Regulatory Approach to Emerging Issues in Banking and Finance[1]

The term bank, historically and more than ever today, covers a multitude of sins[i]. That, however, is not the reason for banking to be one of the most regulated economic sectors anywhere in the world. The one-word and age-old answer for strong regulation is that banks are 'special'. Traditionally, two important characteristics of the financial system which, though not ubiquitously unique anymore, give rise to the need for special regulation: systemic risk and information asymmetry. With slow and rapid changes taking place in the financial service industry, there have been debates since 1990s if banks continue to be 'special'. Despite arguments on both side, there is some kind of acceptance on its progressive erosion of the specialness, but the 'special' crown for banking still remains; and so, do the 'thorns' (of regulation). A school of thought argues that banks are not inherently special but only as special as central banks make them[ii]. In a traditional financial system, the financial stability essentially boils down to banking stability for the critical economic functions they discharge for the real sectors. For RBI, wearing many hats of central banking as it is, banking regulation remains one of its most visible and widely touching functions. The regulatory approach of RBI has not only been in lockstep with the emerging developments in and around the banking and finance, but it always strives to minimize the 'pacing problem'.

2. In its most expansive terms, "regulation seeks to change behavior to produce desired outcomes"[iii]. Regulatory approach means how a regulator gets to grips with problems in sectors, activities or markets under its jurisdiction in a systematic way that enables effective response to the unexpected while maintaining the expectations. This is basically achieved through (i) clear expectation setting; (ii) early identification of risks; (iii) compliance through supervision / enforcement and (iv) working with other stakeholders. After all, a regulation is as effective as its deterrence quotient and ground level compliance. Hence, any regulatory approach would involve both a systemic process for behavioral changes among those regulated and achievement of certain desired outcomes. The desired outcomes are not constants as these are linked to the moving targets of changing environments to which it relate. Similarly, the process to change a behavior is generally an iterative process with calibration and

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[1] **Keynote Address by Jayant Kumar Dash, Executive Director, Reserve Bank of India at CAFRAL Program on Current Issues in Banking and Finance on March 14, 2024**

recalibration. With such dynamics in play, regulatory approach to banking and finance always remains in an in-evolution state. Occurrence and recurrence of crisis-like situations, almost with cyclical regularity, never fail to remind us that we are never done with financial regulation. Outlining regulatory approach to emerging issues in banking and finance can only be directional rather than precise for the above reasons. Nonetheless, it would be interesting to pick up regulatory approach to emerging issues, particularly in banking, in a few select dimensions along with some theoretical and conceptual backdrop. Given the longer hours we have, it is difficult to resist the temptation, in the presence of so many practicing and policy making economists, to divide my remarks in two parts – first certain theoretical dimensions of regulatory approaches and second, the regulatory approach to specific emerging issues.

Part I

Regulatory Theories and Objectives

3. Generally, informational frictions and direct / indirect externalities create needs for regulation. Classically, two basic schools of thought emerged on regulatory policy, namely, positive theories of regulation (e.g theories of market power, interest group theories, regulatory capture theories etc.) and normative theories of regulation (e.g. competition theories, information asymmetry theories, principal agent theory etc.). In India, financial sector regulation evolved as an instrument of planned development at different points of time with distinct objectives such as savings mobilisation, allocation of investible resources mainly through public sector, using administered regimes to begin with. Co-ordination among the financial institutions took precedence over arms' length relationships or checks and balances, thus introducing what could be called a joint-family approach to financial transactions, undermining both the degree of transparency and the extent of accountability[iv].

4. Above all, financial regulation is intended to achieve certain policy outcomes such as market efficiency and integrity through liquidity, reasonable intermediation costs, information symmetry and as also addressing market failure. Financial consumer protection, particularly retail classes, continues to be an overarching objective of regulation. However, it has to be borne in mind that public policy arrangements should

never eliminate the incentive for consumers of financial services to exercise due care[v]. Facilitation of capital formation and access to credit and other products, prevention of illicit activities, taxpayer protection through safety nets, and financial stability are the other objectives. “In the context of financial stability, acceptable regulation should have three broad characteristics. Firstly, regulation ought to be predictable. A regulation susceptible to forbearing instincts carries the concomitant chance of risk inducing behaviour by stakeholders. Second, regulation should aim to shoehorn internal governance mechanisms of the regulated entities in an incentive compatible way. Finally, it should aim to address information asymmetry between the key stakeholders since the lack of information often leads to herd behavior, thus precipitating crises[vi].” An efficient regulation provides avenues for, while making it clear that regulation by itself does not guarantee risk-free transaction[vii]. The typology of regulation generally encloses prudential regulation, conduct regulation, disclosures and reporting, standard setting, anti-competitive regulation, price/ rate regulation, with interlinkages.

Regulatory Architecture

5. Quintessentially, there are three or four architectural models for regulating banking and financial sectors, configuring horizontal and/or vertical approaches. They are (i) Institutional or Sectoral approach (i.e regulator as per form of regulated legal entity; (ii) Functional approach (i.e regulators as per types of business conducted); (ii) Integrated approach (i.e single regulator / ‘Super Regulator’ for all purposes of all sectors); and (iv) Twin-peak approach (i.e regulator as per regulatory objectives namely, (a) systemic stability and (b) market conduct and consumer protection. Achieving consonance between objectives, approaches and action draws the shape of regulatory architecture. The choice of the ‘form’ that regulation should take often banks upon establishment of regulatory objectives to bake in the expected degree of congruence between the chosen approach and action, consistent with the regulatory objectives. Growing complexity of financial products, emergence of large financial conglomerates, BigTechs and the global financial crisis (GFC) have rendered effective regulation a go-to priority for economies around the world. There is a noticeable trend in recent years to move from the sectoral or institutional model of regulation towards the “Twin Peaks” model, despite perceived flipsides such as regulatory overlap and

risk of inter-regulatory cooperation and coordination. During last two decades, more than 80% of OECD countries have changed their regulatory architecture.

6. As for India, the architecture is technically sectoral as Department of Economic Affairs lists the financial regulators consisting of sectoral regulators such as RBI, SEBI, IRDAI, PFRDA as well as Gov. Ministries such as MoF and MCA. One of the big changes in regulation spurred by the crisis has been the advent of macroprudential oversight. For a macroprudential authority to operate effectively, it must be able to prioritize financial stability over other regulatory goals. This implies a hybrid approach of a micro-prudential (MiP) and macro-prudential (MoP) elements i.e having both hierarchical or vertical regulatory structure. However, it is difficult to predict the new regulatory architecture when financial services continue to lose clear demarcating lines while driving on common digital rails and Banking as a Service (BaaS) / Network as a Service (NaaS) model gaining wider acceptance.

Approaches to Regulation

7. Although there is a range of granular approaches to financial service regulation, three broad approaches embody most viz. (i) Rules-Based (prescriptive) Regulation – RBR, (ii) Goals-Based Regulation - GBR, and (ii) Management-Based regulation - MBR. In financial regulation space, the first two have more dominant relevance. An RBR approach sets out prescriptive and definitive actions, processes, standards, or requirements to be followed by the regulated institutions. This affords the latter to know their exact tasks and processes to achieve compliance without much interpretational risk. Au contraire, GBR approach sets high-level goals or principles for certain identified outcome(s) without any specific direction on the means to achieve compliance. GBR is a kind of umbrella term encompassing a group of similar alternative approaches to RBR, e.g principles-based regulation, standards-based regulation, outcomes-based regulation, and performance-based regulation.

8. The RBR and GBR differ on three main attributes i.e flexibility, interpretation and enforceability. The inbuilt flexibility of GBR affords regulated entities to experiment and develop innovative technologies and processes. Due to its adaptive characteristics, GBR is considered advantageous to sectors seeing rapid changes, such as financial

services or technology innovations. Empirically, the case that a ‘pure’ version of either GBR or RBR is a rarity, and various ‘hybrid’ approaches are adopted e.g goals packaged with non-binding guidelines and ‘safe harbours’ clauses; prescriptive rules packaged with qualifications and exceptions. Although it possible to characterise such approaches with GBR-like bias or RBR-like bias, a regulatory approach could be described as a spectrum between the two.

9. A basic consideration in settling on an approach is joining the expected degree of its consonance with action, keeping with the overall regulatory objectives. Such choice would have implications on the achievement of regulatory objectives in terms of, say, risk allocation, compensation structure and conduct dimensions of regulated entities. It also has implications for the regulatory enforcement style, including the capacity and expertise of the regulator. With end goals in view, an RBR focuses on the means of achieving them, and a GBR concentrates on the goals and not so much on the means. MBR focuses on the processes alone based on planning and analysis to develop a set of internal rules and initiatives that address the underlying problem motivating the regulation. Following the ‘Plan-Do-Check-Act’ cycle, regulated entities continuously review, measure, and improve their processes to ensure they are compliant. Despite the emerging approach for RBI to tilt towards GBR, the maturity level of the system still warrants a ‘bright line rules’ superimposed on GBR, that would in parts appear like RBR. In an environment of rapid innovation such as in FinTech and BankTech, principles-based regulation is favored to provide broad standards that can adapt to changing technologies and business models, rather than being tied to specific, dated or rigid rules. Such flexibility can lead to the development of more efficient, user-friendly, and secure financial products and services. Rules-based systems can lead to a checklist mind set, where firms focus more on ticking boxes than ensuring overall compliance in spirit. Principles-based regulation can reduce the number of specific regulations, making it easier for firms to understand and comply but interpretation can bring in complexities.

10. Regulations with a financial stability objective can be spilt into activity-based (ABR) or entity-based (EBR) regulations, essentially reflecting calibration of policy measures. ABR measures addresses an activity on a standalone basis, whereas EBR measures addresses a combination of activities at the level of entities. Calibration of ABR

regulation refers to a given (systemic) activity, regardless of the form of the entity which strengthens the resilience of this activity directly. On the other hand, EBR is calibrated to the combination of activities within an entity, thus strengthening the resilience of activities indirectly by reducing the risk and impact of the entity's failure. ABR would be the default choice when (i) an activity can be effectually regulated on a stand-alone basis and (ii) the failure of that activity – as opposed to that of the entities performing it – can create a systemic event. However, generally financial stability requires regulating the combination of different activities within entities demanding adoption of EBR measures. The inherent nature of financial intermediation, i.e riding on leverage and liquidity/ maturity transformation, give rise to financial vulnerabilities. From another perspective, although ABR targets systemic activities, they don't count the importance of individual entities undertaking the activity and thus cannot necessarily form MaP. ABR, rather than providing a level playing field, needs to impose stricter standards on entities that perform a larger share of a systemic activity. In Indian adoption of a 'belt-and-braces' approach to banking financial sector regulation, EBR and ABR reinforce each other.

11. In public policy space, the phenomenon called "regulatory chill' is believed to have negative impacts on sustainable regulation making. Regulatory Chill is a restraint of regulator to enact certain regulatory or policy measures as a result of litigation, or a fear thereof. While there is no unform definition of this, the response of regulation-makers to action of certain stakeholders often lead to what are called anticipatory chill, response chill or precedential chill.

Regulatory Sight Line – Backward vs. Forward Looking

12. Framing regulation after a crisis (i.e reactive, backward looking) is a recurrent theme in the history of banking and finance. In 1942, in the context of the proposals that led to the establishment of the IMF, John Maynard Keynes famously stated: "Perhaps the most difficult question is how much to decide by rule and how much to leave to discretion". -forward-looking'. Ever since, having a forward looking approach has become almost a *de rigueur*, not only in regulation or supervision, but in many other contexts. An old Russian proverb says "Dwell on the past and you'll lose an eye, Forget the past and you'll lose both eyes." A foot in the past and eye on the future is

the solution in settling the forward- and backward-looking regulatory regimes for banking and finance. Good regulation must be forward looking to prevent being obsolete fast. Looking backwards to take regulations forward is the new mantra in most regulatory approaches. Balance between backward and forward looking regulatory processes i.e rules and discretion, tend to vary from one life cycle stage to the other. (a) At the entry– via licensing, authorisation, it is always rule-based. The issues at stake, e.g the balance between competition and regulation and the function of this stage as catalyst or filter in the design of a sound banking sector cannot be discretionary. (b) In the second stage of supervision, the ongoing monitoring and oversight of the health of the banks and the banking system, are majorly a judgemental function, and hence the balance tilts towards judgement, albeit on the basis of clear and transparent principles. Risk monitoring and risk control entail a great deal of judgment too. The various supervisory tools require that supervisors exercise forward looking judgement. (c) In the third stage of sanction / enforcement, the regulatory and supervisory process, by definition, should be rule-based. The ladder of sanctions needs to be clearly known ex ante. (d) At a crisis management stage, a mix of rules and discretion/judgement works best.

13. Backward looking regulation tends to address gaps in regulation in one sector, region, and jurisdiction; but given the complexity and inter-connectedness of the financial system, activity swiftly spills over to another sector, region or jurisdiction. Threat to financial stability typically comes from quarters that regulators did not have in their scenarios playbook. Thus, forward-looking regulations are required to tackle such unforeseen risks. With help of technology driven models, future events with certain confidence intervals can be visualized and the defending regulations can potentially be structured. The recent thrust on two areas - cybersecurity and FinTech - is a case in point. A decade back, few bankers or policymakers talked about this threat. Today these are identified as major risks to the financial system. To pre-empt the materialisation of future risks, the regulators are vested with greater powers to act proactively and be more intrusive. The term ‘judgment-led’ regulation, however, needs to be based on hard, observable facts as opposed to a view as to what might happen in the future.

Regulatory Globalization

14. Regulatory globalization is the process by which reach of regulatory agencies extend internationally and *vice versa*. This happens through international standard setting vehicles e.g being member of global bodies such as BIS, FATF or through bilateral MoUs/ FTAs among jurisdictions. Since 1990s, the globalization in financial services has been driven by factors such as technology, deregulation and increasing international financial integration. The main drivers for such development include search of business opportunities and risk diversification, improving efficiency in capital allocation through scale economies, regulatory incentives with transparent and relatively less interventionist regulatory frameworks, following corporate clients in their global expansion. One of the man reasons for foreign banks exiting certain jurisdiction has been disproportionate regulatory burden. That has underlined the importance of harmonization of regulations, e.g standardization of some regulations, such as the Basel capital norms and prudential standards. However, this globalization approach has its wages and birth pangs. On conformance to global standards, the regulatory jurisdictions are subjected to global assessments such as Financial Sector Assessment Program (FSAP) by IMF, Regulatory Consistency Assessment Programme (RCAP) by BIS, Mutual Evaluation (ME) by FATF. On bilateral terms, the challenges in ironing out incongruent regulatory requirements across jurisdiction such as recent engagements of Indian regulators with European Securities and Market Authorities (ESMA) have also to be counted in.

Economics of Regulation

15. A critical aspect of regulatory analysis is evaluating the costs and benefits of regulation. In August 1986, Ronald Reagan was speaking in a White House conference of Chairmans of Small Business. To explain the progress his government had made, he alluded to the previous view of the government of the economy which went on to become a very popular quote. He breezily expressed government's view of the economy in a few short phrases: If it moves, tax it. If it keeps moving, regulate it. And if it stops moving, subsidize it. Regulation being a free good is a myth and regulations in financial services bring a complex set of costs and benefits. The literature on costs and efficiency of regulation generally count (a) direct estimates of the administrative burden of compliance with regulation including substantive

compliance costs and notional loss from delay in application and (b) econometric estimates of links between bank performance to the existence of regulators. Assessment of regulatory outcomes would involve, ongoing cost–benefit analyses, techniques to enhance the measurement of these outcomes, and economic principles to guide them. Net regulatory burden to the regulated entity is an important dimension for such analysis. The risk of regulatory overreach may result in additional administrative costs; excessive barriers to scale economies, scope or innovation; or the creation of renting models. Regulatory pressures continue to increase for banking institutions even to compensate for activities of less regulated/ unregulated entities intensifying volume, complexity and reporting obligations. In the regulatory analysis, the reasonableness of net regulatory burden (private costs less private benefits of regulation) vis a vis its beneficial externalities is relevant despite difficulty in its assessment.

16. A regulatory impact analysis (RIA) comprise objective and unbiased approaches for collecting, organizing, and analyzing both quantifiable and unquantifiable data on the impacts of policy options, as a part of evidence-backed policymaking. It critically assesses the positive and negative effects of proposed and existing regulations and non-regulatory alternatives. The ultimate policy decisions should be based on such impact distribution vis-à-vis the policy goals and other emerging concerns, while remaining within the boundaries of relevant laws. OECD analysis shows that conducting RIA within an appropriate systematic framework reflects regulator's capacity to ensure that regulations are efficient and effective in a changing and complex environment. The successful implementation of RIA has been found to be technically and administratively arduous even in advanced countries.

Regulatory Review and Stability

17. Stability, far from being unchanging, refers to a set of desirable and dynamic attributes of regulation such as predictability, effectiveness in achieving goals, time consistency, and enforceability as the operating environment changes. The choice of regulatory tool should therefore be consistent with maintaining a stable regulatory environment in financials service sector. Everyone wants regulation to be stable – unless they think it is bad regulation, when they want it changed at once[viii]. So,

regulators on the one hand, have to demonstrate intent of stability so as to encourage regulated banks to plan activities and capital allocation without being buffeted by regulatory ambivalence. On the other hand, they have to be amenable and flexible to adapt to new market realities, buoy up innovation, facilitate provider responsiveness, and offer regulatory improvements and adjustments to address any imperfections in the current regime. This demands strategies for 're-regulating' – that is adjusting regulatory regimes and controlling both the processes and rates of change so as to reconcile demands for both stability and responsiveness. It is possible to think of three different horizons of change in the regulatory tools. (i) First horizon changes involving incremental adjustments to and 'exploitation' of existing tools; (ii) Second-horizon changes involve 'exploration' of new tools or regulatory mechanisms in addition to that of first horizon; (iii) Third-horizon changes involving paradigm shifts and fundamental transformations in 'pure exploratory' / transformative mode in structures or techniques. A regulatory regime's stability is relative and cannot be judged according to a single timeframe[ix].

18. Events like recent Crédit Suisse (CS) and Silicon Valley Bank (SVB) debacle demands periodic review of financial system regulation. Over-reliance on government bonds deemed as financially safe and risk free in case of SVB was the critical undoing. It went to prove again that financial stability, and core underpinning concepts are moving targets. The event at CS too drives home the case for periodic "fit-for-purpose" review of regulation. Having spoken about RBR and GBR earlier, such recent unraveling can possibly blame failure of regulatory culture as well as regulatory alacrity. Enforcing effective compliance culture across large and complex multinational banks by mainstreaming regulations into banks' day-to-day processes without bumping the business flows is a daunting task for bank supervisors. The tick-the-box treatment of compliance still survives in many banks. Regulators, however, play a critical role here, too: when they consider that their job is done, they induce a false sense of continued safety for all stakeholders involved.

Part II

Alternative Regulatory Approach

19. With emphasis shifting to 'better regulation' and ease of doing business lately, discourses on relative merits of alternative regulatory approaches have gone mainstream among policy thinktanks and academic circles. The alternative regulations generally refer to those with less prescriptive, more flexible latitudes to regulated entities with some elements of self-regulation. This is could be actualized through calibrated GBR with certain RBR-type approaches as backstops in Indian context. The need for higher degree of punitive provisions for deviations is always a moot point in the context of a litigative culture among sections of regulated entities. The alternative approaches have a range of options other than the 'command and control' regulation such as flexibility based on performance, incentives or positive discrminatiom, market based instruments, co-regulation and self-regulation.

20. Self-Regulatory Organisations (SROs) in India has been experimented both in a stand alone form as well in a form of co-regulation adopted in certain situations. The recent draft guidelines on SROs indicate the regulatory approach to use this instrument in coming days. The idea of self-regulation generally involves the members of a group of regulated or quasi regulated entities coming together to establish rules of conduct and voluntarily committing to follow those rules. Typically, in the financial sector, the broad objectives of SROs reflect those of the financial sector regulator, viz., preservation of market and financial integrity and protection of customers / investors. This assumes more significance as newer forms of outsourcing is adopted by the regulated entities. With the guidance received from the regulator, they help instil professional market conduct amongst their members in order to ensure customer / investor protection. SROs often get involved in the documentation of operational guidelines that set out the rules of conduct and prescribe market conventions, standard procedures and documentation, master agreements, etc., to be followed by market participants. In some jurisdictions, they monitor adherence to codes of conduct and regulations issued by the regulator and are also empowered to take appropriate action in case of violations. SROs also establish dispute resolution frameworks to facilitate early resolution of disputes. In their developmental role, SROs serve as the representative of their members in various fora including in interactions with the

regulator. An integral part of SRO functioning is to impart training to the staff of their member organisations and to conduct awareness programmes. Thus, SROs in the current schema are expected to complement the regulatory / supervisory arrangements in financial sector.

Pro-Innovation approach to regulation

21. The roots and products of innovation, catalyzed by newer technologies, are often in enabling policies. Innovations work in a sporadic and unpredictable manner with high level of infant mortality. Start-ups see emerging technologies that are enabling and start building upon them with short 'time to market'. Hence, regulators are generally in catch-up mode and rarely in enablement mode *a priori*. In the first parts of 2000s, most regulatory activity was about trying to control the misconducts of innovative finance. However, at the end of the 2000s, enabling technologies, in particular cloud and the smartphone allowed a burgeoning class of FinTech start-up innovators to launch. The regulators were less prepared for this, but they liked the look of it as it would create more competition and efficiency in financial service. Regulators supported innovation projects internally and through sandboxes, bringing about a massive change. Most regulators are seeking ways to foster their digital finance and FinTech ecosystems to better support financial inclusion and sustainable development. At the same time, the potential of innovation is also sought be balanced against potential risks to financial stability, consumer protection and market integrity. In order to support these objectives, regulators are developing innovation facilities such as innovation hubs and regulatory sandboxes. New policy frameworks and the use of technology for regulatory and supervisory purposes ('RegTech' and 'SupTech') are also works in this direction.

22. Technologies itself support the regulators' shift from 'reactive' to 'dynamic' mode – enabling regulatory formation and compliance to evolve with changing market dynamics more effectively. Nonetheless, the challenge continues to be keeping up, protecting consumers, making sure things work right and avoiding failures without completely shedding some degree of characteristic risk-aversion. The sense of confidence surrounding new technology has aided regulatory support and held in course by a cautious regulatory approach. The economic and societal effect of digital

platforms raises a lot of questions for policymakers in terms of sufficiency of existing regulatory approaches and instruments to promote and safeguard public interests. The drawing board of a policy framework stands on the tripod of platform's characteristics, public interests, and policy options. A return-path analysis for assessing how the interventions affect the business model, whether it has the desired effect on public interests, and ensuring it has no undesired side-effects on public interests. As policymaking moves at a slower speed compared with the exponential growth of technology, regulators face a huge task heading into a new decade. The intersection of big tech and financial services is a puzzle yet to be solved.

New technologies in regulatory delivery

23. The RBI as a full-service central bank has employed emerging technologies in virtually all its functions while also encouraging their adoption in various parts of the financial system. This has also involved spearheading innovation and building up the digital public infrastructure. Within the RBI, big data analytics, AI and ML have been extensively employed in monetary policy, research and data management functions. On the supervisory front, the Advanced Supervisory Analytics Group (ASAG) has been set up to leverage ML models for social media analytics, know your customer (KYC) compliances and for gauging governance effectiveness. The establishment of an advanced off-site supervisory monitoring system—DAKSH – is helping to digitalise supervisory processes. An Integrated Compliance Management and Tracking System (ICMTS) and a Centralised Information Management System (CIMS) are two major SupTech initiatives being implemented for seamless reporting by supervised entities for enhancing data management and data analytics capabilities, respectively. On the digital financial inclusion front, the RBI Innovation Hub has pioneered the delivery of farm loans or Kisan Credit Card (KCC) loans in a fully digital and hassle-free manner. The RBI has also facilitated setting up of digital banking units (DBUs) by commercial banks, which will enable broader access to cost effective and convenient digital financial products and services.

24. The RBI's innovations in payment and settlement systems have been recognised the world over. It is now building upon the success of India's fast payment system – the Unified Payment Interface (UPI) - by incorporating functionalities like offline

payments through near field communication (NFC) technology (UPI Lite X), payments through feature phones (UPI123Pay), conversational payments. On the information technology front, the RBI is working on establishing a cloud facility for the financial sector in India. Taking cognizance of increasing geopolitical and climate related risks, a Lightweight Portable Payment System (LPSS) is being developed to process critical transactions during emergencies. The RBI is also developing a state-of-the-art greenfield data centre to address capacity expansion constraints to meet ever-increasing IT landscape needs and to avoid region specific risks.

Emergent Regulatory Topics

25. As we look at the challenges in the financial sector today, it becomes important to address the profound structural shifts that are transforming the shape of the financial sector. These transitions encompass a myriad of factors, each with its own set of unique challenges. These are also complex, multifaceted matters that demand nuanced, adaptable solutions.

(a) Digital Banking and FinTech: Regulators, including in India, are increasingly focusing on regulating digital banks and fintech companies offering banking services. This includes issues such as licensing requirements, capital adequacy, cybersecurity standards, and consumer protection measures specific to digital banking platforms. As digital banking and fintech continue to reshape the financial services landscape, regulators will need to develop frameworks to oversee these entities effectively. This includes addressing concerns related to consumer protection, cybersecurity, data privacy, and fair competition.

(**b) Open Banking:** Open banking, which involves sharing customer financial data with third-party providers through APIs, is becoming more prevalent in many jurisdictions. Regulators are developing frameworks to govern open banking initiatives, including data privacy, security standards, and consent requirements to protect consumer’s financial information. In India, Account Aggregators plays out the role of open banking across all financial service sectors.

(c) Artificial Intelligence (AI) and Algorithmic Models: The use of AI and algorithms in financial services presents both opportunities and challenges. Regulators may need to develop frameworks to govern the use of AI, algorithmic trading, and automated

decision-making processes to ensure fairness, transparency, and accountability in financial markets. Digital lending models and ECL are examples of current flavour.

(d) Data Privacy: With growing concerns about data privacy and consumer rights, regulators are implementing stricter regulations to protect customer data and ensure transparency in banking practices. This includes requirements for data localization, consent management, and data breach notification.

(e) Cybersecurity and Operational Resilience: Cyber threats continue to evolve, and regulators are increasing their focus on cybersecurity and operational resilience in the banking sector. This includes requirements for banks to implement robust cybersecurity measures, conduct regular assessments, and develop incident response plans.

(f) Regtech and SupTech: Regulators are increasingly embracing technology to enhance regulatory compliance, supervision, and risk management. Future regulations may encourage the adoption of Regtech and SupTech solutions by financial institutions to streamline regulatory reporting, improve data analytics capabilities, and strengthen compliance with regulatory requirements.

(g) Social Media Risk - The speed and scope of dissemination of information has been revolutionized by social media with quick and unhindered sharing. This also means that unsubstantiated rumors and false news can also spread equally quickly and can adversely affect financial institutions, especially banks. The recent banking turmoil in USA has jolted some of the widely held views regarding principles of liquidity management and nature and speed of bank runs. This episode has offered two important lessons: First, the trust is vulnerable to perceptions of weaknesses and misinformed social media commentary. Second, that in an age of social media and internet banking, the speed with which bank runs occur is unprecedented and therefore, the response time to handle any such crisis has telescoped to a fraction of what was hitherto considered acceptable. To address these challenges, constant and effective supervision, complemented by ability of the bank concerned to monitor and prevent spread of misinformation over social media, has become vital.

(h) Systemically Important Financial Institutions (SIFIs): Regulators are monitoring and regulating systemically important banks and financial institutions to prevent another financial crisis. This includes implementing enhanced prudential standards, resolution planning requirements, and cross-border cooperation mechanisms. The interlinkages have introduced newer institutions posing similar risks.

(i) Non-Bank Financial Institutions: Regulators are paying closer attention to non-bank financial institutions such as shadow banks, fintech firms, and payment service providers. This includes ensuring adequate regulation and oversight to address risks associated with these entities and maintain financial stability.

(j) Stress Testing and Capital: In response to the COVID-19 pandemic and other systemic risks, regulators continue to refine stress testing frameworks and capital adequacy requirements for banks. This includes assessing banks' resilience to different economic scenarios and ensuring they maintain sufficient capital buffers to absorb losses.

(k) Climate Risk and Sustainable Finance: Regulators are increasingly focusing on integrating environmental, social, and governance (ESG) factors into banking regulations. This includes requirements for banks to disclose their ESG risks and impacts, as well as efforts to promote green finance and investment practices with sustainability goals. We are all aware of the global challenge that climate change poses to our planet and its impact which is felt across the world. The transition to a more sustainable, environmentally responsible financial sector is no longer an option but an imperative. As societies demand greater commitment towards a cleaner greener environment, regulators must undertake the task of integrating climate risks into the regulatory frameworks. Ensuring that financial institutions consider the environmental impact of their actions while simultaneously managing the flow of credit, demands a delicate balancing act and requires collaborative solutions. The moot question which the regulators have to deliberate on is whether climate risk is a unique risk that need to be captured separately and thus requires a separate framework on a standalone basis or whether it transverses across credit, market and operational risks and can be captured as a part of the existing risk frameworks. Another point of debate is whether these risks need to be captured as combination of pillar 2 (supervisory review) and pillar 3 (market discipline and disclosures) requirements or is it better to capture the risk as part of pillar 1 (capital and liquidity) straight way.

(l) Consumer Protection and Financial Inclusion: Regulators are expected to prioritize initiatives aimed at protecting consumers' rights, promoting financial literacy, and expanding access to banking services, particularly for underserved populations. This may involve implementing measures to prevent predatory lending practices, improve transparency in financial products, and facilitate the adoption of innovative technologies to enhance financial inclusion.

(m) Anti-Money Laundering (AML) and Counter-Terrorist Financing (CTF): Regulators are strengthening AML/CFT regulations to combat money laundering, terrorist financing, and other financial crimes, some of which bank on new technologies to proliferate. This includes implementing stricter customer due diligence requirements, enhancing transaction monitoring systems, and promoting information sharing among financial institutions.

26. The approach to address the emerging and long emerging issues, regulatory design principles would require (i) policy mixes incorporating instrument and institution combination (ii) preference for less interventionist tools (iii) escalating up an instrument pyramid only to the extent necessary to achieve the policy goals (iv) participants empowerment to act as surrogate regulator (v) opportunities maximization for going beyond compliances. RBI has been adopting approaches in the above lines to foster and support innovations and dynamism while balancing it with financial stability considerations to manage transitions.

(a) Simplifying Regulations: The regulatory instructions have evolved over a period of time in consonance with the developmental trajectory of the financial system and institutions. The regulatory perimeter has also expanded in step with newer business models, product lines and geographical territories. Over time, this may have led to certain regulations becoming complex with concomitant increase in compliance burden. Therefore, a periodic stocktake is useful to review the regulatory instructions and compliance procedures with a view to streamlining/ rationalising them and making them more effective. The RBI had set-up Regulations Review Authority 2.0 (RRA) in 2021 (following the RRA 1 set up in 1999) to undertake this task and ensuring simplicity of regulations that has become a priority for us. In my view, future regulations must be responsive to the evolving need of the financial system. For this to happen, we have adopted a five-pillar strategy: (i) making sure that future regulations are forward looking and proactive; (ii) being nimble in our regulatory approach to match the accelerated pace of change has accelerated; (iii) more data driven and impact assessment oriented approaches to regulation; (iv) adoption of a more consultative approach to regulation making; (v) collaboration with more stakeholders including Govt., regulated entities and private sector.

(b) Bringing customer conduct into focus: In whole scheme of regulatory things, the 'customer' must remain at the front and centre. The two primary objectives of regulation viz. financial stability and customer interest protection leads to two broad categories of regulations – prudential regulations and conduct regulations. Prudential regulation builds foundation for financial stability, while conduct regulation lays the ethical foundation for maintaining customer trust, together help in safeguarding the integrity of our financial system. Despite a sectoral regulation approach in India, within RBI, a twin peak model has been emulated in RBI by segregating the prudential and conduct regulation since 2021 after unifying sub-sectoral regulation such as that for commercial banks, cooperative banks and NBFCs. RBI's endeavour has been to inculcate responsible conduct on the part of the regulated entities. To further strengthen our approach towards conduct regulations, the guiding philosophy remains to set certain minimum regulatory expectations, with the option for entities to adopt higher standards depending upon their size, proportionality and customer focus.

(c) Principle Based vs Rule Based Regulations: The Reserve Bank, as a matter of policy, has been gradually giving banks greater operational freedom to conduct their business operations within the overarching regulatory framework. We are thus moving at a good pace towards making our regulations increasingly principle-based.

(d) Maintaining a Level Playing Field: A level playing field ensures that all participants operate within a fair and consistent regulatory framework where the potential risks and rewards of the financial system are evenly balanced. A level playing field is a key condition for a competitive financial sector. As a regulator, we are following the principle of "same activity, same risk, same regulation". This approach can be seen in the case of our guidelines on digital lending, loss default guarantee (LDG) and microfinance sector. However, as explained earlier, a perfectly level playing field may not exist. Maintaining a level playing field is counter balanced by ensuring regulations that are proportionate to the risks posed by the firm to the financial system. This thought has underscored our revised scale-based regulatory approach to NBFCs and revised tier-based regulatory framework for UCBs. It, however, must also be appreciated that limiting the potential for regulatory arbitrage and establishing a level playing field for market participants is an important objective but not an overriding one. To ensure efficient market functioning and, more broadly,

to safeguard the public interest, policymakers may, at times, need to treat different players differently.

Conclusion

27. Framing regulations in today's dynamic and interconnected world has to be a challenging task, but it is a challenge regulators are fully committed to overcoming. The most important contribution of regulators to the society to do their job right – by making forward looking, risk-based and proportionate regulations and implement them in a consistent manner. At the same time, process of regulation making must yield a net beneficial surplus for the financial system with force multiplier power as well. Even as RBI moves forward on these lines, it remains steadfast in its dedication to maintaining stability, fostering growth, and safeguarding the interests of customers. To sum up, the five classic principles of good regulation provide a guidepost to regulators while deciding the approach to regulation on any emergent issue. They are (a) transparency i.e comprehensible with clear objectives; (b) accountability i.e criteria against which its effectiveness can be judged; (c) proportionality i.e having regard to the possible cost on the regulate and alternatives; (d) consistency i.e being consistent not only in itself but with other regulations as well; and (e) goal-orientation i.e focused on the problem it seeks to address with minimum side effects. Supervision and enforcement actions need to be risk-based.

I wish the best for the remaining deliberations in the program and hope everybody goes back more illuminated. Thank you very much.

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