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NITI Aayog

DIGITAL BANKS

A Proposal for Licensing & Regulatory Regime for India

REPORT

July 2022

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Acknowledgements

In writing this Report, "A Proposal for Digital Banks in India: Licensing & Regulatory Regime", we are pleased to have collaborated with Black Dot Public Policy Advisors as the knowledge partner. Mr Mandar Kagade, Founder Principal at Black Dot made valuable contributions in developing this Report.

Ms Shehnaz Ahmed of the Vidhi Centre for Legal Policy acted as external expert reviewer of the Report and offered detailed comments and inputs. We acknowledge her valuable contribution.

We are also grateful for the support and inputs from the Department of Financial Services, Ministry of Finance, representatives of public sector banks including the State Bank of India, and Sabyasachi Upadhyay, Associate, NITI Aayog.

Useful insights were also obtained from the deliberations in the conference, "Neo-banking for Business: The Future of Digital Banking", especially Mr Sopnendu Mohanty, Chief Fintech Officer, Monetary Authority of Singapore. They are gratefully acknowledged.

Last but not the least, the inputs offered by the fintech sector stakeholders who were approached for inputs in the course of drafting this Report is acknowledged. NITI Aayog would endeavour to continue with the stakeholder consultation in evolving policy dialogue.

Anna Roy
Senior Adviser
NITI Aayog

Foreword

India has emerged as a global leader when it comes to fintech innovation. IndiaStack and related developments in the domestic fintech industry and Unified Payments Interface recorded impressive growth. In addition, India has given the world its own version of "open banking", the account aggregator framework that recently went live, enabling the consent-based transfer of financial data between regulated intermediaries. Having prepared the bedrock of financial innovation and inclusion, it is time to look towards the next steps in the direction of digitalisation in the banking, financial services, and insurance sector- with the advent of a "full-stack" digital bank – entities that will issue deposits, make loans and offer the full suite of services under the existing regulatory regime.

The Report on licensing and regulatory regime for Digital Banks released by NITI Aayog aims to cement India's place as a trailblazer in fintech industry. The report highlights the promise that full-stack Digital banks hold as a potential solution for the persistent policy challenge of credit deepening. It is the next stage of financial inclusion. Technology and increased digitalisation are bound to be disruptive for the incumbents impressing the need to provide a level playing field between different business entities for holistic growth of the sector.

The Report addresses the feedback received from 24 organisations, large-scale multi-stakeholder round table discussion, and a series of consultations with industry leaders and experts. I extend my support to all the Ministries, Fintech organisations, platforms, and others who can work on the implementation of the Report's recommendations for a "full-Stack" digital Bank.

Suman Bery
VC, NITI Aayog

Message from the CEO

This Report offers a template and roadmap for a Digital bank licensing and regulatory framework in India.

While the Digital India revolution catalysed by PMJDY, e-KYC and UPI has led a paradigm shift in the way India interacts with and consumes financial services.(PMJDY, launched in 2014, has witnessed 420 million bank accounts opened till date. UPI was launched in 2016 and has become a bellwether real-time payments system clocking ₹ 4 trillion in value transactions till date), there is a long way to go when it comes to credit deepening in the economy. The IFC estimated the addressable credit gap in the nation for MSMEs to be INR 25 lakh crores and growing, in 2019. Meanwhile, credit to GDP ratio on the retail side is also low (compared to economies of the size of India). This credit gap and the business and policy constraints highlighted in the Report reveal a need for leveraging technology effectively to cater to the needs of this segment and bring them within the formal financial fold. With this in mind, the Report examines the prevailing addressable credit gap, demographic niches that are presently underserved/ unserved, global regulatory best practices in licensing Digital Banks and potential risks and mitigants involved to recommend a new segment of regulated entities – full-scale digital banks licensed under Banking Regulation Act. Furthermore, the Report lays out a detailed architecture and sequencing of proposed reform. NITI Aayog in consultation with the Department of Financial Services had released a draft version of this Report as a Discussion Paper in November 2021 to undertake stakeholder consultations. Comments were received from 24 organizations on the Paper. Responses were also received in a round table discussion on the Paper organised on February 25, 2022. Based on all the comments received the final Report is now being released as a policy recommendation from NITI Aayog.

In conclusion, with the establishment of India Stack, the Aadhar layer and the UPI rails that catalysed a payments revolution in this nation, India has become a beacon for global community of Nations. Fully Digital Banks will reinforce India's apex position on the global firmament. The Digital Bank licensing and regulatory framework proposed by Niti Aayog in this Report is a bold initiative towards that inevitable digital future.

Param Iyer

Parameswaran Iyer
CEO, NITI Aayog

Contents

List of Abbreviations

AA	Account Aggregator
ATM	Automatic Teller Machine
B-A-A-S	Banking as a Service
BR	Banking Regulation (Act)
CAC	Customer Acquisition Cost
CAGR	Compounded Annual Growth Rate
CBS	Core Banking Solution
CGTMSE	Credit Guarantee Fund Trust for Micro and Small Enterprises
DB	Digital Banks
DICGC	Deposit Insurance and Credit Guarantee Corporation
e-KYC	e-Know Your Customer
ECLGS	Emergency Credit Line Guarantee Scheme
FIBAC	Annual FICCI Conference on Banking
FPC	Fair Practices Code
FSCS	Financial Services Compensation Scheme
GDP	Gross Domestic Product
GFC	Global Financial Crisis
IFC	International Finance Corporation
IMF	International Monetary Fund
INR	Indian National Rupee
MAS	Monetary Authority of Singapore
MSME	Micro Medium and Small Enterprises
NBFC	Non Banking Financial Company
NEFT	National Electronic Fund Transfer
NFB	New Finance Bank
NIM	Net Interest Margin
NPCI	National Payment Corporation of India

PCI-DSS	Payment Card Industry Data Security Standard
PMJDY	Pradhan Mantri Jan Dhan Yojana
PRA	Prudential Regulation Authority
PSP	Payment Service Provider
RBI	Reserve Bank of India
RTGS	Real Time Gross Settlement
UK	United Kingdom
UPI	Unified Payments Interface
VAS	Value Added Services

Introduction

This Report makes a case, and offers a template and roadmap for a Digital bank licensing and regulatory framework in India.

Section II gives a summary of recent developments in the area of financial inclusion and the rapid strides India has made in that direction catalysed by PMJDY and India stack.

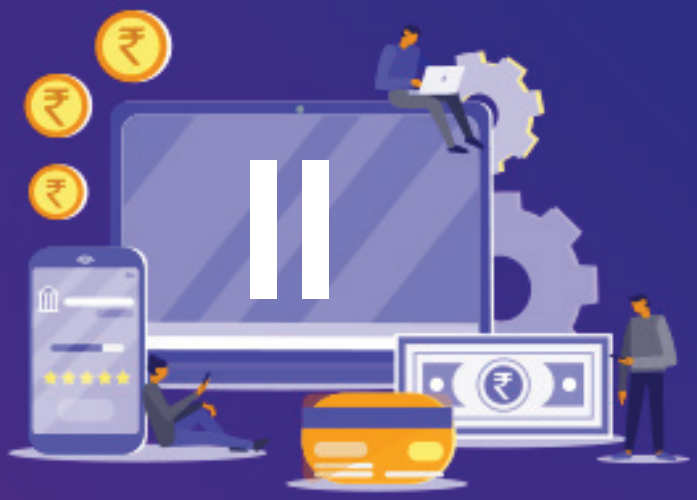
Section III caveats these achievements by observing the identifying significant credit gap that persists among various segments, like the MSMEs underlining the need for complementary mechanisms. Likewise, section III also points to macro data on the retail consumer credit market that suggest credit gap may be a feature of that market as well.

Section IV explains the promise and gives an overview of the prevalent business models, while defining the concept of "Digital bank".

Section V explains the bank-fintech partnership model that has emerged in India in the context of absence of a Digital bank license regime.

Section VI describes the elements of a "Digital Global Regulatory Index", created for the purposes of this Report and maps out the regulatory practices of certain identified benchmark jurisdictions against the Index.

Finally, **Section VII** serves as the capstone and recommends a template for a Digital bank licensing regime/regulatory framework and a pathway for sequencing the ensuing reforms. Section VIII concludes.



II Financial Inclusion: Recent History & Evolution & India's Rapid Strides

The Nachiket Mor Committee Report ("**Committee**"), released in 2014 marks an important milestone towards promoting financial inclusion in a mission mode.[1] One of the salient recommendations of the Committee was differentiated banking policy, ie. issuing specialized bank licenses that would harness narrow specialization along a given dimension rather than have every bank do everything and pursue every opportunity on both sides of its balance sheet.[2]

Pursuant to the Committee's recommendations, RBI issued guidelines for both Payments Banks (PBs) and Small Finance Banks (SFBs), in 2014 respectively. PBs were essentially "narrow banks" that issue deposits, offer payments services and not issue credit in any form , thus having no asset side of the balance sheet (**See Box below**). SFBs[3] are full-fledged banks that focused principally on lending to small businesses. The motivation appeared to be that with the benefit of the banking license, SFBs could leverage low-cost deposits to lend to micro, small and medium sector enterprises and enable financial deepening.[4]

Payments Banks

- Are essentially narrow banks that issue deposits and earn income from HQLAs and fees from distribution, aimed at furthering financial inclusion.
- The focus was issuing safe deposit as store for value to unbanked customers and offer payments services on top of that account eg. remittance
- Are also envisaged as distribution points for other socially relevant financial instruments (e.g. insurance).
- 11 licensees applied. Only 6 continue to operate.
- The RBI recently offered these Payments banks an up-ramp onto Small Finance bank license.[5]

1 Report of the Committee On Comprehensive Financial Services for Small Businesses & Low Income Households (2014) available at, https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/CFS070114RFL.pdf

2 See p. 4 of the Report (Preface).

3 The recommendation of issuing a specialized small finance bank was first made by the Committee on Financial Sector Reforms in 2008. See A Hundred Small Steps: Report of the Committee on Financial Sector Reforms available at, https://faculty.iima.ac.in/~jrvarma/reports/Raghuram-Rajan/cfsr_all.pdf

4 The Committee defined "financial deepening" as the percentage of credit: GDP at various levels of the economy.

5 See https://www.bloombergquint.com/business/payments-banks-may-convert-to-small-finance-lenders-in-three-years-rbi-working-group

Small Finance Banks

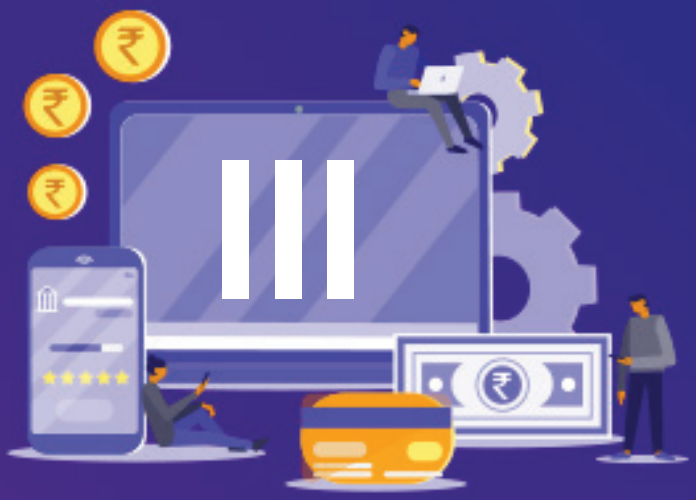
- Have to maintain at least 50 % of the loan portfolio in ticket size of ₹ 2.5 million and below.
- 75% of the credit to sectors identified as priority sector
- Are envisaged to leverage technology to increase coverage and financial deepening.
- 11 SFBs presently licensed and operational
- The RBI recently issued a framework for "on-tap" regime for SFBs

Even as these reforms took shape on the banking front, a broader Digital India revolution catalyzed by PMJDY, India Stack, e-KYC and UPI led a paradigm shift in the way India interacted with and consumed financial services. Under PMJDY, launched in 2014, 420 million bank accounts have been opened till date. UPI, launched in 2016 was the bellwether of enabling real-time payments system, clocking ₹ 4 trillion (in value) transactions till date. Starting from peer-to-peer use-case, it has since leveraged third party applications - fintechs and pure-play technology incumbents - as channel partners to add commercial use-cases across varied contexts. In parallel, India has also taken steps towards operationalizing its own version of "Open banking" through the Account Aggregator ("**AA**") regulatory framework enacted by the RBI. Once commercially deployed, the AA framework is envisaged to catalyse credit deepening among groups that have hitherto been under-served.

However, while regulatory innovation has catalysed payments sector reforms, the principal beast of burden for credit delivery and issuance of demand deposits, ie. the incumbent bank has remained undisrupted. Most of these reforms upended the user experience, i.e. the engagement layer of payments but making little improvement in the core utility banking layer.

Partly flowing from that inertia, the country still has large segments who have not befitted from this digital revolution.


Payment Successful



Are We There Yet? Current Credit Gap, Business & Public Policy Constraints

Despite the rapid strides India has taken to further its financial inclusion agenda, the lack of financial deepening remains a challenge, especially on the small business financing agenda. The latest MSME census (2015-16) figures indicate India has 63.88 million unincorporated MSMEs, (of which about 99 % (63.5 million) are categorized in the "micro" bucket).[6] MSMEs have been creating north of 110 million jobs, per the 73rd round of National Sample Survey, 2016 cited in the MSME Annual Report, 2020-21. The share of MSME gross value added in the national GDP for the year 2019-20 is 30%.[7]

A substantial fraction of these 63.88 million remain outside the ambit of formal finance and there is continued reliance on informal money markets like money lenders (quick disbursal without documentation) or chit funds (delayed disbursal but lower interest rates than money lenders) to finance itself, even at the cost of staying uncompetitive owing to the usurious interest burden.[8]

IFC[9] estimates the total addressable credit gap in the MSME segment to be ₹ 25.8 trillion and growing at a CAGR of 37% (total addressable market demand by the MSME sector is approximately ₹ 37 trillion, of which banks, other institutions and NBFCs supply about ₹ 10.9 trillion). Over the years, the RBI has aligned its regulatory policies towards the objective of financial deepening including revising the Priority Sector Lending guidelines and prescribing sub-bucket wise allocation for the micro and small segment. Despite these measures having yielded some success[10], an addressable credit gap of ₹ 25 trillion credit gap suggests room for further structural policy reforms.

Traditional brick and mortar banks, even with the most optimum priority sector guidelines, face business constraints in evaluating credit risks of small ticket sizes (roughly ₹ 0.1-1 million) that the micro and small sector enterprises may require. A principal inhibiting factor is lack of ability to under-write the credit risk (schematic given in Figure-I below).

6 See MSME Annual Report, 2020-21 available at MSME-ANNUAL-REPORT-ENGLISH%202020-21.pdf p. 23

7 https://www.pib.gov.in/PressReleasePage.aspx?PRID=1744032#:~:text=As%20per%20the%20information%20received,30.5%25%20and%2030.0%25%20respectively.

8 See Estimation Of Debt Requirement of MSMEs in India available at https://www.intellecap.com/wp-content/uploads/2019/04/Financing-Indias-MSMEs-Estimation-of-Debt-Requireme-nt-of-MSMEs-in_India.pdf p. 38 (hereinafter, "Estimation of Debt")

9 See Estimation Of Debt, supra footnote 8, p.11

10 See footnote 2 at p. 40

Firstly, as IFC research suggests, many of these MSMEs rely on informal money market instruments and money lenders for their debt demand out of preference. This "opting-out" means that the owners never create a credit history with the credit information companies that banks may evaluate the credit risk against. Secondly, even if the MSME owners have a personal loan or other exposure to formal financial markets, their debt profile is "blended" in that it is partly funded in formal and partly in informal money markets. Since the informal debt definitionally is not visible in the credit bureaus, lenders exercise *rational apathy* towards funding the MSME segment.[11] In other words, the costs of due diligence that a bank will incur towards evaluating the credit risk adjusted against the ticket-size and the yield from the loan make it unviable.

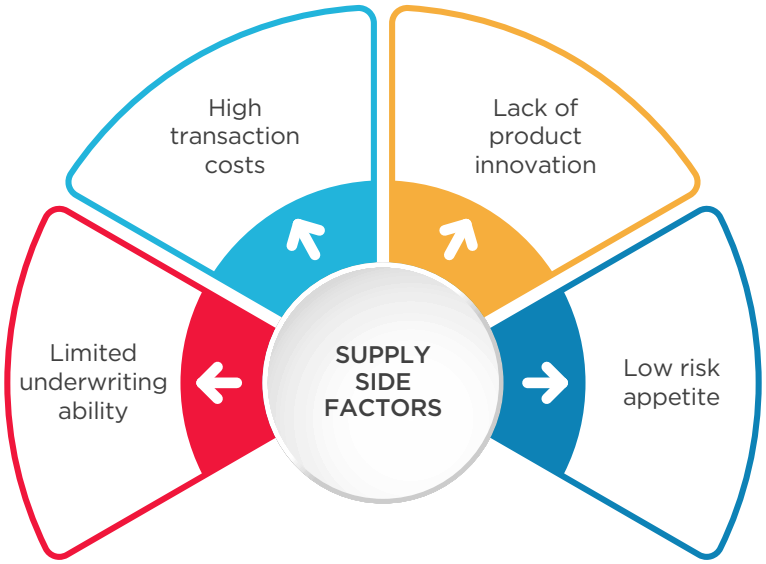


Figure I: *Supply Side constraints in traditional brick and mortar banking*

The other part of this conundrum is that being regulated entities and as fiduciaries of public trust in that they issue retail deposits and are critical Payment Service Providers (PSPs), the compliance requirements of applying for a bank loan are onerous for an unincorporated micro and small enterprise owner ("**MSE**"). So, even in cases where the bank may otherwise be willing to fund a prospect, the adjacent documentation cannot be produced readily.[12] In such cases, it is trite that the MSE owner will *rationally* opt-out and prefer the informal markets with their light-touch processes. Thus there is both demand-side and supply-side friction that results in what economists refer to as "market failure" in the formal MSME debt markets.

The other supply side stakeholder here are the NBFCs. NBFCs are regulated moderately relative to banks and have leveraged that autonomy to develop distribution, underwriting and product expertise in niche areas that are not serviced by banks.[13] This is especially true of the modern NBFCs that have digitized all elements of their value chain[14], giving

11 See Estimation of Debt, supra footnote 8 p.62

12 See Estimation of Debt, p. 60

13 Segments like Ho-Re-Ca (hotels, restaurants and cafes) that banks are reluctant to lend to, for example.

14 NBFCs leveraging financial technologies can embed MSE loan journeys in e-commerce platform applications for example. They can underwrite the MSE basis the inventory and sales data available with these platforms.

them greater reach as evidenced by a larger market share than banks in MSME funding. However, lacking the ability to take deposits, they rely on funding from bank loans and debt capital markets themselves. This translates into higher cost of capital for the NBFCs with corollary consequences for the MSMEs relying on them. By way of illustration, even one of the largest well-capitalized (deposit-taking) NBFCs in India has a cost of funds of approximately 7.5%.[15] A well-capitalized bank by contrast raises funds at 3.8%.[16]

This canonical example informs us about the "bank license premium" that the credit markets offer to the borrowing entity. Evidently, the cost of funds for NBFCs lower down the pyramid is progressively *and non-linearly* higher. Prudent asset-liability management requires them to observe credit cost discipline, thus limiting their ability to issue loans and other facilitation to micro and small enterprises, lower than a viable level of net interest margin (NIM). While NBFCs, especially those that utilize technology for distribution and underwriting have lowered cost-to-serve in terms of these costs, their lack of access to e-KYC channel via Aadhaar authentication constitutes a fixed cost-to-serve that policy reform is yet to ameliorate. (The recent RBI circular opening up access to e-KYC via Aadhaar for NBFCs on the approval route is one step in that direction).

The other salient supply side solution that has emerged in the recent years is Trade Receivables Electronic Discounting System (TReDS). TReDS licensed in 2016 was aimed at addressing the high receivables problem of MSMEs and brings corporate buyers, their MSME supply chain and regulated financing entities together to enable "non-recourse" funding to the MSME suppliers. While sound in theory,[17] as observed by the U K Sinha Committee, the bill discounting platforms have failed to take off and create meaningful volumes of invoice discounting. Some of the principal challenges are:

Lack of corporate buyer incentive:

- **The procedural guidelines are too restrictive.** The buyer is required to relinquish any rights to dispute the service / goods delivered at the time it accepts the invoice to be discounted ("factoring unit").[18] While this is assuring for the financing parties, it inhibits the corporate buyer from on-boarding in the first place because it would be waiving its rights to dispute the goods and services by accepting the "factoring unit". (A better design principle here could be for the platforms to purchase business insurance for the benefit of the financing party. That would preserve the rights of the corporate buyer without prejudicing the financing parties).
- **Unduly restrictive:** As these platforms are meant only for the MSME suppliers, they deter corporate buyers with diverse supply chains that may have non-MSME suppliers. They may be reluctant to bifurcate and operate two invoice discounting systems.

15 See https://www.bajajfinserv.in/fy21-bajaj-finance-q3-investor-presentation.pdf available at, p.6

16 See https://www.kotak.com/content/dam/Kotak/investor-relation/Financial-Result/Annual-Reports/FY-2021/Kotak-Mahindra-Bank/Kotak-Mahindra-Bank-Limited-FY-2020-21.pdf available at p.149

17 It shifts focus of financing parties from the seller that is financed to the corporate buyer because the financing parties are in effect under-writing the buyers in this case. By so shifting the focus, it enables the micro and small enterprise to get funded "off-balance-sheet".

18 See eg. Clause 5.2.2 of the Master Supplier Agreement of M1 Xchange one of the TreDS available at, https://online.m1xchange.com/docs/MasterAgreement.pdf

Other Lean proprietary invoice discounting programs on the market:

- Many corporate buyers have corporate treasury departments that operate their own reverse factoring programs (supply chain financing programs) for their supplier ecosystem. Other banks including SBI also offer such programs for their clients, for vendor and dealer financing.

Shallow pools of financing capital:

- Only RBI regulated entities can bid on these platforms.
- In fact, till the recent enactment of the Factoring (Amendment) Act, 2021, only a limited set of NBFCs (NBFC-Factors) other than banks were permitted to finance through these platforms.

The recent pandemic also brought the financing gap for MSMEs in the *informal sector* into sharp relief. Although both Atma Nirbhar and ECLGS 2.0 were a success,[19] coverage had to be restricted to "banked" MSMEs only. Furthermore, disbursal of loans took upto 60 days leading to loss of critical business for some MSMEs.

An exhaustive review of reasons underlying the financing gap for the MSME sector is beyond the scope of this Report. Nonetheless, the current credit gap and the business and policy constraints this section highlighted, reveals there is a need for licensed entities that leverage technology to moderate the costs of acquisition and cost-to-serve and also have the benefit of low-cost deposits to sustainably supply credit to the MSME sector.

Moreover, with the rise of entrepreneurship, there are new forms of "digital-native" micro and small businesses emerging that have novel business use-cases that they expect their bank to offer them. A typical example in this regard is a gourmet cafe / bakery (typically incorporated as a privately held company) in an urban center that relies on subscription-based S-A-A-S vendors for its office operations. It needs a credit line tailored to its billing and payment cycle to manage its working capital cycle better. Traditional banks (including small finance banks that essentially operate to issue loans to traditional micro and small enterprises)[20] may not be able to customize credit codes on their CBS on the fly for this client.

Retail Credit: Data & Recent Evidence Suggest Credit Gaps Demand Policy Intervention

Furthermore, as the feedback received on the first draft of the Discussion paper (published on November 25, 2021), suggests, although policymakers have focussed on it less than the credit gap for MSMEs, there is a discernible credit gap in the retail credit market in India as well. Data supports this proposition.

19 8.7 million of the 9.2 million borrowers were MSMEs. 82 % of the ₹ 3 trillion CGTMSE guaranteed financial assistance was disbursed. See Minister, MSME replying to a related query in Rajya Sabha.

20 See Management Discussion and Analysis AUBank available at, https://www.aubank.in/assets/Digital/pdf/mda.pdf p.111 (highlighting the opportunities in the MSME credit space for Small finance banks lie with a borrower profile that is in the unorganized sector relying on cash basis accounting). Moreover, established Small finance banks typically issue loans in their core markets and rely on urban centers to issue demand and term liabilities. So, they are not the ideal vehicle to serve the needs of urban businesses.

- It is (also) an under-penetrated market in terms of credit.

  There is significant room to grow consumption in India and promote credit usage. A data point from a recent CIBIL Report underscores the point; out of a total 220 million credit-eligible retail customers, CIBIL found that banks are servicing 33%. As CIBIL notes, the balance 150 million customers are inactive but will have credit needs that need to be serviced. Reflecting this, India has an under-penetrated credit card market. There are approximately 66 million outstanding credit cards (3 cards per 100 of pop; compare that to 892 million outstanding debit cards).

  At a macro level, the PFCE component of the GDP has been a moderated 60%. India's household debt/GDP is ~12%, arguably low by comparable standards.[21] A BIS study estimates that household debt to GDP of ~55% appears to be necessary for economic growth.[22] Thus, policy levers facilitating personal credit (a subset of household debt) at current levels of household debt to GDP, are imperative to offer impetus to growth.

- It (also) has significant potential to be more competitive and pro-innovation

  As the events that precipitated the formation of internal working group of the RBI on digital lending suggest to us, bad actors have perverse incentives to take advantage of desperate borrowers in urgent need of funds. The RBI Report recommends several supply and demand-side measures to mitigate the potential risks flowing from digital lending. However, the fundamental drawback of the formal and regulated retail banking space, is lack of innovation, which constrains potential "thin-file" borrowers to look towards the unregulated and gray markets for their financial needs. Innovation from within the regulated ecosystem and products more tailored to the consumer niches that are otherwise under-served appears to be one potential way to organically wean away consumers from predatory suppliers of credit in the marketplace. The median age of India is 28 years (proxying an aspirational middle class) and it would be ideal to provide them with multiple credit opportunities such as small ticket personal loans, credit cards, Buy-now-pay-later or earned wage access and other substitutes to enable higher consumption and unleash economic growth.

To summarize, there is an opportunity for public policy intervention in terms of banking licence innovation that will support and facilitate a new class of business formation on the MSME banking side. Absent such support, the "organic rate" of emergence and survival of these digital-native businesses is likely to be artificially suppressed with corollary negative spillovers on formal sector employment in urban centres.

Likewise, there may be scope for banking licence innovation on the retail (consumer) credit market side as well, to inject competition and facilitate corollary innovation for the reasons mentioned in the previous paragraph.

21 See IMF, Household Debt, Loans and Debt securities, available at, https://www.imf.org/external/datamapper/HH_LS@GDD/GBR/USA/JPN (IMF data here also gives comparators. Comparatively, China is at 55% and US is 75%).

22 See Lombardi et al, The Real Effects of Household Debt In Short & Long Run (2017) available at, https://www.bis.org/publ/work607.pdf

Licensed Digital banks is an emerging vehicle that policymakers globally, especially in South East Asia, have implemented to try and achieve aforementioned objectives. (**See also, Box**) We define and evaluate Digital banks in the following section.

Digital Banks In Pandemic: Evidence from China

Researchers at the IMF used the pandemic opportunity to test the correlation between digital lending and firm performance. The pandemic offered a good context to test the public policy utility of digital banking especially because "high touch" due diligence was ruled out.

These researchers found that lending to a random sample of 40,000 MSEs by a Digital bank (MyBank) was positively associated with sales growth at borrowers. They further established a possible causal relationship between lending by a Digital bank and the MSE's higher sales growth during the pandemic.[23]

The results are an early empirical confirmation of the narrative in business media that the ability of Digital banking to leverage data and platforms to lend remotely can play a positive role supporting small businesses amidst the pandemic.

23 See Digital Banking Support to Small Businesses Amid Covid-19 available at, https://www.elibrary.imf.org/download-pdf/journals/065/2021/002/article-A001-en.xml p. 9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IV

Digital Banks: A New Kid In Town

Several marketing expressions like "challenger banks", "neo-banks" in addition to "digital banks" are used interchangeably in financial / fintech discourse in India and elsewhere, without regard to whether these fintechs actually function as "banks" as the applicable law defines them.

"Digital Banks" or DBs referred in this Paper means Banks as defined in the Banking Regulation Act, 1949 (B R Act). In other words, these entities will issue deposits, make loans and offer the full suite of services that the B R Act empowers them to. As the name suggests however, DBs *will principally rely on the internet and other proximate channels*[24] *to offer their services and not physical branches.*

However, as a natural corollary to being a "Bank" in full sense of its legal definition, it is proposed that DBs will be subject to prudential and liquidity norms at par with the incumbent commercial banks. Creating a new licensing / regulatory framework is being proposed as regulatory innovation and not as regulatory arbitrage. Having said that, DBs offer a differentiated proposition and as such, there is scope for differentiated treatment in adjacent areas of their operation consistent with treating them identically with incumbent commercial banks, in the critical areas of prudential and liquidity risk.[25] A template of a regulatory framework for DBs for India has been given in Section VII below.

Digital Banks (as proposed here) ARE DISTINCT from Digital Banking Units

The Finance Minister in the budget address for FY-23 announced the proposal to establish "Digital banking Units" (**"DBUs"**) of scheduled commercial banks in 75 districts. The objective is to ensure the benefits of digital payments, banking and fintech innovations reach the grass-roots of India in a consumer friendly manner. Pursuant to the budgetary announcement, the RBI issued guidelines (**"DBU Guidelines"**) on DBUs on April 7, 2022. Since DBUs and Digital Banks are similar constructs, for the sake of abundant clarity and to distinguish the proposal advanced in this Report from DBUs, this section will underline the key differences between the two.

24 Proximate channels will cover technologies like NFC for e.g.

25 This proportionate standard of regulation in a manner consistent with core principles of banking supervision is supported by the Basel Committee on Banking Supervision. See Regulating Fintech Financing: Digital Banks and Fintech Platforms available at, https://www.bis.org/fsi/publ/insights27.pdf (see footnote 22 on p.13)

The DBU guidelines define, "digital banking" as, *present and future electronic banking services provided by a licensed bank for the execution of banking and financial transactions over websites, mobile phones and other digital channels ...."*[26]. A DBU is defined as, *"a fixed point business unit/hub housing digital infrastructure for delivering digital banking products and services..."* Furthermore, the DBU guidelines state DBUs will be treated as "banking outlets"[27], (thus effectively equivalent to a branch as "banking outlets" are essentially redefined branches to account for the use of technology).[28]

That summary leads us to the following differences between "Digital banks" as this Report recommends, and DBUs.

- **Balance Sheet/Legal Personality**
  - DBUs DO NOT have legal personality and ARE NOT licensed under Banking Regulation Act, 1949. Legally, they are equivalent to "banking outlets" ie, branches.
  - Digital Banks will have a balance sheet and legal personality & are proposed to be duly licensed banks u/ B R Act.
- **Level of Innovation/Competition**
  - DBUs improve existing channel architecture by offering regulatory recognition to digital channel. However, they are silent on competition. The DBU guidelines expressly state that only existing commercial banks may establish DBUs.
  - In contrast, a licensing and regulatory framework for Digital banks as proposed here, is more enabling along competition/innovation dimensions

Digital Banks: The Promise They Hold for India

Incumbent commercial banks have inefficient business models as evidenced by high cost to income, and high cost to serve numbers. Banks and fintechs offering digital banking services (so-called, *neo-banks*) rely primarily on digital channels that organically have high efficiency metrics relative to incumbent commercial banks. This structural feature makes them a potentially effective channel through which policymakers can achieve social goals like empowering the hitherto under-banked small businesses, and enhancing trust among retail consumers.

Neo-banking business models emerged globally in the aftermath of the global financial crisis as a response to loss of faith in the incumbent banks. It came of age in 2015 in markets like the United Kingdom and has since matured. Three models of these "challenger banks" (so-called because of their emergence in the aftermath of global financial crisis) appear to have emerged globally.[29]

26 See RBI Circular on DBUs available at, https://www.rbi.org.in/scripts/NotificationUser.aspx?Id=12285&Mode=0 (Clause 3.1)

27 See RBI Circular on DBUs available at, https://www.rbi.org.in/scripts/NotificationUser.aspx?Id=12285&Mode=0 (Clause 4.2)

28 See RBI Circular on Rationalisation of Branch Authorization Policy available at, Reserve Bank of India - Notifications (rbi.org.in) (prefatory commentary).

29 See Deconstructing Digital-Only Banking Models: A Proposed Policy Roadmap for India available at, https://vidhi-legalpolicy.in/wp-content/uploads/2020/09/Deconstructing-Digital-only-Banking-Model-A-Proposed-Policy-Road-map-for-India-1.pdf p.17 (for a quick global snapshot of activity in this space).

- **(Front-End Only) Neo-banks:** These neo-banks partner with incumbent licensed banks to offer "over-the-top" services to the consumers "renting" the balance sheet of a bank (properly so called) to lend and issue deposits from. (Open Technologies, RazorPayX, Dave)
- **Full-Stack (Licensed) Digital banks:** These entities are fully functional banks, regulated by the banking regulator and issue deposits and make loans on their own balance sheet. (Starling, Webank, Kakao, Monzo, N26)
- **(Autonomous) unit of traditional banks:** These entities are essentially neo-banking operations of traditional banks that function autonomously and compete with stand-alone neo-banks. (Marcus,[30] (Goldman Sachs) 811 (Kotak Mahindra Bank), and Yono (State Bank of India).

Characteristic Features

- Business proposition of neo-banks is niche products targeted to demographics that are under-catered to, by mainstreet banks (eg. small businesses, migrants, paycheck-to-paycheck retail consumers, gig economy workers and millennials).
- They offer speed (and its corollary, the absence of friction), superior user experience relative to traditional banks and low cost and transparent cost structures, to their consumers.
- Profitability has emerged a key challenge for entities that do not have regulated status[31] (**See Box**).

The Secret Sauce to Profitability: Starling bank Case Study[32]

While "front-end focused" neo-banks have found achieving balance between growth and profitability a challenge, their full-stack (Digital bank) counterparts appear to have found the secret sauce to profitability. An important case-study in this regard is Starling bank (UK). It offers insights into the question of what is the most viable business model for Fintechs offering digital banking services in India.

Starling Bank: Starling bank acquired a restricted license from the PRA Prudential Regulatory Authority in 2016. In the past 5 years, it has come of age with offerings both on the small business side and retail side. While in the initial years, interchange revenue dominated other sub-heads, the latest annual Report reveals NIM to outrank fee income from their interchange, B-A-A-S and marketplace offerings.[33] Most importantly and supported by NIM growth, Starling turned monthly profitable from October 2020. On the other side of the balance sheet, acquiring the restricted banking license early on the curve enabled Starling to issue low-cost deposits (protected by UK's deposit insurance scheme- FSCS).

30 See https://play.google.com/store/apps/details?id=com.marcus.android&hl=en_IN&gl=US

31 See https://www.economist.com/finance-and-economics/2021/08/21/can-neobanks-popularity-outlast-the-pandemic

32 Kakao (South Korea) and WeBank (China) are other examples of profitable digital banks.

33 See Starling Trading Update 2021 available at, https://www.starlingbank.com/investors/2021/trading-update-june-2021/

Starling's case study highlights the importance of NIM and on-balance sheet lending on profitability. The ability to do balance sheet lending is especially important for a fintech offering digital banking in India given RBI's prescriptive regulation capping interchange. So, regulatory innovation in terms of engineering a DB license they can leverage is the key.[34]

Estimates indicate that DBs have high cost efficiency. Webank for instance incurs a per-account operation cost of $0.5. Compare that to traditional banks and (depending where we are), it may come upto 10-20 times higher.[35] In the Indian context, a FIBAC 2019 Annual Insights Report estimated the banking industry cost to income ratio at about 50 %. Looking beneath the hood, it is apparent that cost to income ratios of large and medium PSBs as also old private banks are more than 50 %. The new private banks, while they run a more efficient operation relative to their peers, still had a cost to income ratio as high as 43 %.[36]

These ratios reduce their reach by excluding micro and small businesses, and credit of smaller tickets from their reach. Digital banks offer promise because their business model can organically cut down cost-to-serve and CAC[37] thus offering them the headroom to expand coverage than the incumbent commercial bank.

Illustrative Use-Cases Enabled by Digital Banks

B-a-a-S: Full-stack DBs offer the promise of enabling additional use-cases beyond the conventional use-cases known to banking. B-a-a-S is one of the more important of these additional use-cases because of the catalytic impact it can potentially have on business banking.

B-a-a-S essentially will involve a DB white-labelling its banking technology stack to other financial service providers that offer a narrower or similar suite of services to their own customers. Imagine for example a multi-state co-operative bank that wants to scale up and challenge the established players in its own native geography. The costs of upgrading its own technology stack and managing it on a day-to-day basis will be a significant overhang for such a small bank. Enter DB that offers its cloud, balance sheet and expert risk staff to the "client" multi-state co-operative to scale up. The client now has the capacity to grow its balance sheet and compete more effectively in the local geography. On the other side, the DB augments its risk-adjusted revenues like NIM with fee-based income.

34 See How the UK Became the Galapagos Of Fintech Innovation available at, https://www.altfi.com/article/5833_11years-how-the-uk-became-the-galapagos-of-fintech-innovation

35 See https://thefinancialbrand.com/104213/digital-banking-transformed-podcast-china-webank-henry-ma/

36 See https://image-src.bcg.com/Images/FIBAC-2019-Report_tcm9-226576.pdf p.10 (C:I ratios of Indian banks)

37 They can acquire the customer at lower costs for example because using APIs, they can embed loan journeys in partner e-commerce applications.

Here's another example: Imagine for example that a Fintech NBFC intends to offer a credit card with a unique instalment plan proposition for its business clients. Since NBFCs can only issue credit cards in partnership with banks, they can partner with a Digital Business bank and leverage their credit card issuance infrastructure to issue and manage its own credit card clientele. The cloud-native architecture of the Digital Business Bank can potentially cut down the time-to-market for the NBFC by an order of magnitude, as opposed to traditional banks that can take upto 6 weeks to integrate and run such a program.

To summarize, B-a-a-S makes it possible for the existing banking ecosystem to "do more with less" (in other words, to enhance unit economics) thus making it more competitive and efficient.

Custodian Banking

A custodian is a specialised financial Institution that holds customers' securities for safekeeping.[38] Panel discussants in the industry consultation held in connection with this Report also highlighted the need for creation of a specialised custodian banking licence in India in keeping with the differentiated (specialised) banking licence policy in India.

For background, in India at present, custodial services are regulated by SEBI. Commercial banks may offer custodial services as permitted by the B R Act, 1949. The other sub-set here is non-bank custodians. However, while institutional capital prefers non-bank custodians to hold securities in their portfolio, the non-bank custodians lack the ability to offer banking services to their clients as part of the bouquet owing to lack of a specialised (and limited) custodial banking licence. This constrains the non-bank custodians from partnering with commercial banks to offer adjacent transactional banking services (e.g., deposits and accounts or foreign exchange management or cash management). But on the same lines as fintechs partnering commercial banks to provide banking services, these stitched-up partnerships are not conducive to ease of business.

This is another illustration of why regulatory innovation through the fashioning of innovative licensing frameworks ought to be in lockstep with development of capital markets and financial technology innovation. It is understood that a proposal for a specialised custodian banking licence was taken up by the RBI in the first monetary policy statement of 2016.

Given the rapid rise in expanse and depth of India's capital markets in the last half a decade- and especially in the "pandemic years" of 2020 and 2021, there may be a case for evaluating the proposal again. In the alternative, RBI may permit SEBI regulated non-bank custodians to have a reverse repo account that would hold both proprietary funds and client fund balances they hold under a Power Of Attorney, in addition to issuing them a AD-I licence (for rendering forex services).

38 See Centre for Innovation in Public Policy "Reforms in Custodian Banking" Policy Brief on Custodian banking (2021) available at, https://www.cipp.in/assets/img/CIPP_Report_210119_final_1_mc.pdf

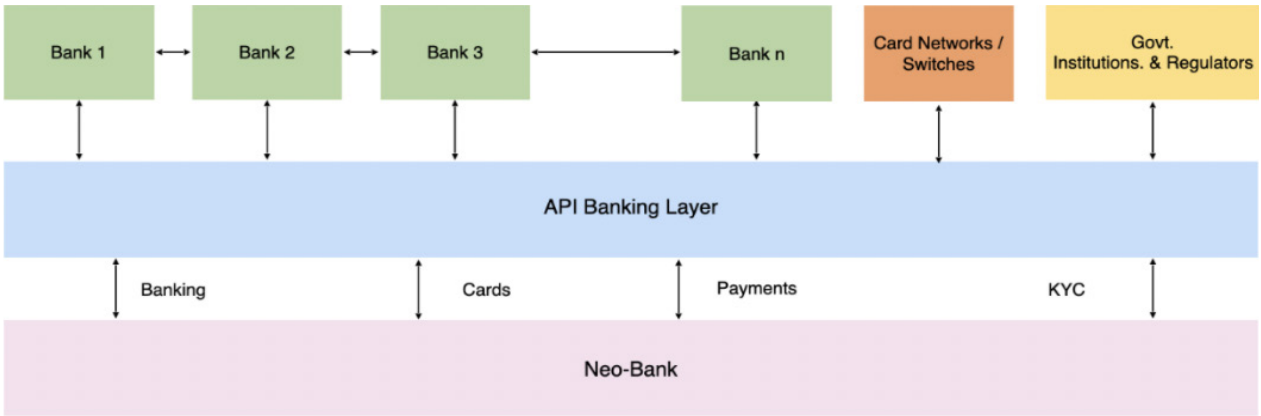

Online Banking
Personal Account
Account Details
Mobile Payment
Personal Loan
Deposites
$ 55,678.99
Current Balance
$ 5,678.99
Current Balance
$ 5,678.99
Current Balance
$ 5,678.99
Current Balance
Bank Visa
12345678
Last Payment: 2022-02-20
$ 2,678.99
Transfers
Saving
Seting
Messages
Log Out

V Challenges With the Existing "Partnership-Based" Neo-Bank Model

The prevalent Neo-bank business model in India is a function of regulatory vacuum. In the absence of a licensing regime for "full-stack" digital banks, fintechs offering the Neo-bank proposition in India have improvised and adopted the "front-end neo-banks" model. As the name indicates, this is a partnership between traditional banks and neo-banks such that the latter bring in the engagement layer and the former bring in the "utility" layer and offer both sides of their balance sheet.

These Neo-banks have further specialized into consumer-facing and small business-facing offerings respectively. A typical consumer facing Neo-bank offers additional conveniences like digital debit card, Personal finance management tools like spend analytics for better budgeting, investment avenues through its mobile application through its B2B partnerships and potentially a credit line. A typical small business-facing fintech offering neo-banking services will offer expense management products (like employee prepaid cards), payroll management, accounts receivables management platform and a business loan / credit line facility through the banking partner.

A thematic sketch of the extant neo-banking model looks as follows.[39]



But this model presents several challenges including with respect to revenue and viability. Some challenges have been presented below:

39 See https://www.outlookindia.com/outlookmoney/fintech/rise-of-neobanks-in-india-6862 (for the origin of thematic Sketch).

Challenge #1: Limited Revenue Potential

Mapping this bouquet of services against revenue potential, it becomes immediately apparent that fintechs have a monetization (and therefore viability) problem. They earn fee-based revenue wherever they act as channel partners (account opening and on-boarding, investment opportunities credit), and potentially earn a fraction of interchange on payments processed through cards; but other than these two buckets, lack any other revenue sources. Moreover, interchange is indirectly regulated in India (through merchant discount rate regulation), so unlike developed markets like the United States (where fintechs can earn revenue on interchange by partnering with small and medium banks), fintechs in India are constrained along this dimension.

Challenge #2: Potential Obsolescence of the Partner Bank Core Banking System

Fintechs offering neo-banking services are constrained by product buckets the partner bank can offer within its business and technological infrastructure.[40] Without the ability to leverage their balance sheet and their own technological stack to create "ground-up" credit products and user experiences, their potential will never be fully unlocked.

As we have pointed out above, traditional banks (with their legacy technology stack with limited product codes) may lack the ability to serve an emerging class of "digital-native" businesses. Solving for this gap through a regulatory innovation in the form of DB license may be a potential solution so that these businesses located downstream of banks may thrive and become engines of employment.

Challenge #3: High Cost of Capital & No Entry Barrier

Additionally, on the other side of the balance-sheet, absent the licensing framework, Neo-banks cannot issue low-cost deposits and are constrained to rely on expensive equity capital to fund innovation and operations. Finally, the licensing framework also serves as a strategic moat for licensed entities. In absence of a licensing framework, entry barriers for fintechs to enter Neo-banking space are low. This creates two negative externalities for the ecosystem. First, as with any ecosystem with low barriers to entry, this context offers opportunities for actors that are not fit-and- proper to enter the market creating a consumer protection risk especially on the retail side. Secondly, it creates herd mentality in terms of simply replicating business models and products already witnessed by the markets, rather than genuine innovation. In other words, there is a "Me-too" risk.

Reports indicate that the RBI is contemplating to establish a working group to regulate "front-end only" neo-banks that are presently operating in the partnership model. [41]A useful point for consideration will be to evaluate a "full stack" DB license which offers

40 See, Rising Challenges for Indian Neo-Banks at https://bfsi.economictimes.indiatimes.com/news/fintech/rising-challenges-for-indian-neo-banks/85028088

41 See https://economictimes.indiatimes.com/tech/technology/rbi-weighs-a-more-formalised-regulatory-system-for-digital-banking-in-india/articleshow/83554764.cms?from=mdr

greater regulatory control and also further deepens the under-banked Indian market,[42] instead of a piecemeal approach. Creating a Digital Bank license also raises the barrier to entry and mitigates the "Me-too risk" to innovation flagged in the previous paragraph.

42 India has less than 1 bank per million population. See Nachiket Mor et al, https://www.bloombergquint.com/opinion/fixing-indias-banks-making-banking-boring-again

VI A Digital Bank Global Regulatory Index

As we briefly touched upon in the previous section, Singapore, Hong Kong and Malaysia have issued special DB regulatory regimes. Elsewhere, as in the United Kingdom, regulators have recognized the DB business model by issuing banking licenses to banks offering "digital-first" / "digital-only" propositions within already existing regulations without creating specialist regimes.

In this section, we define a 4-factor "de jure" index— the Digital Bank Global Regulatory Index ("**Index**") — to map these global regulatory responses (whether through specialist regimes or generally). As a first step towards doing that, we first describe the four factors comprising the index and the scoring methodology adopted. In the next step, we score each of the benchmark jurisdictions against the Index with a view to draw lessons for the proposed Indian DB legal framework. The benchmark jurisdictions chosen for the purposes of this Report are Singapore, UK, Hong Kong, Malaysia, Australia and South Korea.

A. Description of the Index

The 4-factors comprising the Index are as follows:

- **Entry barriers:** This factor will score a regime contingent on whether the entry barriers for fintechs and adjacent entities in securing the DB licenses are high or low. Illustratively, if a jurisdiction prescribes a *one-size-fits-all* minimum capital requirement as eligibility without regard to their differentiated business models, it will be *scored negatively* against this factor. On the other hand, *calibrated eligibility regulation* that accounts for the differences between incumbents and digital banks will be *scored positively* against this factor.

  Regulators are also known to impose track record-linked eligibility conditions to ensure only entities with acumen apply. The proportionality or otherwise of such eligibility conditions is contingent on context. The Index will parse such eligibility requirements asking the following question.

  Is the eligibility barrier imposed bear a reasonable nexus to business sought to be regulated?

Illustratively, this filter will determine an eligibility condition requiring prior track record in e-commerce / financial services/ technology sectors to be proportionate. On the other hand, eligibility conditions that disable a potential applicant based on "status" will be marked negative. Illustratively, a eligibility barrier that states only "entities already regulated by a defined financial regulator are eligible" excludes several entities with expertise to deliver digital banking and as such will be marked negative by the Index.

- **Competition:** This factor scores a regime in terms of how pro-competitive it is. In the context of the banking services market, competition arises between incumbent predominantly "brick-and-mortar" commercial banks and digital banks. Regimes that *do not* privilege incumbents relative to Digital banks operationally will be *scored positively* against this factor. On the other hand, regimes that *discriminate against digital banks operationally* by excluding them from access to privileges that incumbent commercial banks can avail of, will be *scored negatively* against this factor. (An illustration of this could be if, say, a particular jurisdiction offers access to Central Bank payments systems to legacy banks but denies such access to DBs. Another illustration in this regard is unequal access to the deposit insurance system if the jurisdiction has enacted one).
- **Business Restrictions (NOT adjusted for prudence):** This factor scores a regime in terms of the degree of autonomy it confers on a DB in its day to day operations. The risks unique to banking as a business model means that certain restrictions and calibration are necessary for prudential reasons. The "adjustment for prudence" element of this factor accounts for these caveats. Illustratively, if a regime restricts business growth in terms of a defined quantitative threshold of assets / deposits in the initial phase of a DB's journey as a licensed entity, this factor will recognize the rationale driving the restriction if there is a transparent pathway out of these restrictions.
- **Technological Neutrality:** Fintech regulation has low shelf-life as the underlying technologies that regulated entities use are in a state of dynamic flux. This "natural rate of change" can be inhibited however if a regulatory regime leans in favor of one technology / technology standards over another. Such regulatory favouritism can have a chilling effect on innovation. Technological neutrality is therefore a key metric to score a regulatory regime on. Consistent with the above descriptor, regulatory regimes that mandate or otherwise privilege specific technologies by hard-coding them in law are scored negatively against this factor, and vice versa.

B. Mapping Of Benchmark Jurisdictions Against the Index

Index Variable	Looking Under the Hood						
Entry Barriers	Are minimum capital mandates proportionate?	✓	✓	✗[43]	✓	✓	✓
	Is the track record eligibility condition proportionate?	✓					
	(If there are others), Are the other eligibility conditions imposed proportionate?		✓			✓	
Competition	Do Digital banks have equal access to deposit insurance system	✓	✓	✓	✓	✓	✓
	Do Digital banks have equal access to all payments systems & schemes	✗[44]	✓	✓	✓	✓	✓
	Equal access to revenue sources at par w/ incumbents	✗[45]	✓	✗[46]	✓	✓	✗[47]
Business restrictions (NOT adjusted for prudential reasons)	Are there any restrictions on minimum balance fees NOT justified by prudence?	✓[48]		✓[49]			
	Are there any physical presence mandates NOT justified by prudence?	✗		✗	✗		
	Are there any asset / deposit caps NOT justified by prudence?	✗	✗	✗	✗	✗	✗
Technological Neutrality	Are there any restrictions against or a preference for a particular technology?	✗	✗	✗	✗	✗	✗

✓ = Yes ✗ = No

43 HKMA prescribes identical minimum capital rules (HKD 300,000) for both incumbent commercial banks and Digital banks ("Virtual banks" as they are referred to in HongKong). In so far the entry barrier applies a one-size-fits-all rule without regard to the different business models, and objectives of two types of banks concerned, the Index marks it as a negative.

44 MAS precludes Digital Full Banks from accessing ATM Network.

45 MAS regulation precludes Digital Banks from imposing minimum balance fees. In so far as such restriction reduces avenues for revenue generation and has no nexus to prudential aspects, the Index marks it as negative. Note that individual Digital banks may choose to voluntarily waive such fees to attract more customers. Competition on such measures should be welcomed by the policymakers.

46 HKMA regulation precludes Digital Banks from imposing minimum balance fees. In so far as such restriction reduces avenues for revenue generation and has no nexus to prudential aspects, the Index marks it as negative. Note that individual Digital banks may choose to voluntarily waive such fees to attract more customers. Competition on such measures should be welcomed by the policymakers.

47 Financial Services Commission precludes Digital banks from lending to Corporates.

48 See footnote 3

49 See footnote 4

- Purpose of the Index is to give us a frame of reference for what "default settings" India's Digital bank regulatory framework should adopt.
- As it will be apparent from the mapping out exercise:
    - Technological neutrality is a common theme. That is a learning India's regulatory policy can take home. There are certain technologies that have gotten entrenched in regulation. Illustratively, India's extant e-KYC regulations embed use of OTP as the second factor in authentication. That has gained ubiquity over the years despite the fact that there are other options with lesser friction and same / more effectiveness available. While that promotes standardization arguably, global regulatory practice is not in favor of such prescriptive approach as it may have a chilling effect on innovation.
    - Calibration is another common theme. Differentiated minimum capital requirements is the key-a progression to offer the new entities a head-start is facilitative of competition. One size fits requirements for merely commencing business favors incumbents over challenge
    - Exit plan "Living Wills" as they are called, is also a common feature.

VII Digital Bank Regulatory Framework for India: A Template

This section will serve as the capstone of this Report and recommend a potential template, pathway and the operative steps under the applicable laws to be executed for enacting a DB licensing and regulatory regime for India. The infrastructural enablers for it in terms of a national ID, credit information architecture (credit information companies), a real time payments protocol (UPI), and an emerging open banking regulatory framework (account aggregators) are already present. India has the opportunity to leverage these enablers to enact an industry leading regime for governing DBs.

The sequence and the template suggested here is informed by the DB Regulatory Index created for the purposes of this Report.[50] In addition, inputs and written submissions received from stakeholders forming part of the 60 day consultation window, relevant practitioners and public policy commentary and the interviews conducted for the purposes of this Report have also been relied upon.

A. The Sequence

Consistent with best practises revealed by the DB Regulatory Index, the following 3 step sequence is recommended:

- **Step 1:** Introduce a *restricted* Digital Business bank licence and a *restricted* Digital Consumer Bank license (the dimensions along which these licences will be restricted has been detailed below in subsection-B and the legal mechanics involved in sub-section- C below).
- **Step 2:** The applicant acquiring this *restricted* license ("**Licensee**") enlists in the regulatory sandbox and commences operations as a Digital Business bank/ Digital Consumer bank as the case may be, in the sandbox.

  RBI's regulatory sandbox framework ("**Sandbox framework**") recognizes the need to offer relaxations (including inter alia financial soundness, track record and adjacent issues) to entities enlisted in the sandbox to facilitate experimentation.[51]

50 See Section IV for a description of the four factors underlying the Index and the scoring methodology. Section V also tabulates the results of mapping identified Benchmark Jurisdictions against the Index to tease out certain best practices that should inform the India template.

51 See Clause 6.2 of the RBI Regulatory Sandbox available at, https://www.rbi.org.in/scripts/PublicationReportDetails.aspx?UrlPage=&ID=1161 (stating that the RBI may consider relaxing conditions regarding financial soundness, liquidity and track record among other things for applicant(s) for the duration of the sandbox).

Certain relaxations have been recommended for Digital Business banks / Digital Consumer banks for the duration of the time they will be operating in the regulatory sandbox.

- The RBI and the applicant identify a set of metrics for which the Licensee will be progressively monitored. Without being exhaustive, such metrics could be around cost to acquire a customer, volume / value of credit disbursed to MSMEs, technological preparedness, compliance levels of the Licensee across prudential aspects, among other things.

- **Step 3:** Contingent on satisfactory performance of the Licensee in the sandbox, the restrictions can be relaxed when the Licensee graduates from the sandbox and becomes a full scale Digital bank (Business or Consumer as the case may be). **(See diagram above for progression).**
- The duration of this progression, i.e. the duration for which the Licensee will operate in a regulatory sandbox will vary from case to case. So, the regulation could leave for the RBI to make that determination.[52] In this regard, it is also noted that the Sandbox Framework is designed for flexibility of duration at the cohort level.[53] Given the significance of this regulatory innovation, RBI is expected to leverage this built-in flexibility to decide the duration on a case-to-case basis in consultation with the licensee and give itself and the Licensee sufficient and fair time to observe the Licensee's execution as a Digital Business bank (or Digital Consumer bank, as the case may be) in the sandbox before graduating it to full-scale Licensee (or exiting them from the sandbox as the case may be). There was feedback on this point with several comments seeking clearly defined timelines. However, the sequence laid down in the previous version of the Report is retained for the following reasons:
    - This decision is best taken at the time of entry into sandbox by the RBI in consultation with the licensee.
    - Prescribing timelines at the policy proposal phase would be an exercise in arbitrary guess-estimates.

52 This is on identical lines as Singapore. MAS retains the discretion to make the determination about the licensee's progress based on disclosed objective factors but does not prescribe any time period. See https://www.mas.gov.sg/-/media/Annex-A-Digital-Full-Bank-Framework.pdf p. 2

53 See Clause 6.1 of the Sandbox Framework available at, https://www.rbi.org.in/scripts/PublicationReportDetails.aspx?UrlPage=&ID=1161#S8 (recognizes that cohorts may run for varying time periods and offers an indicative timeline of 6 months).

- As already pointed out above, this approach is mirrored by global regulatory best practices. It offers the RBI the opportunity to calibrate timeline based on relevant factors. including experience / track record/ fit-and-proper of the applicant.
- On the other hand, if the metrics agreed on ex ante are not met over a defined period, the licensee may be given a window to unwind the liabilities created including any term deposits, assign assets created to an identified buyer and exit the sandbox, per the process laid down in RBI's regulatory sandbox framework. (For the sake of abundant clarity, other grounds for exiting the sandbox provided therein would continue to be available to the RBI and the Licensee).[54]

B. Features/Conditions of Digital Business bank License/Digital Consumer bank Licence

- **Minimum paid-up capital:** Minimum Paid-up Capital for a *restricted* Digital Business bank operating in a regulatory sandbox may be proportionate to its status as restricted. While the RBI is the final arbiter of what numerical value constitutes "proportionate", the following recommendations are offered:
  - As pointed out above, the Sandbox Framework recognizes relaxations along the financial soundness dimension. It is recommended that the RBI consider offering the Licensees relaxation in terms of minimum paid up capital using this lever. In the restricted phase, Digital Business bank may be required to bring in ₹ 20 crore of minimum paid-up capital.
  - Upon progression from the sandbox a full-scale Digital Business bank will be required to bring in ₹ 200 Crores (equivalent to that required of the Small Finance bank).[55]
  - The minimum capital for a Digital Consumer bank in the restricted (sandbox) phase may follow the same approach as above. Since a Digital Consumer bank is a case of first instance in India with no incumbent proxy, RBI may consider asking the licensee minimum capital to bring in minimum capital proportionate to the projected book size and risk profile of borrowers in the business plan, while operating in the sandbox.
  - The same calibrated approach may be adopted after the Digital Consumer bank "graduates" from the regulatory sandbox and begins operations as a full-scale Digital Consumer bank.
- **Track record & Potential Applicant Pool:** Given the "digital-native" nature of banks that will operate under this license, the license may require one or more controlling persons of the applicant entity to have an established track record in adjacent industries such as e-commerce, payments, technology (e.g. cloud

54 See Clause 6.6 (b), and (c) of the Sandbox Framework available at, https://www.rbi.org.in/scripts/PublicationReportDetails.aspx?UrlPage=&ID=1161#S8 (stipulating grounds of exit at the behest of the RBI, and the sandbox entity (in this instance, the Digital Business Bank licensee).

55 Small Finance Banks, with their focus on small businesses on the asset side are the closest equivalent to the (proposed) Digital Business bank. As such, progressively raising the min. paid-up capital requirement to ₹ 200 crores promotes competition without treating disproportionately favoring any entity.

computing). As with other licenses (eg, Payment banks, NUEs), applicants may have the option to apply in consortium. Existing neo-banks seeking to upgrade or small finance banks / other regulated entities (e.g. existing incumbent banks that may see the opportunity in full-stack Digital Business bank license) are also potential eligible candidates for application. Note that consistent with the objective of promoting competition, this applicant pool is deliberately defined as widely as possible, and specific categories mentioned are not to be construed as exhaustive but indicative. Accordingly, while the language is clear, it is clarified that fintechs are also included in the potential applicant pool. The same will apply to the applicant pool for Digital Consumer bank licence.

- **Equal Access to the Infrastructure Enablers:** In order that the license and the business proposition of a Digital Business bank / Digital Consumer bank remain viable and to promote competition, it should have access to all the key infrastructure enablers in the Indian financial ecosystem, as traditional banks are. That includes access to:
  - Aadhaar e-KYC / Credit Information Companies
  - UPI, IMPS / Central Payment Systems (NEFT/ RTGS).
  - ATM schemes
  - Deposit Insurance & Credit Guarantee Corporation (DICGC) (against levy of appropriate premium as determined by the DICGC).
  - AA ecosystem.

  For the sake of abundant caution, the categories of infrastructures listed here are illustrative, not exhaustive. As such, the guiding principle for access to infrastructures is parity with incumbent commercial banks. so as to ensure level playing field.

- **Phased relaxation of Business Restrictions:** The mapping of Benchmark Jurisdictions on the Index revealed that several of them have started with business restrictions (e.g. on asset and deposit size) accompanied with proportionately reduced minimum paid-up capital thresholds. The restricted Digital Business bank license can be designed to mirror that approach. These business restrictions can be in terms of asset and deposit size (in value terms) and / or number of customers serviced.

  As pointed out in the earlier segment, the regulator may progressively relax them contingent upon satisfactory performance of the Licensee on agreed metrics till the point where the Licensee is ready to exit the sandbox and operate as a "full scale Digital Business bank."

  The same principle is recommended to be applied to Digital Consumer banks. Accordingly, Digital Consumer bank licensees may issue assets and liabilities within the limits prescribed or service the number of customers within the limits prescribed, in the sandbox phase. These restrictions may no longer apply when it graduates from the sandbox and becomes a full-scale Digital Consumer bank.

- **Prudential / Liquidity risk regulation:** This aspect will be identical for both Digital Business banks / Digital Consumer bank *that have progressed to full license*, and the incumbent commercial banks. Regulatory touchpoints like capital adequacy, risk weights, liquidity coverage ratio will be included under this head. Being a full-fledged bank, Digital business bank(s) will be required to be fully compliant with the relevant thresholds applicable to them specifically or commercial banks generally.

  In the sandbox (restricted) phase of a Digital business bank, RBI may prescribe prudential / liquidity standards proportional to the asset and deposit caps it is subjected to.

- **Technological Risk regulation:** Technology risks assume greater importance for Digital Business Banks / Digital Consumer banks relative to the traditional banks because they leverage their APIs to have relationships to numerous counter-parties that risks can originate from. The licence should require conditions for *ex ante* technological preparedness and *ex post* business continuity planning (detailed in the following segment). *Ex ante* technological preparedness will entail:

  - Incorporation of zero trust architecture to mitigate technology risks- the panel discussants highlighted this point in the industry consultation organized in connection with this Report.
  - Creation of clearly defined processes (leveraging technology) enabling consumers that have encountered a security event, to report the event. The panel discussants also stressed on this aspect. They also recommended spreading awareness across the digital banking ecosystem including through innovative use of marketing.
  - Continuing compliance with industry-grade certifications like PCI-DSS and the attendant audits of the Digital Business Banks.
  - Board-level policies and expertise in assessing evolving cybersecurity risks (including saliently that of ransomware illustratively), by mandating a defined fraction of executive directors to have relevant skill sets, augmented by a carrots-and-sticks compensation framework that motivates these personnel to be proactive about these risks.
  - Additionally, installing and upskilling technology risk supervision personnel of the RBI commensurately to offer intelligent oversight of the first line of defence delineated above.
  - Due to their "digital-native" avatar, new technologies such as machine learning and blockchain can be more easily and seamlessly integrated into the overall operations of Digital Business banks (as also DBs generally). These technologies can provide an extra layer of security.
  - Relatedly, panel discussants highlighted the need for clear regulatory guidelines for deploying core banking system on cloud. At present, while regulations do not foreclose such deployment in the absence of clearly

delineated framework, existing banks are reluctant to leverage cloud architecture. Digital banks will have to rely on cloud architecture for scaling their services efficiently so that they achieve their business as well as public policy objectives. So, a clear regulatory framework for deployment of core banking systems on cloud that is consistent with technological neutrality, is the key.

Technology Risks: A Deeper Dive & Mitigation

As is with the existing challenges being faced by traditional brick and mortar banks which have gone through the digital route like net banking, the prospective digital banks face similar challenges in the internet paradigm in the form of a myriad of cyber attacks that

- Phishing and vishing leading to hijacking of accounts and takeovers
- Malware, Spyware and other forms of cyber attacks coordinated by viruses, botnets etc. With neobanks and digital-only banks being foresoon to be run mostly on hand-held devices and desktop computers, there is an increased risk posed by such cyber-attacks.

The aforementioned threats posed by technological risks primarily are pervasive in both existing digital banking channels by scheduled commercial banks as well as digital banks. It is imperative to lay out a strong technology foundation built on that is cyber-proof along with building of capacities to deal with and mitigate such risks.

Given the fast-paced changing landscape of the regulatory templates, it will be necessary for digital banks to use emerging technologies for seamless integration with RegTech solutions of banks and regulators, along with Regulators themselves developing emerging SupTech solutions to enable automated supervision. According to the taxonomy adopted by the report of the Financial Security Board[56]:-

SupTech: The application of emerging technologies to help regulators automate their supervisory requirements. This will "improve oversight, surveillance and analytical capabilities, and generate real time indicators of risk to support forward looking, judgement based, supervision and policymaking."

RegTech: The application of emerging technologies to help financial institutions meet their regulatory requirements.

Once neobanks and digital-only banks employ RegTech solutions, this could "improve compliance outcomes, enhance risk management capabilities and generate new insights into the business for improved decision-making." According to a report by Deloitte[57], RegTech solutions provide five basis core services - Compliance, Identity Management and Control, Risk Management, Regulatory Reporting and Transaction Monitoring. The successful deployment of these technologies will help in facilitating automated tech and data-driven two-sided flow of information and thereby enable seamless compliance. Additionally, across all banks, whether traditional or digital:

56 https://www.fsb.org/wp-content/uploads/P091020.pdf

57 https://www2.deloitte.com/lu/en/pages/technology/articles/regtech-companies-compliance.html

- There should be guidelines for the right standards of reporting to the authorities.
- Common reporting standards can be developed for police authorities, regulators etc. to enable easier investigation.
- Automated generation of STR (Suspicion Transaction Report) can be made a norm among all banks. Legal & departmental action against all such bank managers and unit for negligence.
- Digital banks should have an automated or emergency request team. This will cut short the time in obtaining bank data. One of the biggest huddles with traditional banking ecosystem is the non-availability of bank staff on some particular days of the month. This is a huge challenge as it delays the investigation process.
- Finally, appointment of CISOs (Chief Information Security officer) in digital banks. The CISO will act as nodal officer for immediate response for any cyber-attack.

- **Business Continuity Planning:** Since after the global financial crisis, regulators including the Federal Reserve have required banks under their supervision to submit "business continuity plans" (BCPs) (also known as "Living Wills") in order to game out "an exit strategy" for depositors and other creditors to the bank, in the event of bank failure or winding down of business for other reasons. RBI also has enacted such requirements in the regulations concerning P2P-NBFCs.[58]

  As the Index reveals, almost every jurisdiction also requires DBs or banks generally to submit these BCPs and keep them updated. On the same lines, Digital Business banks / Digital Consumer banks will be required to submit BCPs to provide for exit strategy for all potential creditors for all financial, operational and saliently, technology risks. Regulatory oversight over BCPs is especially important in the context of DBs given that they can leverage their APIs to have relationships to numerous counter-parties that risks can originate from.

- **Other Regulatory Aspects / Ecosystem Enablers:** Likewise, Digital Business banks will be required to fully comply with any regulations touching upon bank conduct that RBI may issue from time to time. This should also be the case for Digital Consumer banks.

  In terms of ecosystem enablers, financial literacy will be the key enabler (or challenge, seen in a different lens) in the context of a regulatory framework for digital bank licence. A National Centre for Financial Education (NCFE) survey (2019) found that only 27 % of adult Indians are financially literate. The NCFE has proposed a "5Cs" approach in its national strategy document released in 2020 to ensure a greater fraction of Indians are financially literate. The "5Cs" approach is premised on:
  - Content
  - Capacity
  - Community
  - Communication
  - Collaboration

58 See https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=11137

Financial service providers in general and any potential intermediaries relevant to the digital bank licensing framework have a role to play along each of these 5 channels for digital banks to achieve their public policy objectives. For instance, they can leverage their app ecosystem, the aggregation of consumers and technology to create contemporaneously relevant financial content that they can dispense to the users through the applications. This dissemination can also take innovative forms like quizzes, stories, GIFs and interest can be sustained through introducing weekly leaderboards illustratively. They may also partner government stakeholders to co-create mass media campaigns around financial literacy; thus facilitating the "Collaboration" aspect of NCFE's strategy. Being focussed on leveraging technology, they can organically facilitate NCFE's recommendation for using technology to disseminate financial education messages ("Communication").

Other ways of communicating financial education/ financial literacy content/ messaging include the "Nukkad/ Natak" medium. The maximal use of local languages for explanatory visuals can help in easier absorption of guided journeys. Such employment of community-friendly and comprehensible media of communication embedded within related life events like marriage, parenting, will help enable financial literacy messages and engage various target audiences.

- **Technological neutrality:** Consistent with the best practices that the Index revealed, the Digital Business bank licence and the ambient regulation should be technologically agnostic. It should neither express a preference for nor bar a Digital Business bank from using/ not using any technology. This should also be the case for Digital Consumer banks.
- **Products and services:** Subject to asset and deposit limits and other restrictions (including for eg, number of customers), a Digital Business bank may potentially offer the following banking services in the restricted phase. Furthermore, although the language used was clear, In response to one comment received, it is clarified that these asset and deposit limits are at the entity-level, not at the consumer level.
    - Loans to MSMEs / Credit cards (subject to appropriate prudential safeguards) to MSMEs
    - Current Account services /business banking Services / time deposits from retail consumers, MSME businesses, other corporate and unincorporated entities
    - Factoring / Distribution (Channel Partner)
    - Others specified in Section 6 of the BR Act subject to exclusions issued by RBI under the terms of the license

  As will be apparent, the scope of liabilities is widened to include all categories of persons consistent with input from stakeholders. But only time deposits may be issued. This approach was thought to be prudent to propose in the sandbox phase, given the structure of demand liabilities and the "run-risk" they engender. Upon graduation from the regulatory sandbox and as a full-scale commercial bank, the licensee may issue both types of deposits.

Furthermore, while tailoring of these restrictions is an operational decision that is best taken at the time of entry into regulatory sandbox, experience with Payments banks suggests that it may be prudent to not be too rigid in defining these limits lest it create disincentives for micro and small businesses to utilize these accounts for their business transactions. Illustratively, consider a limit of ₹ 100,000/- for end of day balances in current accounts offered by these banks. Such limits can restrict micro and small businesses from utilizing these accounts during seasonal cash flow surges (eg, Diwali) or use these accounts as designated accounts for loan disbursals. After the progression to fully licensed stage, it can continue to offer these and other products and services at scale and without restrictions.

The corresponding products/ services for the Digital Consumer bank in the restricted phase may potentially include the following:

- Term Loans / credit cards (subject to appropriate prudential safeguards)/ other innovative credit products to retail consumers (This expression is worded broadly deliberately. It is expected that licensees will create innovative products for retail consumers responding to felt needs of the marketplace).
- Time deposits from retail consumers, MSME businesses and other corporate and unincorporated entities
- Distribution of products and services

Others specified in section 6 of the BR Act subject to exclusions issued by the RBI under the terms of the license

- **Progressive interpretation of branch mandates:** Consistent with the best practices that the Index revealed, the license may stipulate that the Digital bank may have one place of business. Furthermore, consistent with the RBI's continuing progressive re-interpretation of branch mandates[59] (issued pursuant to the guidelines under Section 23 of the BR Act) to account for technology as a factor in delivery channel, the license may lay down the objective of delivering banking services to defined unbanked areas leaving the channels of delivery to be determined based on the bank's policies.
- **Value Added Services:** Digital Business banks as a business construct are uniquely placed to benefit from a unified offering of both banking and value-added commercial services, because the idea of licensed Digital Business bank has evolved from "front-end" Neo-banks that, as engagement layers of their partner-banks, are already offering many of these services in India. APIs enable them to integrate services like payroll, accounts receivables/ accounts payables management, tax compliance and other S-A-A-S based services in the business flows of their customers directly. These services offer both an engagement avenue and revenue source for the proposed Digital Business Bank.

59 See first bi-monthly Monetary Policy Statement available at, *https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=36654* (para 28), See also Das, "Banking Landscape In the 21st Century" available at, *https://www.bis.org/review/r200302b.pdf* (para 20)

Modern regulatory practice no longer eschews banks from offering complimentary commercial services on the same balance sheet provided there is no prudential risk flowing from the commercial operations to the banking end of the business. (**See Box below**). In light of the fact that VAS offers a robust revenue model, we recommend that the Digital business bank have the permission to engage in non-financial business complementary to their core financial business, under this license subject to there being no prudential risk in the same.

Finally, since policymakers will have the opportunity to monitor Digital Business banks offering these complimentary commercial services through the regulatory sandbox and beyond in our proposal, they will be equipped with more information to consider extending the facility to incumbent traditional banks after they have monitored the Digital Business banks over the full rating cycle.

Value Added Services on DB balance-sheet

Modern financial services and innovative regulatory approaches are increasingly challenging traditional notions about separating banking from commerce. Modern regulatory practice no longer eschews banks from offering complimentary commercial services on the same balance sheet, *provided* there is no prudential risk flowing from the commercial operations to the banking end of the business. One policy design India could study in this regard is that of MAS. Under an amendment to Regulation 23G that is to enter into effect later this year, MAS has proposed that banks may operate certain "Nonfinancial businesses" (NFBs) that are related or complimentary to their core financial business. Pursuant to this reform, MAS has prescribed a list of permissible NFBs that banks have "automatic permission" to operate.[60] To further support the banks in this regard, MAS has created an "approval" route that banks can utilize to seek MAS' approval to operate NFBs that are outside the "automatic route". More importantly, MAS has also created a clear list of *non-permissible* NFBs that are clear no-go areas.[61]

This policy design can be applied beneficially in the context of creating a licensing regime for Digital Business banks in India. Digital Business banks as a business construct are uniquely placed to benefit from a unified offering of both banking and value-added commercial services, because the idea of licensed Digital Business Banks has evolved from "front-end" neo-banks that, as engagement layers of their partner-banks, are already offering many of these services in India. APIs enable them to integrate services like payroll, accounts receivables/ accounts payables management, tax compliance and other S-A-A-S based services in the business flows of their customers directly. Permitting Digital Business banks to continue to offer these and other value-added services that are complementary to their core financial services will offer two-fold advantage of enabling greater customer stickiness and increasing revenues for them. .

60 This is not an isolated shift. The Federal Deposit Insurance Corporation recently approved Square Inc's "Industrial Loan License"- a licensing structure that permits convergence of banking and commerce. See https://www.jdsupra.com/legalnews/square-obtains-fdic-charter-to-operate-80734/

61 See a summary of the MAS reform measure here, https://e.linklaters.com/69/3466/downloads/210119-mas-streamlines-its-anti-commingling-framework-enough-to-level-the-playing-field-final.pdf.

Critically, from a regulatory stand-point, since these are fee-based services and do not involve any incremental credit risk, there are no externalities flowing to the said Digital Business bank from offering these services on the same balance sheet as the banking business. In fact, deep integration with a business only enhances the transparency between the business and the Digital Business bank.

The same principle should inform Digital Consumer bank proposed here. As with Digital Business banks, Central Government in consultation with the RBI may lay down an exhaustive list of "go" and "no-go" NFBs. Subject to exclusions, a Digital Consumer bank may engage in NFBs that are unique to the niche retail consumer segment it may be targeting.

C. Priority Sector Lending In the Context of Digital Banks

Several stakeholders sought clarity on how priority sector lending ("**PSL**") obligations would apply for Digital banks. Accordingly, this segment will offer recommendations along this direction. Right at the outset, it is noted that these recommendations are aimed at starting a public policy dialogue with financial sector stakeholders on how best to manage the tension between legacy set of regulations i.e., PSL obligations and regulatory innovation sought to be achieved through Digital bank licensing and regulatory framework. As such, these recommendations are consultative in purport, not cast in stone.

As with differentiated minimum capital requirements earlier, application of PSL obligations to innovative bank licensing regimes warrant nuance rather than a "checklist" approach of extending PSL obligations mechanically. This is arguably all the more so when India's banking license policy pivoted to differentiated banking regimes in keeping with the Nachiket Mor Committee recommendations. Keeping this in mind, the following may be considered:

- **Digital Business Banks**

  The RBI master directions define "MSMEs" as one of the eligible categories for PSL obligations. However, since Digital Business banks are proposed to be established to enable credit penetration among under-served / unserved small business niches by their very purpose, there is a justifiable case for keeping the PSL mandate component of their book narrow (in terms of % of the total book size). It is proposed that the RBI may determine the PSL obligations for Digital Business bank licensees on a case by case basis at the time the licensee is ready to begin full-scale banking operations. A case by case approach gives all stakeholders the opportunity to be nuanced rather than prescribe heavily bureaucratized PSL obligations. Additionally, being fully licensed banks under the B R Act, these banks may participate in the market for PSL certificates (recognized as a form of business banks may engage in under Section 6 (1) (o) of the Act). Furthermore, as one of the stakeholders pointed out in the consultation, investing in security receipts where priority sector assets are the underlying is another way, these banks can meet their PSL targets.

- **Digital Consumer Banks**

  Under the extant RBI PSL master directions, loans to the following categories of borrowers are eligible for "PSL treatment" under the "weaker sections" category.[62]

  - Loans to borrowers belonging to SC/ ST communities
  - Loans to individual women beneficiaries upto INR 100,000/- per borrower
  - Loans to individuals for education including vocational courses (upto INR 1 million)
  - Persons with disabilities
  - Loans to distressed persons other than farmers to refinance their non-institutional debt

  These categories, being in the nature of retail consumers are a natural target group for Digital Consumer banks. In other words, Digital Consumer banks would have the specialized capacity to under-write borrowers in these aforementioned categories. So, it is recommended that upon being fully operational (ie after "successfully" graduating from regulatory sandbox), Digital Consumer banks may be considered to have complied with their PSL obligations if a defined % of their asset book comprises of credit to these categories of borrowers.

  Furthermore, since Digital Consumer banks are proposed to be established to enable credit penetration among under-served retail consumer niches deliberately, the PSL component of their book ought to be kept narrow. So, symmetrical to Digital Business banks above, it is proposed that the RBI may determine the PSL obligations for Digital Consumer bank licensees on a case by case basis at the time the licensee is ready to begin full-scale banking operations. Additionally, being fully licensed banks under the B R Act, these banks may participate in the market for PSL certificates (recognized as a form of business banks may engage in under Section 6 (1) (o) of the Act). Furthermore, as one of the stakeholders pointed out in the consultation, investing in security receipts where priority sector assets are the underlying is another way, these banks can meet their PSL targets.

- **Ancillary Issues re applicability of PSL to Digital Banks**

  Finally, it is observed that while the broader banking and financial marketplace has moved to allocate credit based on market principles and RBI does not prescribe interest rates on individual category of loans any more, the PSL category continues to be governed by a set of legacy laws including administered interest rates (by the Department of Regulation). This two-step / dual regulatory architecture appears to be overdue for reform. While these recommendations are specific to the scope of this Report, it may be feasible for policymakers and RBI to consult the banking and finance industry about "upgrading" the legacy PSL regulatory framework so we avoid the exercise of trying to retro-fit them to new licensing regimes such as the ones recommended in this paper.

62 See Master Directions- RBI (PSL- Targets & Classification), 2020 available at https://rbidocs.rbi.org.in/rdocs/notification/PDFs/MDPSL803EE903174E4C85AFA14C335A5B0909.PDF (p.15)

D. Legal Mechanics to Issue the License

While RBI's authority to issue a license to a banking company under Section 22 of the Banking Regulation Act (BR Act) is straightforward[63], an additional step is necessary for creating a licensing regime for Digital Business banks and Digital Consumer banks that permits them to offer value-added-services (and generally, NFBs) that are complementary to their core financial business, on the same balance sheet as the banking services.

The enumerated forms of business stipulated in Section 6 does not stipulate NFBs. So, the Central Government will have to invoke its powers under the residuary clause, (o) of Section 6 to notify, *"NFBs that are complementary to core financial business of banks"* as an (additional) business that a Digital Business Bank may engage in.

Accordingly, the legal engineering for the respective license takes the following two steps:

- A Digital business bank license / Digital Consumer bank license under Section 22 with the requisite enablers and business restrictions (minimum capital / asset & deposit size caps et al) as described above. The license may also lay down the path to "Full scale" Digital business bank / Digital Consumer bank license.
- A central government notification under Section 6 (0) notifying *"NFB that is complementary to core financial business of Digital business banks"/ "Digital Consumer Banks* as an additional line of business they can engage in.
- Following the MAS template, the Central Government in consultation with the RBI, may create permissible list of NFBs for Digital business banks and Digital Consumer banks respectively, and a list of non-permissible NFBs to ensure prudential decorum.

63 Both Payments bank and Small Finance bank licenses were engineered pursuant to the authority under Section 22.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Conclusion

India's public digital infrastructure, especially UPI has successfully demonstrated how to challenge established incumbents. As pointed out in the opening section, UPI transactions measured have surpassed ₹ 4 trillion in value. Aadhaar authentications have passed 55 trillion. Finally, India is at the cusp of operationalizing its own Open banking framework.

These indices demonstrate India has the technology stack to fully facilitate DBs. Creating a blue-print for digital banking regulatory framework & policy offers India the opportunity to cement her position as the global leader in Fintech at the same time as solving the several public policy challenges she faces.

Annexure-I

Digital bank Licensing & Regulatory Regime Report: Accounting for Comments (Consolidated)

S.No.	Institution	Comment received	Action Taken
1	**Vidhi Center of Legal Policy**	Suggestion to add a foonote about the Rajan Committee Report, 2008-where the proposal for Small Finance Banks originated.	Added in related footnote 3 of Report Version 2.
2	**Vidhi Center of Legal Policy**	Suggestion about a tangential detail in connection with RBI's recent move to let Payment Banks on-ramp to Small Finance Banks	Not added because it was not directly relevant to the broad strokes context-setting.
3	**Vidhi Center of Legal Policy**	Suggestion about highlighting the role MSMEs play in the Indian economy	Added in Section III (p.4)
4	**Vidhi Center of Legal Policy**	Suggestion about adding a segment dealing with how banks fail to appreciate the unique business needs of MSMEs.	The Report captures this lacuna in section III (p.8) and section V (p.16) respectively.
5	**Vidhi Center of Legal Policy**	Suggestion about including a snapshot of growing neo-bank market in India, and globally, pointing to Vidhi's own work.	Referred the readers to Vidhi's work in related footnote 23 of the Report Version 2.
6	**Vidhi Center of Legal Policy**	Suggestion about reaffirming the point made in the text, using the BIS paper in the footnote.	Added the BIS paper in footnote 22 adjacent to the text.
7	**Vidhi Center of Legal Policy**	Suggestions about flagging risks emanating from existing "neo-banks"	We have accounted for and flagged off the consumer protection risks emanating from the prevalent partnership model and market structure in Section V. We have NOT included Vidhi's suggestions in this regard to their full extent, in the interests of economy and brevity of the Report as also to focus on the narrow objective here- that of creating a regulatory template and roadmap for full-stack digital bank.

S.No.	Institution	Comment received	Action Taken
8	**Vidhi Center of Legal Policy**	Suggestion about specifying the relaxations if any that would be available for licensees in the regulatory sandbox	The Report already incorporated the recommended relaxations in Section VII, Sub-section B at pp. 23, 24 (in terms of minimum-paid up capital). We further also highlighted that the extant regulatory sandbox framework of the RBI recognizes these types of relaxations as being available.
9	**Vidhi Center of Legal Policy**	Suggestion about providing for the situations in which the Digital bank licensee has to exit the sandbox (eg, when it is unable to meet regulatory expectations / benchmarks).	Added in section VII at p.23 of the Report.
10	**Vidhi Center of Legal Policy**	Suggestion about dealing explicitly with the timelines for the Digital bank licenses in the sandbox (duration of a Digital bank licensee in a sandbox)	Added in section VII at p.22 of Version 2 of the Report
11	**Vidhi Center of Legal Policy**	Suggestion about recommending an eligibility criteria for Digital bank license	Added in section VII at p. 24 of the Report Version 2
12	**Vidhi Center of Legal Policy**	Suggestion about providing for RBI monitoring and supervision over Digital bank licensees in the sandbox phase.	The Report already provides for this on a composite read of Section VII at pp. 21 and 25.
13	**Vidhi Center of Legal Policy**	Suggestion to clarify if incumbent traditional banks will also have the license to offer "NFB" on their balance sheet	Added a clarification in section VII at p.29 of the Report Version 2.
14	**Vidhi Center of Legal Policy**	Suggestion to illustrate a list of permissible NFBs.	The Report has referred the interested reader to a note by *LinkLaters* discussing the issue via footnote 33. So, this suggestion was NOT included.
15	**Vidhi Center of Legal Policy**	Suggestion to add a segment recommending RBI to publish the Digital bank guidelines.	NOT added as being too obvious. When the RBI issues license under S. 22 of the Banking Regulation Act, it is trite that the process thereunder will be followed.
16	**Sabyasachi U**	Suggestion about use-case for "group-based" lending(similar to SHGs in villages)	The use-case about collective lending products/ schemes is already provided for by MFI-NBFCs. The digital bank licensing and regulatory framework proposed here was primarily aimed at bridging the INR 30 trillion (by latest estimates) credit gap in the micro and small segments of the MSME sector primarily (with one-to-one lender-borrower privity). So, this suggestion was not included.

S.No.	Institution	Comment received	Action Taken
17	**RazorPay Technologies**	Suggestion about including a section dealing with why NBFCs are also inadequate in fully addressing the addressable credit gap in the MSME sector, in the interests of 360 degrees view of the supply ecosystem.	Added specific paragraphs dealing with why NBFCs also can't solve for the addressable credit gap in the MSME sector, in Section III. on p.6 of the Report Version 2
18	**RazorPay Technologies**	Suggestion about including B-a-a-S as a use-case that a Digital bank license enables	Added a separate box highlighting illustrative use-cases that a Digital bank license will enable, on p. 14 of the Report Version 2.
19	**RazorPay Technologies**	Suggestion about highlighting that digital-native businesses that urban centers have witnessed in recent years, demand newer banking products and solutions from their banking partners that traditional banks may not be fully be equipped to offer. In the absence of reg.reform by way of Digital bank license, this downstream entrepreneurship will fade away.	Added the importance of regulatory reform in the direction of Digital bank license to promoring and facilitating "digital-native" micro and small businesses that urban centers have witnessed in the recent years. The Report Version 2 has data pointing out that existing vehicles- SFBs for instance, are typically in the business of lending to traditional businesses in their core markets. Thus, there is a public policy intervention needed here. See Sections III and V (p.16)
20	**SBI**	Raising caution about the increased cyber-security risks from a full-stack Digital bank license	Added a detailed ex-ante and ex-post technology risk mitigation framework in the Report Version 2. See section VII (pages 25, 26).
21	**IAMAI**	Recommendation to include Digital Retail (Consumer) bank licensing framework as well in the Report	The recommendation is included in the final version of the Report. Please see p. 51, 52 and following pages.
22	**IAMAI**	Recommendation to modify sequence for grant of DB licence to scaled neo-banks	The recommendation is not accepted for the reason that it goes against the principle of promoting competition. As the section on factors comprising the Index reveals, competitive neutrality is one of the key pillars informing the present proposal. Hard coding a particular category of applicant over others violates it.

S.No.	Institution	Comment received	Action Taken
23	**IAMAI**	Min. cap should be in the range of INR 50- 100 Cr	The Report in its first version already recommends INR 100 Cr upon the licensee graduating from a regulatory sandbox, to being a full-scale bank. Please see p.46 The lesser thresholds of min. cap. in the regulatory sandbox "restricted" phase, are fully supported by the data evidenced by the Index created in the Report - majority of the jurisdictions comprising the Index have adopted lower thresholds in the sandbox phase. Please see p.40 Furthermore, note that the licence is "restricted" and hence licensees will operate with entity-level asset/ liability / customers served limitations. As such, a lower threshold of capital in the regulatory sandbox is reasonable.
24	**IAMAI**	Greater clarity on the Timelines and the metrics path from "restricted" to "full-scale"	This recommendation is not accepted in the final version because of the reasons offered in the final version of the paper. Please see p.45
25	**NASSCOM**	Reg. Sandbox is not necessarily needed to "domicile" this innovation	This suggestion does not stand legal scrutiny. The Reg. Sandbox framework notified by the RBI offers the legal basis for the RBI to prescribe proportionately lower minimum capital requirements for the licensee(s) during the "restricted" phase. The RBI is itself bound by laws and regulations already enacted. As such, relaxations *outside* of the reg. sandbox framework are legally untenable. The recent example of NARCL where the RBI declined approving the initial structure proposed because the SARFAESI did not recognize it, is a case in point. As such, routing this innovation through a reg. sandbox is important. Absent relaxation on minimum capital and other compliances allowable under the reg. sandbox framework, the policy reform will not achieve the intended goal of attracting a deep and competitive pool of applicants for the Digital bank licence

S.No.	Institution	Comment received	Action Taken
26	**NASSCOM**	Clearly distinguish between "full-stack Digital Business Bank and "full-stack Digital Universal bank"	This issue is not current anymore in the final version of the Report. Taking into account feedback to consider recommending a framework for retail consumer, the final version of the Report recommends two regimes respectively, towards Digital Business bank and Digital Consumer bank. The rationale and data supporting the reasons for a Digital Consumer Bank licensing regime is offered in the final version of the Report. Please see pp.19, 20. For the sequence for bringing in, and the features of the Digital Consumer bank, Please see pp. 51, 52 et al Finally, the expression, "full-stack" that can potentially be confusing is changed to, "full-scale" to describe a Digital bank that graduates from the reg. sandbox and commences operations.
27	**NASSCOM**	Prescribe the Min. Capital thresholds clearly for all stages	(As already pointed out above), the minimum capital recommendation in the previous version of the Report is retained in the final version for reasons elucidated. Please see p.45
28	**NASSCOM**	Minimum. the threshold for participation in "restricted" phase should be raised.	The lesser thresholds of min. cap. in the regulatory sandbox "restricted" phase, are fully supported by the data evidenced by the Index created in the Report - majority of the jurisdictions comprising the Index have adopted lower thresholds in the sandbox phase. Please see p.40 Furthermore, note that the licence is "restricted" and hence licensees will operate with entity-level asset/ liability / customers served limitations. As such, a lower threshold of capital in the regulatory sandbox is reasonable.

S.No.	Institution	Comment received	Action Taken
29	**NASSCOM**	Offer greater clarity on existing neo-banking arrangements	The Report highlights the limitations of existing neo-banks as context for making a case for a Digital bank licensing framework in India. As such, existing neo-bank partnerships may continue at present as also later when India enacts a Digital Bank framework, subject to RBI outsourcing guidelines and related regulations. Commercially, a license is merely one way for organizing and operating a business. For any eligible applicants, their respective boards will take the commercial decision on whether to partner with incumbent banks and operate a B2B2C business, or go for the licence and create their own balance sheet.
30	**NASSCOM**	Priority sector Guidelines will require a fresh look	Taking into account this (and other) feedback, this recommendation is included in the final version of the Report. Please see p.56 and following pages.
31	**NASSCOM**	Engage more directly with challenges of consumer protection (that Digital Banks throw up)	Taking this feedback into account, and since the issues of consumer protection are wide and encompass banking and finance in general, it is proposed to create another research project on "Digital Literacy" and related issues and zoom in narrowly on how public policy may be reformed to mitigate the risks.
32	**Revolut**	Players meeting a defined stringent qualifying criteria should be directly granted a "full-scale" Digital Bank licence while others should take the reg. sandbox route to get the regulator's confidence	(For the reasons stated above), this recommendation was not accepted. To reiterate: The recommendation goes against the principle of promoting competitive neutrality. As the section on factors comprising the Index reveals, competitive neutrality is one of the key pillars informing the present proposal. Hard coding a particular category of applicant over others violates it. Furthermore, it may be noted that if a given category of applicant is already experienced and has a track record of operating as a regulated entity, the regulatory sandbox framework timelines recommended in the Report are malleable and could be tailored to a particular licensee. Please see p. 45

S.No.	Institution	Comment received	Action Taken
33	**Revolut**	Digital Banks should be able to offer all types of products to all types of users	This recommendation is reflected in the final version of the Report in terms of the liability products a Digital Business Consumer bank may offer. Accordingly both types of Digital Banks may issue deposits to a wide set of customers. This is aimed to enable the licensees to moderate the weighted average cost of deposits. Please see pp. 51-53 Given India has since 2014, pivoted towards a differentiated banking licence regime, end-users of credit products (asset-side products for banks) for both Digital Business bank / Digital Consumer Bank are however tailored on the basis of target group identified.
34	**Revolut**	Access to Open banking/ power to issue credit cards	The recommendation regarding power to issue credit cards is accepted and included in the final version of the Report Please see p.51, 53 The previous version of the Report has already recommended access to AA framework- India's version of Open Banking during the sandbox phase. Please see p.48 Moreover, Under the regulation as it stands, Digital Banks, when they are duly licensed and operational, will qualify under "Financial Information User" category and as such would be eligible to participate in AA ecosystem.
35	**ORF**	Ownership structures of Fintechs are diversified and some of them may not be controlled by Indian residents, as required by RBI	As pointed out in the Report, Digital Banks will be "bank" as understood in the BR Act, 1949. As such, the extant FDI policy applicable to the banking sector would be applicable to Digital Banks, as they would be applicable to all banks. In light of this, applicants that are fintechs and desirous of seeking a Digital Bank licence will have to re-engineer their cap table (capital structure) to comply with the sectoral ownership rules prescribed by the RBI. This is also consistent with the regulatory parity principle embraced by the Report.

S.No.	Institution	Comment received	Action Taken
36	**ORF**	The Report should consider how priority sector guidelines can be incorporated in regulatory framework for Digital Banks	This recommendation is accepted and implemented in the final version of the Report. Please see p. 56
37	**ORF**	A potential template for Digital Retail Bank licensing may also be created	This recommendation is accepted and implemented in the final version of the Report. Please see p. 51, 52 and following pages.
38	**ORF**	Minimum criteria on applicant pool- the need to ensure these do not operate as a entry barrier	The Report, both in the first and final version, is committed to mitigate all potential entry barriers and promote competition by widening the applicant pool consistent with the need to ensure only serious entities having expertise in relevant areas and understanding of risks in the digital domain. The minimum criteria recommended balances this tension, and is supported by the data revealed by the Global regulatory Index created under the Report.
39	**PayU**	Expand the scope of the deposits to TGs other than MSMEs, for Digital Banks	This recommendation is adopted in the final version of the Report. Accordingly both types of Digital Banks - Business and Consumer- may issue deposits to a wide set of customers. This is aimed to enable the licensees to moderate the weighted average cost of deposits. Please see pp. 51-53
40	**PayU**	Entities that already have lending experience (NBFC, PPI licence) should be directly issued a full-scale licence	This recommendation is not accepted for the following reasons: The recommendation is inconsistent with the principle of promoting competitive neutrality. As the section on factors comprising the Index reveals, competitive neutrality is one of the key pillars informing the present proposal. Hard coding preference for a particular category of applicant over others is inconsistent with the principle. Furthermore, it may be noted that if a given category of applicant is already experienced and has a track record of operating as a regulated entity, the regulatory sandbox framework timelines recommended in the Report are malleable and could be tailored to a particular licensee. Please see p. 45 While NBFCs do have experience with operating the credit book, most NBFCs in India are non-deposi-taking and do not have a track record of issuing and growing a CASA franchise. (PPIs are even more irrelevant to the argument as they have neither and are merely PSPs).

S.No.	Institution	Comment received	Action Taken
41	**PayU**	Clarify the PSL requirements	This recommendation is accepted and implemented in the final version of the Report. Please see p. 56
42	**CRED**	A regulatory and licensing template for Digital Retail bank may be added	The recommendation is included in the final version of the Report. Please see p. 51, 52 and following pages.
43	**CRED**	A specific section dealing how Digital Banks will engage with PSL obligations will be ideal to be included.	This recommendation is accepted and implemented in the final version of the Report. Please see p. 56
44	**PwC**	The Report should include nuanced licences (such as Digital Retail Bank) and that an identically phase-wise approach should be followed for Digital Retail bank.	The final version of the The final version of the Report has incorporated a parallel reg. and licensing framework for Digital Consumer banks. Please see p.42, pp 51, 53 et al
45	**PwC**	The applicant pool should include Fintechs as well as other players specified	The final version of the Report clarifies by way of abundant caution that the categories of potential applicants mentioned are illustrative, not exhaustive and that Fintechs are included. Please see p. 47
46	**PwC**	Additional VAS	The categories of VAS mentioned are illustrative. As the Report recommends, Central Govt in consultation with RBI may notify a exhaustive list of NFBs that the Digital banks may engage in (along with a exclusion list) Please see p.61
47	**PwC**	ESG / Audit	The subject of ESG's application to the banking sector is subject matter of global debate as of today and matters are in a flux. Moreover, it is a banking sector-wide issue and not specific to Digital banks. As such, the final version of the Report does not include this recommendation. Finally, as the Report highlights at the outset, Digital banks are banks, as understood under the BR Act. As such, the existing auditing and compliance requirements applicable to commercial banks would apply to these banks when they are operational. Given that the proposal is only in ideation phase, Any specific auditing and compliance requirements specific to Digital banks should at least await greater traction to the framework proposed in the Report.

S.No.	Institution	Comment received	Action Taken
48	**Uttarakhand Police (through authorized representative)**	Several cybersecurity – specific recommendations and inputs	Incorporated the relevant ones to the Report in a separate box. Please see pp, 55-56 of the final version of the Report.
49	**Niti Aayog**	Financial literacy enablers/ challenges	Incorporated the recommendations and way forward in a seprate section. Please see 57, 58 of the final version of the Report.
50	**CIPP**	Submissions regarding specialized banking license in context of Custodians	Incorporated the points highlighted in a box. Please see p.30 of the final version of the Report.
51	**Deloitte**	Several submissions touching upon the scope of the Digital Bank license and operational requirements. Salient suggestions: -Introduce a consolidated Digital Bank license (rather than differentiated licenses for MSMEs and retail separately. -Digital Banks should also be subject to the deposit insurance requirement and limits	The RBI has recognized and implemented a differentiated bank licensing policy since adoption of the Mor Committee recommendations in 2014. The differentiation proposed in the Report is consistent with that differentiated banking policy. Furthermore, taking feedback received during consultation phase, The final draft of the Report recommends that the RBI issue the relevant licenses and test the performance of qualified licensees in the sandbox, across both small business and consumer categories. Regarding deposit insurance, the Report already incorporats that requirement by explicitly stating that licensees under this proposed framework are "Banks" as we understand them in B R Act. It bolsters that by explicitly stating regulatory parity between incumbents and Digital banks as a necessary principle of the proposed framework.
52	**Dvara Research**	Expressed scepticism Digital Banks will move the needle for financial inclusion. However, submission was positive about the potential of Digital Banks for promoting competition. It recognized that incumbents have not leveraged technology to offer customized products to their consumers. In Conclusion, Dvara sees merit in licensing Digital Banks to promote competition in the banking sector.	Promoting competition in the banking sector is one of the express motivations for this Proposal. Please see p.25, and p.37, 38 of the Discussion paper (where this rationale is explicitly charted out).