IIT Bombay Technical Report (February 2017)

Discovering the right MDR for India

Ashish Das

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

Indian Institute of Technology Bombay
Powai, Mumbai - 400076, India

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RBI has brought out a draft regulation on MDR, seeking public comments. While keeping the digital payment focus for the country, this report suggests tweaks in the approach being advocated by RBI.
In this report all possible care has been taken to project the correct picture using the data gathered. Deviations, if any, are inadvertent.

Discovering the right MDR for India

Ashish Das[1]
Department of Mathematics, Indian Institute of Technology Bombay, Mumbai

February 28, 2017

Executive Summary

1. Reserve Bank of India (RBI), the Government, banks, retailers, consumers – all are struggling to arrive at a digital payments model which is not only cheaper than cash but has the same appeal in terms of convenience. Cash is definitely not feasible in large size transactions, nor is it convenient for certain businesses which include organised retail and services. This brings us to small and medium businesses comprising small and medium merchants for whom cash is feasible and convenient and we need to see how we can make them comfortable with digital means of payments. As people try migrating to digital means from the age old cash mode of payments, there are some associated costs to go digital, which does not exist in cash. A major component of this cost that merchants have to bear is what is called the merchant discount rate (MDR). So what have RBI and the Government done on the MDR front?

2. In September 2012, RBI mandated banks to cap debit card MDR at 0.75% for transactions upto Rs 2000 and 1% for transactions above Rs 2000. This MDR regulation was set with an intent that big merchants, who had thick margins, could cross-subsidise the smaller merchants. Though this appealed on face, it had its drawbacks in form of benefits of lower MDR of 0.75% getting exposed to big merchants having sales mostly in sub Rs 2000 ticket sizes.

3. To overcome the defects of the present slab-rate MDR which is based on transaction value, RBI has now proposed a merchant turnover based model[2], which surely appeal more so as to correct the unwarranted benefits that got passed on to big merchants. RBI has arrived at the category of big merchants as those whose annual turnover exceeds Rs 20 lakh and for whom the MDR cap has been increased to 0.95% (from 0.75%, for sub Rs 2000 ticket size). What this categorization actually means is that a major chunk of merchants having small businesses (with annual turnovers not exceeding Rs 2 crore) have been put in the big merchant category. Furthermore, the merchant category having annual turnovers upto Rs 20 lakh is literally void

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[1] Dr. Ashish Das is a Professor of Statistics with the Indian Institute of Technology Bombay. E-mail: ashish@math.iitb.ac.in
[2] Draft Circular - Rationalisation of Merchant Discount Rate (MDR) for Debit Card Transactions. RBI, February 16, 2017. https://www.rbi.org.in/Scripts/bs_viewcontent.aspx?Id=3317

since atleast 50% of them have average daily sales of less than Rs 2000 with no great need to accept card based payments even at a RBI perceived reduced MDR of 0.4%.

4. The country's prime objective is to bring such merchants under the ambit of digital payments that keep a potential of reducing cash in the system, but have been repelling the digital drive due to the associated MDR costs (vis-à-vis free cash). The draft MDR regulation disincentivises these very merchants (small and medium in size) for accepting debit card payments by hike in MDR from 0.75% to 0.95%. As already acknowledged by RBI, even if merchants get acquired for card payments, small and medium merchants usually repel paying the MDR and thus try to extract the same from the consumers either directly or indirectly. With RBI's intent to close the direct avenue of extracting MDR, these merchants would either let go digital payments or indirectly extract the same from their consumers. Either way it disincentivises digital means of payments over cash.

5. It is felt that RBI's approach in its draft MDR regulation lacks the true spirit in moving merchants, especially small and medium ones, the digital way. The prime objective of this report is to demonstrate the same. Some aspects in RBI's draft MDR regulation that gets highlighted in this report include:

(i) The category of 'small' merchants defined for promoting digital payments is nearly void.

(ii) Merchants upto double the size of these 'small' merchant category do not even fall under any tax bracket, but have been categorized as 'big' merchants.

(iii) A major chunk of this category of 'big' merchants, who are considered small unorganised businesses by the Government[3] and who today were paying 0.75% MDR stand disadvantaged by the draft regulation as they are now envisaged to pay MDR at a higher rate of 0.95%.

(iv) The need for reworking the categorization of merchants based on sound principles of merchant's utility measure for cash payments vis-à-vis digital payments.

(v) The need for introduction of *small* and *medium* merchants based on Government's scheme of presumptive income tax for small and medium tax payers whose annual turnover is upto Rs 2 crores.

(vi) Utilisation of the fact that the tax liability under the scheme of presumptive income tax for *small* and *medium* tax payers whose annual turnover is upto Rs 2 crores, where only 6% (rather than 8%) of their annual turnover is counted as presumptive income in respect of turnover which is received by non-cash means.

[3] See The Finance Bill 2017

(vii) Discovery of the MDR based on merchant's utility and Government's tax incentive to go digital.

(viii) Relook at the weakness of the slab-rate MDR based on transaction value, and possible quick tweaks.

(ix) Discrimination between Government as psudo-merchants vis-à-vis true merchants.

(x) RBI's approved rule prohibiting *small* and *medium* merchants to reject expensive credit card based transactions and go exclusively the cheaper debit card way – the rule negates promotion of card enabled digital payments since the *small* and *medium* merchants get exposed to credit card MDRs which ranges in the high of 1.5 to 3.5%.

6. Recognizing the weakness of the erstwhile slab-rate based model to generate higher MDR for *large*[4] merchants with sub Rs 2000 ticket sizes, a possible avenue could have been to simply set a rule that for *large* merchants the highest slab-rate MDR applies irrespective of the transaction ticket size. This would not only protect the *small* and *medium* merchants with lower MDR but would also protect the banks when such *small* and *medium* merchants transact with ticket sizes of more than Rs 2000 and when *large* merchants transact with sub Rs 2000 ticket sizes.

Recommendations:

7. *Proposed MDR structure:* In order to facilitate wider acceptance of card payments, RBI as a special measures rationalised the MDR for debit card transactions upto Rs 2000 for the period January 1 - March 31, 2017. For transactions upto Rs 1000, MDR has been capped at 0.25% of the transaction value, while for transactions above Rs 1000 and upto Rs 2000, MDR has been capped at 0.5% of the transaction value. Thus, in the interest of promoting digital payments, as a simple-to-execute alternative, RBI's interim rate caps of 0.25%, 0.50% and 1% may continue, with a rider that MDR caps for *large* merchant would be 1% irrespective of the transaction ticket size. This would work on the principle of cross-subsidisation.

8. *MDR for mobile payments:* Mobile based retail payments should be seen in isolation, ignoring the age old business model developed over time for credit and debit cards. Thus, QR Code based transactions or merchant Unified Payments Interface (UPI) transactions should be brought to forefront with low MDR. That would help in increasing volumes in the coming years. None of the *small* and *medium* merchants would be inclined to pay 0.8% MDR on the mobile platform. For that matter, even 0.5% MDR may be viewed as too high on the UPI merchant platform for *small* and *medium* merchants. For them cash could still turnout to be cheaper unless MDR is significantly low.

[4] Merchants with annual turnover exceeding Rs 2 crore

9. *MDR for BHIM platform:* The Government should consider a separate league of MDR for merchant payments through BHIM (Bharat Interface for Money). For the payments industry to provide a UPI transaction service, it does not cost more than Rs 3 per transaction[5]. Considering that the average ticket size on the merchant UPI platform is Rs 1000, MDR can easily be set at 0.3%. Accordingly, for making UPI a viable and more sought after payment mode for wide-ranging categories of merchants, such MDR can be staggered keeping a low of 0.2% for *small* and *medium* merchants and 0.5% for *large* merchants. Alternatively, MDR can be set at 0.2% for transactions not exceeding Rs 1000, and 0.5% for transactions above Rs 1000, subject to MDR being 0.5% for *large* merchants irrespective of the ticket size.

10. *Digital payments need support till volumes pickup:* Though it is acknowledged that digital payments do come at a cost, the transaction costs would reduce only if volumes pickup. The country has to invest through its banking system to build volumes. Volumes being currently low cannot be the ground to charge more from *small* and *medium* merchants – that would be a retrograde step. As a way out, following the principle of cross-subsidisation, we have to obtain a well calibrated balance such that *large* merchants can be used in the MDR play to cross-subsidise the MDR of *small* and *medium* merchants. Thus the definition of *large* merchants attaches much significance.

11. *Make cost of cash explicit:* Furthermore, banks have to target to break even few years down the line by balancing the costs associating with providing the cash payment system and the digital payment system. Banks have to devise means to show the users of the payment system that after a certain minimum threshold, cash is more expensive to use than digital payments.

12. *Way forward:* While converging to prudent regulations incorporating all good features in a simplistic manner, the only way forward is that the digital payment space enshrines (i) user friendly and secure transaction; (ii) seamless communication; (iii) parity in transaction cost vis-à-vis cash; and (iv) awareness building and behavioural/cultural change among the people of India. We have looked into some of these aspects; suggesting ways and means of ironing out possible frictions in the digital payment space so as to give long run impetus to digitisation.

Acknowledgements

The author thanks few officials in the card payment networks and banks for some fruitful discussions. Thanks are also due to Dr. Praggya Das for going through a draft version of the report and offering comments.

[5] NEFT costs Rs 2.50 for upto Rs 10,000 of fund transfer

I. Introduction

1. Reserve Bank of India (RBI), the Government, banks, retailers, consumers – all are struggling to arrive at a digital payments model which is not only cheaper than cash but has the same appeal in terms of convenience. Cash is definitely not feasible in large size transactions, nor is it convenient for certain businesses which include organised retail and services. This brings us to small and medium businesses comprising small and medium merchants for whom cash is feasible and convenient and we need to see how we can make them comfortable with digital means of payments. As people try migrating to digital means from the age old cash mode of payments, there are some associated costs to go digital, which does not exist in cash. A major component of this cost that merchants have to bear is what is called the merchant discount rate (MDR). So what have RBI and the Government done on the MDR front?

2. The Government had constituted two high level committees on digital payments which, among other things, pondered on the issue of MDR. Shri Chandra Babu Naidu led Chief Ministers Committee on Digital Payments had submitted an interim report[6] while Shri Ratan P. Watal led Committee on Digital Payments had submitted their full report[7]. Unlike the Watal report which advocated deregulating MDR caps on debit cards[8], the Naidu report indicates of having provided a more focused report on MDR for consideration of RBI. Naidu report mentions about keeping the MDR Zero for Aadhaar enabled payments and Low / Zero MDR for all digital payments to Government entities. Recently RBI released a draft MDR regulation[9] considering size categorization of retail merchants and setting caps on MDR.

3. With an objective to boost digital retail payments, effective September 2012, RBI mandated banks to cap debit card MDR at 0.75% for transactions upto Rs 2000 and 1% for transactions above Rs 2000. This MDR regulation was set with an intent that big merchants, who had thick margins, could cross-subsidise the smaller merchants. Though this appealed on face, it had its drawbacks in form of benefits of lower MDR of 0.75% getting exposed to big merchants having sales mostly in sub Rs 2000 ticket sizes. Furthermore, with total value of transactions in sub Rs 2000 being almost twice than Rs 2000 plus ticket sizes, the revenue generation for the payment service providers got stressed.

[6] Naidu Report : Interim Report of the Committee of Chief Ministers on Digital Payments http://niti.gov.in/writereaddata/files/new_initiatives/Digi%20Report%20-%20FInal.pdf

[7] Watal Report : Committee on Digital Payments - Medium Term Recommendations to Strengthen Digital Payments Ecosystem http://finmin.nic.in/reports/watal_report271216.pdf

[8] The Committee is of the opinion that the existing MDR should only be restricted to merchant which are utilities or monopoly in nature. Here the merchants might not have the same incentive as other merchants to bear the MDR.

[9] Draft Circular - Rationalisation of Merchant Discount Rate (MDR) for Debit Card Transactions. RBI, February 16, 2017. https://www.rbi.org.in/Scripts/bs_viewcontent.aspx?Id=3317

4. To overcome the defects of the present slab-rate MDR which is based on transaction value, RBI has now proposed a merchant turnover based model[10], which surely appeal more so as to correct the unwarranted benefits that got passed on to big merchants. RBI has arrived at the category of big merchants as those whose annual turnover exceeds Rs 20 lakh and for whom the MDR cap has been increased to 0.95% (from 0.75%, for sub Rs 2000 ticket size). What this categorization actually means is that a major chunk of merchants having small businesses (with annual turnovers not exceeding Rs 2 crore) have been put in the big merchant category. Furthermore, the merchant category having annual turnovers upto Rs 20 lakh is literally void since atleast 50% of them have average daily sales of less than Rs 2000 with no great need to accept card based payments even at a RBI perceived reduced MDR of 0.4%.

5. The country's prime objective is to bring such merchants under the ambit of digital payments that keep a potential of reducing cash in the system, but have been repelling the digital drive due to the associated MDR costs (vis-à-vis free cash). The draft MDR regulation disincentivises these very merchants (small and medium in size) for accepting debit card payments by hike in MDR from 0.75% to 0.95%. As already acknowledged by RBI, even if merchants get acquired for card payments, small and medium merchants usually repel paying the MDR and thus try to extract the same from the consumers either directly or indirectly. With RBI's intent to close the direct avenue of extracting MDR, these merchants would either let go digital payments or indirectly extract the same from their consumers. Either way it disincentivises digital means of payments over cash.

6. It is felt that RBI's approach in its draft MDR regulation lacks the true spirit in moving merchants, especially small and medium ones, the digital way. The prime objective of this report is to demonstrate the same. We also try to highlight few other related issues for promoting digital means of payments.

[10] Draft Circular - Rationalisation of Merchant Discount Rate (MDR) for Debit Card Transactions. RBI, February 16, 2017. https://www.rbi.org.in/Scripts/bs_viewcontent.aspx?Id=3317

II. What is RBI's draft MDR regulation?

7. Based mainly on consultations with various stakeholders (which has to include representatives from the users of digital payments, small/medium/large retailers and service providers, banks, network providers and Government as merchant), RBI has decided to restructure MDR on the basis of merchant turnover rather than the present slab-rate which is based on transaction value. RBI, in agreement with the two above mentioned reports, considers it prudent for having a differential MDR for Government transactions and for certain special categories in view of the non-discretionary nature of those expenses, etc.

8. Merchant categories proposed by RBI are

(i) Small merchants with turnover outside the ambit of GST (turnover less than Rs 20 lakh p.a.)

(ii) Government transactions

(iii) Special category of merchants

(iv) All other category of merchants with turnover within the ambit of GST (turnover above Rs 20 lakh p.a.)

9. The list of entities under special category of merchants and the Government merchant category is provided in Table 1.

Table 1: Merchant Category List with differential MDR Structure

Sr No	**Special Merchant Category***
1	Utilities incl. Private Sector (Electricity, Water, Municipal Taxes). Excludes Telecom.
2	Education Sector (Govt. & Private sector). Coaching Classes excluded.
3	Hospitals (Only Government) and primary health care centres, Jan Aushadhi outlets
4	Agriculture and allied activities including fertilizers and seeds, nursery, farming equipment, APMCs and mandis, fisheries, milk cooperatives, vegetable mandis etc.
5	Cooperatives including KVIC
6	Army Canteens
7	State Transport& State Waterways; Toll collections
8	Insurance
9	Mutual Fund
10	PDS / Fair price shops
11	Places of Tourist Interest run by Govt. (ASI Monuments, Forest Dept./National Parks, Museums, Zoos & Aquariums, Govt. Libraries, Govt. Expositions etc.)

Sr. No	**Government Merchant Category***
1	GST, Income Tax, Customs Duty, other Government Taxes & Levies & Fines
2	MEA Passport Fees
3	Visa Fees (Indian Consulates & Foreign Consulates operating in India)
4	Railways – Ticketing and Passenger services
5	Duties and registration charges such as Property registration, Vehicle Registration, Stamp Duty, Road Tax etc. and any other Municipal taxes.

* Indicative, not exhaustive

10. The maximum MDR for debit card transactions for different merchant categories has been proposed by RBI as under:

Sr. No	Merchant Category	MDR for debit card transactions (as a % of transaction value)	
		Physical POS infrastructure	**Digital POS**
1.	Small merchants	Not exceeding 0.40%	Not exceeding 0.30%
2.	Special category of merchants	Not exceeding 0.40%	Not exceeding 0.30%
3.	All other category of merchants (other than Government)	Not exceeding 0.95%	Not exceeding 0.85%
4.	Government Transactions	• Flat fee of Rs 5 for transaction value Rs 1 to Rs 1000 • Flat fee of Rs 10 for transaction value Rs 1001 to Rs 2000 • MDR not exceeding 0.50% for transaction value above Rs 2001 with cap of Rs 250 per transaction	

11. RBI writes "…taking into account the need for encouraging asset-light digital infrastructure such as QR-code, there is a need to differentiate MDR between acquiring infrastructure involving physical terminals, including mPOS and digital acceptance infrastructure models such as QR Code." It is not clear what all comprises physical POS infrastructure and the digital POS infrastructure. For example, is an e-commerce online payment using debit card, a digital POS transaction? Furthermore, there is nothing concrete when RBI writes "…in scenarios where the merchant is willing to pay upfront for the card acceptance infrastructure, the MDR has to be on the lower side." Though the draft regulation has set caps on MDR fees, it is silent on any other fees that the banks may impose for debit card merchant transactions. This gives the bank the freedom to impose other fees not in the name of MDR.

III. Small merchants?

12. Small merchants (annual turnover of less than Rs 20 lakh), for digital payment purpose, have been categorized by RBI as those who sell, on an average, less than Rs 5500 worth[11] of goods and services per day. In other words, in order to see what RBI means by a big merchant, we provide different sizes of merchants having various sales figures corresponding to annual turnovers (Table 2).

Table 2: Merchant sales per day categorized under big merchants

Turnover Rs 20 lakh: Average sale of Rs 5500 per day	
No. of sales	Average ticket size (Rs)
50	110
100	55
150	36
200	27

Turnover Rs 40 lakh: Average sale of Rs 11000 per day	
No. of sales	Average ticket size (Rs)
50	220
100	110
150	72
200	54

Turnover Rs 60 lakh: Average sale of Rs 16500 per day	
No. of sales	Average ticket size (Rs)
50	330
100	165
150	108
200	81

Turnover Rs 80 lakh: Average sale of Rs 22000 per day	
No. of sales	Average ticket size (Rs)
50	440
100	220
150	144
200	108

Turnover Rs 100 lakh: Average sale of Rs 27500 per day	
No. of sales	Average ticket size (Rs)
50	550
100	275
150	180
200	135

Turnover Rs 120 lakh: Average sale of Rs 33000 per day	
No. of sales	Average ticket size (Rs)
50	660
100	330
150	216
200	162

'No. of sales' means number of transactions in a day

Does an annual turnover of Rs 20 lakh make a merchant a big merchant? A turnover of Rs 20 lakh per annum is equivalent to an average daily sale of Rs 5500. Even a small vegetable vendor sells goods worth that amount.

13. Thus, under RBI's draft MDR structure, even a small to medium kirana shop or a vegetable vendor, who usually shun digital payments, appear to have been shown the disadvantages of

[11] Rs 20,00,000/365 = Rs 5,480

digital payments (over cash), because of the high costs proposed to be associated with it. The costs are as high as Rs 2.55 for a Rs 300 purchase transaction, or Rs 0.85 for every Rs 100 worth of digital payment transaction that is being associated with the QR Code based mobile payment. In case of physical POS these costs are Rs 2.85 and Rs 0.95 respectively. It makes less business sense for these very merchants to go for a physical POS and incur expenses not only at a higher rate of Rs 0.95 for every Rs 100 worth of sales, but also pay a monthly rental fee for a POS terminal. Given that Unified Payments Interface (UPI) Apps, like BHIM (Bharat Interface for Money), are enabled for interoperable QR Code based payments, the high costs proposed for such retail digital payments would make even these unattractive vis-à-vis cash.

14. By categorizing these relatively small and medium merchants as big merchants and advising them to pay more for using digital means of payments, RBI is disincentivising the digital push among them. This neither makes business sense nor gives any comfort over cash payments to small and medium merchants. RBI is implicitly portraying cash as a cheaper mode of payment for relatively small and medium merchants.

15. RBI should alternately identify a category of large merchants, which in spirit of the draft MDR regulation include really big businesses, like hotels, big restaurants, hospitals, big service providers, organised department stores, etc. Accordingly, the 4th category of merchants in RBI's draft circular should be large merchants. Now what could possibly be meant by merchants who are large?

16. The Government has identified **small unorganised businesses** comprising merchants whose annual turnover is not exceeding Rs 2 crore. In fact, linking their business in terms of the digital means of payment, the Government under The Finance Bill 2017 has put in place the following:

> "**Measures for promoting digital payments in case of small unorganised businesses:** The existing provisions of section 44AD of the Act, inter-alia, provides for a presumptive income scheme in case of eligible assesses carrying out eligible businesses. Under this scheme, in case of an eligible assessee engaged in eligible business having total turnover or gross receipts not exceeding Rs 2 crore in a previous year, a sum equal to 8% of the total turnover or gross receipts, or, as the case may be, a sum higher than the aforesaid sum declared by the assessee in his return of income, is deemed to be the profits and gains of such business chargeable to tax under the head "profits and gains of business or profession".
> **In order to promote digital transactions and to encourage small unorganised business to accept digital payments**, it is proposed to amend section 44AD of the Act to reduce the existing rate of deemed total income of 8% to 6% in respect of the amount of such total turnover or gross receipts received by an account payee cheque or account payee bank draft or use of electronic clearing system through a bank account during the previous year or before the due date specified in sub-section (1) of section 139 in respect of that previous year. However, the existing rate of deemed profit of 8% referred to in

section 44AD of the Act, shall continue to apply in respect of total turnover or gross receipts received in any other mode.

This amendment will take effect from 1st April, 2017 and will, accordingly, apply in relation to the assessment year 2017-18 and subsequent years."

17. In line with the Government's definition of small unorganised businesses comprising small and medium merchant tax payers, we propose to define *small* merchants as those having annual turnover upto Rs 1 crore, and *medium* merchants as those with turnover of Rs 1 crore to Rs 2 crore per annum. It is the *small* and *medium* merchants who need to primarily ride the country's digital payment wave, since most of the *large* merchants (with turnover exceeding Rs 2 crore per annum) are already onboard the digital payment space. Most of the merchants under RBI's categorization of 'small' merchants, neither are nor should be our thrust area for now. Moreover, merchants with turnover of less than Rs 10 lakh per annum, i.e., average sales of less than Rs 2700 per day, may still have the comfort of cash over digital payments, even if the MDR is 0.4% (or 0.3% for QR Code based mobile payments). Also it is paramount to understand that paying Rs 100 to Rs 300 a month in addition to the MDR of 0.4% makes no good business sense for such small merchants. Moreover, for *small* and *medium* merchants as defined above, the present proposal of RBI disincentivises digital payments compared to the rates that prevail today or what they were during the pre-demonetisation era.

IV. True returns for *small* and *medium* merchants

18. In view the tax incentives provided for non-cash receipts (through reduced presumptive income for *small* and *medium* merchants), in Table 3 we provide the tax liabilities for the category of *small* and *medium* merchants. In the table, it is assumed that no other tax benefits are claimed. The Income Tax shown is inclusive of Cess. The tax computations are for the income in the financial year 2017-18.

19. Table 3 shows clearly that the merchants with annual turnover of Rs 40 lakh or less do not fall under taxable bracket. Truly, they are small merchants. Moreover, by making suitable tax saving investments, this zero tax liability can be enjoyed by merchants having annual turnover close to Rs 60 lakh. Now, working on a conservative footing of no tax benefits enjoyed through tax saving investments by the merchants, we see how RBI's present merchant categorization model disincentivises digital payments for the merchants. Table 4 provides the net cost to merchants inclusive of MDR while adopting RBI's approach. Clearly, *small* and *medium* merchants, under RBI's proposed MDR have no reason to go the digital way as that overburdens their business costs, net of tax and MDR.

20. Accordingly, if at all the merchant categorization approach is feasible to implement in the payment space, one can at best consider small and medium tax payers for setting thresholds for *small* to *medium* merchants. With annual turnover not exceeding Rs 2 crores attributed to *small* and *medium* merchants, the other class may be considered as *large* merchants. RBI's definition of 'small' merchants is just about void for the purpose of promoting digital means of payments. In that process the bulk of the 'big' merchants (other than special and Government) who are considered small unorganised businesses by the Government remain neglected. The MDR slabs and various merchant categories proposed by RBI need to be tweaked to bring the neglected merchant class under the ambit of digital acceptance.

Table 3: Tax liability for merchants having turnover not exceeding Rs 2 crore

Annual Turnover	Taxable Income (0% non-cash)	Taxable Income (25% non-cash)	Taxable Income (50% non-cash)	Taxable Income (75% non-cash)	Taxable Income (100% non-cash)
1000000	80000	75000	70000	65000	60000
2000000	160000	150000	140000	130000	120000
3000000	240000	225000	210000	195000	180000
4000000	320000	300000	280000	260000	240000
5000000	400000	375000	350000	325000	300000
6000000	480000	450000	420000	390000	360000
7000000	560000	525000	490000	455000	420000
8000000	640000	600000	560000	520000	480000
9000000	720000	675000	630000	585000	540000
10000000	800000	750000	700000	650000	600000
11000000	880000	825000	770000	715000	660000
12000000	960000	900000	840000	780000	720000
13000000	1040000	975000	910000	845000	780000
14000000	1120000	1050000	980000	910000	840000
15000000	1200000	1125000	1050000	975000	900000
16000000	1280000	1200000	1120000	1040000	960000
17000000	1360000	1275000	1190000	1105000	1020000
18000000	1440000	1350000	1260000	1170000	1080000
19000000	1520000	1425000	1330000	1235000	1140000
20000000	1600000	1500000	1400000	1300000	1200000

Annual Turnover	Income Tax (0% non-cash)	Income Tax (25% non-cash)	Income Tax (50% non-cash)	Income Tax (75% non-cash)	Income Tax (100% non-cash)
1000000	0	0	0	0	0
2000000	0	0	0	0	0
3000000	0	0	0	0	0
4000000	1030	0	0	0	0
5000000	7725	6438	2575	1288	0
6000000	11845	10300	8755	7210	5665
7000000	25235	18025	12360	10558	8755
8000000	41715	33475	25235	16995	11845
9000000	58195	48925	39655	30385	21115
10000000	74675	64375	54075	43775	33475
11000000	91155	79825	68495	57165	45835
12000000	107635	95275	82915	70555	58195
13000000	128235	110725	97335	83945	70555
14000000	152955	131325	111755	97335	82915
15000000	177675	154500	131325	110725	95275
16000000	202395	177675	152955	128235	107635
17000000	227115	200850	174585	148320	122055
18000000	251835	224025	196215	168405	140595
19000000	276555	247200	217845	188490	159135
20000000	301275	270375	239475	208575	177675

All figures are in Rs

Table 4: Net cost (Tax + MDR) to merchants under RBI's proposed MDR approach

Annual Turnover	MDR as proportion	Cost on MDR (0% non-cash)	Cost on MDR (25% non-cash)	Cost on MDR (50% non-cash)	Cost on MDR (75% non-cash)	Cost on MDR (100% non-cash)
1000000	0.0035	0	875	1750	2625	3500
2000000	0.0035	0	1750	3500	5250	7000
3000000	0.009	0	6750	13500	20250	27000
4000000	0.009	0	9000	18000	27000	36000
5000000	0.009	0	11250	22500	33750	45000
6000000	0.009	0	13500	27000	40500	54000
7000000	0.009	0	15750	31500	47250	63000
8000000	0.009	0	18000	36000	54000	72000
9000000	0.009	0	20250	40500	60750	81000
10000000	0.009	0	22500	45000	67500	90000
11000000	0.009	0	24750	49500	74250	99000
12000000	0.009	0	27000	54000	81000	108000
13000000	0.009	0	29250	58500	87750	117000
14000000	0.009	0	31500	63000	94500	126000
15000000	0.009	0	33750	67500	101250	135000
16000000	0.009	0	36000	72000	108000	144000
17000000	0.009	0	38250	76500	114750	153000
18000000	0.009	0	40500	81000	121500	162000
19000000	0.009	0	42750	85500	128250	171000
20000000	0.009	0	45000	90000	135000	180000

Annual Turnover	MDR as proportion	Tax+MDR (0% non-cash)	Tax+MDR (25% non-cash)	Tax+MDR (50% non-cash)	Tax+MDR (75% non-cash)	Tax+MDR (100% non-cash)
1000000	0.0035	0	875	1750	2625	3500
2000000	0.0035	0	1750	3500	5250	7000
3000000	0.009	0	6750	13500	20250	27000
4000000	0.009	1030	9000	18000	27000	36000
5000000	0.009	7725	17688	25075	35038	45000
6000000	0.009	11845	23800	35755	47710	59665
7000000	0.009	25235	33775	43860	57808	71755
8000000	0.009	41715	51475	61235	70995	83845
9000000	0.009	58195	69175	80155	91135	102115
10000000	0.009	74675	86875	99075	111275	123475
11000000	0.009	91155	104575	117995	131415	144835
12000000	0.009	107635	122275	136915	151555	166195
13000000	0.009	128235	139975	155835	171695	187555
14000000	0.009	152955	162825	174755	191835	208915
15000000	0.009	177675	188250	198825	211975	230275
16000000	0.009	202395	213675	224955	236235	251635
17000000	0.009	227115	239100	251085	263070	275055
18000000	0.009	251835	264525	277215	289905	302595
19000000	0.009	276555	289950	303345	316740	330135
20000000	0.009	301275	315375	329475	343575	357675

All figures are in Rs

Figures in red under Tax+MDR show that the preferred option for merchants is 100% transaction in cash

21. As a caution, RBI's present approach in categorizing 'small merchants' (which are too small) for the purpose of payments may bring in situations similar to 'BSBDA[12] and small accounts'. Just like banks (unless thrust) shoo away small customers (as they turn out to be too expensive to serve), 'small merchants' would be dissuaded by acquiring banks for physical POS or m-POS by showing fees other than MDR. Furthermore, majority of these RBI's 'small merchants' have such low businesses that digital payment will not be their cup of tea, more so when other expenses are also involved in form of - MDR, cost of smart phone, cost of data, and cost of fluctuating data connectivity to do seamless transactions, etc.

22. Though there are some reservations on how well the categorization approach can be implemented and supervised by RBI, with our broader definition of *small*, *medium* and *large* merchants, we present a net cost workout in Table 5 using a revised cap on MDR. The revised MDR caps used are:

- MDR not exceeding 0.35% for *small* merchants defined as those having annual turnover of upto Rs 1 crore, and
- MDR not exceeding 0.50% for *medium* merchants defined as those having annual turnover in the range of Rs 1 crore to Rs 2 crore.

23. Table 5 demonstrates that the revised MDR caps would work better for *small* and *medium* merchants. The Tax+MDR figures marked in red, provided in the table, indicate the true incentives for adopting the digital means of payment in clear terms. This demonstrates that a more comprehensive cost-benefit analysis, from a merchant's perspective, is needed. Inappropriate definition of small and medium merchants for the purpose of setting higher MDR for large merchants may prompt these *small* and *medium* merchants to shun digital payments altogether.

24. The above proposed categorization brings under the ambit those merchants who need to primarily ride the country's digital retail payments wave, since the *large* merchants are already onboard. Too small a merchant (with average daily sales of less than Rs 2700) neither is nor should be our thrust area for now since they may still have the comfort of cash over digital payments even if the MDR is 0.35%. But they would learn and embrace mobile based payments once the Government focuses on promoting retail payments through BHIM in a big way, (i.e., once BHIM stabilizes).

[12] Basic Savings Bank Deposit Account

Table 5: Net cost (Tax + MDR) to merchants under revised and calibrated MDR

Annual Turnover	MDR as proportion	Cost on MDR (0% non-cash)	Cost on MDR (25% non-cash)	Cost on MDR (50% non-cash)	Cost on MDR (75% non-cash)	Cost on MDR (100% non-cash)
1000000	0.0035	0	875	1750	2625	3500
2000000	0.0035	0	1750	3500	5250	7000
3000000	0.0035	0	2625	5250	7875	10500
4000000	0.0035	0	3500	7000	10500	14000
5000000	0.0035	0	4375	8750	13125	17500
6000000	0.0035	0	5250	10500	15750	21000
7000000	0.0035	0	6125	12250	18375	24500
8000000	0.0035	0	7000	14000	21000	28000
9000000	0.0035	0	7875	15750	23625	31500
10000000	0.0035	0	8750	17500	26250	35000
11000000	0.005	0	13750	27500	41250	55000
12000000	0.005	0	15000	30000	45000	60000
13000000	0.005	0	16250	32500	48750	65000
14000000	0.005	0	17500	35000	52500	70000
15000000	0.005	0	18750	37500	56250	75000
16000000	0.005	0	20000	40000	60000	80000
17000000	0.005	0	21250	42500	63750	85000
18000000	0.005	0	22500	45000	67500	90000
19000000	0.005	0	23750	47500	71250	95000
20000000	0.005	0	25000	50000	75000	100000

Annual Turnover	MDR as proportion	Tax+MDR (0% non-cash)	Tax+MDR (25% non-cash)	Tax+MDR (50% non-cash)	Tax+MDR (75% non-cash)	Tax+MDR (100% non-cash)
1000000	0.0035	0	875	1750	2625	3500
2000000	0.0035	0	1750	3500	5250	7000
3000000	0.0035	0	2625	5250	7875	10500
4000000	0.0035	1030	3500	7000	10500	14000
5000000	0.0035	7725	10813	11325	14413	17500
6000000	0.0035	11845	15550	19255	22960	26665
7000000	0.0035	25235	24150	24610	28933	33255
8000000	0.0035	41715	40475	39235	37995	39845
9000000	0.0035	58195	56800	55405	54010	52615
10000000	0.0035	74675	73125	71575	70025	68475
11000000	0.005	91155	93575	95995	98415	100835
12000000	0.005	107635	110275	112915	115555	118195
13000000	0.005	128235	126975	129835	132695	135555
14000000	0.005	152955	148825	146755	149835	152915
15000000	0.005	177675	173250	168825	166975	170275
16000000	0.005	202395	197675	192955	188235	187635
17000000	0.005	227115	222100	217085	212070	207055
18000000	0.005	251835	246525	241215	235905	230595
19000000	0.005	276555	270950	265345	259740	254135
20000000	0.005	301275	295375	289475	283575	277675

All figures are in Rs

Figures in red under Tax+MDR show the profitable option for merchants, w.r.t. lower net tax liability on embracing digital payments

V. The slab-rate MDR based on transaction value

25. The Watal Report highlights the breakup of debit card transactions of less than Rs 2000 and more than Rs 2000 in value terms (see Table 6). Nearly 65% of the total values of debit card transactions fall under sub Rs 2000, generating revenue in form of MDR at the rate of 0.75%.

Table 6: Debit card transactions of less than and more than Rs 2000 in value terms

Table 6.10.: *Breakup of acquirer gross margins**

Type of transaction	% of transactions value by value	MDR charged to merchants	Issuer interchange fees	Scheme fees	Acquirer gross margin
Debit Regular $\lesssim$ INR 2,000	20%	0.75%	0.50%	0.07%	01.8%
Debit Premium $\lesssim$ INR 2,000	15%	0.75%	0.65%	0.07%	0.03%
Debit Regular > INR 2,000	10%	1.00%	0.75%	0.07%	0.18%
Debit Premium > INR 2,000	10%	1.00%	0.90%	0.07%	0.03%
Prepaid	5%	1.00%	1.85%	0.07%	0.92%
Credit Regular	10%	1.30%	1.10%	0.07%	0.13%
Credit Premium	25%	1.90%	1.80%	0.70%	0.03%
Credit Corporate	5%	1.90%	2.00%	0.07%	0.17%

*Source: See, submission dated 28-10-2016 by Payment Council of India

Source: Shri Ratan P. Watal Report "Committee on Digital Payments – Medium Term Recommendations to Strengthen Digital Payments Ecosystem"

26. With the significant growth in debit card transactions since November 2016, the average ticket size has reduced. Thus, it is expected that currently the total values of debit card transactions with ticket sizes more than Rs 2000 has a share which is less than 30%. Therefore, the reduction of MDR from 1% to 0.95% will affect only 30% of the transactions in value terms, but would lead to MDR increase from 0.75% to 0.95% for majority of the complementary 70% of the total values of debit card transactions falling under sub Rs 2000. In short, overall RBI has proposed a net increase of MDR for most of the *small* and *medium* merchants.

27. Recognizing the weakness of the erstwhile slab-rate based model to generate higher MDR for *large* merchants with sub Rs 2000 ticket sizes, a possible avenue could have been to simply set a rule that for *large* merchants the highest slab-rate MDR applies irrespective of the transaction ticket size. This would not only protect the *small* and *medium* merchants with lower

MDR but would also protect the banks when such *small* and *medium* merchants transact with ticket sizes of more than Rs 2000 and when *large* merchants transact with sub Rs 2000 ticket sizes.

28. In order to facilitate wider acceptance of card payments, RBI as a special measures rationalised the MDR for debit card transactions upto Rs 2000 for the period January 1 - March 31, 2017. For transactions upto Rs 1000, MDR has been capped at 0.25% of the transaction value, while for transactions above Rs 1000 and upto Rs 2000, MDR has been capped at 0.5% of the transaction value. Earlier, effective September 2012, the MDR structure for debit card transactions were mandated with a cap of 1% of the transaction value for ticket sizes exceeding Rs 2000.

29. Thus, in the interest of promoting digital payments, as a simple-to-execute alternative, RBI's interim rate caps of 0.25%, 0.50% and 1% may continue, with a rider that MDR caps for *large* merchant would be 1% irrespective of the transaction ticket size. This would work on the principle of cross-subsidisation. With *large* merchants having thick margins, there is hardly any difference between 1% and 0.95% – more so since they are being made conscious of the fact that the country needs their contribution to enable cross-subsidisation.

VI. Discriminating Government as merchant vis-à-vis true merchants

30. We have seen Indian Railways repelling the mid-2016 instructions issued by the finance ministry under Cabinet approved directions on "Promotion of Payments through Cards and Digital means". It took the February 1, 2017 Union Budget (that will take effect from April 1, 2017) to ensure that the IRCTC would stop showing their customers that issuing banks would charge a fee (minimum of Rs 10 and as high as 1.8% of the transaction amount) for using debit or credit cards. Then we have seen the petrol-diesel-CNG sellers forcing their standpoint in early January 2017 repelling to bear the MDR cost. The situation became so complicated that in the interest of digital payments, the Government had to intervene. As per RBI, under Oil Ministry, the negotiations on MDR between banks and oil companies are converging. These scenarios reflect that MDR when thrust can be contested provided merchants have the capacity to contest. Merchants in both the above example turn out to be the Government as merchants.

31. Payment system is more for the people of India which includes more of common retailers and service providers. And majority of these common retailers and service providers are serving the people on behalf of the Government – a Government whose prime responsibly is the well-being of the people and prosperity of the country. Accordingly, there should not be marked discrimination between Government as merchants serving the people and the common retailers and service providers serving the people. It is a fact that the Government is serving all categories of people – the rich as well as the poor. There is not much merit in arguing that the Government as a merchant should enjoy privileges in the payment space, which does business with a rich client when providing 1st class AC train service or issuing a passport, whereas a merchant like Big Bazaar, servings all classes of people, are considered not worthy enough to have a level playing field in the basic digital payment space. Why? What is more *essential* – 'grocery and daily use items' or 'getting hold of a passport'? Are expenses on 'grocery and daily use items' of less non-discretionary nature than 'travelling by AC 1st class' or 'procuring a passport'?

32. Ideally, Government should showcase a level playing field when considering itself as a psudo-merchant and providing services for the people just like other merchants. Let competition discover the MDR under uniform caps for all *large* merchants. Since a cap is not meant to be the floor, it would be upon the merchants, including Government merchants, to bargain for better MDR within the cap, based on the size of business. **The public sector (PSU) banks, owned by the Government (and on Government's instructions), can still serve select Government and Government undertaking merchants falling under the *large* merchant category, by either setting the MDR at 0.5% or relaxing MDR riders imposed on *large* merchants.** The private banks also have the freedom to compete and acquire such merchants at reduced MDR. It may be noted that RBI has already indicated that the card payment networks set the interchange and network fees (which are two of the three components of MDR) on percentage basis rather than any flat fee basis.

VII. Protecting merchants against high MDR on credit cards

33. Though RBI has presently set price protection through MDR caps only for debit card linked merchant payments either using physical POS or digital POS, it is silent on MDR protection for these very merchants when consumers make credit card linked merchant payments. RBI does not provide any freedom to the *small* and *medium* merchants to reject such expensive credit card based transactions and go exclusively the cheaper debit card way – even when it is given that a consumer carrying a credit card also carries a debit card. The merchants are prohibited to discriminate between card types. This is a RBI approved rule set by payment card network providers. This rule acts as a strong negative for promoting card enabled digital payments since the *small* and *medium* merchants get exposed to credit card MDRs which ranges in the high 1.5 to 3.5%.

34. The existence of marked difference between debit and credit card MDRs is more prominent in countries where lending rates are high, like in India. Though RBI attempted to promote card payments by setting MDR caps on debit cards (effective September 2012), the scope of encouragement remained limited due to persistence of high MDR on credit cards. This also led to possible bundling of debit and credit card MDRs by banks. RBI never ventured to address this issue, though being aware of the same. With *BharatQR* as a common interoperable QR code based mobile payment system riding primarily on debit card, credit card and UPI, the credit card MDR may become a concern for *small* and *medium* merchants to shun digital payments.

35. **Alongside RBI's protection through caps on debit card based transactions, RBI needs to show a way out and protect against such expensive credit card transactions, thrust onto *small* and *medium* merchants.** For more details on this aspect and discovering the right MDR, one may refer to a recent Report "Sanitising Distortions in Digital Payments" (see reference [6]).

VIII. Mobile based retail payments and concluding remarks

36. Mobile based retail payments should be seen in isolation, ignoring the age old business model developed over time for credit and debit cards. Thus, QR Code based transactions or merchant UPI transactions should be brought to forefront with low MDR. That would help in increasing volumes in the coming years. None of the *small* and *medium* merchants would be inclined to pay 0.8% MDR on the mobile platform. For that matter, even 0.5% MDR may be viewed as too high on the UPI merchant platform for *small* and *medium* merchants. For them cash could still turnout to be cheaper unless MDR is significantly low.

37. Thus, the Government should consider a separate league of MDR for merchant payments through BHIM. For the payments industry to provide a UPI transaction service, it does not cost more than Rs 3 per transaction[13] (under present volumes of IMPS[14] transactions). Considering that the average ticket size on the merchant UPI platform is Rs 1000, MDR can easily be set at 0.3%. Accordingly, for making UPI a viable and more sought after payment mode for wide-ranging categories of merchants, such MDR can be staggered keeping a low rate of 0.2% for *small* and *medium* merchants and a higher rate of 0.5% for *large* merchants. Alternatively, MDR can be set at 0.2% for transactions not exceeding Rs 1000, and 0.5% for transactions above Rs 1000, subject to MDR being 0.5% for *large* merchants irrespective of the ticket size.

38. Though it is acknowledged that digital payments do come at a cost, the transaction costs would reduce only if volumes pickup. The country has to invest through its banking system to build volumes. Volumes being currently low cannot be the ground to charge more from *small* and *medium* merchants – that would be a retrograde step.

39. A classic example of how regulatory intervention in payment system pricing benefits a payment product is seen in the exponential expansion of ATM and NEFT usage in India after the charges were rationalised and regulated. An inclusive growth of technology driven digital payment system cannot be left to the market. Though MDR charges are essential for sustained growth of digital payments industry, contrary to the principles of credit cards business, debit cards work on a simple principle of account to account bank transfer. A bank acquiring a merchant for digital payment is akin to the bank approaching the merchant to open a current account with it. Once the merchant is banked, extending digital payment (acceptance) facility to it by its bank is near non-discretionary. This is perceptibly different from acquisition of merchants by banks under the age old credit card acceptance model. Therefore, keeping with the wider objective of ensuring greater penetration and acceptability of bank account based digital payments, MDR must be set at optimal levels for debit card and mobile based transactions. The MDR must be low enough to ensure that merchants adopt the payment

[13] NEFT costs Rs 2.50 for upto Rs 10,000 of fund transfer
[14] Immediate Payment Service

method (and encourage customers to use such payment methods), yet high enough so that it makes a self-sustaining business proposition for banks. Accordingly, under given objectives, regulatory intervention with regard to MDR pricing is paramount, and the regulation should be such as to focus upon removal of acceptance barriers.

40. As a way out, following the principle of cross-subsidisation, we have to obtain a well calibrated balance such that *large* merchants can be used in the MDR play to cross-subsidise the MDR of *small* and *medium* merchants. Thus the definition of *large* merchants attaches much significance.

41. Furthermore, banks have to target to break even few years down the line by balancing the costs associating with providing the cash payment system and the digital payment system. Banks have to devise means to show the users of the payment system that after a certain minimum threshold, cash is more expensive to use than digital payments.

42. While converging to prudent regulations incorporating all good features in a simplistic manner, the only way forward is that the digital payment space enshrines (i) user friendly and secure transaction; (ii) seamless communication; (iii) parity in transaction cost vis-à-vis cash; and (iv) awareness building and behavioural/cultural change among the people of India. We have looked into some of these aspects; suggesting ways and means of ironing out possible frictions in the digital payment space so as to give long run impetus to digitisation.

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