

## Transition from Paper to Plastic: Trends and Issues of Plastic Money in India

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**Abstract:** The historic night of November 8, 2016 sent shock waves through the country, when Prime Minister Narendra Modi demonitised two biggest denominations of currency- 500 and 1000. The shock slowly subsided leaving people in a dilemma regarding the still unknown trend of using alternative means to cash. Bank cards, e-banking, mobile wallets, RTGS, NEFT etc. gained popularity overnight. The demonitisation exercise gave people the push they needed to opt these alternate modes and realize the government's ambitious dream of 'Digital India'. The easiest and comparatively most popular alternative out of the spectrum of options provided to us- plastic money- has not been able to edge over paper notes. The government and banks have been promoting various benefits attached to using plastic money along with incentives like cash back schemes and other discount offers. Still, the common man is averse to transition. This paper is an attempt to understand the reasons for the slow and unwelcomed transition towards the use of plastic money in India, even when the benefits are clearly visible. The study attempts to objectively analyse the benefits and risks attached to plastic money and suggests certain steps to overcome the fear of this relatively new and alien medium of exchange.

**Keywords:** alternatives, credit cards, debit cards, demonitisation, money, plastic

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### I. Introduction

The present central government has a number of ambitious programmes and flagship schemes to take pride in. Amongst the most promoted is the 'Digital India' dream of Prime Minister Narendra Modi, which gained momentum after demonitisation on November 8, 2016. The government and other authorities have realized that the people have to be heavily incentivized and need a little push to embark on this journey to becoming a digital economy. The evident need to curb the menace of black money, corruption and the benefit of accessible and chronological records of transactions which happen digitally were some of the major reasons for moving on to the modern path of cashless economy. The common Indian is still reluctant to move on to the alternatives modes of transactions which are unknown, complicated and new. Adding to the problems is the need of technological literacy to use these modes, smartphones, internet connectivity and the ability to understand and comprehend the steps to be followed to make and receive payments via technology. This study is an attempt to compare the benefits and risks of plastic money in order to establish if plastic money can completely replace currency notes in India and how can the problems attached with the means be overcome.

### II. Research Objectives

The paper has the following objectives:

- To study the current trends in the use of plastic money
- To find out the benefits and risks people find in this alternative to cash
- To understand the problems hindering the popularity of plastic money
- To provide suggestions in order to overcome the blockages in the path of India becoming a digital economy

### III. Research Methodology

The paper employs a literature based study and includes findings from numerous researches, articles, journals, newspapers, magazines, interviews of experts in concerned fields. The paper undertakes a secondary data based study to find out quantitative results and give as objective a finding as possible.

### IV. India and 'Plastic Money'

Plastic money refers to the credit cards or debit cards we use as an alternative means to cash transactions. Different types of plastic money are:

**a. Credit Cards**

Credit Cards are linked to an account. A person can draw up to a credit limit set as per his/her credit score and payment capabilities. A specified number of interest free days for repayment are given during which repayments of the drawn money are made. Beyond the time period, credit card interest has to be paid. A credit card holder earns reward points for purchases made.

**b. Charge Cards**

Charge cards are similar to credit cards except that no line of credit is provided and repayment has to be made at the end of every month. In case of failure, the non payer becomes a defaulter and penalties are levied.

**c. Debit Cards**

Although debit cards came a decade after the introduction of credit cards, these remain India's favoured form of plastic money. Debit cards are linked to a bank account and the amounts transacted are deducted from the account balance as and when payments are made. Some debit cards can be used as ATM cards too.

**d. ATM Cards**

These are used at ATMs to withdraw and deposit cash, or transfer funds between accounts. Adequate funds are required before transactions are permitted.

**e. MasterCard and Visa**

These are international NPOs which promote the use of cards for business, internationally. They have a vast network of merchant institutions worldwide.

India became familiar with the concept of credit cards in 1981, almost a decade after the world was already using it comfortably. From then on, credit cards gained popularity in the Indian society, though at a much slower pace as compared to developed countries like US. The then US market was dominated by Visa and Master card. In India, the big players were HSBC and Citibank. During 1987 to 2001, the market grew to 4 million cards with over 25-30% of compounded annual growth in new cardholder's base. Since then the numbers have increased many fold and the variety of cards too have increased with the same fervor.

**Table 1: ATM & Card Statistics for December 2017**

Banks	Credit Cards				Debit Cards			
	No. of Transactions (Actuals)		Amount of transactions (Rs. Millions)		No. of Transactions (Actuals)		Amount of transactions (Rs. Millions)	
	ATM	POS	ATM	POS	ATM	POS	ATM	POS
STATE BANK OF INDIA	131212	19212446	493.8	75409.8	360648020	83961854	1089293.1	120138.2
HDFC BANK LTD	180158	35622883	961.4	118308.7	32925582	35635504	166244.1	51054.0
ICICI BANK LTD	34885	16573526	123.0	47816.3	33379695	34167276	165488.1	50433.1
PUNJAB NATIONAL BANK	9654	571535	41.1	1229.8	24368447	11518577	106818.2	15262.7
AXIS BANK LTD	81518	11006659	325.0	39507.5	27274130	20048229	118441.7	29852.9
CANARA BANK	36288	501660	185.9	1061.3	21280412	8503565	88675.9	11703.5
BANK OF BARODA	6879	340582	25.0	802.6	18798766	10785268	79909.4	10749.4
UNION BANK OF INDIA	2786	175438	13.6	468.1	28575702	5984438	74678.9	7250.0
IDBI LTD	379	80305	1.8	188.9	9356810	5348939	40551.7	6451.5
BANK OF INDIA	23771	267421	131.5	721.3	28942597	8114307	65054.1	8114.7

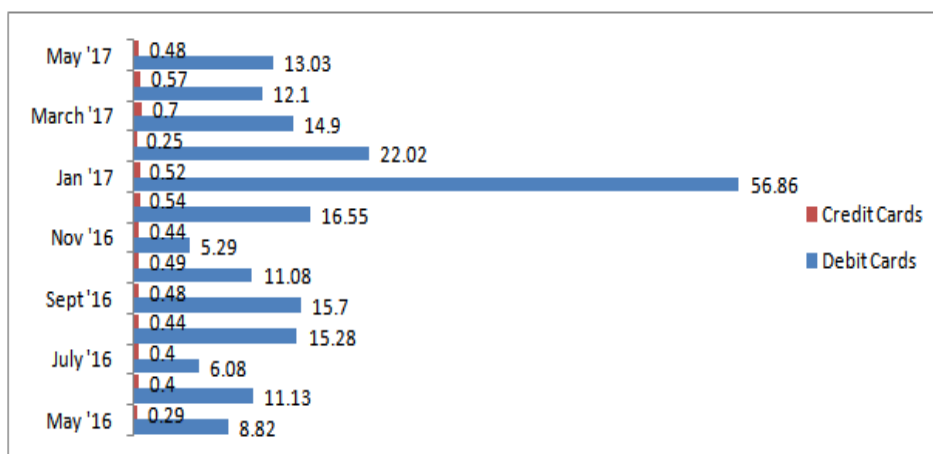
Data source: Reserve Bank of India, Bankwise ATM/POS/Card Statistics

<https://rbidocs.rbi.org.in/rdocs/ATM/PDFs/ATM1220175D43321D1D7A40198491F0E1A1647FD4.PDF>

The huge population of middle and high class consumers in India provides a profitable yet untapped potential market for players in this field, provided they understand the reasons for the reluctant acceptance of bank cards by the people. Table 1 shows 10 popular banks in India and their respective volume and value of credit card and debit card transactions for the month of December, 2017. HDFC Bank Ltd. remains the biggest player in credit card transactions through ATMs as well as PoS, followed by SBI, while SBI leads in debit card transaction value. IDBI Ltd. records the least in both categories. Numerous e-commerce websites like Amazon, Flipkart, Myntra etc. provide cashback schemes mainly on transactions made via SBI and HDFC bank cards, which further highlights the popularity of these banks' services.

Indians are risk averse. People are not comfortable dealing with credit card burdens and the additional interest payments, credit limits, imbalanced spending habits and unbudgeted expenses. The huge default rates during the worldwide financial crises of 2007-08 led to the drop in credit card base in India. The number of debit card transactions thus hugely outnumbered credit card transactions. Due to the psychological and economical comforts of discipline and budget expenditures, Indians favour debit cards over credit cards.

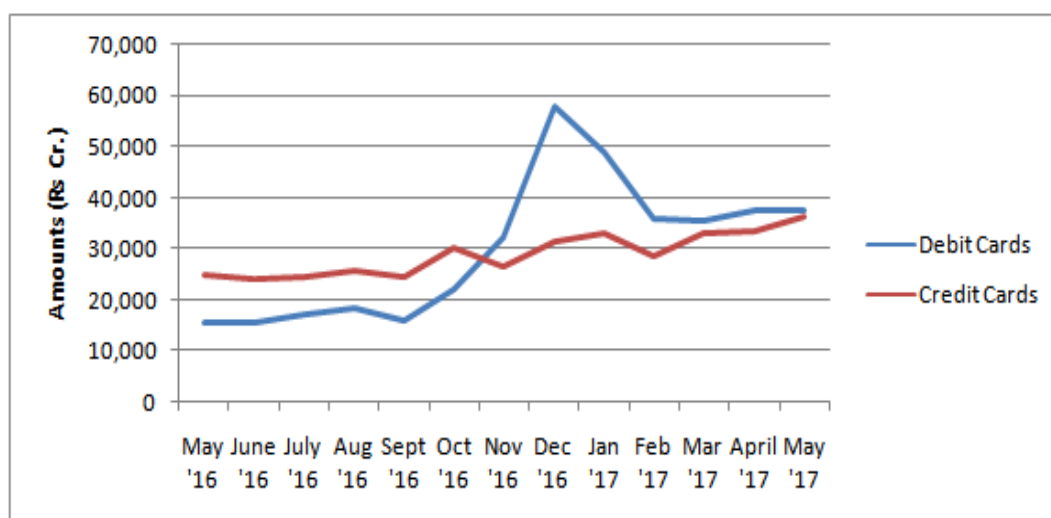
**Figure 1:** Total Number of Debit Cards and Credit Cards Added per month (in millions)



Data Source: <https://www.medianama.com/2017/07/223-india-credit-cards-debit-cards-may-2017/>

As per RBI, the month of May 2017 saw a total of 30.86 million credit cards and 880 million debit cards in operation. Card usage increased after demonitisation in November, 2016. While the increase in debit card issuance rose at an increasing rate, credit card issuance increased at a decreasing rate from December 2016 to February 2017.

**Figure 2:** Amounts transacted through Debit and Credit Cards (May '16- May '17)



Data Source: <https://www.medianama.com/2017/07/223-india-credit-cards-debit-cards-may-2017/>

Total amount transacted through Credit Cards increased by 46% in the one year period from May 2016 to 2017 while that of Debit Cards increased by a whopping 142%. Figure 2 shows that the value of transactions was more by credit cards than debit cards before November, 2016 (demonitisation). Since then the amounts transacted via debit cards have increased immensely but the difference is slowly lessening, which could mean that people are letting go their inhibitions regarding credit cards. Banks are more comfortable issuing credit cards now than before. Easy accessibility to CIBIL scores has eased issuance. E-commerce boom and more and more people shopping online have also helped increase the demand.

### V. Findings

Credit cards remain favoured by big buyers with ability and credibility to use credit limits. The middle class of the country remains true to debit cards as these can be used as ATM cards and people mostly use cards to withdraw cash from ATMs. RBI has been reducing Merchant Discount Rates (MDR) for debit card transactions to further encourage usage. Small towns are contributing to the rise in usage of debit cards as well. The surge in debit card usage is mostly driven by smaller banks like Oriental Bank of Commerce and Punjab & Sind Bank. According to bankers, if every debit card holder in the country uses his card even once every month, total share of debit card transactions will surpass 80%. Metro cities are witnessing credit card penetration mostly due to ability to repay and incentives of rewards and cashbacks. Debit cards still account for 60% of the spending through cards.

India had around 2.7 crore credit cards in the economy as of April, 2017. A survey by TransUnion Cibil covering 1,100 consumers across eight metro cities showed that 78% of Indian credit card holders pay off monthly bills fully. 92% of credit card holders paid amounts greater than minimum due. Delinquency trends (90 days or more past due) in December 2016 had improved to 1.51% from December 2015's 1.65%, showing relatively stable performance overall. 9 out of 10 credit cards users are aware about the negative impact of delay or non payments on their credit scores. Still 33% reported to have no idea about importance of paying more than minimum amount due.

An ASSOCHAM-Resurgent India study predicted the large scale growth in Indian e-commerce industry in the year 2017, which can be a major reason for the increasing use of cards for shopping.

A Google-BCG report (2016) says digital payments industry in India will grow 10 times to touch \$500 billion by 2020 and contribute 15% of GDP. The report, 'Digital Payments 2020', is based on research conducted by researcher Nielsen AG with more than 3,500 respondents, combined with BCG and Google's industry intelligence. The report predicts that non-cash transactions will exceed cash transactions in the economy by 2023. The top three services for which Indians are using digital payment methods are online shopping, utility bill payments and movie ticket purchases. As per the report, convenience is the most important factor driving the growth, followed by availability of offers (discounts, reward points, cashback schemes). Indian consumers are 90% as likely to use digital payments for both online and offline transactions.

A study by Impetus Research, a market research agency, pointed out that the RBI and commercial banks lose upto Rs21,000 crore in currency operations every year, which could be drastically reduced with the use of plastic money.

## **VI. Advantages of Plastic Money**

The major drawbacks of cash transactions include problem of keeping record of expenses, however minor, assigning responsibility of transaction, tracing of sources and the menace of unaccounted cash in the country. The government sighted the humongous amounts of black money in circulation in the economy to be the prime reason behind the herculean task of demonitisation. Use of plastic money overcomes these challenges and provides various other benefits as well.

### ***f. Safety***

Using bank cards instead of cash helps in removing the hassle and risk of carrying big bundles of cash everywhere. With plastic cards in one's pockets, any transaction, however big or small, can be made and one is free from the tension of keeping safe the currency notes. Risk of theft or accidental loss of money can be eliminated with the use of plastic money.

### ***g. Convenience***

Transactions made with cash alternatives can be made without any prior planning of securing exact amount of currency notes and carrying them over to the payee. People can shop, pay bills, transfer funds sitting in the comfort of their homes. It has become easy for travelers as they don't have to carry cash anymore. Increase in the number of PoS and ATMs have helped popularize these alternatives to cash.

### ***h. Credit Facility***

Use of credit provides the benefit of spending now and repaying later. This can prove beneficial in case of unplanned expenditure and emergencies.

### ***i. Economical***

Making purchases using credit or debit cards is time and cost saving as one does not have to travel all the way to the seller to make payments. Providing card details over the internet suffices.

### ***j. Record of Transaction***

Transactions via bank cards helps keep a chronological and detailed record of payments, which can be helpful in case of any discrepancies in account balances or in case of any fraudulent activity.

**k. Tracing Sources**

Every transaction made with credit or debit cards is recorded which provides a clear link of source of payments and receivers. This proves immensely beneficial in order to establish source of money and catch any fraudulent and unaccounted move of money in the economy.

**VII. Disadvantages of Plastic Money**

Credit and debit cards, both have their benefits which are proving more evident since Indian were pushed to use these alternatives to paper money post demonitisation. The months after November 2016 saw a spike in use of these cards as seen in Figure 1 and Figure 2 but later the demand again reduced. Inhibitions regarding safety of identification and the complexity of internet technology are the major causes of reluctant use of plastic money. Certain disadvantages and risks of these cash alternatives are:

**l. Lack of Infrastructure**

Various regions in India still do not have access to basic facilities like electricity. As of January 2017, 240 million Indians had no electricity. Over 50 million rural households had no access despite idle capacity generation. In the year 2014, World Bank termed India as home to world's largest un-electrified population. With the lack of electricity, the ambitious dream to make India 'Digital' seems like a far-fetched plan without any concrete base. Plastic money cannot be popularised without making electricity, internet facilities, PoS, ATMs etc. available at every door step.

**m. Widespread Illiteracy**

India has the world's largest population of illiterate adults, with about 37% of the total population (287 million) unable to read and write. With such a huge portion of the nation still in dark about practical and balanced use of cash, the country's transition to becoming a digital economy with widespread use of plastic money for everyday purchases seems like an unattainable goal.

**n. Complexity**

Use of credit and debit cards requires basic understanding of internet facilities, ATM procedures, PIN and OTP requirements and cyber security sense. Majority of the people do not have the ability or guidance to use cards, thus remaining outside the coverage of bank cards.

**o. Risk of Loss and Misuse**

Credit and debit cards are linked to bank accounts and are therefore linked to personal information which is sensitive and can prove harmful in the hands of any unauthorized persons. Various measures like PIN authentication, biometric identifications, SMS alerts and e-mail statements are being taken to ensure safety of transactions.

**p. Impulse Purchases**

The ease of not having to ensure specific quantities of cash while using plastic money has the side effect of impulsive spending and unbudgeted expenditure which can prove to be a burden on pocket at the time of repayments. Out of control spending habits have to be curbed and self discipline is necessary to use plastic money as a productive and economical alternative to cash.

**q. Not Meant for Daily Use**

Small everyday payments are still not popularly made via cards. Small time retailers too do not accept payments via bank cards.

**VIII. Overcoming Challenges**

The government and other responsible authorities have to ensure more widespread availability of Pos machines. Basic cyber safety training and tips should be provided and card holders have to be sensitized about the sensitive nature of bank card information. Making linking of phone numbers to accounts should be made mandatory for easy and timely SMS alert facility. Linking of Aadhaar cards to bank accounts is a way to ensure authenticity of account and card holders.

The most important step to be taken is provision of infrastructural facilities like technical knowledge and internet facilities to all the people in order to widen the coverage of plastic money in the country.

Card holders have to self discipline to not fall prey to unnecessary expenditures and debt traps. Budgeted and methodical use of plastic money can prove productive for the people and the country as a whole.

### **IX. Future Prospects**

Smooth, simple and secure payment processes will help bring about behavioural changes and faster adoption of digital payments and banking among un-banked segments. There is still a huge potential market in India as consumption is still dominated by cash, with cards contributing only 5 per cent of the personal consumption expenditure. In developed countries, 30-50 per cent of spends happen through cards.

Rapid growth in smartphone usage and online shopping habits contributes to the increasing trend of use of credit and debit cards.

In India, safety standards followed by players to prevent misuse match the best in the world. For example, any transaction above a particular sum is automatically referred to the issuing bank which calls up the cardholder in a matter of seconds on the mobile phone to confirm the purchase.

### **X. Conclusion**

Any alternative to cash can be popularized only if authorities address people's inhibitions and overcome the challenges in the path of transition. The benefits of plastic money cannot be negated and to develop in the modern world, moving away from paper currency is becoming important. Further research and discussions on the topic should be done to methodically bring about the change to this new form of currency.

### **References**

- [1] Anand, N. (June 06, 2017). "After years of diffidence among users, credit cards hit a record high in India". Quartz India. Available at <https://qz.com/998098/after-years-of-diffidence-among-users-credit-cards-hit-a-record-high-in-india/>
- [2] Sathiya Bama, P., & Gunasundari, K. (2016). Challenges and Future Prospects of Plastic Money. *International Journal of Management Research & Review*. Volume 6 (7). (pp 942-949). Article No-8/942-949. ISSN: 2249-7196. Available at [http://ijmrr.com/admin/upload\\_data/journal\\_Gunasundari%208jul16mrr.pdf](http://ijmrr.com/admin/upload_data/journal_Gunasundari%208jul16mrr.pdf)
- [3] Kalavalapalli, Y., & Nair, V. (July 28, 2016). "Digital payments in India seen touching \$500 billion by 2020". Livemint. Available at <http://www.livemint.com/Industry/M6SPyd4vUcC7QIQRnJBqaO/Digital-payments-in-India-seen-touching-500-billion-by-2020.html>
- [4] Neelavathi, K., Chavali, R. & Rao, U. (2017). A Study on Impact of Usage of Plastic Money in India. Presented at International Conference on "Paradigm Shift in Taxation, Accounting, Page Finance and Insurance". *IOSR Journal of Business and Management*. (pp. 64-69). Volume 6. e-ISSN: 2278-487X, p-ISSN: 2319-7668. Source <http://www.iosrjournals.org/iosr-jbm/papers/Conf.17037-2017/Volume-6/12.%2064-69.pdf>
- [5] Ray, A. (April 11, 2017). "About 92% of Indian credit card holders shows good repayment habit, says TransUnion Cibil". *The Economic Times*. Available at <https://economictimes.indiatimes.com/industry/banking/finance/banking/about-92-of-indian-credit-card-holders-shows-good-repayment-habit-says-transunion-cibil/articleshow/58125305.cms>
- [6] Reserve Bank of India. ATM & Card Statistics for December 2017. Bankwise ATM/PoS/Card statistics. Source <https://www.rbi.org.in/scripts/atmview.aspx>
- [7] Shetty, M. (March 27, 2017). "Note ban effect: Debit cards preferred over credit cards, account for 60% of card spend". *The Times of India*. Available at <https://timesofindia.indiatimes.com/business/india-business/note-ban-effect-debit-cards-preferred-over-credit-cards-account-for-60-of-card-spend/articleshow/57845483.cms>
- [8] Singh, R.K., & Sundria, S. (January 25, 2017). "Living in the Dark: 240 Million Indians Have No Electricity". *Bloomberg*. Available at <https://www.bloomberg.com/news/features/2017-01-24/living-in-the-dark-240-million-indians-have-no-electricity>

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