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ENABLING UPI ACCESS

For India's Digital Asset Exchanges



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A Case for Enabling UPI Access for India's Digital Asset Exchanges

I. Introduction

This position paper makes a case for enabling compliant digital asset exchanges operating in India to be onboarded as Merchants by acquirer banks on UPI rails.

The position paper is structured as follows: **Section II** describes the Indian web3 ecosystem in its salient features by way of background. **Section III** zooms in on the bottleneck faced by Indian digital asset exchanges in enabling access through UPI. It highlights the impediment stemming from the broad language used in circular issued by the NPCI to acquiring banks on UPI. **Section IV** makes the case for *compliant* digital asset exchanges to be on-boarded as merchants on UPI. It points out that none of the impediments specified in the relevant NPCI circulars apply to digital asset exchanges that are carrying out business in compliance with the applicable laws. **Section V** demonstrates that there are compelling public policy reasons in enabling above-the-board access to digital assets investment through UPI especially in the context of FTX (Bahamas) implosion. **Section VI** concludes with a set of specific reliefs from the NPCI flowing from this position paper.

II. The Indian Web3 Opportunity & Context Setting

Web3 is the umbrella expression for capturing the set of technologies that rely on decentralization, cryptography and digital assets. As a recent NASSCOM Report on Web3 notes¹, India has the unique opportunity to leapfrog competition in adopting web3 at scale. To put that framing statement in numbers, over 450 start-ups that could be classified under the web3 umbrella have been established in India as of H12022. 11 % of the global talent base for powering these start-ups are based out of India and this expert human capital is growing at 120 % CAGR.

Several use-cases have emerged globally and locally. Among the salient ones that come to mind are Polygon's partnership with the Govt. of Maharashtra to issue 65000 caste

¹ See The India Web3 Start Up Landscape available at, https://nasscom.in/knowledge-center/publications/india-web3-startup-landscape-emerging-technology-leadership-frontier

certificates on Polygon. Uttarakhand leveraged Polygon to increase transparency around supply chain of medical assets to be supplied to state medical colleges.² Other blockchain-based use-cases like automated contingent contracts have emerged to potentially challenge existing intermediaries like escrow agents. While use-cases developed on top of closed loop digital assets like non-fungible tokens (eg, loyalty) are still evolving, these digital assets offer the promise of unbundling the intermediated market structure of creative economy and put more power in the hands of creators (artists, singers, athletes).

A USISPF research exercise estimates economic value added of \$1.1 trillion to India's economy in this decade. As a corollary, digital assets specifically and web3 generally, are attracting policymaker and investor attention both locally and globally. As a derivative of all this potential in the space and in anticipation of application of these use-cases several years down the road, a market has emerged in investment and trading in representative digital assets locally as well as globally. Digital asset exchanges offer a medium for investors, both retail and institutional, to invest in these digital assets based on their assessment of the future expected value of these digital assets. In other words, these exchanges are similar to securities exchanges where investors invest in stocks / bonds of listed businesses based on their assessment of future expected value of these businesses (or their credit worthiness) through investing and trading in their equity securities/debt securities.³

In much the same ways as an index offers a snapshot of what the Indian economy may look like several years out, investor activity on digital asset exchanges offers a snapshot of what the web3 economy may look like several decades out. Of course, just as investors with both short- and long-term time horizons participate in the securities market, digital asset exchanges also witness participation from short term and long-term investors. NASSCOM estimates that 2% of India's population are active digital assets users. Thus, a considerable fraction of India's population is "digital -assets-active" and interested in exploring web3 applications.

² Uttar Pradesh and Telangana are the other states that are relying on blockchain technology to enhance transparency in the context of G2C use-cases.

³ Note that while the digital assets and the underlying blockchain technology are decentralized; at least in the current iteration, digital asset exchanges are centralized intermediaries offering a marketplace for buying and selling of these digital assets.

It is pertinent to point out at this stage that digital assets are integral to the web3 ecosystem. We emphasize this specifically to dispel the notion that has gained currency among certain policymakers and regulators that India can foreclose digital assets directly or indirectly and yet leverage the underlying technology (i.e. blockchain). As we have pointed out in several public fora⁴, a blockchain without the embedded token is just a distributed database. While it can power some use-cases (eg, where robust information storage is the key objective), digital assets (tokens) offer decentralisation, programmability and instantaneous transfer of value (that power use-cases like cross-border payments at fraction of a cost to that imposed by incumbent systems). So, the web3 public policy design should account for digital assets and the pivotal role they play in the web3 ecosystem. (For abundant clarity, as we have highlighted above in the case of Maharashtra Telangana and Uttar Pradesh, the technologies that comprise Web3 are capable of powering use-cases in several non-financial contexts (eg, supply chain transparency).

Finally, it is important to highlight that in addition to solving for the immediate usecase of providing a safe investment / trading avenue to domestic investors, digital asset exchanges may also serve as an on-ramp for these participants to become knowledgeable about and gain access to the broader web3 ecosystem including the underlying technology, blockchain. If India is to realize the potential web3 offers to its economy, the learning curve for mass adoption has to be flatter. Policymakers need to recognize the social utility of digital asset exchanges in enabling that.

III. The Problem Statement

The NASSCOM Report cited above draws attention to regulatory policy uncertainty as the principal headwind to the potential value added web3 offers the promise for. It specifically calls out the current "shadow ban" on digital asset exchanges and digital asset investors from accessing UPI as one of the key impediments to the evolving web3 ecosystem in the nation.

⁴ See https://economictimes.indiatimes.com/opinion/et-commentary/blockchain-with-token-vs-blockchain-without-token-big-challenge-before-policymakers/articleshow/95435212.cms?from=mdr

Mirroring practice in cards-based payment systems, merchant on-boarding to the UPI channel is achieved through acquiring banks enlisted as such in the UPI ecosystem. A typical merchant on-boarding involves an acquiring bank allotting a Merchant Identification Code ("MID") to a given merchant, doing the due diligence on the merchant, completing the KYC and relevant fraud prevention and hygiene checks and then enabling access of that merchant on UPI rails. However, as the NASSCOM Report notes, acquiring banks appear to be <u>not</u> allotting MID to digital asset exchanges <u>as a class</u> thereby disabling their investors from transacting on these digital asset exchanges through the UPI.

Digging under the hood of relevant NPCI literature, it appears to be that NPCI's broad language in certain circulars may have a chilling effect on acquiring banks' incentives to on-board digital asset exchanges <u>as a class</u> and the "ban" reported by NASSCOM in its Report on digital asset exchanges from accessing UPI for transacting appears to be a corollary of this broad language.

For example, Clause 3 (iii) of the NPCI office circular 18 ("**the Circular**") dated September 2021 titled, "Reference Guidelines for Members" (acquiring banks) stipulates categories of "Prohibited Merchants" as follows:

- → Exclusion of Merchant categories that have been banned under the Central or State laws (or regulations thereunder)
- → Exclusion of Merchant operating such business that is not specifically permitted by the regulator, statutory or other competent authority
- → Exclusion of Merchant posing a high brand or reputation risk
- → Exclusion of Merchant operating in financial products / services that are not regulated.

It is trite from a literal reading of Clause 3 (iii) that leaving aside (a) that speaks of "merchants banned as a category" (i.e., class) under central or state laws, other exclusions require acquiring banks to take a case-by-case approach in determining if a given merchant is "Prohibited Merchant" or otherwise. No such central or state law or ancillary regulation banning digital asset exchanges exists. Indeed, the Supreme Court has recognized that natural citizens that have founded digital asset exchanges operate under the protective

umbrella of Article 19 (1) (g) and may conduct their business subject to reasonable restrictions.⁵ As such, acquiring banks cannot legally ban digital asset exchanges as a class from on-boarding as a UPI merchant under the applicable law and plain meaning of NPCI's internal "law". Nonetheless the ban persists on digital asset exchanges as a class. Not being supported by any applicable law, it is arbitrary and warrants NPCI's intervention.

IV. The Case for Compliant Digital Asset Exchanges to be on-boarded as **Merchants**

This section will demonstrate that compliant digital asset exchanges appear to be eligible under each of the limbs of the clause above to be on-boarded as a merchant on UPI. But before we proceed further, we offer a definition of what a compliant digital exchange means. Typically, we suggest that a compliant entity will have the following indicia:

- Incorporated in India, employ Indians, and are promoted by Indian residents to ensure accountability to Indian consumers and law enforcement and fiscal authorities.
- Is a "Reporting Entity" under the Prevention Of Money Laundering Act ("PMLA") and compliant with the reporting and record-keeping obligations thereunder. (In this regard, it may be noted that the notification issued by the Department of Revenue, Ministry of Finance on March 7, 2023 bringing digital asset intermediaries under the ambit of PMLA, establishes equivalence between incumbent "traditional" financial Institutions (eg, banks) that are "Reporting Entities" under the law.
- Have adopted global best practices KYC, in order to address concerns around money laundering and terrorist financing
- Have adopted industry grade standards for operations and standard-setting on their platform including for token listing hygiene (eg, due diligence before listing, fit and proper of the issuer and the like)
- Comply with advertising guidelines laid down by ASCI⁶

⁵ See IAMAI v UOI available at, https://indiankanoon.org/doc/12397485/

⁶ See also p.7 below

- Deduct TDS on behalf of their users and contribute towards nation building in the form of taxation
- Maintain transparency about user funds
- Have a consumer grievance settlement mechanism with defined timelines towards resolution of complaints,
- Comply with CERT-In mandates and cooperates with law enforcement in the context of complaints of cyber fraud registered through the "1930" helpline of the MHA.
- Is preferably a member of relevant industry bodies having a wide representation (Illustratively, Bharat Web3 Association is one such association that presently prescribes rules and standards for its members. As the industry matures and a formal SRO is recognized, membership of that SRO may be stipulated as a best practice).
- Have appointed a Compliance Officer to liaise with law enforcement and regulators

a. Does A Digital Asset Exchange Pose Reputation / Brand Risk?

A review of academic research of reputation risk reveals that regulators have focussed on reputation risk for banks from the 1990s. Reputation risk in a banking context has been defined as the risk that stakeholders will negatively change their expectations and behaviour with respect to a bank (when a bank does not live up to their expectations). Clearly, this is a nebulous standard to interpret and enforce because stakeholders may find their expectations not met owing to a variety of reasons. Some of these expectations will of course be fairly broadly held; for example, given banks are fiduciaries of customer trust, mis-selling of financial products can engender reputation risk.

But it can get tricky if we change the above example to say a bank funding a gas pipeline or a coal plant. Obviously, *some* staunch environmentalists among a bank's stakeholders may find their expectations unmet when they witness their bank funding these

⁷ Julie Hill, Reputation Risk Georgia Law Review available here, https://papers.srn.com/sol3/papers.cfm?abstract_id=3353847#:~:text=Julie%20Andersen%20Hill,-University%20of%20Alabama&text=Reputation%20risk%20is%20the%20risk,risk%20guidance%20and%2 oenforcement%20efforts.

projects. But more moderate of the bank's customer cohort would rationally weigh the pros and cons of a gas pipeline / coal plant and absolve the bank given the net benefit of energy security it confers. The question of whether credit facilitation to gas pipeline / coal plants poses a reputation risk ought to be answered therefore *in the negative unless there is a law against it*. In other words, reputation risk unless defined by a duly enacted law, best be construed to derivatively stem from another distinctly illegal action. It cannot be an original source of risk itself because stakeholders being diverse that would open the floodgates on emergent businesses (or other businesses that may be considered by sections of stakeholders as immoral eg, gaming) that are at the frontiers of social imagination for now.

The case of digital asset exchanges is similar. It is a recognized fact that digital assets are volatile assets and as such investors run the risk of losing all their invested capital if the markets are unfavourable. It may also be recognized that should that happen, *some* sensitive investors given to emotion may hold the acquiring bank on-boarding the digital asset exchange responsible, but <u>if the digital asset exchange concerned has been otherwise fully compliant with all the applicable laws</u>, it can't be rationally suggested that the said digital asset exchange poses a reputation risk.

Another illustration to support this view is the IPO use-case on UPI. Investors may bid for securities markets IPO through UPI. SEBI / NPCI has enabled bidding for IPO as a use-case in 2019. However, several recent IPOs issued in the *pandemic years* are now trading below their listed price⁹ and investors, both retail and institutional, have incurred steep losses. To put some numbers out, 33% of the IPOs listed in 2021 ended the calendar year below their listed price.¹⁰ Nonetheless, no bank may reasonably argue this wealth erosion as a reason to disallow UPI access to the principal securities exchanges like NSE / BSE in connection with the IPO on account of reputation risk / brand risk. Capital erosion through manifestation of market risks is a given in the securities market. By the same token, digital asset exchanges should not be discriminated against on this count.¹¹

 8 See discussion on risks stemming from Wells Fargo funding Dakota Access Pipeline, footnote 2 p.536 and sources cited therein.

⁹ See PayTM and Zomato stock prices respectively. Zomato stock trading at ~46 % discount to its listing price. PayTM stock trading at ~74 % discount to its listing price (data as of November 18, 2022)

¹⁰ https://economictimes.indiatimes.com/markets/ipos/fpos/ipo-review-2021-1-in-every-3-stock-debutants-trades-below-issue-price/articleshow/88561639.cms?from=mdr

¹¹ The same principle holds for secondary market risks like fraud. Of course, it may be the case that a given digital asset exchange may have been culpable or negligent in enforcing its fraud controls and supervision.

Finally, the expression, "stakeholders" is wide enough to include regulators and payment system operators (e.g., NPCI, Mastercard, Visa). Being human, they may themselves have strongly held beliefs about a given business. A narrower interpretation to the expression guards against frontier and other socially controversial businesses (e.g., payday lending to cite another example) from being unfairly targeted by activist-minded regulators. Illustratively, witness "Operation Choke Point" in which certain federal regulators in the US *informally* influenced banks to stop facilitating payday lending and other socially controversial businesses. It is trite that absent duly enacted law, they were outside their legal authority to use such stealth tactics to clamp down on these "inconvenient" businesses and the practice has since stopped. Thus, a narrow interpretation protects these founders (businesses) from regulators enforcing their personal will rather than duly enacted laws.

In closing, the inherently nebulous nature of expressions like "reputation risk" and "brand risk", there is a case for interpreting them narrowly. This is especially the case when the Parliament has not defined these expressions in a duly enacted law. To reiterate, <u>a fully compliant digital asset exchange does not per se pose any reputation risk / brand risk just because the assets traded on it exhibit high volatility and may cause erosion of capital.</u>

b. Are Digital Asset Exchanges Unregulated? / Do Digital Asset Exchanges offer a Unregulated Service?

A Digital asset exchange offers a platform for buying / selling of specific digital assets and as such offers a financial service to investors. But consistent with the NPCI expectation that only merchants that offer *regulated* financial services are on-boarded by acquiring banks, a duly constituted digital asset exchange compliant with applicable laws squarely qualifies within the *regulated* category.

Aside from plethora of business and labor laws, an investor seeking to execute a buy/sell transaction on a digital asset exchange is a "consumer" of that service and by

But that is a case-by-case evaluation and *that guilty exchange* (and its personnel) may of course be said to pose a reputation risk.

natural corollary, a digital asset exchange is subject to consumer protection laws from an investor standpoint. This position also flows from existing jurisprudence on financial services like banking and insurance; consumers of both services are afforded the protection of consumer protection laws. So, a digital asset exchange *operates* (and offers) *regulated services* to its customers (as the relevant clause expects acquiring banks to verify before onboarding a merchant). The customers have legal recourse if the service is deficient in any respect and the digital asset exchange concerned is subject to comply with any orders passed by the Court.

Finally, the "1930" helpline of the MHA in the context of financial cyber frauds, for efficient registration of complaints and tracking and disgorgement of misappropriated funds also offers a measure of safety to investors transacting on digital asset exchanges.

Additionally, on March 7, 2023 the Department of Revenue, Ministry of Finance has issued a notification 12 bringing certain activities including:

- exchange between virtual digital assets and fiat currency
- exchange between one/ more forms of virtual digital assets
- transfer, and safekeeping or administration of virtual digital assets or instruments enabling control over them
- provision of financial services related to issuer's offer and sale of virtual digital assets

within the ambit of PMLA. Since Digital Asset Exchanges offer several of the activities defined above, they are "Reporting Entities" for the purpose of the PMLA and subject to compliances that comprise mandatory KYC of their customers, record-keeping, and reporting obligations to the authorities administering it. The notification establishes parity between digital asset exchanges and other financial service providers in the context of PMLA.

Even before the issuance of the notification under PMLA, it appears that industry practice had voluntarily moved to comply with investor KYC, record-keeping and reporting

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¹² See https://drive.google.com/file/d/18Gbuwm3kaERzGnWJFfF3RnZ5lfEOWndM/view?usp=sharing

practices mirroring incumbent regulated entities under PMLA. In other words, digital asset exchanges were already de facto regulated by PMLA. The notification confirms it de jure.

In closing, digital asset exchanges offer a regulated service per the expectation of NPCI under the relevant circular and as such that requirement is not an impediment for their on-board as "merchant" on UPI. We also note that in addition to being regulated under the laws mentioned above, digital asset exchanges are subject to supervision by CERT-IN, ASCI and under the Income Tax Act (accounting for regulation in information security, consumer protection and fiscal transparency respectively).

V. Why UPI Access for Digital Asset Exchanges Protects Indian Investors

This section will demonstrate that there are several compelling public policy reasons for enabling above-the-board UPI access through normal banking channels. Given that we are authoring this position paper in the backdrop of FTX implosion, we also show why enabling access to digital asset investments through normal banking channels on-shore will protect Indian citizens and investors.

a. Investor Protection Rationale

Policymaking is an exercise in mitigating second order effects. However, definitionally, they are not apparent at first sight. So, policymakers and regulators have to ask the question, what could go wrong with this policy design? In other words, we have to use inversion as a mental model.

Applying these two insights to the context of this paper, it is manifest that keeping digital asset exchanges off the UPI (banking) rails may have / has had several unintended consequences We highlight the ones from investor protection angle below:

 UPI offers a seamless user journey. Not enabling UPI for digital asset exchanges may result in investors (customers) moving their transactions / assets to offshore digital asset exchanges in search of convenience. This results in loss of visibility of the transaction trail for regulators and law enforcement potentially violating FEMA and exacerbating money laundering risks.

- The foreclosure in accessing UPI route has merely pushed the participants to digital asset exchanges that offer peer-to-peer ("P2P") avenue to Indian investors for exchanging digital assets for INR. The mechanics of facilitating this are simple in that the exchange concerned acts /operates through an escrow wallet to hold funds till the time the digital assets are not safely in the wallet of the purchaser.¹³ Several of these exchanges are offshore and the Indian investor (typically retail), has access to these options by merely downloading an app. To further complete the irony, the transfer of funds to consummate this transaction may happen via UPI. Reports in bellwether press indicate that ~ 80 % of the digital assets transaction may have moved to the P2P route after closure of UPI option for digital asset exchanges.¹⁴ Contrast this percentage point with the estimate of ~ 15 the previous year when UPI route was available for digital asset exchanges.
- More importantly, as the FTX implosion shows, this capital flight may result in exposing domestic retail investors to unscrupulous actors operating out of tax haven jurisdictions like the Bahamas / Cayman islands with lax investor protection and prudential norms. CoinGecko data suggests Indians may be the 8th most impacted group from the collapse of FTX (This study uses methodology based on traffic share and monthly unique visitors- these indicia are abstracted from actual transactions on the exchange and so the ranking may be viewed with due caveat).¹⁵

While some may argue that *caveat investor* applies for these investors and that they should know better, it is plain that being Indian citizens, they deserve to be equally protected

 $^{^{13}}$ See https://www.financialexpress.com/blockchain/how-indian-users-can-invest-inr-in-crypto-now-p2p-trading-explained/2490480/

¹⁴ See https://economictimes.indiatimes.com/markets/cryptocurrency/indians-continue-buying-cryptos-via-p2p-and-other-methods-even-after-upi-halt/articleshow/86311934.cms?from=mdr ¹⁵ See https://www.coingecko.com/research/publications/countries-impacted-ftx-collapse

and their naivete or ignorance cannot be a reason to deny them the protection of Indian laws. As such, enabling efficient access to onshore digital asset exchanges that are compliant with the laws of India is the ideal way to reduce the perverse incentives to seek offshore digital asset exchanges for transacting. Creating these well-regulated domestic avenues is the best way to mitigate exposing Indians to "FTX-risk".

b. Investor Rights Rationale

Some may argue that enabling efficient access to digital asset exchanges through UPI will only expose more and more youth to speculative asset classes. But it is plain to see the weakness in the foregoing assumption. Human nature is what it is and the motivated investor will seek out the digital assets she intends to purchase whether it is socially useful or not. The only way to solve this *Prisoner's dilemma* is to offer them regulated avenues domestically to transact in these assets.

Moreover, the rights of retail individual investors to invest their assets in instruments of their choice and at platforms of their choice may be seen as a subset of their Article 21 rights (and as such, may not be denied to them without procedure established by law). Arbitrarily denying a class of investors from accessing instruments of their choice via UPI when another group of investors has access to their choice (e.g., IPO) may also violate Article 14. So, there is a investors' rights rationale to this reform as well.

Regulators and industry bodies should find ways of constructively utilising investor education funds for educating both retail and institutional investors about digital assets and hygiene checks while evaluating investments.

VI. The Path Forward

In conclusion, we urge the NPCI to take the following steps:

- Create a Merchant Category Code for *Compliant* Digital Asset Exchange business.
- The NPCI may consider adopting the indicia for *compliant exchanges* we have offered above. 16 Acquiring banks may further consider bucketing individual exchanges in "green", "amber", "red" channels contingent on the latter's operational fidelity to these indicia across time and transactions, when they are considering the exchanges' application to on-board.

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¹⁶ See p. 6 above.

Black Dot Policy Advisors Private Limited

Black Dot was conceptualised as a proactive public policy advisory firm with the aim to act as a bridge between the Fintech and financial industry and Govt. and regulatory stakeholders. Black Dot's approach is ecosystem driven and it typically involves proactively crafting policy proposals (mainly focussed on fintech, financial policy and adjacent areas) and advocating it to stakeholders to develop public policy in ways that are win-win for India. Black Dot's expertise lies in its financial acumen and in its sound knowledge of the business aspects of the fintech space which gives it an edge in suitably advising different stakeholders as well as in converging their interests. Since its founding, Black Dot has advised and executed both businesses as usual and moon-shot public policy engagements for scaled start-ups and financial incumbents operating out of India. Black Dot is also actively engaged with the Niti Aayog Frontier technology team on certain projects in connection with the Fintech segment thereof on a pro-bono basis. Most recently, in June 2022, Black Dot collaborated with Niti Aayog as a knowledge partner in writing the Report, "Digital Banks: A Proposal for Licensing & Regulatory Regime for India."

ABOUT THE FOUNDER: Black Dot was founded by Mandar Kagade in May, 2020. Before conceptualizing Black Dot, Mandar Kagade was the Head, Public Policy at "CreditOn", a B2B Fintech firm in the credit origination space. Before that, he was heading the public policy team at Catalyst, a start-up incubator in the digital payments space wherein he produced several policy papers including notably one on use-cases for the RBI regulatory sandbox. He is a recovering corporate and financial regulatory lawyer and a graduate of Columbia Law School, and Govt Law College, Mumbai respectively.

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