework provides a time duration of twenty-four months during which time the entire sandbox should move towards complete digital environment. However, it recognizes that the IS should be flexible and adapt to incorporate changes once the IS evolves and matures.¹¹¹ This can be interpreted to mean that the time period of twenty-four months may be further extended by SEBI depending upon how the products/services/solutions react in the SEBI Framework.

However, the IRDAI Framework provides the least amount of time to an applicant innovating under a RS and provides no extension beyond a period of twelve months, under any circumstance.¹¹²

F. Negative List of products/services/solutions

The RBI Framework provides a list of products/services/technology that cannot be considered for testing such as credit registry, credit information, crypto currency/crypto assets services, trading/investing/settling in crypto assets, initial coin offerings, etc., chain marketing services, or any other product or services which has been banned by the regulators/Government of India¹¹³. However, the SEBI Framework and IRDAI Framework do not provide any such negative list. This may lead to a conflict and contradiction between the positions taken by the market regulators of the country. RBI has since 2013 cautioned the investors from dealing in virtual currencies. This should not mean that any interested applicant which cannot otherwise experiment under the RBI Framework, is able to do the same under SEBI Framework and/or IRDAI Framework with slight market specific tweaking. SEBI/IRDAI must therefore, either provide a similar negative list of items which cannot be tested in the sandbox or clearly state that anything which is not specifically allowed under the circular/regulations is prohibited.

Having said that, the risks and benefits associated with virtual currencies can only be identified by allowing it to operate in an isolated environment with minimal effect on the markets and consumers. Further, virtual currencies are allowed to operate in regulatory sandboxes in the UK.¹¹⁴ The Indian government may also consider allowing virtual currencies to be experimented in India. Bodies such as NASSOCHAM and Payments Council of India has



advocated for an open framework by allowing crypto assets in the sandbox. They believe that

crypto currencies are based on block-chain technology which can resolve issues of security and governance with applications such as smart contracts and multi-party financial contracts enabling digital identity.¹¹⁵

G. FinTech Bridge Agreements

India can consider entering into FinTech Bridge Agreements such as UK-Australia FinTech Bridge Agreement and the Hong Kong-UK FinTech Bridge Agreement. This will enable India to actively collaborate with the foreign governments, FinTech industry bodies, FinTech regulators around the world and companies pioneering in the FinTech sector while simultaneously learning and adopting models suitable for growth of its own FinTech space.

For example, the UK-Australia FinTech Bridge Agreement builds upon the existing cooperation agreement between the UK Financial Conduct Authority and Australian Securities Investment Commission signed on March 23, 2016 and further agreement signed on March 21, 2018. The UK-Australia FinTech Bridge Agreement provides a framework for individual agreements between the relevant government and private sector parties from the UK and Australia to support cooperation in FinTech activities.¹¹⁶

Similarly, the Hong Kong-UK FinTech Bridge Agreement provides a framework to promote FinTech development in both places by holding panel discussions and award shows which brings influencers from the government, FinTech, investment and professional services to address challenges and mitigate the risks associated with FinTech markets.¹¹⁷

H. Common body for all market regulators

Instead of all the three market regulators releasing different set of guidelines for functioning of an innovation sandbox for their respective sectors, it would be advisable to establish a common body consisting of representatives of all market regulators and releasing one consolidated set of governing guidelines.¹¹⁸ This will create a harmonized regulatory environment especially when the primary objective of the market regulators is to promote innovation and provide maximum benefit to the consumers. This will further help RBI achieve the 4 Cs of competition, cost, convenience and confidence, as envisaged under the RBI Vision Document 2021.

Clause 7.1 of the RBI Framework provides that testing of products/innovations will be overseen by FTU. There are most likely to be inter-regulatory issues inside a RS. Hence, representatives from various regulatory departments such as inter alia, IRDAI, Pension Fund Regulatory and Development Authority ("PFRDA") and Department for Promotion of Industry and Internal Trade ("DPIIT") must be a part of FTU. It is unclear whether the domain experts which are proposed to be a part of the monitoring committee under the RBI Framework would be experts in other sectors as well.

This is similar to a Steering Committee envisaged under the SEBI Framework and a single point of contact under the IRDAI Framework. These bodies should also be open to having representatives from other departments for a fair assessment of the proposals submitted.

The RBI Framework allows a vast headroom for subjectivity and discretion exercisable by RBI in the selection of applicants and during the RS period. This must be replaced with a transparent criterion. For example, RBI may publish a template application form and disclose the constitution of the FTU. This will bring greater transparency and objectivity to the application selection, evaluation and rejection process. RBI may adopt an OKRA document as envisaged under the SEBI Framework¹¹⁹ which will provide an effective oversight on entire process of the RS.

An objective criterion is also required to be adopted under IRDAI Framework which contains provisions deeming the decision of chairperson of IRDAI on continuance/discontinuance of an applicant's proposal as final¹²⁰ and giving wide powers to IRDAI to call, inspect and investigate any documents, records or communication of the applicant. Disclosing the constitution of the monitoring committees which is bestowed with overwhelming powers under various frameworks, will bring comfort for the applicants experimenting in the RS and resolve any possible conflict of interest issues.

* Associate, Shardul Amarchand Mangaldas & Co Advocates and Solicitors, New Delhi. <ayushimishra26@gmail.com>

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³³ *Supra* note 16 at Para 6.5.2(d).

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⁵² *Supra* note 39 at Para 4 II (f).

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⁵⁴ *Supra* note 39 at Para 4 II (b).

⁵⁵ *Supra* note 39 at Para 4 II (c).

⁵⁶ *Supra* note 39 at Para 4 II (d).

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