

## MOVING FROM CASH TO CASHLESS ECONOMY: CHALLENGES AND OPPORTUNITIES FOR INDIA

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Dr. Hanuman Sahai Kumawat\*  
Dr. Sunil Kumar Goyal\*\*

### ABSTRACT

*Cashless economy is an economy where maximum transactions are done without using the physical cash but through digital means like credit cards, debit cards, e-wallets and electronic fund transfer (ECS, NEFT, RTGS, USSD, UPI, Aadhar based payment system etc.). India uses too much cash for transactions. The ratio of cash to gross domestic product is one of the highest in the world. In Financial year 2015, RBI spent Rs. 27 billion on just the activity of currency issuance and management. India faces many challenges in setting up a cashless economy like: lack of digital and banking infrastructure, cyber security and financial literacy, high cash dependency etc. Finance Minister, in 2016 budget speech, talked about the idea of making India a cashless society. The major benefits of cashless economy in india are: reduced tax avoidance and money laundering, reduced costs of printing money etc. Secondary data has been used for study which is collected from different newspapers, websites, journals etc. In Dec., 2016 total value transaction done using E-wallet was 97.70 (Rs. in Billion) and in Jan., 2017 it is increased upto 108.69. Indian digital payments industry is expected to reach \$700 billion by 2022 in terms of value of transactions.*

**KEYWORDS:** *Cashless economy, Demonetization, Digital Wallet, Electronic Payments, Point of Sales.*

### Introduction

Cashless Economy can be defined as a situation in which the flow of cash within an economy is non-existent and all transactions must be through electronic channels such as direct debit, credit cards, debit cards, electronic clearing, PoS (point of sales) machines, digital wallets etc. and payment systems such as Immediate Payment Service (IMPS), National Electronic Funds Transfer (NEFT) and Real Time Gross Settlement (RTGS) in India. Only 15% of Indian households have access to the Internet and 5.5% subscription for mobile broadband. The aim of this paper is to examine Challenges and Opportunities of cashless economy in India.

### Objectives of the Study

This study is to evaluate the cashless economy in India. The main objectives of the study can be listed as follows:

- To study the concept of cashless economy.
- To know the need for cash and challenges to go to digital.
- To study the current position of cashless India.
- To study the opportunities and advantages if India become a cashless economy.
- To study the challenges in front of the govt. to establish cashless economy in India.

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\* Assistant Professor, Department of ABST, S.P.C. Government College, Ajmer, Rajasthan, India.

\*\* Assistant Professor, Department of ABST, S.P.C. Government College, Ajmer, Rajasthan, India.

- To study the initiative taken by the government towards digital economy in India.
- Analyze the future trend of cashless transaction.
- To suggest the future prospects of cashless India.

#### **Significance of the Study**

This paper discusses about the current scenario of cashless India after demonetization. It also strives to describe the focuses on the impact of devaluation on our economy, counterfeit currency and challenges towards cashless economy.

#### **Government Encourage Cash less Transactions**

According to a 2014 study by Tufts University, the cost of cash in India, cash operations cost was about Rs. 21,000 crore annually.

#### **Indian Scenario**

- Indian economy is primarily to be driven by the use of cash and less than 5% of all payments happen electronically.
- A report by Google India and Boston Consulting Group showed that in 2015 around 75% of transactions in India were cash-based while in developed countries like USA, Japan, France, Germany etc. it was just around 20-25%.
- Indian economy is primarily driven by the informal sector and it relies heavily on cash based transactions.

#### **Review of Literature**

- **Jain, P.M (2006)** in their article “E-payments and e-banking An Analysis of Growth Pattern of Cashless Transaction System”. Taking fullest advantage of technology, quick payments and remittances will ensure optimal use of available funds for banks, financial institutions. He also pointed out the need for e-payments and modes of e-payments.
- **P Manivannan (2013)** in his research paper “Plastic Money a way for cash Less Payment System” examined that Plastic Money i.e. usage of Credit card was measured a luxury, and has become needed.

#### **Methodology of Research**

This is a descriptive research and based on secondary data. The study is basically conceptual in nature and for the purpose of the study; an extensive review of literature has been studied and identified the critical challenges facing in India. The data has been collected from internet. Also, related texts like textbooks, journals and other publications of professional were also consulted. Quantative study has been done to draw conclusions. Percentage analysis, ratio, Average etc. mathematical tools has been used to analyze the data. The study has undertaken with the help of secondary sources of data and already published data like news papeR, websites and different reports given by the government.

#### **Challenges in Making India a Cashless Economy**

There are many challenges facing the introduction of cashless system of payment in Indian economy. They are as follows:

- **High Cash Dependency:** India has a high cash penetration in almost all of its transactions that happen as B2C transactions. Total cash flow in the market accounts for 12.04% of the GDP, which is among the highest in developing countries.
- **Lack of Digital Infrastructure:** Lack of adequate infrastructure is a major hurdle in setting up a cashless economy. Inefficient banking systems, poor digital infrastructure, poor internet connectivity. The remote areas are still not having the banks at their door step. There are no ATM facilities in the remote areas. In 2014, there were just 18 ATMs and 13 commercial bank branches for every 100,000 adults – in comparison; the number in Brazil was 129 and 47 respectively. From 2013 to 2015, debit cards grew twice as fast as the number of PoS terminals and 1.5 times the number of ATMs, with the majority of the new infrastructure taking root in urban centres. The banks need to be fully equipped to handle the surge in e-transactions. The first and foremost requirement of a digital economy is the penetration of internet and smart phone. Only 30% of subscriber use smart phones, over 70% of them are in cities while 70% of Indian population lives in villages.
- **Financial Inclusion:** only 60% of the country’s population has bank accounts. Still large number of people is not having the bank accounts. More than 228 million accounts were opened under PMJDY (Pradhan Mantri Jan Dhan Yojana) scheme till July 2016.

- **Cyber Security:** In October, 2016, 3.2 million debit card details belonging to multiple Indian banks were hacked. Cyber-attacks have become increasingly difficult to curb and the focus needs to also be on drafting a strong legislation to guarantee digital privacy and data security. Digital infrastructure is highly vulnerable to cyber-attacks, cyber frauds, phishing and identity theft.
- **Fraud:** Credit cards can be stolen. A thief may use them directly or to get their information.

#### Opportunities and Advantages of Cashless Economy in India

The expenditure incurred in printing and transportation of currency notes is reduced. Cashless economy helps in curbing generation of black money.

- **Reduce cost of printing money:** Printing money is the direct cost that affects the bank (Reserve Bank of India). In the cash system of economy where maximum people will work on the cash transaction, government has to produce more and more cash notes.
- **Decreased Crimes:** The risk of theft will continue until people carry cash and by going cashless the same can be reduced. The government, however, has to take measures to curb the online scam and identity theft incidents.
- **Cost effective to Banks:** Normally, if a bank transaction is done manually, it costs nearly Rs. 40 to 45 and the same is done through internet it costs 7 to 8. Simultaneously, if the same transaction is done through either U Mobile or ATM it hardly costs Rs. 12 to 14 and Rs. 3 to 4 respectively. Production of coins and paper currency is indeed an expensive endeavor.
- **Safe and Secure:** Both it is safer for bank and customer as well, it keeps high degree of secrecy. If stolen, it is easy to block a credit card or mobile wallet remotely.
- **Improved Economic Growth:** Shopping online gets easy as one can use a number of payment options; from credit and debit cards to net banking. In addition to this, going cashless also has health benefits. With physical currency, the chance of spreading of germs is more.
- **Control of Black Money and check for Anti money laundry:** Even transactions can be done through e banking but same can be traced while it is very difficult to trace the transactions in cash. There are certain checks also in depositing and withdrawing money through bank accounts. Hence, it will definitely control over black money and money laundering in the days to come.
- **Higher Revenue:** A derivative advantage of transparent transactions is collection of tax will increase. Thus generating higher revenue for the government, which in turn will be converted into public welfare policies and schemes.
- **Saves Money and Time:** Presently banking requires a good number of staff to attend and redress the complaints at different stages. They can reduce costs as they no longer need the manual accounting work to be done.
- **Maintenance Cost:** Maintenance in the form of storage of notes, transportation of the notes to the distant places, security of the notes, and devices for the detection of counterfeit notes. The other major aspect of the maintenance is that the distribution of money through ATM machines at the different locations. It is reported that all this maintenance cost the government about 5% of the GDP of India. In nutshell we can save somewhere around 500 crores by this mean only.

#### Data Analysis and Interpretation

##### At a glance

Value (Rs. in Crore)	Cards at PoS	IMPS	UPI	USSD	PPI
July, 2017	43933	60476	3381	30.21	2511
August, 2017	45708	65149	4127	29.42	2722
Change (in %)	4.04	7.73	22.06	-2.62	8.41

Source: Reserve Bank of India

PoS=Point of Sales, IMPS=Immediate Payment System, UPI=Unified Payments Interface, USSD= Unstructured Supplementary Service Data, PPI=Prepaid Payment Instruments. According to Reserve Bank of India, USSD transactions remained unchanged in volume terms at 0.19 million and slipped 2.6% in value terms from the month-ago period to Rs. 29.42 crore. The Unified Payments Interface (UPI) channel grew the fastest rising 45% month-on-month in terms of the aggregate volume of transactions to 16.6 million in August and 22% in value terms to Rs. 4,127.2 crore. This brings the average ticket size of a UPI transaction to Rs. 2,486, lower than the corresponding figure of Rs. 2,966 for July. The increased usage of UPI may have come due to more e-commerce players in August.

The aggregate value of card transactions rose over 4% from the previous month to Rs. 45,708 crore. This data is based on card transactions sourced from four banks and the final figure for the entire system is likely to be much higher. The value of transactions made through Immediate Payment System (IMPS) rose 7.7% month-on-month to 65,149.47 crore, while the volume grew 9.5% to 75.7 million. As per RBI, in Nov., 2016 UPI and debit & credit cards volume was 0.3 Million (value in Rs. 90 crore) and 205.5 Million (value in Rs. 35240 crore) respectively, whereas in August, 2017 UPI and debit & credit cards volume was 16.6 Million (value in Rs. 4127 crore) and 243 Million (value in Rs. 45708 crore) respectively.

As per data released by Prime Minister Shri Narendra Modi on his website, cashless transactions have picked up ever since demonetization had come to effect and initiatives were being taken by various wings of the government, encouraging people to go cashless. In the financial year of 2016-17, there were a total of 865.9 crore digital transactions across all banking platforms. This is a significant rise from the 2013-14 number of 254.5 crore digital transactions. Within a period of 3 years, the amount of digital transactions has more than tripled. Recently, Niti Aayog principal advisor Ratan Watal shared similar statistics, stating that digital payments grew 55 per cent in volume and 24.2 per cent in value in 2016-17 over 2015-16. Official statistics indicate an 80% increase in the value of digital transactions in 2017-18, with the total amount expected to touch Rs. 1,800 crore in the wake of the impetus provided by demonetization.

#### Dimensions of the Opportunity

PARAMETER	VALUE	REMARKS
Population of India	121.06 crore	Census of India 2011
Notes in Circulation on 8 <sup>th</sup> Nov. 2016:		
(a) Rs. 1000	685.8 crore	
(b) Rs. 500	1716.5 crore	
Bank Branches	135263	RBI-All Scheduled Commercial Banks (2 <sup>nd</sup> Qtr. of 2016-17)
ATM	202801	RBI ( August, 2016)
Mobile Phones	93.65 crore	TRAI-March,2016
Internet Users	46.2 crore	Estimates for June, 2016 by IAMAI

Source: National Informatics Centre, 27 Dec.,2016

According to RBI Bulletin Cashless Transaction in India increased day by day. The statistics in report shows that, in Nov., 2016 and Dec., 2016 total value transaction done using E-wallet was 50.74 and 97.70 (Rs. In Billion) respectively and in Jan., 2017 it is increased upto 108.69. Union finance minister Arun Jaitley in his budget speech this year said, "A mission will be set up with a target of 2,500 crore digital transactions for 2017-18 through UPI, USSD, Aadhar Pay, IMPS and debit cards". India is a country with currency in circulation Rs. 17.97 lakh crore (trillion) as on November 2016 and with annual population growth rate of around 1.2% annually the need of currency for transaction will also rise. With 1.34 billion population of this country and only 3-4% actually paying taxes there is really a point of concern. Every year Government bear around 1.7% of real GDP as a cost of cash and foregone tax revenues from the 'shadow' economy account for 3.2% of GDP. Cashless economy, involves all the transaction without actual cash in the economy. As on October 2016, there are 94.2 crore debit cards in the country. In the Financial Stability Report of 2015-16, RBI said share of electronic transactions as a part of total transactions in the system has climbed to 84.4% in volume terms, up from around 74%, and almost 95.2% of total value is now paid digitally. The value of transactions through prepaid cards increased to Rs. 25,400 crore from Rs. 10,500 crore, and for mobile wallets it grew to Rs. 20,600 crore from Rs. 8,200 crore last year.

Indian digital payments industry is expected to reach \$700 billion by 2022 in terms of value of transactions. It is expected that more than 80% of the urban population in India will adopt digital payments as a part of their routine by 2022, and 70% of the retail chains will adopt the same. The reduced transaction charges and the degree of ease of cash transfers associated with the electronic fund transfers and mobile banking will further drive the growth of digital payment systems in India.

#### Findings, Conclusion and Suggestions

The main findings of the study are outlined below:

- Payment gateway is the way of making online payment. It acts as the third party between user and vendor. Because of the security user proceed to pay vendor. Still payment gateway is not fully secured. By using payment gateway transactions makes fast and easy.

- Usage of Credit/Debit Cards is more and more increasing for online payment. However, the Secondary data shows that majority of online transactions are made by Cash, ECS.
- Now a days people are not visiting banks more often to withdraw the cash. The use of these cards and ATM machines have changed the banking process. Spending through debit or ATM cards, increased by 45% year-on-year.
- Customers are using more of e-commerce sites and payment is done online by using such cards. 58% of the user uses Direct Debit, 7% uses Cash Card and 33% uses Credit cards.
- Most of the customers not feel safe to share their cards CCV / PIN number.

#### **Conclusion**

The need to move towards a cashless economy in India is immense. One, it will save a huge amount of money that is spend annually in printing and maintaining currency. Currently less than 1% of all consumption expenditure is incurred through cashless instruments. The arrival of malls, multiplexes, online shopping stores and shopping complexes encourage the customers to make use of plastic cards. The government needs to take the necessary steps and make some policy considerations when they are preparing for a cashless economy. The payment systems have to be protected from the cyber-attacks. Going cashless provides a lot more benefits than just convenience to people, businesses and the government in particular. Increasing use of electronic payments boosts consumption and GDP. This move by the Government along with the implementation of the GST will eventually make the system more accountable and efficient.

#### **Suggestions**

A summary of suggestions on the improvements of cashless economy, we had studied are as follows:

- Abolishment of government fees on credit card transactions; reduction of interchange fee on card transactions.
- Tax rebates for consumers and for merchants who adopt electronic payments.
- People should be educated adequately. The use of cards in the ATM should be described to the people so that they can easily use the card.
- Proper infrastructure should be developed in the remote areas so that this facility should be taken to the rural and remote India.
- Buyers and sellers both should be made aware about the benefits of the cashless transactions.
- There is a need for the regulatory authorities to ensure that the policy was properly enforced.

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