



DIGITAL BANKS

A Proposal for Licensing & Regulatory Regime for India

DISCUSSION PAPER

November 2021



NITI Aayog

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Regime for India**

**Comments on the Discussion Paper may be provided
on or before 31st January 2022 preferably on
email at annaroy@nic.in**

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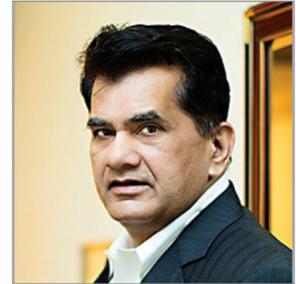
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Foreword

Over the past few years, India has been witnessing an unprecedented level of digitization and digital disruption, which has completely transformed the way in which public services are delivered. Digitization has become a prominent theme which is driving inclusion across the financial services, education and healthcare ecosystem for all the citizens of India. As a result of the powerful JAM trinity of Jan Dhan Bank Accounts, the biometric Aadhar Card and hundreds of millions of mobile phones, financial inclusion has become a reality for the citizens of India. This has been furthered by the Unified Payments Interface (UPI) which has witnessed extraordinary adoption. UPI recorded over 4.2 billion transactions worth over ₹ 7.7 trillion in just October 2021. The platform approach taken by the government in conceptualizing UPI has resulted in top-class payments products being developed on top of it, as a result of which payments can be made with the click of a mobile phone not just at retail outlets but also peer to peer, completely redefining the way in which money is transferred between individuals. A “whole of India approach” towards financial inclusion has also resulted in Direct Benefit Transfer (DBT) through apps such as PM-KISAN and extending microcredit facility to street vendors through PM-SVANIDHI apps.



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. The success that India has witnessed on the retail payments and credit front, has failed to replicate when it comes to payments and credit needs of its small businesses. The current credit gap and the business and policy constraints reveal a need for leveraging technology effectively to cater to the needs of this segment and bring them within the formal financial fold.

This Discussion Paper examines the global scenario, and based on the same, recommends a new segment of regulated entities – full-stack digital banks. A detailed architecture and sequencing of reform has been proposed in this paper, the purpose of which is to undertake stakeholder consultations. Based on the comments received, the paper will be finalized and shared as a policy recommendation from NITI Aayog.

A handwritten signature in black ink, appearing to read 'Amitabh Kant'. The signature is stylized and fluid, with a long horizontal stroke at the end.

Amitabh Kant
CEO, NITI Aayog

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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 Discussion paper 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 identifying significant credit gap that persists among various segments, like the MSMEs, underlining the need for alternative mechanism. The Section argues in favour of having licensed Digital banks as potential mitigant.

Section IV explains its potential and gives an overview of the prevalent business models, while defining the concept of “Digital bank”.

Section V explains the scenario that has evolved in India following the regulatory vacuum and absence of a Digital bank license regime.

Section VI describes the elements of a “Digital Global Regulatory Index”, created for the purposes of this Discussion paper 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 gives the recommendations.





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**). SFBs³ 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 e.g. 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 catalysed 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.

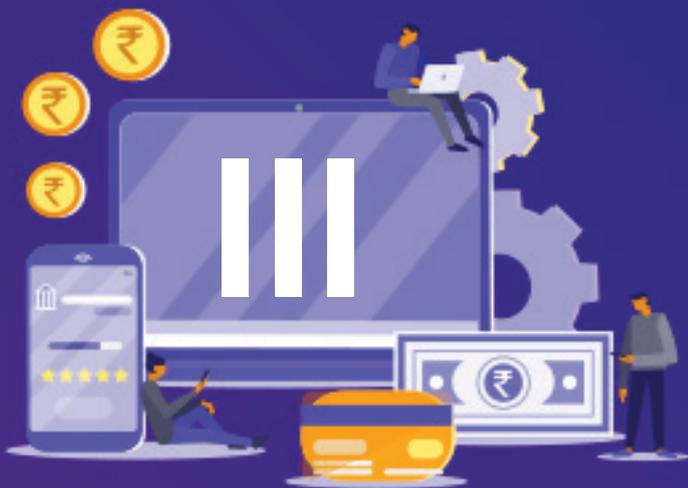
However, while regulatory innovation has catalysed payments sector reforms the principal beast of burden for credit delivery and issuance of demand deposits, i.e. the incumbent bank has remained undisrupted. Most of these reforms upended the user experience, i.e. the engagement layer of payments but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

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

Payment Successful

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 disbursement without documentation) or chit funds (delayed disbursement but lower interest rates than money lenders) to finance itself, even at the cost of staying uncompetitive owing to the usurious interest burden.⁸

IFC⁹ 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 success¹⁰, 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](https://www.msme.gov.in/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.intellectcap.com/wp-content/uploads/2019/04/Financing-Indias-MSMEs-Estimation-of-Debt-Requirement-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.

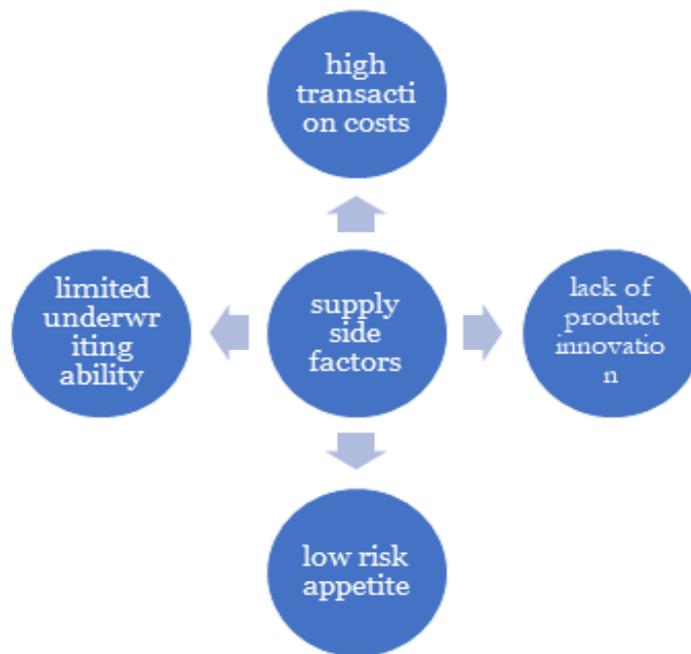


Figure 1: Supply Side constraints in traditional brick and mortar banking

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 *rationaly* 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

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.



true of the modern NBFCs that have digitized all elements of their value chain¹⁴, giving 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-

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.

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>



MSME suppliers. They may be reluctant to bifurcate and operate two invoice discounting systems.

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, disbursement 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 Discussion paper. 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.

There is an opportunity for public policy intervention in terms of banking license innovation that will support and facilitate this new class of business formation. Absent such support, the “organic rate” of emergence and survival of these digital-native businesses will be artificially suppressed with corollary negative spillovers on formal sector employment in urban centers.

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.



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.²¹

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.

²¹ 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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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 channels²² 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.²³ A template of a regulatory framework for DBs for India has been given in Section VII below.

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.

²² Proximate channels will cover technologies like NFC for e.g.

²³ 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)



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.²⁴

- **(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,²⁵ (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 status²⁶ (**See Box**).

The Secret Sauce to Profitability: Starling bank Case Study²⁷

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.

24 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-Roadmap-for-India-1.pdf> p.17 (for a quick global snapshot of activity in this space).

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

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

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



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.²⁸ 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).

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.²⁹

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.³⁰ 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 %.³¹

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 CAC³² thus offering them the headroom to expand coverage than the incumbent commercial bank.

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

29 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

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

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

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



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.

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.

Augmented Credit Under-writing: Account Aggregators (AA) have the opportunity to on-board Digital Business banks on the AA ecosystem. Business consumers can then use the consent architecture to share their data with these banks with “financial information users” to enable better credit underwriting. On the same lines, can augment their own credit models and underwriting by relying on historical data provided by incumbent “financial information providers” to offer business banking and lending products to their customers.



Online Banking

Personal Account
Account Details

Mobile Payment

Personal Loan

Deposites

Bank Visa
12345678

Last Payment 2022-02-20

Log Out

- Transfers
- Saving
- Setting
- Messages

\$55,678.99
Current Balance

\$5,678.99
Current Balance

\$5,678.99
Current Balance

\$5,678.99
Current Balance

\$2,678.99

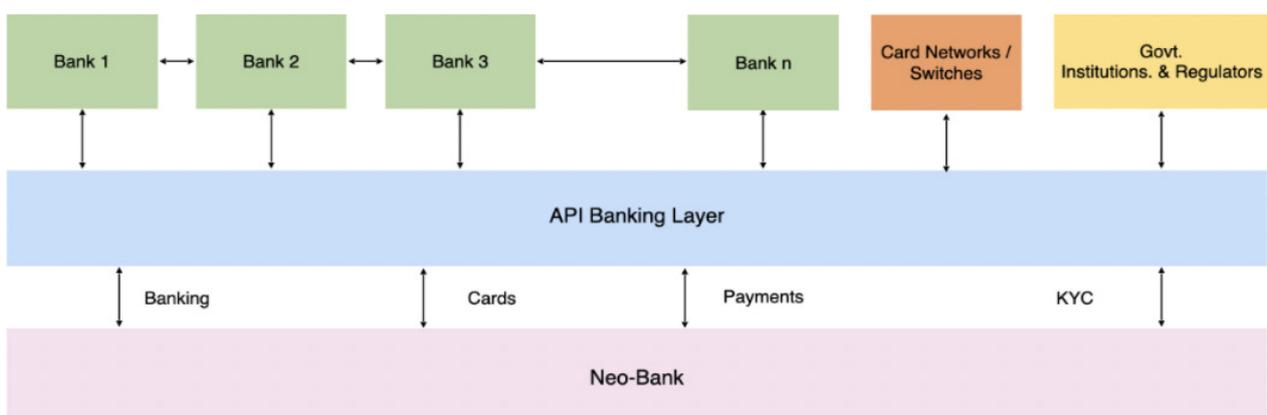


Challenges With the Existing “Partnership-Based” Neo-Bank Model

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.³³



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

³³ 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 onboarding, 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.³⁴ 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 is critical 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.³⁵ A useful point for consideration will be to evaluate a “full stack” DB license which offers

³⁴ See, Rising Challenges for Indian Neo-Banks at <https://bfsi.economictimes.indiatimes.com/news/fintech/rising-challenges-for-indian-neo-banks/85028088>

³⁵ 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,³⁶ 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.

³⁶ 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>



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 Discussion Paper 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 favoritism 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?	✓	✓	✗ ³⁷	✓	✓	✓
	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	✗ ³⁸	✓	✓	✓	✓	✓
	Equal access to revenue sources at par w/ incumbents	✗ ³⁹	✓	✗ ⁴⁰	✓	✓	✗ ⁴¹
Business restrictions (NOT adjusted for prudential reasons)	Are there any restrictions on minimum balance fees NOT justified by prudence?	✓ ⁴²		✓ ⁴³			
	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

³⁷ 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.

³⁸ MAS precludes Digital Full Banks from accessing ATM Network.

³⁹ 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.

⁴⁰ 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.

⁴¹ Financial Services Commission precludes Digital banks from lending to Corporates.

⁴² See footnote 3

⁴³ 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.





Digital Bank Regulatory Framework for India: A Template

This section will serve as the capstone of this Discussion Paper 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 .

As a threshold issue, a two-stage approach is recommended. Given the important role of credit in growth of economy and pressing public policy necessity for bridging the ₹ 25 trillion credit gap in the MSME sector, it is recommended that Digital business bank license be phased-in in stage 1⁴⁴. The RBI may consider introducing a “Digital Universal Bank” license in Stage 2 on the basis of regulatory experience gathered in Stage 1.

The sequence and the template suggested here is informed by the DB Regulatory Index created for the purposes of this Report.⁴⁴ In addition inputs received from 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 practices revealed by the DB Regulatory Index, the following 3 step sequence is recommended:

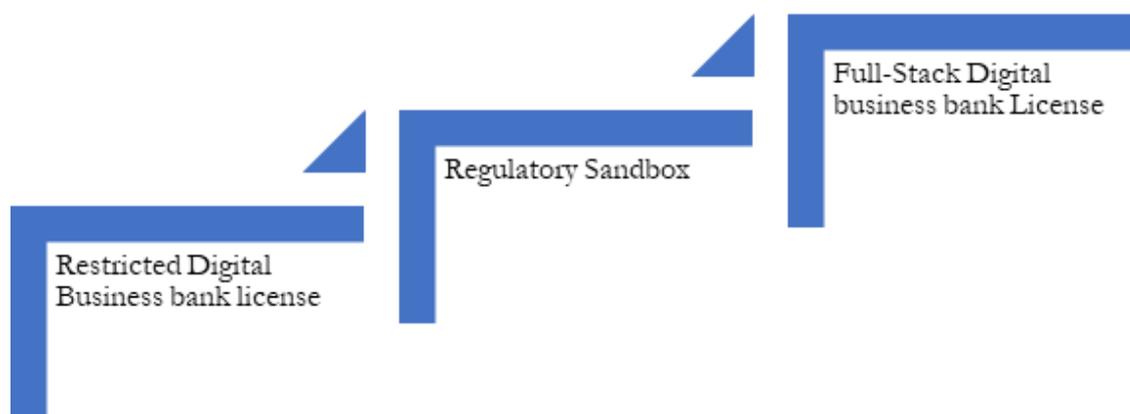
- **Step 1:** Introduce a *restricted* Digital Business bank license (the dimensions along which the license will be restricted has been detailed below in sub-section-B and the legal mechanics involved in sub-section- C below).
- **Step 2:** The applicant acquiring this *restricted* license (“**Licensee**”) enlists in the regulatory sandbox and commences operations as a Digital Business bank in the sandbox.

⁴⁴ 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.



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.⁴⁵ Certain relaxations have been recommended for Digital Business 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 initial set of restrictions can be progressively relaxed to advance the Licensee to a Full Stack Digital Business bank license.
- 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.⁴⁶ In this regard, it is also noted that the Sandbox Framework is designed for flexibility of duration at the cohort level.⁴⁷ Given the significance of this regulatory innovation, RBI is expected to leverage this built-in flexibility to decide the duration of this cohort and give itself and the Licensees sufficient and fair time to observe the Licensees' execution as a Digital Business bank in the sandbox before graduating them to full-stack Licensee (or exiting them from the sandbox as the case may be).
- 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.

⁴⁵ 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).

⁴⁶ 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

⁴⁷ 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).



(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).⁴⁸

- The same sequence can inform Stage 2 of the reform in phasing in “Digital Universal banks”.

B. Features / Conditions of Digital Business bank License

- **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 ladder for minimum paid-up capital is being proposed by way of illustration:
 - 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 into the final stage, a Full-stack Digital Business bank will be required to bring in ₹ 200 Crores (equivalent to that required of the Small Finance bank).⁴⁹
- **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 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.
- **Equal Access to the Infrastructure Enablers:** In order that the license and the business proposition of a Digital Business bank remain viable and pro-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 (NPCI) / 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.

⁴⁸ See Clause 6.6 (b), and (c) of the Sandbox Framework available at, <https://www.rbi.org.in/scripts/PublicationReport-Details.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).

⁴⁹ 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.



- **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 Stack Digital Business bank.”
- **Prudential / Liquidity risk regulation:** This aspect will be identical for both Digital Business banks *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.
- 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 (as also DBs generally) relative to the traditional banks because they leverage their APIs to have relationships to numerous counterparties that risks can originate from. The license 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:
 - 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.
 - Finally, 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.
- **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.⁵⁰

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 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:** 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 generally for DBs).
- **Technological neutrality:** Consistent with the best practices that the Index revealed, the Digital Business bank license 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 generally for DBs).
- **Products and services:** Subject to asset and deposit limits and other restrictions (including for eg, number of customers), a Digital Business bank should be able to offer standard banking services in the restricted phase.
 - Loans / Current Account /business banking Services / fixed deposits to MSME businesses
 - Factoring / Distribution (Channel Partner)
 - Others specified in Section 6 of the BR Act.

While tailoring of these limits 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 disbursements. After the progression to fully licensed stage, it can continue to offer these and other products and services at scale and without restrictions.

- **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

⁵⁰ See <https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=11137>



continuing progressive re-interpretation of branch mandates⁵¹ (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.

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 the “automatic permission” to operate.⁵² To further

51 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)

52 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/>



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.⁵³

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. .

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.

Like MAS, the RBI can define clear no-go areas which shall remain outside the scope of permissible NFBs for Digital Business banks.

C. 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 straightforward⁵⁴, an additional step is necessary for creating a licensing regime for Digital Business 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 license takes the following two steps:

- A Digital business 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 progression to “Full Stack”

⁵³ 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>.

⁵⁴ Both Payments bank and Small Finance bank licenses were engineered pursuant to the authority under Section 22.



Digital business bank license and the conditions to which such progression is subject to.

- A central government notification under Section 6 (O) notifying “*NFB that is complementary to core financial business of Digital business banks*” as an additional line of business they can engage in.
- Following the MAS template, the Central Government in consultation with the RBI, can create a permissible list of NFBs for Digital business banks and a list of non-permissible NFBs to ensure prudential decorum.



BANK

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CREDIT CARD



1234 0000 5678 0000



B





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.

