



# Promotion of Payments through Cards and Digital means

Ashish Das

Department of Mathematics  
Indian Institute of Technology Bombay  
Mumbai-400076, India



Indian Institute of Technology Bombay  
Powai, Mumbai-400 076, India



## **Contents**

<b>Executive Summary and Major Action Points</b>	<b>i – iv</b>
<b>Summary</b>	<b>1</b>
<b>Acknowledgements</b>	<b>2</b>
<b>1. Introduction</b>	<b>3 – 4</b>
<b>2. The Finance Ministry Guidelines</b>	<b>5 – 17</b>
<b>3. The RBI's Concept Paper</b>	<b>18 – 22</b>
<b>4. Closing Remarks and Way Forward</b>	<b>23 – 27</b>
<b>5. Comments from Stakeholders</b>	<b>28 – 32</b>
<b>References</b>	<b>33 – 34</b>



# Promotion of Payments through Cards and Digital means

Ashish Das<sup>+</sup>

Department of Mathematics, Indian Institute of Technology Bombay, Mumbai 400076

*April 24, 2016*

## Executive Summary and Major Action Points

The Government and the Reserve Bank of India (RBI) want to make it cost-effective for banks to provide point of sale (POS) terminals (for using credit and debit cards) at small merchant establishments. Furthermore, to incentivise consumers for more electronic transactions, the government has decided to withdraw the surcharge, service charge or convenience fee on digital payments on cards and online payments.

A cashless economy generates better tax revenue, more financial inclusion and benefits individuals too. It gives the convenience of anytime anywhere banking using smartphones; funds are available on tap; there is no risk of carrying currency notes; and money in the bank earns interest till the final point of use. Also, the data generated out of one's spending pattern help banks to offer customised financial products.

Digital payment players are making more efficient means of next-generation payment systems through use of smartphones for transactions. In order to see India move from being a largely cash-happy country to a digital-savvy nation, there is still a long road to travel. So far, in the absence of clear thrust points and regulations, most of the developments in payments ecosystem had been market driven. In order to set catalysts for the digital payment systems, Government of India, Ministry of Finance (Department of Economic Affairs) on February 29, 2016 came out with cabinet approved guidelines for the [Promotion of Payments through Cards and Digital means](#). Alongside, the RBI on March 8, 2016 came out with a [Concept Paper on Card Acceptance Infrastructure](#).

This report analyses the pros and cons of the directions set forth in the above two documents. Based on the analysis, the following major action points emerge that may facilitate migration of the country from a cash dominated society to a less-cash more-digital economy.

---

<sup>+</sup> Dr. Ashish Das is a Professor of Statistics with the Indian Institute of Technology Bombay. E-mail: [ashish@math.iitb.ac.in](mailto:ashish@math.iitb.ac.in)



## **Major Action Points:**

**1. Rationalising Quantum of MDR:** As per RBI mandate, the MDR for debit cards has been capped at 0.75% for transaction values upto Rs 2000 and at 1% for transaction values above Rs 2000. However, in case of credit cards, no such mandate exists and the MDR ranges from 1.5 to 3.5%. Keeping in view that the cost to withdraw cash upto Rs 10,000 at ATMs is about Rs 20 and conservatively assuming that the cost to run an ATM is at least twice that of running a POS, ideally cost of transaction upto Rs 10,000 at POS should be at most Rs 10. However, following the trend set by the credit card companies, the debit card business inherited the ad valorem pricing model. The two businesses being poles apart, the least one expects is that the MDR for debit cards (and similar digital transactions) is capped appropriately such that MDR is no more than 0.1% of the amount in excess of Rs 10,000. Thus for a Rs 25,000 transaction using a debit card for which the standard MDR is 1% (say), instead of the present model of imposing a commission of Rs 250, the proposed commission is Rs 115. Such a move, to some extent, would reduce the present exploitative nature of commissions which ultimately is being borne by the users of digital payments. Regarding MDR on amounts less than Rs 10,000, RBI and the government need to take a more holistic view.

**[Para 2.10-2.12]**

**2. Separating Payment and Credit Feature of Credit Card:** The credit card as a payment product should not be bundled with a loan product to serve the payment needs of India. Due to the inherent difference in cost in executing a credit card transaction (vis-à-vis a debit card transaction), there should be distinction while carrying out such digital payment transactions using credit card so as to separately reflect the true cost of availing credit and the cost of processing the payment. Accordingly, to be fair, one needs to be transparent in showing the cost of (conscious or unconscious) credit taken by the unsuspecting card holder while transacting using a credit card. The average cost of such credit is at least 1% of the transaction amount, which is currently overburdening the payment system. The freedom of choice does not exist today (in the current credit-and debit-card model) to reduce the cost of digital payments because of a forced expense thrust on the digital payment system of the country. Accordingly, as a corrective measure, we should make the MDR for credit cards same as that of debit cards and let banks be given the freedom to separately charge their customers for the loans they take through credit cards. Such a move would remove the existing discrimination between customers created by the current payment system model for credit cards.

**[Para 2.17-2.26, 3.14-3.20]**

**3. Promoting Acquirers and Streamlining MDR Sharing Structure:** To promote acceptance infrastructure, there is a need to tweak the existing revenue sharing structure of MDR that is presently biased against the acquirer business. Given the separation of



charges for credit facility (in credit cards) from the digital payment facility, the report suggests that the distribution of the MDR for all types of cards (and other digital modes) should be in the following order (i) at least 50% for the acquirer bank, (ii) at least 30% for the issuer bank and (iii) at most 10% for the switch provider. Moreover, even though we may not be setting any mandates on issuer banks to contribute equally as acquirers, one needs to be careful in ensuring that issuers have a level playing field to acquire merchants and serve them as acquirer banks, if they so wish. Accordingly, in the interest of increasing efficiency in the digital payment system of the country, and to promote the development of acceptance infrastructure, RBI should consider enhancing the maximum balance limits on current accounts with Payments Banks to facilitate merchant accounts for retail payment transactions.

**[Para 2.8-2.9, 3.5]**

**4. UPI-App as Direct Interface by NPCI:** UPI-App in its present avatar is an excellent innovation by NPCI. In the present design, the front-end user interface for UPI-App is to be provided by the bank (Payment Service Provider) that facilitates the customer to download the UPI-App. It would be worthwhile for NPCI to work towards additionally providing the UPI-App to the customers directly. The primary advantage of this would be to reduce one to two layers of bank involvement in transactions where the UPI-App provider bank (Payment Service Provider) is not the payer or/and payee bank. With centrality of operations with NPCI, it would also make the product features more flexible with ease to innovate and improve. UPI-App of NPCI should be backed by RBI and regulated, if required. Furthermore, if at all the RBI and the government should use public money to fund for an efficient and economical acceptance infrastructure, it should be the UPI in terms of all possible support and push, such as, aggressive awareness building, initial handholding for users and MDR support for *small ticket transactions*. RBI and the government should provide the necessary support towards making the UPI endeavour robust, seamless, secure and successful, for India to become a less-cash more-digital economy.

**[Para 2.28-2.32]**

**5. Incentivising and Awareness Building for Non-cash Usage:** It is important to project that electronic transactions, if not better, are at par with cash transactions. Thus any scope of potential disincentives of the use of non-cash over cash transactions or/and incentives of use of cash over non-cash transactions should be recognised beforehand. There is a requirement of awareness building through a concentrated financial education program to educate the people of India on the country's benefits of cashless/paperless transactions. People should make cashless transactions a culture and RBI should impart this important message of financial/depositor education through DEAF.

**[Para 2.16]**

**6. Show Digital payments Cheaper than Expensive Cash:** The cost of cash has to get reflected appropriately, which is not the case for heavy users of the same, be it the



merchants when they deposit cash, or the customers when they withdraw cash, or the RBI when it distributes cash for free but charges for processing electronic payments, or banks which do not maintain parity on fees imposed to their customers while making electronic transactions more expensive for their customers than cash transactions. For every account holder (big or small, savings or current) Cash-in and Cash-outs in excess of Rs 100,000 a month should not be encouraged since this goes against the present mandate of making our economy less-cash more-digital. Accordingly, the government and the regulator should deliberate the appropriateness of devising means to discourage such Cash-ins and Cash-outs.

**[Para 2.2-2.3]**

**7. Government Support for Service Tax:** The government should consider service tax break for few years on the fees imposed by banks for digital financial transactions which moves people away from cash and cheques. It is important to assert here that though it may superficially appear to be a revenue loss, but the government will get compensated by the economic benefits of less cash and minimal use of cheques.

**[Para 2.33-2.34]**



# Promotion of Payments through Cards and Digital means<sup>\*</sup>

Ashish Das<sup>+</sup>

Department of Mathematics, Indian Institute of Technology Bombay, Mumbai 400076

*April 24, 2016*

## Summary

Government of India, Ministry of Finance (Department of Economic Affairs) on February 29, 2016 came out with cabinet approved guidelines for the [Promotion of Payments through Cards and Digital means](#). Alongside, the Reserve Bank of India (RBI) on March 8, 2016 came out with a [Concept Paper on Card Acceptance Infrastructure](#). These two documents provide some directions on how one could possibly set catalysts to migrate the country from cash dominated society to an electronic payment embracing society. In the absence of clear thrust points and regulations, till now most of the developments in payment systems had been market driven. However, RBI did play a significant role in ensuring that prudent controls are put in place for mitigating risks associated with electronic payments.

Though there had been few technical reports that the author had produced over the past few years, which brought in some thought provoking insights for the payment system of India, the current report analyses the pros and cons of the directions set forth in the above two documents, provides implementable solutions for some of the issues raised and makes suggestions on the path ahead for digitalising payments in India.

---

<sup>\*</sup> The views expressed are those of the author and not necessarily of the institution to which he belongs.

<sup>+</sup> Dr. Ashish Das is a Professor of Statistics with the Indian Institute of Technology Bombay. E-mail: ashish@math.iitb.ac.in



### **Acknowledgements**

The author thanks few officials in the card companies, banks, IBA, NPCI, RBI and DFS for some fruitful discussions. We are also thankful to few merchants in the organised retail, NASSCOM, Retailers Association of India, All-India Bank Depositors' Association and IBA for their thoughtful formal and informal comments on a draft report circulated among various stakeholders for their inputs and comments. Finally, the author is thankful to many others who shared their thoughts in the course of preparation of this report.

In this report all possible care has been taken to project the correct picture using the data gathered. Deviations, if any, are inadvertent.





## **1. Introduction**

1.1 The country is moving through a phase of dynamic changes in the payment systems. This is primarily due to technological advances coming into play to revolutionise the payment space. The country has to now move away from cash and embrace the cost effective, secure, easy-to-use digital payments that bring in efficiency and accountability in payment transactions.

1.2 Government of India, Ministry of Finance (Department of Economic Affairs) on February 29, 2016 came out with cabinet approved guidelines for the [Promotion of Payments through Cards and Digital means](#). Alongside, the Reserve Bank of India (RBI) on March 8, 2016 came out with a [Concept Paper on Card Acceptance Infrastructure](#). These two documents provide some directions on how one could possibly set catalysts to migrate the country from cash dominated society to an electronic payment embracing society. In the absence of clear thrust points and regulations, till now most of the developments in payment systems had been market driven. However, RBI did play a significant role in ensuring that prudent controls are put in place for mitigating risks associated with electronic payments.

1.3 The country now has the potential to migrate from cheques and cash to POS, mobile and computer based platforms for digital payments. With a billion banked population, following the government's initiative to facilitate opening of bank accounts, efforts should now focus on transiting these banked populace to digital payments by simplification of digital money transactions.

1.4 Other than maintaining brick and mortar branches and ATMs, an important head of operational expense for banks pertains to management of cash. This is a cost not only for banks but also for the government and ultimately through various forms for the economy in general.

1.5 There is a high cost of cash to the economy that is not explicitly stated. These include both direct cost (printing/transporting notes, weeding out soiled notes, combating counterfeiting by several means including periodically introducing new series of currency notes and withdrawing existing ones, etc.) and indirect cost (loss of tax revenue, creation/prevalence of black money, etc.). Moreover, cash facilitates crime and cash is not 'swachha' (imagine the germs that currency notes carry when we receive balance cash from a fishmonger, a vegetable vendor, an auto-riksha driver or even from an ATM). Moving towards cashless economy is the appropriate way to address these ills.

1.6 In order to see how the country can possibly take carefully measured steps to move into an era of less-cash more-digital payment transactions, the approach adopted here



## *Promotion of Payments through Cards and Digital means*

tries to set the backdrop by first studying the relevant texts from the two documents and then articulating on them. The resultant report analyses the pros and cons of the directions set forth in the above two documents, provides implementable solutions for some of the issues raised and makes suggestions on the path ahead for digitalising payments in India.



## 2. The Finance Ministry Guidelines

2.1 The Finance Ministry's office memorandum provides broad guidelines on the way-forward for promotion of payments through cards and digital means. In what follows, we give the verbatim guidelines set forth (placed in box) and then provide our views and comments.

Subject: Promotion of Payments through Cards and Digital Means

The Guidelines for the promotion of payments through cards and digital means have been approved, as given below:

### 2. Objectives

- i. Improve the ease of conducting card/ digital transactions for an individual.
- ii. Reduce the risks and costs of handling cash at the individual level.
- iii. Reduce costs of managing cash in the economy.
- iv. Build a transactions history to enable improved credit access and financial inclusion.
- v. Reduce tax avoidance.
- vi. Reduce the impact of counterfeit money.

### 2.2 Demonstrate actual cost of cash while transacting in cash.

The objectives ii and iii, as it stands, would only promote cash. However, the inherent meaning of the two objectives can be no different from reducing the expensive cash in the system. Thus, in order to reduce cash at all levels of the economy (individuals / customers / merchants / service providers), the use of cash should be made to appear what it actually costs the system, i.e., the government and RBI should **ensure that the actual cost to handle cash is clearly visible** while two entities transact in cash. For this, banks should be the first source to explicitly identify the same. The objectives v and vi are directed towards reducing cash.

### 3. Scope

- i. Provide access to financial payment services to every citizen along with ability to conduct card/ digital transactions.
- ii. Digitalize Government collections by equipping each collection point with a method to accept card/ digital payments.
- iii. Migrate payment transactions from cash dominated to non-cash through incentivization of card/ digital transactions and disincentivization of cash based transactions.
- iv. Enhance acceptance infrastructure in the country to promote digital transactions.
- v. Encourage corporates, institutions and merchant establishments to facilitate card/ digital payments.



#### 4. Definition

Digital transactions are defined as transactions in which the customer authorizes the transfer of money through electronic means, and the funds flow directly from one account to another. These accounts could be held in banks, or with entities/ providers. These transfers could be done through means of cards (debit / credit), mobile wallets, mobile apps, net banking, Electronic Clearing Service (ECS), National Electronic Fund Transfer (NEFT), Immediate Payment Service (IMPS), pre-paid instruments or other similar means.

#### 5. Goal

The goal of the proposed policy changes is to provide the necessary incentives to use digital financial transactions to replace the use of cash - either in government transactions, or in regular commerce over a period of time through policy intervention.

2.3 In order to replace the use of cash by promoting digital financial transactions, the goal should be to provide necessary incentives to all participants – government, RBI, banks, merchants and customers. The question is who would provide the necessary incentives? The incentives have to be provided by those who promote cash, whether it is government / RBI / banks / merchants / customers. The government and RBI who invest in producing cash have to invest equally for the digital transactions. The banks spend huge amount of money to manage cash. An equal amount of money needs to be invested by banks to promote digital payments. Finally, merchants and customers need to pay the banks when they transact in cash, say in excess of Rs One lakh<sup>1</sup> a month. For every account holder (big or small, savings or current) Cash-in and Cash-outs in excess of Rs One lakh a month should not be encouraged since this goes against the present mandate of making our economy less-cash more-digital. Accordingly, the government and the regulator should deliberate the appropriateness of devising means to discourage such Cash-ins and Cash-outs.

#### 6. Short Term Steps

The Short Term Steps for Promotion of Payments through Card/ Digital Means, which will be implemented within one year, are suggested as follows:

##### A. Promotion of Card/ Digital Transactions in Government Payments and Collections

i. Government Departments/ Organizations/ Central Public Sector Undertakings/Anchor Networks shall take steps to (a) withdraw convenience fee/service charge/surcharge on customers who prefer to make card/ digital payments for essential commodities, utility service providers, petrol pumps, gas agencies, railway tickets /IRCTC, tax department, museums, monuments etc.; (b) take appropriate steps to bear MDR cost like other merchants; and (c) build acceptance infrastructure (POS/ Mobile POS terminals) for card/ digital payments at all collection centres.

<sup>1</sup> 1 lakh = 100 thousand



2.4 The government has to showcase and also ensure that for the merchants and service providers, it actually costs more to transact in cash than by electronic means. Once there is realisation among merchants that cash is not ‘free’ but more expensive than alternate digital channels of payments, things would then automatically fall in place. There should not be a feeling among merchants and service providers that they are subsidising their products (by increased expenditure) while receiving payments through electronic means (vis-à-vis cash). The feeling can be avoided if the merchants are sensitive to the actual cost of cash as against the merchant discount rate (MDR). Even after paying MDR, if the merchants / service providers find some savings on transactions carried out electronically, then they have the freedom to offer discounts equivalent to the savings so as to encourage use of digital payments over cash. However, if there are situations where the merchant / service provider is able to demonstrate that cash is a cheaper mode to transact than electronic means, then the government/regulator has to intervene and correct the MDR and cash handing costs. This may usually arise in case of many *small ticket transactions*. We discuss more on this later.

ii. Ministry of Road Transport & Highways/ Ministry of Urban Development shall facilitate the use of existing open-loop systems issued by a bank for multipurpose use, including for making transit payments with a dedicated application (eg. Toll fees, metro rail and bus services, etc.).

iii. Department of Financial Services/ RBI shall ensure that each eligible account holder under PMJDY may be provided access to the digital financial services in addition to the ‘RuPay Card’.

2.5 In order to implement iii, we need to make Unified Payments Interface (UPI) robust and efficient. It can become a front-end mode (as cheap as cash or even cheaper) for *small ticket transactions* and for most of the electronic payment needs. With the availability of affordable smart phones in the market, UPI would not have any restriction of reaching the hinterlands, so long as there is connectivity. This has the potential of making the Pradhan Mantri Jan-Dhan Yojana (PMJDY) truly successful through ease of access to digital financial services.

iv. Department of Electronics & Information Technology shall formulate an action plan to ensure Government Departments/Organisations introduce appropriate acceptance infrastructure and facilitate collection of all revenue, fee, penalties etc., through card/digital means beyond a specified threshold, through ‘PayGov India’ or other mechanisms.



v. Department of Electronics & Information Technology shall develop 'PayGov India' as a "single unified portal" across central, state governments and their public sector undertakings for collection purposes.

2.6 For iv and v, the banks have to ensure servicing these clients (government merchants) on cost plus basis whether facilitating their cash transaction needs or electronic transactions. If cash is expensive, it should be accordingly reflected by the banks to their clients (particularly so to big clients, doing cash transactions in excess of Rs One lakh per month). However, in the unlikely event of electronic means being more expensive than cash (for the banks), the government should strive towards taking corrective measures after a thorough assessment.

#### B. Measures for Wider Adoption of Card/ Digital Transactions

i. Department of Financial Services/RBI shall take steps to (a) rationalize Merchant Discount Rate (MDR) on Card transactions; and (b) formulate a differentiated MDR framework for some key transaction segments, such as utility payments and railway ticketing by examining the matter holistically in consultation with the stakeholders.

2.7 MDR has to be cost plus based. True cost of cash to the user (which includes government / RBI / banks / service provider / merchants / customers) has to get reflected appropriately in order to discover the correct MDR. Any situation where cash is artificially made to appear cheaper should be corrected through appropriate regulations.

2.8 One of the major inhibitors for the development of digital acceptance infrastructure is the lack of appropriate incentive structure. While one could see quick proliferation of ATMs in India after appropriate regulatory measures (to promote ATMs) were taken by RBI, the same is not seen in case of POS since RBI is yet to bring in regulations for the same. Today, for an ATM cash withdrawal (account debit) by a bank customer at a third party ATM, the debit card holder's bank is ready to spend about Rs 15, as it costs that much to the bank who owns the ATM to process an ATM transaction. Moreover, currently the regulator and the banks find it prudent to portray such expensive payments as cheap vis-à-vis digital payments, which add to further costs associated with excessive cash in the economy. As against this, for a digital POS payment by a bank customer (again an account debit), the system (more, specifically the acquirer bank) is ready to help the issuer bank (debit card holder's bank) by not burdening it with any fee. This is a boon for the issuer bank as against what we see in case of ATM usage. However, since the acquirer bank has a revenue earning model in terms of MDR and current account balances from the merchant, there exist a revenue sharing model where the acquirer bank pays the issuer bank in this debit card business. The correct discovery of the revenue sharing quantum has its impact on the overall cost of a digital payment.



2.9 It can be argued that since such digital payments are much cheaper than ATM transactions for an issuer bank, the issuer banks should promote migration from the use of expensive ATM (for which mandates force the banks to provide such service almost free) to the cheaper and beneficial POS based digital payments. Accordingly, the revenue distribution of the MDR should be in the following order (i) atleast 50% for the acquirer bank, (ii) atleast 30% for the issuer bank and (iii) atleast 10% for the switch provider.

2.10 Furthermore, given that retail digital transaction volumes are increasing and would increase at a higher rate with the moves made by the policy makers, for every merchant transaction (whether through POS/Payment Gateway or UPI or other digital means) the digital payment system providers should mandate to **'set a maximum MDR for amounts upto Rs 10,000'**. However, there is a need to realise the important aspect of arriving at this maximum MDR rationally through use of meaningful data. The correct discovery of the MDR should be data driven and holistically researched<sup>2</sup>. It is proposed that **for Payment Gateway (PG) this maximum MDR be fixed at 1% while for POS or similar physical devices the maximum MDR be fixed at 0.75%**. For protecting digital transactions against fraud, a system of insurance should be built. An insurance premium of the order of 0.1% of the transaction fee (or MDR) may be considered.

2.11 In order to cover for expenses related to fraud control / risk mitigation and developmental activities, for the **incremental amounts in excess of Rs 10,000, the MDR should have a uniform cap of 0.1%**. However, freedom may be given to the digital payment system providers to set a minimum absolute fee not exceeding Re 1.50 for every POS/PG or similar transaction. Accordingly, contrary to present rules set by switch providers, merchants may be given the freedom of choice on any mode of payments for amounts less than Rs 200, even if he has been enabled to accept payments digitally.

2.12 Just to encourage *small ticket transactions*, cheaper modes for merchant payments like UPI could be initially subsidised for its MDR, keeping it at flat Rs 1. This needs to be articulated more as and when UPI gains ground and stabilises.

ii. Department of Financial Services/RBI shall relax Two Factor Authentication for both card present and card not present transactions below a certain specified amount. DFS/RBI shall work out a multi tiered authentication framework for low, medium and high value transactions.

<sup>2</sup> Effective September 2012, RBI has set mandates on MDR for debit card transactions. The MDR has been capped at 0.75% for transaction values upto Rs 2000 and at 1% for transaction values above Rs 2000.





iii. Department of Revenue shall take steps to remove double taxation, if any, on service tax currently paid on MDR by the acquiring bank and on interchange fee by the issuing bank.

iv. Wherever needed, the Departments/ Ministries shall make modifications in the Rules and Regulations that may have been issued, so that appropriate change is incorporated to allow payments / receipts by using cards/ digital means also. Cash payments by any Government Department/ Agency shall be allowed only under very specific circumstances for clearly stated reasons.

v. Department of Revenue/ Department of Financial Services shall mandate payments beyond a prescribed threshold only in card/ digital/cashless mode.

2.13 Arriving at a threshold value beyond which only digital payments would take place is an important and effective step. How about making this threshold value as Rs fifty thousand? But this would require some inputs from the users of cash who could possibly demonstrate the pain points, if any, of transacting big amounts electronically. Based on such inputs appropriate steps may be taken.

#### C. Creating Acceptance Infrastructure

i. Department of Financial Services/ RBI shall introduce of formulae linked acceptance infrastructure for different stakeholders of certain card products through appropriate ratio of POS terminals/ mobile POS terminals to cards issued or other means. The possibility of creating an Acceptance/ Financial Inclusion Fund for the purpose shall be explored.

ii. Department of Financial Services/ RBI shall re-examine requirements under PML Act and Rules, for bringing Uniform (Know Your Customer) KYC norms based on an authorised identity for all payment systems, including Unique Identification Number or other proof of identity. Appropriate steps shall also be taken to introduce tiered KYC for facilitating low, medium and high value transactions through cards and digital means.

iii. Department of Financial Services/ RBI shall amend and simplify the Merchant Acquisition guidelines to include Unique Identification Number or other identity based eKYC for merchants.

iv. Department of Financial Services / RBI shall take steps to allow enhanced Cashout, of a specified amount, at Point of Sale (POS) Terminals through Cards/ Digital means.

2.14 Restricting to the present form of POS devices would amount to setting mandates despite knowing the inefficiency that it could bring in. Furthermore, it would also be





very expensive and non-sustainable. However, improvised devices which are more robust and cost efficient could be a better answer for setting mandates. For example, given its potential, one may consider UPI not only for mandates but also for funding the same (through the proposed fund creation) as a means for front-end acceptance and cash-outs.

#### D. Encouraging Mobile Banking/ Payment Channels

- i. Department of Telecommunications shall take appropriate steps for rationalization/reduction of USSD Charges and the feasibility of its being charged only on successful transactions.
- ii. Department of Telecommunications/ Department of Financial Services/ RBI shall make a provision for a unified USSD platform which can support transactions across all payment mechanisms.
- iii. Department of Financial services/ RBI shall promote Mobile banking to leverage upon the huge infrastructure available at lower cost. Towards this end, steps shall be taken to address mobile banking registration and activation challenges; ease regulations and reduce entry barriers to digital wallets/ pre-paid instruments.

2.15 With the creation of UPI, we should concentrate towards ensuring data connectivity wherever a mobile phone works for the purpose of talking. Department of Telecommunications should work towards this. We should promote mobile payments through the interoperable UPI.

#### E. Awareness and Grievance Redressal

- i. Department of Financial Services/RBI shall take steps (a) to create necessary assurance mechanisms for fraudulent transactions wherein, in case of a fraudulent transaction, the money will be credited back to customers' account and blocked and subsequently released after the investigation is complete, within maximum of 2-3 months; (b) to strengthen the role of banking ombudsman to provide greater customer confidence and (c) to formulate a comprehensive customer protection policy for transactions through cards and digital means.
- ii. Department of Financial Services/RBI shall take steps to optimally use funds under Depositor Education and Awareness Fund (DEAF) for expanding acceptance infrastructure and conducting awareness campaigns for a less cash society.

2.16 Other than aspects relating to safeguarding one's tax evasion wishes and the perception of exposure to possible fraudulent electronic transactions (which would fade



over time), it is important to project that electronic transactions, if not better, are at par with cash transactions. Thus any scope of potential disincentives of the use of non-cash over cash transactions or/and incentives of use of cash over non-cash transactions should be recognised beforehand. There is a requirement of awareness building through a concentrated financial education program to educate the people of India on the country's benefits of cashless/paperless transactions. People should make cashless transactions a culture and RBI should impart this important message of financial/depositor education through DEAF.

#### 7. Medium Term Steps

The Medium Term Steps for Promotion of Payments through Cards/ Digital Means, which may be implemented within two years, are suggested below:

i. Department of Financial Services/RBI shall frame necessary guidelines for merchant payment standards and interoperability between various issuers and acceptance networks, including telecom, internet, pre-paid instrument providers and Payments Banks, to ensure that merchant payments are interoperable across the broad spectrum of payments and settlements system.

#### 2.17 **The mind-set of a distorted payment system model - time to change?**

Framing of necessary guidelines for merchant payment standards is an important aspect on its own. Today with credit cards being an important and relatively expensive mode of digital financial transaction, do merchants have a level playing field for acceptance of such cards vis-à-vis debit cards/pre-paid instruments/UPI transactions? If not, this needs to be addressed appropriately to avoid disadvantaging merchants while entertaining cards (credit/debit/pre-paid) and other forms of digital payments (UPI/mobile payments, etc.) at par.

2.18 MasterCard / Visa / Amex are pioneers of credit cards business since they set the business model in absence or other cashless retail payments. They could effectively develop this, for the good of the digital payment system on Earth, through well researched strategies on interchange. They became the giants of the digital payments. However, with the inception of debit cards and its real time capabilities (thanks to Core Banking Solutions), is it time now to have a fresh relook at digital payment system models on Earth? Well, if not Earth, how about India?

2.19 As a financial product, credit card is a combination of the payment system and the credit system of the country. Until debit cards came into being, credit cards were primarily the only digital payment product available. As against credit cards, the debit card is solely payment product.



2.20 For any credit product (of which loans through credit cards falls in the category of unsecured credit), RBI has mandated a minimum rate, called based rate<sup>3</sup>, at which such credits can be given. The prevailing base rate is of the order of 9.5% per annum. Thus, for the average credit of 38 days<sup>4</sup> provided for credits enjoyed through credit cards, the credit card issuing bank, as per the RBI mandates, has to necessarily receive interest for the credit at least at the base rate. Accordingly, the cost of credit for the 38 days (adopting the annual credit card loan rate at base rate) works out to be at least 0.99% of the credit amount. However, given the nature of the unsecured loans being provided through credit cards, the capital adequacy requirements would lead to further increase in capital charge, which is expensive. Considering this additional risk based cost at 0.1%, a conservative cost of credit for the 38 days works out to be at least 1.1% of the credit amount. This 1.1% cost has to be part of the MDR that reflects on the overall MDR for credit cards making credit card an expensive payment product as against debit cards or other credit-less payment products. It would be unfair to thrust such a camouflaged payment product in the name of digital payments. However, to retain such an excellent digital product for the payment needs, it would be fair to see that the beneficiaries of credit facility bear the interest burden and that the cost is not passed on in a camouflaged manner to the overall digital payment system costs (in the retail segment).

2.21 Based on the Country's December 2015 data<sup>5</sup> on Credit and Debit card spends at POS, it is seen that though in volume terms credit cards constitutes only 40% of the card transactions at POS, in value terms credit cards constitutes 60% of card transaction amounts. Also, even if we consider a conservative estimate of the true average differential of MDR between credit cards and debits cards as 1.2%, the RBI data<sup>6</sup> suggests that, on an average, credit cards would burden the payment system by more than Rs 3000 crore<sup>7</sup> in a financial year (through use at POS). People of India, as users of the payment system are unknowingly paying for this avoidable cost, given that other cheaper and equally efficient modes of digital payments (like debit cards, mobile payments, UPI) exist alongside credit cards. Adding the credit card freebees in form of cash backs / reward points and the e-commerce credit card data vis-à-vis other electronic means of transaction, the overburden figure to the payment system would be much higher. In other words non-credit card users transacting digitally are subsidizing for the expensive credit card system in use.

2.22 Presently merchants are not allowed to surcharge customers on credit cards. Credit cards being a credit mode of payment, merchants could possibly be given a freedom to charge for the credit cost only. It could be made very clear that the surcharge is for use of credit and not because of using digital means for making payment.

---

<sup>3</sup> Effective April 1, banks have moved to Marginal Cost of funds based Lending Rate (MCLR)

<sup>4</sup> Based on average of the number of days of credit, i.e., 24 days through 52 days.

<sup>5</sup> [Bank-wise ATM/POS/Card Statistics - December 2015](#), RBI.

<sup>6</sup> Rs 21,194 crore worth of credit card transactions at POS in December 2015.

<sup>7</sup> 1 crore = 10 million



2.23 In the event that we ignore this aspect, one has to be careful to address the concerns of the merchants and consumers (on this disparity designed in the electronic payment system of the country), where though a merchant is more than happy to accept cheaper modes like debit cards/pre-paid instruments/UPI/mobile payments (and accordingly price his products) but develops a negative impression of the electronic payment modes just because he is forced to accept a premier credit card with an associated MDR of 3% or more. Under the current regulations, in general, merchants are prohibited to show different prices of a product/service based on the payment modes. The merchant realizes that it is unfair to adjust the list price uniformly (in a competitive market) to accommodate for the current mandate to accept the debit and credit cards at par. However, if the selling price is uniformly hiked by the merchant, it becomes unfair and discriminatory for the debit card/UPI/prepaid/mobile payment modes and their users.

2.24 So, do we allow surcharge on credit cards? Merchants being given the freedom to surcharge only on credit cards may well get misused, given the gullible nature of our customers. It is also difficult to implement, since it is difficult to assess when a merchant is overcharging, etc. Thus, for credit card based transactions, merchants being given the freedom to surcharge based on the differentials in MDR (that exist vis-à-vis debit cards) does not appear to be a good idea.

2.25 Instead MDR for credit cards should be made same as that for debit cards (or similar forms where there is no credit involved) and let issuing bank be given the freedom to impose a credit fee when the credit card monthly statements are generated (compensating for the decreased interchange). However, for foreign credit cards used in India or Indian credit cards used outside India the international rules would apply. Note that the use of foreign credit cards used in India is minuscule compared to all card transactions done in India. Furthermore, such foreign credit card transactions in India are more concentrated around high net worth merchants.

2.26 Such a move would impact the domestic credit card usage (and the credit card business) by decline in the usage by direct credit cost conscious customers for sure but would lead to migration of credit card payments to other non-credit electronic payments which are seamless, secure and cheaper for merchants with no apparent cost to consumers.

2.27 Debit cards and other equivalent mobile phone based modes should address the interoperability between various issuers and acceptance networks and ensure that merchant payments are interoperable across the broad spectrum of payment and settlement systems.



ii. Department of Economic Affairs shall constitute one or more Committees with key industry stakeholders, RBI and concerned Government Departments to review the payment system in the country. The following issues, among other, may be addressed by the Committee:

a. Need for changes, if any, in the regulatory mechanisms under the Payments and Settlement Systems (PSS) Act, 2007 and, in other legislations affecting the payment ecosystem.

b. Leveraging Unique Identification Number or other proof of identity for authentication of card/ digital transactions and setting up of a Centralised KYC Registry.

c. Introduction of single window system of Payment Gateway to accept all types of Cards/ Digital payments for Government receipts and enable settlements between consumer and merchants via NPCI or other agencies within specified timelines.

2.28 The National Payments Corporation of India (NPCI) has envisaged UPI, which is a user friendly mobile App for unified funds transfer (between two bank accounts) using mobile phones. Created by NPCI, the UPI-App can currently be provided only by a bank to their own customers and to other banks' customers. The App has been developed incorporating universality, seamlessness, privacy, security, convenience and speed. It is expected to be a game changer in the electronic payment system of the country. As the UPI-App evolves over time, it has the potential to replace card payments.

2.29 With UPI-App providing easy means of quick transfer of funds between two entities using IMPS, it carries the potential of replacing the expensive cash or cheques or usage of debit/pre-paid cards at POS and for e-commerce. In addition to the standard push (payer initiated) feature, UPI-App (like credit and debit cards) has incorporated the pull (payee initiated) features making it attractive for merchant transactions.

2.30 The current UPI structure necessitates that a bank (bank X, say) will identify itself with the UPI-App and all communications of the UPI-App installed on a mobile phone will get routed through this bank even if the App-user is a non-customer of Bank X and is doing transactions between two banks, both different from bank X. Thus, under the present design, the front-end interface with UPI is necessarily through a bank (Payment Service Provider). It may be worthwhile for NPCI to work towards providing the UPI-App to the customers directly. NPCI is a national asset, and an institute of national importance. It can build the capacity (if not there already) to make a product that can provide direct interface to customers and migrate them from the traditional modes of payments to electronic payment platforms in India. With a clear revenue model for banks (independent of their earlier investments made in various cashless/paperless payment initiatives), it is proposed that



- (i) UPI-App should be supplied additionally by NPCI directly to end users (like National Unified USSD<sup>8</sup> Platform (NUUP)).
- (ii) UPI-App should be backed by RBI and regulated, if required.
- (iii) NPCI should act as a switch to communicate messages directly between the two banks, the payer and the payee.
- (iv) UPI-App communicates directly 'between NPCI and Payer' and 'between NPCI and Payee' and transfer funds through IMPS.
- (v) RBI and the government should provide the necessary support towards making the UPI endeavour robust, seamless, secure and successful, for the good of a less-cash more-digital economy.
- (vi) UPI-App should be enabled with a provision to withdraw cash from ATMs without the requirement of a debit card.
- (vii) RBI / Government / NPCI should have extensive campaigns for awareness building on the lines of Aadhaar campaign.

2.31 The primary advantage of the proposed model would be to reduce one to two layers of bank involvement in transactions where the UPI-App provider bank (Payment Service Provider) is not the payer or/and payee bank. With centrality of operations with NPCI, it would also make the product features more flexible with ease to innovate and improve. For example, to withdraw cash from an ATM using the UPI-App, one has to execute cash request by indicating the debit bank and amount. This would generate a one-time-password (OTP). The person walks into any ATM and opts for UPI-withdrawal. The ATM would then ask for mobile number, amount, OTP (and possibly the ATM PIN issued by the payer-bank). On a successful authentication, cash is dispensed.

2.32 With volumes increasing, the per transaction cost to run the system would decrease significantly and the business model could be made self-sufficient through an appropriate revenue sharing model.

d. Studying feasibility and framing rules for creating a payments history for all card/digital payments and ensure merchants/ consumers can leverage their credit history to access instant, low-cost micro-credit through digital means and create necessary linkages between payments transaction history and credit information.

iii. Department of Revenue/ Department of Economic Affairs/ Department of Financial Services shall grant tax rebates/incentives or introduce mechanisms for cash back/lottery or any other measures to incentivise transactions through cards and digital means.

<sup>8</sup> Unstructured Supplementary Service Data



iv. Department of Financial Services/ RBI shall develop a methodology for enabling very high value transactions through cards and digital means beyond the limits presently prescribed.

2.33 As a first step, the government should consider service tax break for few years on the fees imposed by banks for digital financial transactions which moves people away from cash and cheques.

2.34 It is important to assert here that though it may superficially appear to be a revenue loss, but the government will get compensated by the economic benefits of less cash and minimal use of cheques.





### **3. The RBI's Concept Paper**

3.1 The fourth bi-monthly monetary policy statement 2015-16 emphasised the need to bring out a Concept Paper to discuss the proliferation of card acceptance infrastructure in the country. Subsequently, RBI's Concept Paper released on March 8, 2016 primarily discusses ways and means to promote card acceptance infrastructure. As a result, the Concept Paper has deviated from the principle of platform or form factor agnostics for the promotion of electronic payment transactions. It has restricted its concept to card acceptance only, though over time more efficient and innovative forms of payment methods have evolved or are evolving.

3.2 The Concept Paper has mainly set guidance on two aspects.

1. How and why not to fund for enhancing card acceptance infrastructure?
2. How and why to rationalise the MDR?

3.3 Chapter 3 of the Concept Paper deals with '**Strategies for enhancing acceptance infrastructure**'. We first take up the two strategies set forth by RBI for enhancing acceptance infrastructure.

#### **3.4 Strategy 1: Mandate terminalisation to issuers in proportion to their card issuance.**

We did not see such a strategy even for ATM deployments. The reason is simple. In case of ATM's the business model on its own guided one to install ATMs. To set an appropriate model, it was RBI and NPCI who mandated a balanced pricing and commission distribution structure. Thus, to maintain quality, there appears to be no need to adopt such a strategy of mandating terminalisation. Instead, to make the acquiring business attractive, reverse the present trend of sharing merchant fees (or, MDR) between the acquirer and the issuer. For more details, see paragraphs 2.8-2.9 and 2.14.

3.5 However, even though we may not be setting any mandates on issuer banks to contribute equally as acquirers, one needs to be careful in ensuring that issuers have a level playing field to acquire merchants and serve them as acquirer banks, if they so wish. For example, consider Payments Banks that was envisaged by the Nachiket Mor committee to provide state of art banking service harnessing technology and which has now come into existence. Though such new players have been created to facilitate ease of payments through efficient and cheap technological innovations, however the development of Payments Banks to serve current accounts of merchant establishments as acquire banks appear to be restrictive because of the limitations set by the regulator on maximum balances that can be maintained in these current accounts. In the interest of increasing efficiency in the digital payment system of the country, and to promote the development of acceptance infrastructure, **RBI should consider enhancing the**





**maximum balance limits on current accounts with Payments Banks to facilitate merchant accounts for retail payment transactions.**

### **3.6 Strategy 2: Promote setting up of Acceptance Development Fund.**

Before the government or RBI tries to use public money to build this fund, one needs to ask the players of the card business, which includes banks and switch providers, on whether they would like to contribute to the 'acceptance development fund'? And if yes, would it be for acceptance development of the expensive POS or some other innovative channels?

3.7 Furthermore, if at all the RBI and the government should use public money to fund for an efficient and economical acceptance infrastructure, it should be the UPI in terms of all possible support and push, such as, aggressive awareness building, initial handholding for users and MDR support for *small ticket transactions*.

3.8 While we discuss the acceptance development fund, it is pertinent to mention that currently on one hand RBI appears to subsidise cash within certain monthly limits, while on the other, it is disincentivising the cheaper electronic payments by facilitating imposition of commissions and fees for even a single digital payment in a month. To efficiently utilize the public money, and to achieve its own vision of moving the country to a less-cash society, RBI should desirably impose suitable commissions / charges for cash not only coming into the currency chest but also for cash leaving the currency chests (to the extent it actually costs to run the establishment of the currency chests). Such a move should be used to create awareness among banks and the public on the high cost of cash. The funds generated out of such commissions could rightfully be used to fund the NPCI's initiatives on digital payments. This could be a way in which RBI could promote efficient, secure and cheap digital payments over the cost incentive and less efficient cash.

3.9 Chapter 4 of the Concept Paper deals with '**Rationalisation of Merchant Discount Rate**'. We now take up the options and issues set forth by RBI on MDR.

3.10 In paragraphs 2.7-2.12 and 2.17-2.26, we have elaborated the thought process on MDR. There we had dwelt on most of the options and issues set forth by RBI on MDR.

3.11 We now take up two simple questions. The questions were addressed to merchant groups and we elaborate the responses.

- **Do merchants pay differently to the payment companies while different digital payment modes are used by their customers?** This question is important since we would see an era where mandates / contract would prohibit surcharge / convenience fees that prevail today (which is mainly due to possible variations in the cost of digital payment modes that the merchants see).



**Answer from merchant:** The POS and PG usage costs are indeed different for different modes of payments used by the customers. For PG, customers use credit card, debit card and net banking and the credit card merchant fee (or, MDR) is the highest followed by debit card and net banking.

- **Knowing that credit card would cost the merchant more, do we need a level playing field where merchants are not discouraged while they provide a form agnostic digital payments acceptance platform?** By artificially creating a disparity where one digital mode is more expensive than the other (though for the merchant, as digital payment modes, they are no different), is it unnecessarily increasing the cost for the merchants while they accept credit cards?

**Answer from merchant:** The answer is an obvious yes because all the big merchants today absorb this cost and do not pass it on to the customers. So it would be worthwhile to bring this credit card eco system at par with UPI kind of platform. Separate charge of credit risk fee from those who availed credit is a way out.

Here when we write that “all the big merchants today absorb this cost and do not pass it on to the customers”, it means that currently we don't pass it on to the customers as % of the transaction value because it is not allowed to charge additional fee on the use of any plastic card except by petrol pumps and Indian Railway Catering and Tourism Corporation's (IRCTC) online ticket booking. Therefore this cost sits into merchant's profit and loss. It is correct that eventually the burden would fall on the customer. It is felt that we articulate on the principle of treating all digital modes of payments at par and the infra cost to support digital payments should be more like Capex at their end. If banks like, they could also charge credit fee separately for credit risk but not in form of bundled payment processing fee.

The above clarity in the response was obtained after some interactions as below.

*“How is it possible for any merchant to absorb the cost associated with a product that they sell? That cannot be a long term business model. Here, a product cost is nothing but the net of all expenditure associated with passing the product in the hands of the customer. To this you add some profit to arrive at the selling price.*

*Even when a discount is offered, it does not mean that a merchant is absorbing any loss due to it. It can simply mean tweaking the profit component or that the cost price has changed due to some reason and the merchant wants to pass it on by naming it as discounts.*

*In order to justify that MDR on credit cards should be brought at par with debit cards / UPI, it is a must that we are able to demonstrate that it is the majority of the ordinary customers (using payments in form of direct debit but not credit cards) who are paying for the lopsided payment system, and*



*that too in a camouflaged manner. (This is under the current premise that merchants cannot show that different digital payment modes would cost the customers differently.)”*

3.12 The government has now decided to treat government merchants and service providers (utility service providers, petrol pumps, gas agencies, railway tickets /IRCTC, tax department, passport service, museums, monuments etc.) at par with other private merchants with respect to payment systems. Thus, contrary to the concept prevailing in some businesses like railways and petrol pumps, the government has now decided to portray as if they would start bearing the cost of digital transactions rather than customers bearing the same.

3.13 Thus, with government becoming a true merchant with respect to the payment systems, the question that arise again is why should this merchant want cheaper modes of digital payments to subsidise the expensive modes (like credit cards) at the cost of their loyal and common customers (who are making digital payments but not by credit cards).

#### **3.14 Whether merchant charges should be unbundled?**

RBI has raised an important issue of merchant charges being bundled leading to difficulty in ensuring adherences to the present regulatory mandates on MDR for debit cards and the same for the new rationalised mandates on MDR for digital payments, as and when it comes. For better policy making, it is important to see transparency in MDR for its better understanding and thereby grooming the future of the payment system through informed decisions.

3.15 As a simple illustration consider a merchant having a better negotiating power to strike a deal to pay a uniform MDR of 1.5% across all card types (from classic to signature credit cards as well as debit credit). What does this reflect? It shows how acquiring banks and the switch providers camouflage the working of the card system to apparently reflect that the cost of debit and credit cards are same in the card payment system. So, what is the problem and how does one correct it<sup>9</sup>? The problem is that the true cost of the payment modes does not get reflected leading to unconscious usage of an expensive mode of payment, that is, the credit card. It is fair if one (merchants or

---

<sup>9</sup> To comply with the regulatory norms, banks set internal understandings. For example, while selling a specific product if there were 10 card transactions (each of Rs 1000) of which 4 were debit and 6 were credit, the bank would charge the merchant Rs 15 for each of the transactions (at an MDR of 1.5%) leading to a total fee of Rs 150. However, when it comes to regulatory compliance, the bank has to show that, for each of the 4 debit card transactions the merchant was charged Rs 7.50 leading to a total fee of Rs 30 due to debit cards. This makes the MDR for debit cards as 0.75%. To account for the balance of Rs 120, the bank has to indicate the MDR on credit cards as  $120 \times 100 / 6000 = 2\%$ . The merchant, being probably ignorant, finds it appropriate to add Rs 15 uniformly as his cost, while arriving at his selling price of Rs 1000. Thus what we see in this example is that the debit card payment system is cross subsidising for the credit card payment system, and that too, to the extent of the non-transparent differentiated MDR of 1.25%.



consumers) is consciously using credit cards with a clear understanding that it is increasing your costs vis-à-vis debit cards. However, if one is not kept conscious of the same then that shows a defect in the digital payment systems.

### **3.16 Whether MDR for credit cards should be rationalised?**

RBI has raised this question and as we have already discussed in detail, any answer different from “yes” would only showcase how we are cheating ourselves and our country (see paragraphs 2.17-2.26 and 3.15).

3.17 Credit card business should earn from conscious credit offered in the hands of the card holder (which runs on the current business model of unconscious credit) and the scope of more credit utilization (prevailing conscious credit) through rollover of credit dues.

3.18 The adverse effects of drugs and intoxicants and their consequent addiction are not in the interest of our society. Accordingly, government has set forth controls through laws to inhibit them. In a similar fashion, credit card usage leads to addiction when one sees the freebies in form of cash backs, reward points and apparently disguised free credit. The flip side is the current payment system where the cost of providing such credit and freebies is not borne by the person enjoying the benefits but are borne by the merchants which is eventually borne unconsciously by all the other customers. Therefore, it is time that the government and RBI take appropriate steps to control such negatives in the digital payment systems by making things more apparent and upfront. This would help in the true discovery of reduced costs for our digital payment systems.

3.19 Protection of customer interest (whether merchants or consumers) on digital payments is prime. One should take a very bold stand on interchange. The present percentage game only favours producers of digital payments. To be fair it should be cost plus and not exploitative. Credit card, as such, is a dual feature instrument. Those issued credit cards should be covered by an overdraft like facility, so that the customer who enjoys credit pays for it. Why digital payment users who are non-users of credit cards pay for the support of credit cards? Having articulated on this aspect, it is time now for the governments and the regulators to deliberate keeping all stakeholders in mind.

3.20 We would like to add here that there is an apparent feeling among the credit card users (who pay their dues on time) that why should they lose on the historic monetary benefits of credit cards (over debit cards) that they are enjoying for free. It is not easy to internalise the fact that there is no free lunch and that the system in totality is bearing its cost (it being a zero sum game).



## **4. Closing Remarks and Way Forward**

4.1 For small value transactions carried out at relatively smaller shops, there are some impediments for them to go the electronic way. There is an inherent feeling of becoming accountable to pay tax, be it service tax, value added tax (VAT), or income tax, which otherwise they do not bother to indulge in. These are the people who may have less than Rs One lakh worth of monthly retail transactions. For them, whether they are in metros or in tier VI centres, how do we give a sense of comfort to embrace digital payments? Moreover, the cost of paying Rs 500 every month as rental for the POS terminal and then, additionally pay a minimum MDR of 0.75% acts as inhibitors to promote digital payments. To top it with extra burden, there is the risk of entertaining a credit card which currently attracts a MDR in the range of 1.5% to 3.5%. These negative aspects of going the digital way need to be smoothed for small merchants.

4.2 The aspects related to varied MDR due to different types of payment cards, for which the merchants have no control, creates a negative impression and thus discourages digital payments. In the absence of uniform MDR, based solely on payment processing fee for credit and debit cards, should credit cards be thrust on to the merchants as a payment mode, wherein the merchants are required to unwillingly pay for a virtual credit associated (though the merchants are more than happy to accept debit cards or similar non-credit payment modes, which attracts only the payment processing cost)? The clear message on MDR has to be uniform rate structure irrespective of the card type used. However, with the digital payment ecosystem gearing towards the economical mobile based platforms, it is pertinent to mention that such mobile payments would have minimal MDR vis-à-vis the proposed MDR for card based POS transactions.

4.3 It is very important that we provide necessary support for the market to make moves to slowly change the mind-set of merchants (small and big) through intensive financial education on the advantages of digital payments for our country.

4.4 We now summarise the various suggestions that get derived from this report.

### **On MDR:**

- MDR has to be cost plus based. True cost of cash to the user (which includes government / RBI / banks / service provider / merchants / customers) has to get reflected appropriately in order to discover the correct MDR. Any situation where cash is artificially made to appear cheaper should be corrected through regulatory means.
- The revenue distribution of the MDR should be in the following order (i) atleast 50% for the acquirer bank, (ii) atleast 30% for the issuer bank and (iii) atleast 10% for the switch provider.



- Furthermore, given that retail digital transaction volumes are increasing and would increase at a higher rate with the moves made by the policy makers, for every merchant transaction (whether through POS/PG or UPI or other digital means) the digital payment system providers should mandate to **‘set a maximum MDR for amounts upto Rs 10,000’**. However, there is a need to realise the important aspect of arriving at this maximum MDR rationally through use of meaningful data. The correct discovery of the MDR should be data driven and holistically researched. It is proposed that **for PG this maximum MDR be fixed at 1% while for POS or similar physical devices the maximum MDR be fixed at 0.75%**.
- For protecting digital transactions against fraud, a system of insurance should be built. An insurance premium of the order of 0.1% of the transaction fee (or MDR) may be considered.
- In order to cover for expenses related to fraud control / risk mitigation and developmental activities, for the **incremental amounts in excess of Rs 10,000, the MDR should have a uniform cap of 0.1%**.
- Freedom may be given to the digital payment system providers to set a minimum absolute fee not exceeding Re 1.50 for every POS/PG or similar transaction. Accordingly, contrary to present rules set by switch providers, merchants may be given the freedom of choice on any mode of payments for amounts less than Rs 200, even if he has been enabled to accept payments digitally.
- Just to encourage *small ticket transactions*, cheaper modes for merchant payments like UPI could be initially subsidised for its MDR, keeping it at flat Rs 1. This needs to be articulated more as and when UPI gains ground and stabilises.

#### On Credit Cards:

- For credit card based transactions, merchants should not be given the freedom to surcharge based on the differentials in MDR that exist vis-à-vis debit cards. Instead MDR for credit cards should be made same as that for debit cards or similar forms where there is no credit involved. The issuing bank will have the freedom to impose a credit fee when the credit card monthly statements are generated. It should be clearly understood that the issuing bank, if it decides to charge, does so for use of credit and not because of using digit means for making payments (given that one who has a credit card, also carried a debit card).
- Credit card business should earn from conscious credit offered in the hands of the card holder (which runs on the current business model of unconscious credit) and the scope of more credit utilization (prevailing conscious credit) through rollover of credit dues.
- The adverse effects of drugs and intoxicants and their consequent addiction are not in the interest of our society. Accordingly, government has set forth controls





through laws to inhibit them. In a similar fashion, credit card usage leads to addiction when one sees the freebies in form of cash backs, reward points and apparently disguised free credit. The flip side is the current payment system where the cost of providing such credit and freebies is not borne by the person enjoying the benefits but are borne by the merchants which is eventually borne unconsciously by all the other customers. Therefore, it is time that the government and RBI take appropriate steps to control such negatives in the digital payment systems by making things more apparent and upfront. This would help in the true discovery of reduced costs for our digital payment systems.

#### **On Cash Usage:**

- The cost of cash has to get reflected appropriately, which is not the case for heavy users of the same, be it the merchants when they deposit cash, or the customers when they withdraw cash, or the RBI when it distributes cash for free but charges for processing electronic payments, or banks which do not maintain parity on fees imposed to their customers while making electronic transactions more expensive for their customers than cash transactions.
- For every account holder (big or small, savings or current) Cash-in and Cash-outs in excess of Rs One lakh a month should not be encouraged since this goes against the present mandate of making our economy less-cash more-digital. Accordingly, the government and the regulator should deliberate the appropriateness of devising means to discourage such Cash-ins and Cash-outs.

#### **On POS/mobile-POS and Development of Acceptance Infrastructure:**

- Restricting to the present form of POS devices would amount to setting mandates despite knowing the inefficiency that it could bring in. Furthermore, it would also be very expensive and non-sustainable. However, improvised devices which are more robust and cost efficient could be a better answer for setting mandates. For example, given its potential, one may consider UPI not only for mandates but also for funding the same (through the proposed fund creation) as a means for front-end acceptance and cash-outs.
- However, even though we may not be setting any mandates on issuer banks to contribute equally as acquirers, one needs to be careful in ensuring that issuers have a level playing field to acquire merchants and serve them as acquirer banks, if they so wish. Accordingly, in the interest of increasing efficiency in the digital payment system of the country, and to promote the development of acceptance infrastructure, **RBI should consider enhancing the maximum balance limits on current accounts with Payments Banks to facilitate merchant accounts for retail payment transactions.**



**On Acceptance Development Fund:**

- Before the government or RBI tries to use public money to build this fund, one needs to ask the players of the card business, which includes banks and switch providers, on whether they would like to contribute to the 'acceptance development fund'? And if yes, would it be for acceptance development of the expensive POS or some other innovative channels?
- Furthermore, if at all the RBI and the government should use public money to fund for an efficient and economical acceptance infrastructure, it should be the UPI in terms of all possible support and push, such as, aggressive awareness building, initial handholding for users and MDR support for *small ticket transactions*.

**On Awareness Building:**

- It is important to project that electronic transactions, if not better, are at par with cash transactions. Thus any scope of potential disincentives of the use of non-cash over cash transactions or/and incentives of use of cash over non-cash transactions should be recognised beforehand. There is a requirement of awareness building through a concentrated financial education program to educate the people of India on the country's benefits of cashless/paperless transactions. People should make cashless transactions a culture and RBI should impart this important message of financial/depositor education through DEAF.

**On UPI:**

- It may be worthwhile for NPCI to work towards additionally providing the UPI-App to the customers directly. The primary advantage of this would be to reduce one to two layers of bank involvement in transactions where the UPI-App provider bank (Payment Service Provider) is not the payer or/and payee bank. With centrality of operations with NPCI, it would also make the product features more flexible with ease to innovate and improve. Thus,
  - (i) UPI-App should be supplied additionally by NPCI directly to end users (like NUUP).
  - (ii) UPI-App should be backed by RBI and regulated, if required.
  - (iii) NPCI should act as a switch to communicate messages directly between the two banks, the payer and the payee.
  - (iv) UPI-App communicates directly 'between NPCI and Payer' and 'between NPCI and Payee' and transfer funds through IMPS.
  - (v) RBI and the government should provide the necessary support towards making the UPI endeavour robust, seamless, secure and successful, for the good of a less-cash more-digital economy.
  - (vi) UPI-App should be enabled with a provision to withdraw cash from ATMs without the requirement of a debit card.
  - (vii) RBI / Government / NPCI should have extensive campaigns for awareness building on the lines of Aadhaar campaign.





**A Token of Encouragement:**

- The government should consider service tax break for few years on the fees imposed by banks for digital financial transactions which moves people away from cash and cheques.
- It is important to assert here that though it may superficially appear to be a revenue loss, but the government will get compensated by the economic benefits of less cash and minimal use of cheques.

4.5 With the government's initiative in place and in RBI's capacity as the guardian of public interest and regulator of financial systems, we conclude by saying that this report may help the regulators of the payment system to address some of the existing frictions, and assist them to lead the country through an appropriate path towards a less-cash more-digital society.



## **5. Comments from Stakeholders**

A draft report was circulated among various stakeholders for their inputs and comments. The author received few informal views from financial institutions and payment system facilitators. Formal comments have been received from two important stakeholders of the payment system. They are the **All India Bank Depositors' Association** and the **Retailers Association of India**.

### **All India Bank Depositors' Association**

April 23, 2016

Dear Dr. Ashish Das

Thank you very much for your email along with your concept paper.

On behalf of the All India Bank Depositors' Association (AIBDA), we are pleased to make following comments and observations:

All India Bank Depositors' Association endorses the recent guidelines of Ministry of Finance, Govt. of India for promotion of digital payments. The efforts of the Reserve Bank of India to progressively move away from cash dominated society to digital payment embracing society are also welcome.

However, the transition to the digital payment system will have inevitable cost implications, the burden of which should not fall on the bank depositors alone. It must be incumbent on the banks to bear a predominant share of the cost.

Equally importantly, the progressive phasing out of cash transactions would significantly improve the quality of management of economic and commercial activities. In turn, this would confer several tangible and intangible benefits to the economy and the banking system. Illustratively, it will reduce the volume of currency physically held by the public as well as cash-based financial transactions. Hence, it would be possible for the Govt. of India jointly with the RBI to formulate a scheme of subsidizing the cost of operating digital payment system by way of support to the banks in a transparent and accountable manner.



While the digital payment system has many advantages, it is imperative that the RBI together with the banking fraternity undertakes massive education and awareness program for general public and more particularly for bank depositors. This must be a condition precedent, given the level of financial and digital illiteracy in the country.

Fortunately, NPCI has envisaged **Unified Payments Interface [UPI]**, which is a user-friendly mobile App for unified funds transfer between two bank accounts using mobile phones. We see tremendous potential in this scheme for all the stakeholders. Using a mobile App has unique advantages of seamlessness, universality, privacy, security, convenience and speed. The UPI has, thus, the potential of making alternative modes of digital payments more competitive as its cost will be market-driven.

AIBDA, therefore, expects that UPI App should come into operation immediately so that bank depositors can opt for the cheapest mode of conducting their digital transactions. Needless to reiterate, for this purpose, education and awareness must receive primacy of the focus from concerned authorities.

Ashok Ravat  
Hon. Secretary

Sunil S. Bhandare  
President



Retailers Association of India (RAI) is the unified voice of Indian retailers working with all the stakeholders for creating the right environment for the growth of the modern retail industry in India. RAI is the body that encourages, develops, facilitates and supports retailers to become modern and adopt best practices that will delight customers. RAI has a three charter aim of Retail Development, Facilitation and Propagation. RAI is the premier body of Retailers in India having 998 member establishments including large and small retailers in the country having approximately 248,000 stores.

RAI's mission is to develop, facilitate and propagate practices and processes that will grow the Indian retail industry, leading to increased consumption and growth of the economy. Retail industry gets its strength from the expertise of people working in the Industry who in turn create services committed to customer satisfaction.

Currently, merchants believe that they have a better realization of value when they accept cash on payments from customers. For most merchant's acceptance of payments via debit cards/ credit cards/on the payment software or mobile wallets is an additional cost in a business that has very little margin.

Hence there is a need to recalibrate the costs in and on various card and digital payment system. The following are the recommendations to promote payments through cards and other electronic means to check tax evasion and transition towards a cashless economy.

#### **MDR on debit cards**

The unreasonable pricing of debit cards is a dis-incentive for small and medium merchants, who have less pricing power due to their low volumes, to transit to card based payments. Therefore, we strongly recommend that...

- The Merchant Discount Rate (MDR) on debit cards/prepaid cards be on a transaction basis rather than on a % basis. For e.g. Rs 5 for transaction up to 2000/- and Rs 10 for transaction above Rs 2000/-.
- Payments via debit cards are like payments via bank transfer. Since fees on RTGS, ATM transaction, pay order, cheque issuing, net banking all are based on transaction basis, debit card transactions also be treated at par with these modes of payment.

#### **RAI National Council**

**B A Kodandarama Setty,**

**B S Nagesh,**  
Shoppers Stop Ltd.

**Kishore Biyani,**  
Future Group

**Noel Tata,**  
Trent Ltd.

**Shashwat Goenka,**  
Spencer's Retail

**Vinay Nadkarni,**  
Globus Stores Pvt. Ltd.

**Kumar Rajagopalan,**  
Retailers Association of India

**Atul Chand,**  
ITC - LRBD

**BhaskarBhat,**  
Titan Industries Ltd.

**Bijou Kurien,**  
L Capital Asia

**Kabir Lumba,**  
Lifestyle International (P) Ltd.

**Govind Shrikhande,**  
Shoppers Stop Ltd.

**Jamshed Daboo,**  
Trent Hypermarket Ltd.

**Pinakiranjan Mishra,**  
Ernst & Young Pvt. Ltd.

**Rafique Malik,**  
Metro Shoes Ltd.

**Rakesh Biyani,**  
Future Group

**Rahul Mehta,**  
CMAI

**Shubhranshu Pani,**  
Jones Lang LaSalle

**J Suresh,**  
Arvind Brands



### **MDR on Credit Cards**

The MDR on credit cards is very high with different banks charging different rates. There is a need to standardize and rationalize the rate and put a maximum cap of MDR on credit cards.

We recommend that MDR on credit card should not be more than 0.75 % or Rs. 1000 per transaction (whichever is Lower) considering the level of technology in the modern time the cost of operation of credit card has to be reduced.

We recommend that there should be a restriction on the interchange rate on premium paid cards to control the high MDR.

### **MDR on Payment Gateway**

MDR on payment gateways should be at par with that on point of sales. This will give a boost to mobile payments as well.

### **UPI, the new alternative**

We believe that *Unified Payment Interface (UPI)* will be a game changer for this industry. RBI, together with the government, should provide necessary support to make UPI successful and allow merchants to accept payments via the UPI-App. The role of National Payments Corporation of India in this regard is very crucial.

UPI will not only enable direct bank-to-bank transactions based on minimum or zero fees but also help to facilitate real-time payments, improving the working capital cycle as merchants will get payments on the spot.

### **Tax Reform required to promote cashless economy**

It is our recommendation that the government should:

- Exempt MDR from service tax.
- Allows tax exemption on accepting payment via Digital means so that all small to large merchants can push for accepting payments through non cash methods. An appropriate tax rebate to a merchant can be offered if at least 75% value of a merchant's transactions are through cards.
- Encourage states to give some waiver in VAT rate of the product, if a dealer facilitates payment of a particular transaction through electronic means.

### **RAI National Council**

**B A Kodandarama Setty,**  
Vivek Ltd.

**B S Nagesh,**  
Shoppers Stop Ltd.

**Kishore Biyani,**  
Future Group

**Noel Tata,**  
Trent Ltd.

**Shashwat Goenka,**  
Spencer's Retail

**Vinay Nadkarni,**  
Globus Stores Pvt. Ltd.

**Kumar Rajagopalan,**  
Retailers Association of India

**Atul Chand,**  
ITC - LRBD

**BhaskarBhat,**  
Titan Industries Ltd.

**Bijou Kurien,**  
L Capital Asia

**Kabir Lumba,**  
Lifestyle International (P) Ltd.

**Govind Shrikhande,**  
Shoppers Stop Ltd.

**Jamshed Daboo,**  
Trent Hypermarket Ltd.

**Pinakiranjan Mishra,**  
Ernst & Young Pvt. Ltd.

**Rafique Malik,**  
Metro Shoes Ltd.

**Rakesh Biyani,**  
Future Group

**Rahul Mehta,**  
CMAI

**Shubhranshu Pani,**  
Jones Lang LaSalle

**J Suresh,**  
Arvind Brands



- Exempt EDC machine and POS terminal from custom duty to help banks to provide the same to merchants at lower rents. This will help motivate small merchants to install POS machines at their outlets.
- Consider extending marginal relief to individuals under Income Tax Act if they use digital payment modes to transactions of at least 25% of their gross total incomes. The exemption may be given under section 80C in the form of deduction from gross total income.

#### RAI National Council

**B A Kodandarama Setty,**

**B S Nagesh,**  
Shoppers Stop Ltd.

**Kishore Biyani,**  
Future Group

**Noel Tata,**  
Trent Ltd.

**Shashwat Goenka,**  
Spencer's Retail

**Vinay Nadkarni,**  
Globus Stores Pvt. Ltd.

**Kumar Rajagopalan,**  
Retailers Association of India

**Atul Chand,**  
ITC - LRBD

**BhaskarBhat,**  
Titan Industries Ltd.

**Bijou Kurien,**  
L Capital Asia

**Kabir Lumba,**  
Lifestyle International (P) Ltd.

**Govind Shrikhande,**  
Shoppers Stop Ltd.

**Jamshed Daboo,**  
Trent Hypermarket Ltd.

**Pinakiranjan Mishra,**  
Ernst & Young Pvt. Ltd.

**Rafique Malik,**  
Metro Shoes Ltd.

**Rakesh Biyani,**  
Future Group

**Rahul Mehta,**  
CMAI

**Shubhranshu Pani,**  
Jones Lang LaSalle

**J Suresh,**  
Arvind Brands



## **References** (*Chronological from oldest*)

[1] Das, Ashish (2008). Acceptability Standards in Credit Card Industry. November 10, 2008.

<http://www.math.iitb.ac.in/~ashish/workshop/CreditCard23November10.pdf>

[2] Das, Ashish Das and Agarwal, Rakhi (2010). Cashless Payment System in India- A Roadmap. IIT Bombay Technical Report. May 31, 2010.

<http://dspace.library.iitb.ac.in/jspui/handle/10054/1732>

[3] Barman, R.B., Das, Ashish, Markus Tacke and Srinivasan, N. (2011). Assessment of the Payment System With respect to Inclusiveness towards Small Remittances. NABARD-GIZ Report. February, 2011.

<http://www.math.iitb.ac.in/~ashish/workshop/Assessment%20of%20the%20Payment%20Systems%202011.pdf>

[4] Das, Ashish (2011). Electronic Remittance System in India- Rationalization. IIT Bombay Technical Report. May 25, 2011.

<http://dspace.library.iitb.ac.in/jspui/handle/10054/1735>

[5] Das, Ashish (2012). Including the Poor– Need for Reforms in Remittances. IIT Bombay Technical Report. July 23, 2012.

[http://dspace.library.iitb.ac.in/jspui/bitstream/100/14395/3/NEFT-Report\\_2012.pdf](http://dspace.library.iitb.ac.in/jspui/bitstream/100/14395/3/NEFT-Report_2012.pdf)

[6] A Discussion Paper on Disincentivising Issuance and Usage of Cheques. RBI Discussion paper. January 31, 2013.

[https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/DPDC300113\\_F.pdf](https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/DPDC300113_F.pdf)

[7] Das, Ashish (2013). Banks Violating Prevention of Money-Laundering Act for Excluding the Excluded. IIT Bombay Technical Report. November 26, 2013.

<http://dspace.library.iitb.ac.in/jspui/handle/100/14418>

[8] Usage of ATMs – Rationalisation of number of free transactions. RBI/2014-15/179 DPSS.CO.PD.No. 316/02.10.002/2014-2015. August 14, 2014.

<http://www.rbi.org.in/scripts/NotificationUser.aspx?Id=9170&Mode=0>

[9] Das, Ashish (2014). The Art of Living for ATMs in India. IIT Bombay Technical Report. September 15, 2014.

<http://dspace.library.iitb.ac.in/jspui/handle/100/14421>





- [10] Usage of ATMs –Rationalisation of number of free transactions – Clarifications. RBI/2014-15/260 DPSS.CO.PD.No.659/02.10.002/2014-2015. October 10, 2014.  
<https://rbi.org.in/Scripts/NotificationUser.aspx?Id=9276&Mode=0>
- [11] Basic Statistical Returns of Scheduled Commercial Banks in India - Volume 44, March 2015. RBI. March 10, 2016.  
<https://rbi.org.in/Scripts/AnnualPublications.aspx?head=Basic%20Statistical%20Returns>
- [12] UNIFIED PAYMENT INTERFACE API and Technology Specifications. Specifications – Version 1.2.1, NPCI. March 16, 2016.  
[http://www.npci.org.in/documents/Unified\\_Payment\\_Interface\\_API\\_Technology\\_Specifications%20v121.pdf](http://www.npci.org.in/documents/Unified_Payment_Interface_API_Technology_Specifications%20v121.pdf)
- [13] Das, Ashish (2016). Incentivising ATM-cash and cheques over electronic transactions - A policy gap. IIT Bombay Technical Report. January 26, 2016.  
<http://dspace.library.iitb.ac.in/jspui/handle/100/18425>
- [14] Promotion of Payments through Cards and Digital means. Government of India (Ministry of Finance), February 29, 2016.  
[http://finmin.nic.in/the\\_ministry/dept\\_eco\\_affairs/currency\\_coinage/Promo\\_PaymentsMeans\\_Card\\_Digital.pdf](http://finmin.nic.in/the_ministry/dept_eco_affairs/currency_coinage/Promo_PaymentsMeans_Card_Digital.pdf)
- [15] Concept Paper on Card Acceptance Infrastructure. RBI, March 8, 2016.  
<https://www.rbi.org.in/Scripts/PublicationReportDetails.aspx?UrlPage=&ID=840>