

**RECENT TRENDS IN THE MODES OF ACCESSING BANKING SERVICES IN INDIA  
– AN ANALYSIS**

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**ABSTRACT**

Banking sector is at the center of all the economic activities in the economy. The developments and changes in the banking sector have a great impact on the development of the economy and individual lives. Over the period of time there is a change in the way banking activities are undertaken by individuals. The physical access to the bank is not necessary today to carryout banking activities. The non-physical modes of accessing banking services through credit and debit cards, internet banking, NEFT, RTGS, ECS facilities, etc. have gained popularity in this era of information technology. This paper analyses this trend in banking in India from 2004 -05 onwards and finds that the non-physical mode is gaining importance and acceptance in India.

Key Words: Banking, banking services, ECS, NEFT, RTGS

## INTRODUCTION

Banking sector is at the center of all the economic activities in the economy. The developments and changes in the banking sector have a great impact on the development of the economy and individual lives. Few years ago, to access banking services, it was a must to physically be in the bank branch in which the customer has maintained the account. It was not possible to undertake any transaction unless the branch is visited by the customer or his representative. Today the situation has changed considerably. Banking services can be accessed at the convenience of the customer at any place convenient to him without depending on the location of bank.

The modes of accessing banking services can be dividing broadly into two broad categories (a.) Physical Mode – the traditional way of visiting the bank branch to avail the services and (b.) Non-Physical Modes [1] – the new generation modes of accessing the banking services without physically visiting the bank branch. This includes ATM, ECS, Debit Card, Credit Card, NEFT and RTGS transactions. This paper analyses the trends in the use of non-physical modes of accessing banking services in India.

## PAPER BASED TRANSACTIONS VS PAPERLESS (ELECTRONIC) TRANSACTIONS

The first aspect in the analysis is the analysis of movement from paper based transaction to paperless or electronic transactions in India. The electronic transactions started replacing paper based transactions in the banking industry with the use of information technology services. In 2002-03 the volume of paper based transactions was 1,014 million as against 173 million electronic transactions. These figures changed to 12,895 Lakh and 11,300 Lakh respectively in 2005-06. Table I presents the data relating to paper based transactions vs paperless (electronic) transactions during the period 2002-03 to 2005-06.

The data presented in Table I shows that 10,139 million transactions were paper based in the year 2002-03 of the total 11,869 million transactions in the year, i.e., 85.42% of the transactions were paper based. From the value point of view 99.72% of total value of the transactions that took place in 2002-03 was paper based. From 2002-03 to 2003-04 total volume of transactions increased by 4.31% from 11,869 million to 12,380 million. In the same period the electronic transactions increased by 24.39% from 1,730 million to 2,152 million and paper based transactions increased only by 0.88%. In the next two years total transactions increased by 28.20% and 52.45% respectively and in the same period electronic transactions increased by 95.17% and 169.05% over respective previous years. The paper based transactions showed a 14.11% and 10.49% increase in the same period.

**Table I: Paper Based Transactions vs Paperless (Electronic) Transactions**

Year	Volume (In Million)					
	<i>Paper Based Transactions</i>	<i>Percentage Change over previous year</i>	<i>Electronic Transactions</i>	<i>Percentage Change over previous year</i>	<i>Total</i>	<i>Percentage Change over previous year</i>
2002-03	10139	NA	1730	NA	11869	NA
	85.42		14.58			
2003-04	10228	0.88	2152	24.39	12380	4.31
	82.62		17.38			
2004-05	11671	14.11	4200	95.17	15871	28.20
	73.54		26.46			
2005-06	12895	10.49	11300	169.05	24195	52.45
	53.30		46.70			
Year	Value (In Rs. Crore)					
	<i>Paper Based Transactions</i>	<i>Percentage Change over previous year</i>	<i>Electronic Transactions</i>	<i>Percentage Change over previous year</i>	<i>Total</i>	<i>Percentage Change over previous year</i>
2002-03	13424313	NA	37536	NA	13461849	NA
	99.72		0.28			
2003-04	11595960	-13.62	67461	79.72	11663421	-13.36
	99.42		0.58			
2004-05	10120716	-12.72	4221153	6157.18	14341869	22.96
	70.57		29.43			
2005-06	11337062	12.02	11884429	181.54	23221491	61.91
	48.82		51.18			
Year	Value per paper transaction (Rs. per Transaction)		Value per electronic Transaction (Rs. per Transaction)		Value per total transaction (Rs. per Transaction)	
2002-03	13240.27		216.97		11342.02	
2003-04	11337.47		313.48		9421.18	
2004-05	8671.68		10050.36		9036.53	
2005-06	8791.83		10517.19		9597.64	

Source: Report on Trend and Progress of Banking in India, 2005-06

Note: Values in brackets show the percentage to total

In terms of value of transactions in rupees crore from 2002-03 to 2003-04 there was a decrease of 13.36% whereas the value of electronic transactions increased by 79.72% and paper based

transactions decreased by 13.62%. From 2003-04 to 2004-05 total value of transactions increased by 22.96% whereas paper based transactions decreased by 12.72% and electronic transactions increased by 6,157.18%. Similarly from 2004-05 to 2005-06 electronic transactions increased by 181.54% in value.

A comparison of volume and value of transactions indicate, although there is slight increase in the volume of paper based transactions the total value of these transactions has shown a net decline. Which has resulted in the decline in value per paper based transaction. In 2002-2003 paper based transactions had a value of Rs. 1,324.03 crore per million transactions. This decreased to Rs.879.18 crore per million transactions in 2005-06. Opposite has happened in the case of electronic transactions.

The value of electronic transactions was Rs. 21.70 crore per million transactions in 2002-03 which increased to Rs. 1,051.72 crore per million transactions in 2005-06. Thus, each electronic transaction has grown in size and paper based transactions have shrunk in size. This indicates that electronic transactions are being preferred for large value transactions due to its conveniences such as low cost, quick settlement of transactions, safety etc.

Hence, it can be concluded safely that the customer preference has shifted to electronic mode of transactions from the traditional paper based transactions over the period of the time.

### **TRENDS IN NON-PHYSICAL PAYMENT METHODS**

The increased adoption of technology in the banking sector in India has resulted in manifold increase in non-physical (electronic) payment methods such as ECS, NEFT, RTGS, credit cards and debit cards. The total electronic payments showed an increase in volume of transactions from 178 thousand transactions in 2001-02 to 1216 million transactions in 2011-12. In terms of value of transactions in 2001-02 Rs.6,123crore worth of transactions took place in electronic mode which rose to Rs. 5,61,382 billion in 2011-12. Table II shows the volume of transactions and Table III shows the value of transactions in electronic mode from 2004-05 to 2011-12. Table IV shows the value per electronic transactions from 2004-05 to 2011-12.

The data show that the electronic mode gaining importance and acceptance in India. In terms of value transactions in 2004-05 electronic payment method had a volume of 228.90 million transactions which rose to 1,216 million in 2011-12. In terms of value of transactions, it rose from Rs. 1,087.48 billion to Rs. 5,61,382 billion between 2004-05 and 2011-12. This indicates that customers prefer to transact through electronic media in the banking system in the recent years. Their acceptance is also indicated by the value per transaction. The value per electronic transaction rose from Rs. 4.75 thousand per transaction to Rs. 461.66 thousand per transaction. Hence, it is safe to conclude that customers have shown preference to electronic mode for their

banking transactions in India. The data also shows the contribution of ECS –Credit, ECS-Debit, NEFT/RTGS, credit cards and debit cards to the electronic mode of payment in India.

**Table II: Volume of Transactions in Non-Physical Mode from 2004-05 to 2011-12**

VOLUME (In Million)								
	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
ECS - Credit	40.05	44.22	69.02	78.37	88.39	98.10	117.00	122.00
	17.50	15.51	18.22	14.64	13.24	28.28	12.23	10.03
ECS - Debit	15.30	35.96	75.20	127.12	160.06	149.30	157.00	165.00
	6.68	12.62	19.86	23.75	23.97	43.04	16.41	13.57
NEFT	2.55	3.07	4.78	13.32	32.16	66.30	132.00	226.00
	1.11	1.08	1.26	2.49	4.82	19.11	13.79	18.59
RTGS	NOT AVAILABLE					33.20	49.00	55.00
						9.57	5.12	4.52
Credit Cards	129.47	156.09	169.54	228.20	259.56	NOT AVAILABLE	265.00	320.00
	56.56	54.76	44.77	42.63	38.87		27.69	26.32
Debit Cards	41.53	45.69	60.18	88.31	127.65		237.00	328.00
	18.14	16.03	15.89	16.50	19.11		24.76	26.97
Total	228.90	285.01	378.71	535.31	667.83	346.90	957.00	1216.00
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Report on Trend and Progress of Banking in India

Note: Values in brackets show the percentage to total

**A. ECS-Credit:** Under ECS-Credit one entity/company would make payments from its bank account to a number of recipients by direct credit to their bank accounts [2]. In 2004-05 ECS-Credit accounted to 17.50% of total volume of 228.90 million transactions in the year in electronic mode. In terms of value transacted, ECS-Credit had a value of Rs. 201.80 billion in 2004-05 of the total volume of Rs. 1,087.48 billion accounting for 18.56% of the total with an average of Rs. 5.04 thousand per transaction. Over the period from 2004-05 to 2011-12 the value per transactions through ECS-Credit has increased considerably. In 2011-12 it stood at Rs. 15.07 thousand per transactions with 122 million transactions accounting to 10.03% of total transactions in electronic mode and Rs. 1,838 billion in terms of transaction value taking place in ECS-Credit. It should be noted that in 2007-08 there was steep rise in ECS-Credit transactions. Rs. 7,822.22 billion was transacted through ECS-Credit in 2007-08. This steep rise in ECS-



Credit was due to the refund of the oversubscription amount of IPOs floated by companies using electronic mode as mandated by the stock exchange [3]. This suggests that the convenience of electronic transactions when emphasised as a policy initiative familiarizes the customers and makes them internalise the new initiative.

**Table III: Value of Transactions in Non-Physical Mode  
from 2004-05 to 2011-12**

VALUE (Rs. Billion)								
	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
<b>ECS - Credit</b>	201.80	323.24	832.73	7822.22	974.87	1176.13	1817.00	1838.00
	18.56	22.08	35.33	75.07	19.48	0.29	0.36	0.33
<b>ECS - Debit</b>	29.20	129.86	254.41	489.37	669.76	695.24	736.00	834.00
	2.69	8.87	10.79	4.70	13.39	0.17	0.15	0.15
<b>NEFT</b>	546.01	612.88	774.46	1403.26	2519.56	4095.07	9321.00	17903.00
	50.21	41.87	32.86	13.47	50.36	1.02	1.87	3.19
<b>RTGS</b>	NOT AVAILABLE					394533.59	484872.00	539307.00
						98.51	97.39	96.07
<b>Credit Cards</b>	256.86	338.86	413.61	579.84	653.56	NOT AVAILABLE	755.00	966.00
	23.62	23.15	17.55	5.56	13.06		0.15	0.17
<b>Debit Cards</b>	53.61	58.97	81.72	125.21	185.47		387.00	534.00
	4.93	4.03	3.47	1.20	3.71		0.08	0.10
<b>Total</b>	1087.48	1463.81	2356.93	10419.90	5003.22	400500.03	497888.00	561382.00
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Report on Trend and Progress of Banking in India

Note: Values in brackets show the percentage to total

**B. ECS-Debit:** ECS-Debit is mostly used by utility companies, like telephone companies, electricity companies, etc. to receive the bill payment directly from the bank account of their customers [4]. In 2004-05 ECS-Debit accounted for 6.68% of total volume transacted through electronic mode amounting to Rs. 29.20 billion, value per transaction being Rs. 1.91 thousand. Over the period from 2004-05 to 2011-12 ECS-Debit transactions increased considerably. In 2011-12 the total volume of ECS-Debit transactions stood at 165.00 million with total value of Rs. 834 billion accounting for 13.57% of total volume of electronic transactions with a value of Rs 5.05 thousand per transaction.

Table IV: Value per Transaction in Non-Physical from 2004-05 to 2011-12

VALUE PER TRANSACTION (Rs. Thousand per Transaction)								
	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
ECS - Credit	5.04	7.31	12.07	99.82	11.03	11.99	15.53	15.07
ECS - Debit	1.91	3.61	3.38	3.85	4.18	4.66	4.69	5.05
NEFT	214.21	199.83	162.16	105.39	78.34	61.77	70.61	79.22
RTGS	NOT AVAILABLE					11883.54	9895.35	9805.58
Credit Cards	1.98	2.17	2.44	2.54	2.52	NOT AVAILABLE	2.85	3.02
Debit Cards	1.29	1.29	1.36	1.42	1.45		1.63	1.63
Total	4.75	5.14	6.22	19.47	7.49	1154.51	520.26	461.66

**C. NEFT and RTGS:** National Electronic Funds Transfer (NEFT) and Real Time Gross Settlement (RTGS) are the services which provide electronic mode of remittance of funds from one bank account to another. While NEFT is a near-real time system with settlement taking place at hourly intervals, RTGS is a real-time gross settlement arrangement which was operationalised on March 26, 2004. Both these systems are operated by the Reserve Bank of India. The volume and value of transactions processed through the two systems has shown an impressive growth over the years. (Though RTGS was introduced in 2004 data on RTGS transactions is available separately only from 2009-10).

In 2004-05, 2.55 million transactions took place through NEFT system which was only 1.11% of total volume of electronic transactions in that year. Over the period from 2004-05 the volume of transactions improved considerably. In 2009-10, 19.11% of total volume of electronic transactions was through NEFT system. This figure stood at 18.59% in 2011-12. In RTGS 33.20 million transactions took place in 2009-10 which rose to 55 million transactions in 2011-12. In terms of value of transactions, NEFT contributed 50.21% of total volume of electronic transactions in the year 2004-05 which results in Rs.214.21 thousand per transaction. This shows that several large value transactions took place through NEFT system. In the year 2009-10, the year from which data relating to RTGS is available separately, 98.51% of total value of electronic transactions took place through RTGS system with value per transaction of Rs.11,883.54 thousand. In 2011-12 RTGS transaction value was Rs.5,39,307 billion, which is 96.07% of total value of electronic transactions in that year with a value of Rs.9805.58 thousand per transaction.

These trends clearly show that the preference for electronic transactions among customers is increasing rapidly. More importantly, the preference is shifting towards NEFT and RTGS transactions which can be undertaken online in the convenience of home or office without requiring visiting the bank in person.

**D. Card Based Transactions:** Card based transactions showed an upward trend during the study period. While credit cards had a volume of 129.47 million transactions in 2004-05, debit cards had a volume of 18.14 million transactions in 2004-05. The volume of transactions rose to 320 million transactions in credit cards and 328 million transactions in debit cards 2011-12. In terms of value credit cards had a transaction value of Rs. 256.86 billion in 2004-05 which rose to Rs. 966 billion in 2011-12. Debit card transactions had a value of Rs. 53.61 billion in 2004-05 which rose to Rs. 534 billion in 2011-12. The most important aspect that should be noted here is that the value per transaction of card based transactions increased only marginally during the period of study. Credit card transactions had a value of Rs. 1.98 thousand per transaction which increased to Rs. 3.02 thousand in 2011-12. Similarly debit card transactions had a value of Rs. 1.29 thousand per transaction which rose marginally to Rs. 1.63 thousand per transaction. This trend is in tune with the retail nature of these transactions. The excess use of card based transactions, especially credit card transactions, and increase in their value per transaction would be alarming for the economy and to the people who are habituated to card based transactions.

## CONCLUSION

From the above discussion it can be concluded that nonphysical modes of accessing banking services have gained importance over the period of time. Trends clearly suggest that customers are adopting electronic or non-physical modes of accessing banking services fast and the volume and value of these transactions are increasing rapidly. While this is a welcome development we should not forget that at times physical access to banking services is a must and safe for both customers and banks like in the case of a loan account. Therefore, it is required that non-physical modes of accessing banking services should not be overemphasized but it should receive due importance in a developing economy like that of India.

## END NOTES

[1] Author defines Non-Physical Modes as the modes of accessing banking services in which the customer need not visit any bank branch to carry out the banking transaction. It does not mean the absence of physical infrastructure.

[2] Source: [http://www.rbi.org.in/Scripts/bs\\_viewcontent.aspx?Id=508](http://www.rbi.org.in/Scripts/bs_viewcontent.aspx?Id=508)

[3] Report on Trend and Progress of Banking in India 2008-09 Pg. 142

[4] Source: [http://www.rbi.org.in/Scripts/bs\\_viewcontent.aspx?Id=508](http://www.rbi.org.in/Scripts/bs_viewcontent.aspx?Id=508)