CUTS International

Competition and regulatory concerns in payment systems ecosystem in India:

Brief note based on initial literature review

1. Background

Digital transfer of funds between unique repositories (traditionally, bank accounts) are facilitated by payment systems. Several payments systems are operational in India at present. Some of these include: Real Time Gross Settlement (RTGS), National Electronic Funds Transfer (NEFT), Immediate Payment Service (IMPS), Aadhar Enabled Payment System (AEPS) and most recently operationalised, Unified Payments Interface (UPI).[1]

The Reserve Bank of India (RBI), which is banking and also the payments regulator, operates RTGS and NEFT payment systems. The National Payments Corporation of India (NPCI) operates IMPS, AEPS and UPI.

NPCI is a non-profit company promoted by 10 banks to run the payment systems. In September 2016, its shareholding was expanded to include 46 new banks.[2] Its board includes a nominee director from RBI and nominees of core promoter banks.

In addition to operating the payment systems, NPCI has also been authorised to operate as a central unit for new centralised bill payment mechanism: Bharat Bill Payment System (BBPS). NPCI is expected to leverage on its existing payments systems (IMPS, AEPS and UPI) to facilitate payments in BBPS.

This brief note based on initial literature review (desk research) undertakes preliminary assessment of the interface between NPCI and other market players in payment systems ecosystem from a competition and regulatory perspective. It points to some concerns in this regard, which need to be further examined, as part of the research project on competition and regulatory assessment in digital payments infrastructure sector[3], being implemented by CUTS International.[4]

2. Need for a bank account

As indicated earlier, bank accounts have traditionally acted as repositories for digital money and hence, acted as point of initiation and culmination of digital payments. This has been changing in past half a decade or so. The avenues to store digital money have expanded to include pre-paid payment instruments (PPIs), such as smart cards, magnetic stripe cards, internet accounts, internet wallets, mobile accounts, mobile wallets, paper vouchers and any such instruments.

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[1] R. Gandhi, *Evolution of payment systems in India – or is it a revolution?*, Speech at BHU, Varanasi, 22 October 2016

[2] NPCI Press Release, *NPCI shareholding gets broad based*, 12 September 2016

[3] For details, see http://www.cuts-ccier.org/Payments-Infrastructure/

[4] For details, see www.cuts-international.org

Banks as well as non-banks have been authorised to issue PPIs.[5] Our initial desk research indicates that the control which traditional universal banks exercise on payments systems through their shareholding in NPCI is being unfairly exercised to exclude the access of payment systems to non-banks.

In other words, non-bank PPIs are not being allowed direct and interoperable access to NPCI payments systems and all the payment systems run by NPCI are required to be routed through a bank account. Lack of interoperability limits payments options,[6] adversely affects access,[7] and deprives consumers of enhanced user interface.[8] See table 1 below for details.

Table 1: Payments systems and their interface with non-banks

Service	**Summary**	**Role of non-banks**
IMPS[9]	Instant, 24X7, electronic fund transfer service through mobile phones, using mobile money identifier (issued by bank); bank account number and IFS code; or aadhar number (seeded in bank account), for: • Inter-bank fund transfer • Transfer from bank account to PPI of non-bank • Transfer from PPI of non-bank to bank account Interesting to note is that the steering committee of IMPS comprises 18 banks and does not have non-bank representation	• Act as banking correspondents (BCs) to facilitate inter-bank fund transfer • Enable transactions with bank as counterparty • *Transactions inter-se non-bank PPIs not allowed (lack of interoperability)*
AEPS[10]	Interoperable financial inclusion (government to person (G2P) transfer) and related transactions to any bank account using the Aadhaar authentication. Other facilities include	• Engage in authorisation, best finger detection, e-KYC and demographic authentication services • Act as BCs to facilitate withdrawal

[5] However, banks can issue several kinds of PPIs which non-banks are not allowed to issue. For instance, banks can exclusively issue: open PPIs (enabling cash withdrawal/ deposit); PPIs to government organisations for onward issuance to beneficiaries of government sponsored schemes; PPIs to other financial institutions for credit of one-time/periodic payments by these organisations to their customers; PPIs to corporates for onward issuance to their employees, etc. See, RBI Master Circular on Issuance and Operation of PPIs in India, July 2016

[6] "*Early lessons from the Indonesian and Tanzanian mobile money markets, which respectively became interoperable in 2013 and 2014, seem to show that greater interoperability appears to accelerate transaction growth and improve user experience. In Tanzania, the combined volumes and value of off-net P2P transfers between Airtel and Tigo spiked the month after the bilateral interoperability agreements was announced between the two operators in August 2014*" GSMA, *State of Industry Report: Mobile Financial Services for the Unbanked*, 2014. Also, Kulkarni, *Enabling effective competition in mobile money markets,* 2015.

[7] *Accelerating financial inclusion: The role of payment systems*, EY, 7 (2013), available at http://www.ey.com/Publication/vwLUAssets/EY-Financial-Services-Accelerating-financial-inclusion/$FILE/EY-Financial-Services-Accelerating-financial-inclusion.pdf, notes the significant role of non-bank PPIs in digital payments. Also see, *NPCI: Driving digital payment revolution*, Axis Capital, 15 (2016), available at http://www.npci.org.in/documents/AxisCapitalreportonNPCI.pdf

[8] This is evident from the fact that non-bank wallets like Paytm, Itzcash, Mobikwik and Freecharge have witnessed substantially higher downloads/ users when compared with their bank counterparts.

[9] For details, see http://www.npci.org.in/aboutimps.aspx

[10] For details, see http://www.npci.org.in/AEPSOverview.aspx

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	balance enquiry, cash deposit/ withdrawal and inter-bank transfer (through aadhar number linked to bank account). This is facilitated through unique issuer identification number (to identify bank with which aadhar number is mapped); aadhar number and fingerprint. The G2P transactions are enabled through Aadhar Payment Bridge System (APBS) wherein settlement happens through RTGS system. However, APBS is not 24*7 in nature.[11] Interesting to note is that banks are allowed to issue dedicated PPIs to government organisations for onward issuance to beneficiaries of government sponsored schemes, but non-banks are not allowed to do so. Other services including the transfers between aadhar enabled bank accounts are facilitated through AEPS. Interesting to note is that the steering committee of AEPS is made up of banks only, without any non-bank representation.	and transfer • *Government entitlements not allowed to be transferred in non-bank PPIs* • *Transfers between banks and non-bank PPIs not allowed*
UPI[12]	Immediate money transfer through mobile device 24 hours*7 days*365 days. It facilitates accessing different bank accounts through single mobile application and single click two factor authentication (security standard prescribed by regulations). The steering committee of UPI is same as IMPS steering committee.	• It seems that non-banks can be acquired as merchants by banks, requiring them to pay commission to banks • Non-banks might be able to partner with banks to develop UPI enabled apps, and participate in non-UPI leg of the transaction • *Non-banks are not directly allowed access of UPI, inhibiting transactions from bank accounts to non-bank PPIs and vice versa; and transactions inter-se non-bank PPIs*
BBPS[13]	Tiered structure for operating the bill payment system. NPCI will function as the authorized Bharat Bill Payment Central Unit (BBPCU), which will be responsible for setting business standards, rules and procedures for technical and business requirements for all the	• While non-banks can act as payment operating unit and facilitate bill payments, the settlement will be made through the RBI's RTGS payment system. Only banks have access to RTGS.

[11] For details, see http://www.npci.org.in/documents/FAQs_on_APBS_for_Banks1.pdf
[12] For details, see http://www.npci.org.in/UPI_Background.aspx
[13] For details, see http://www.npci.org.in/BBPS-about-us.aspx

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	participants. It will also undertake clearing and settlement activities related to transactions routed through BBPS.	Thus, non-banks will need a sponsor bank to open bank accounts and enable settlement • *Settlement between non-banks is not allowed (without intermediary sponsor bank)*

The table above highlights that while non-bank PPIs might have access to services offered by NPCI, it is not direct or interoperable. Non-banks can access NPCI systems only with/through banks, potentially making the transactions expensive, time-consuming and inefficient. Such inability also plausibly curtails innovation, customisation and enhanced user interface which non-banks have the capacity to provide.

Concerns relating to weak customer verification, money laundering, and inadequate customer protection appears to hinder direct access of non-banks to NPCI systems. However, with increasing use of secure technology for customer verification (electronic KYC based on aadhar) and harmonisation of KYC standards across sectors[14], such concerns should mitigate.

Several experts,[15] including the financial Sector Legislative Reform Commission (FSLRC) Working Group on Payments have called for a level playing field within the payments industry and between bank and non-bank players.[16]

International experience: While Indian regulations seem to be fixated with notion of banks having the entitlement of being sole repositories of digital money, other countries appear to be moving away from this idea. The Bank of England recently decided to extend direct excess to RTGS to non-bank payment service providers, over time.[17] The European Payment Services Directive 2 allows innovative players to compete for digital payments services alongside banks and other traditional providers.[18] Mexico has granted non-banks access to Mexican real time gross settlement system (SPEI).[19] The recently issued Singapore Payments Roadmap envisages expanding access to the payments systems and facilitating private sector innovations and improvements.[20]

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[14] Telecom companies and non-bank PPIs are allowed to acquire customers through e-KYC

[15] Srikanth L, *UPI is a toll road*, October 2016, available at http://www.medianama.com/2016/10/223-upi-is-a-toll-road/

[16] Report of FSLRC Working Group on Payments (2013) is available at https://macrofinance.nipfp.org.in/fslrc/documents/wg_payments_report.pdf

[17] Bank of England, *Progress update on Bank's blueprint for a new RTGS system*, June 2016, available at http://www.bankofengland.co.uk/markets/Documents/paymentsystems/rtgsblueprintupdate.pdf

[18] European Commission, *European Parliament adopts European Commission proposal to create safer and more innovative European payments*, 8 October 2015, available at http://europa.eu/rapid/press-release_IP-15-5792_en.htm?locale=en

[19] Committee on Payments and Market Infrastructures, *Non-banks in retail payments*, September 2014, available at http://www.bis.org/cpmi/publ/d118.pdf

[20] *Singapore Payments Roadmap*, August 2016, available at http://www.mas.gov.sg/~/media/MAS/News%20and%20Publications/Press%20Releases/Singapore%20Payments%20Roadmap%20Report%20%20August%202016.pdf

Consequently, India needs to rethink the role of non-banks in payments service ecosystem, in the interest of growth of digital payments services, and its relevance for consumers in India.

3. Exclusivity of NPCI

The gamut of services offered by NPCI has made it dominant player in several services (such as card payments) and exclusive player in many (such as IMPS, UPI, Aadhar enabled G2P and P2P transfers). As a result, it is the only organisation recognised as retail payments organisation in the country.[21] By virtue of being sole service provider, it sets standards for interested participants to access its services, and also is the price setter for such services. All banks and non-bank participants to NPCI systems are expected to comply with standards and price set by NPCI. As a result, NPCI is increasingly turning into exclusive service provider-cum-quasi regulator for payments systems in the country.

Lack of competition to NPCI raises several concerns. These include systemic risk i.e. failure of NPCI could have domino effect on entire financial system; and reduction in efficiency, customer protection, and increase in avoidable costs, over time. For instance, successful transfer of government benefit to a beneficiary's bank account is contingent upon bank uploading the correct aadhar number of beneficiary in the NPCI mapper at the time of input file uploaded by bank. Failure to do so could result in rejection of transaction[22] without any recourse to customers.

The FSLRC Working Group on Payments also noted the worrisome prospect of monopoly by design which is being created through NPCI. It recommended that RBI should generate confidence that there is no regulatory resistance to other payment system providers competing with NPCI, and that the latter does not resort to predatory pricing and abuse of dominance.[23]

Despite such recommendations, the regulator does not appear to encourage competition to NPCI. For instance, the eligibility criteria for operating as Bharat Bill Payment Central Unit (BBPCU, the role now performed by NPCI) was a Section 25 company under the Companies Act 1956 (amended to Section 8 of the Companies Act 2013), having professional senior management and experience in handling central infrastructure in payments, clearing and settlement, and transaction processing.[24] Such condition appears to have automatically excluded potential competitors from the market. As indicated earlier, exclusive operations as BBPCU has also authorised NPCI to set standards and potentially act as quasi-regulator, in addition to being an operator.

Globally, the need to separate regulation from the operations is being recognised. Therefore, there is a push to constitute different entities regulating and operating payments systems. For instance, UK has an independent and professionally run Payments System Regulator, a subsidiary of Financial Conduct Authority.[25] The Monetary Authority of Singapore recently issued a consultation paper on

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[21] RBI authorisations for payments systems, available at https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=12043

[22] For details, see FAQs on APBs, available at http://www.npci.org.in/documents/FAQs_on_APBS_for_Banks1.pdf

[23] Report of FSLRC Working Group on Payments (2013) is available at https://macrofinance.nipfp.org.in/fslrc/documents/wg_payments_report.pdf

[24] RBI Guidelines for implementation of BBPS, available at https://www.rbi.org.in/scripts/NotificationUser.aspx?Id=9368&Mode=0

[25] For details, see https://www.psr.org.uk/about-psr/psr-purpose

activity based payments framework and establishment of a National Payments Council.[26] Such independent regulators are increasingly adopting a more broad-based stakeholder consultation approach, which involves non-banking activities.

Consequently, there is a need to rethink the role of NPCI and the multiple functions it is currently carrying out, in the interest of growth of digital payments services, and its relevance for consumers in India.

4. Immediate next steps

1. Deepening research to better understand:

- The reason for exclusion of non-bank to NPCI payments services (UPI, BBPS, APBS/ AEPS) and the impact of such exclusion on consumers
- The reason for lack of competition to NPCI and the impact thereof on the sector
- Trends on access to payment systems by non-banks in other jurisdictions
- Existence and regulation of systemically important payments system operators in other countries.

2. Identification of information gaps and designing stakeholder consultation tools

3. Interaction with key stakeholders on access to payments systems, role of NPCI and regulation of payment systems (see Annexure for indicative list of stakeholders)

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[26] The Consultation Paper, issued in August 2016, is available at http://www.mas.gov.sg/~/media/resource/publications/consult_papers/2016/Proposed%20Activity%20Based%20Payments%20Framework%20and%20Establishment%20of%20a%20National%20Payments%20Council.pdf