

# Evaluation of cashless economy concept in Indian scenario

P. Shamshadali\*<sup>1</sup>, C.P. Fidha\*<sup>2</sup>, C. Syamjith\*<sup>3</sup>

<sup>1&3</sup>Assistant Professor, Department of Commerce, Jamia Nadwiyya Arts & Science College, Edavanna, Malappuram, Kerala-676541, India

<sup>2</sup>Post Graduate Student, Department of Commerce, Pondicherry University, Pondicherry-605014, India  
shamshadali.nbr@gmail.com<sup>1</sup>, fidhasusa@gmail.com<sup>2</sup>, syamjithc4@gmail.com<sup>3</sup>

## Abstract

**Background/Objectives:** India as a developing nation, in the journey towards the economic prosperity the concept of Cashless Economy will have an eminent role. The present study aims to evaluate the status of Cashless Economy concept in Indian scenario.

**Methods/Statistical analysis:** Analyzing different electronic settlement indicators/ utilities for the period of six years from 2012 to 2018 which are compiled from the different annual reports of Reserve Bank of India (RBI). The data set covers both the pre and post three years periods of cashless economy concept of India and availed up to 2018. Total Electronic Settlement, Total Paper Clearing, Total Retail Payments, National Electronic Funds Transfer (NEFT), Immediate Payment Service (IMPS), Unified Payment Interface (UPI), Total Card Payments and Total Debit Cards are considered as the indicators of electronic settlements and Cashless economy tools.

**Findings:** The study found that the Cashless Economy concept of India is a success by positive improved results in the usage and performance of various electronic settlement utilities in pre and post periods of Cashless Economy. By results of decreased value operation of total paper clearing and the positive progress of all other e-payment indicators like Total Retail Payments, National Electronic Funds Transfer (NEFT), Immediate Payment Service (IMPS), Unified Payment Interface (UPI), Total Card Payments and Total Debit Cards can conclude the Economic Development program is a success. It also found that different electronic settlements utilities were withdrawn from the market with an effect of launching kind varieties of different up-to-dated customer friendly utilities. The study also enlarge its view to Indian economy will have a positive impact of cashless policy in its growth.

**Improvements/Applications:** There is no such a comparison study happened the analysis of status of electronic settlements system of India after launching of Digital India program. This pre and post period comparison analysis of E-settlements make its own existence from rest and it is the latest study on the field.

**Keywords:** Cashless Economy, E-Payment Utilities, Indian Economy, Digital India, Economic Development.

## 1. Introduction

The meaning of a cashless economy does not mean economy without cash, but it means where the economy functioning and transactions are carried through electronic means of payments and receipt. The concept of adopting cashless economy also account the right direction towards growth and development of country economy thus by ensuring in reduction of cash related corruption and attracting more foreign investors to the country. Digital transactions are traceable thereby surety in taxable income for Government, reducing the circulation of black money. The whole country is undergoing the process of modernization in money transactions. Large businesses to street vendors are now accepting electronic payments [1]. India as a transforming economy in the universe step towards cashless will be the milestone. This study is an attempt to analyze the operational result of Cashless Economy concept in Indian scenario so far.

A cashless society is an economic state whereby financial transactions are done through the transfer of digital information between the transacting parties instead of physical banknotes or coins. Cashless India is the program aimed to make Indian economy developed by ensuring more security, anti corrupted and universally accessible. Setting up of embedded integrated electronic payment system can be a motive to make Indian economy dreams to reality. Country like India being one of the highly populated countries also faces plenty of barriers which have to be overcome like illiteracy, bureaucracy, rejection for changes etc. to achieve the remarkable economy growth.

India, where the majority of the population lived upon agriculture and in rural area, it is a difficult task for the transformation of physical forms in to electronic. To make Indian citizen competent, Government of India launched Digital India mission in 2015. Digital India is a campaign launched by the government of India to reach the governmental products and services to the citizens of the nation through electronic means by improved online infrastructure and increased internet connectivity. The Digital India program is a flagship program of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy. "Faceless, Paperless, Cashless" is one of professed role of Digital India. Implementing cashless economy concept in India will performed through Digital India program. National Payments Corporation of India (NPCI) controls the entire retail payments and settlement systems in India; it is an initiative of Reserve Bank of India (RBI) and Indian Banks Association (IBA) under the provisions of the Payment and Settlement Systems Act, 2007, for creating a robust Payment & Settlement Infrastructure in India. As part of promoting cashless transactions and converting India into less-cash society, various modes of digital payments are available such as Banking Cards (debit/ credit/ cash/ travel / others), Unstructured Supplementary Service Data (USSD), AADHAAR Enabled Payment System (AEPS), Unified Payments Interface (UPI), Mobile Wallets, Banks Pre-Paid Cards, Point of Sale, Internet Banking, Mobile Banking and Micro ATMs.

A Study had conducted on the development of banking in the plastic card usage trends in Indian banking sector by taking samples in Mumbai, India. The study found that customers confidently prefer plastic cards over the cash and paper money. There different forcing factors to adopt these technical advantage in business transaction and personal as well such as Discounts on shopping, easy carrying of cash, Security of money, Easy to use, Personal Loan on Credit Card, 24\*7 services and no need to visit bank branches. Study pointing card payments instead of physical money will be a step forward to economic growth and development [2].

Further, a study on the benefit and challenges related to the implementation of cashless aspect in Indian economy found that introduction of cashless economy in India can be a right direction to growth and development of economy. It also adds cashless economy will help in reducing black money, removal of fake currency, reduce cash related robbery. The study point out major challenges in implementation of the policy are cyber fraud, high illiteracy rate, attitude of people, lack of transparency and inefficiency in digital payment system. It suggests licensing payment banks, promoting mobile wallets, withdrawing service charge on cards and digital payments and financial literacy campaign to make cashless economy policy easier in practice [3]. A study on Level of awareness of smart phone and its use in rural areas of India has completed to identify the implementation barriers of cashless services in rural India. The study found that there should be well planned regulations behind the setting up of cashless economy in India where country like highly populated, Government has to make proper infrastructure as well, else the policy will be disastrous and the consequences will be everlasting [4].

## 2. Materials and Methods

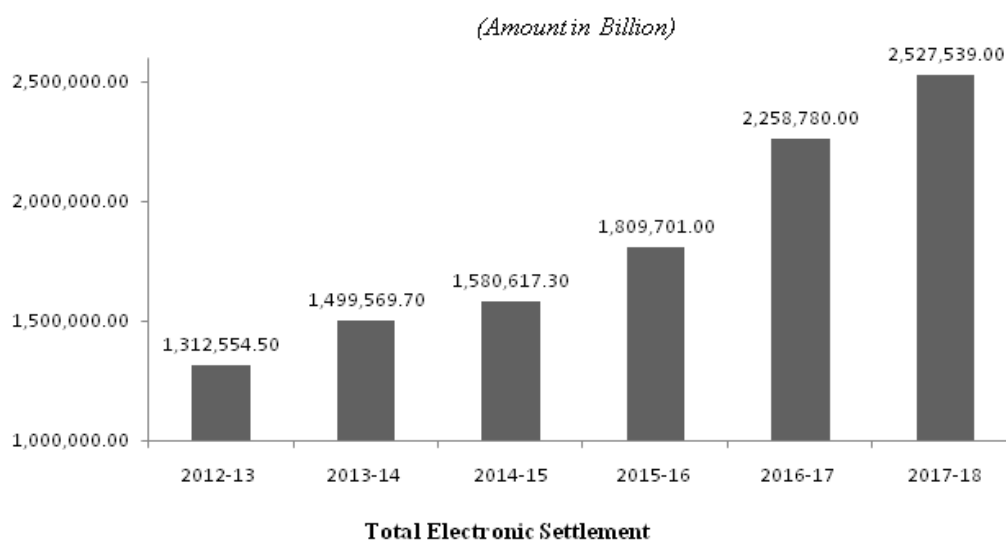
As the objective, the evaluation of status of Cashless Economy concept in Indian scenario has been done by analyzing the performance and usage of different electronic settlement utilities. To analyze the acceptance and success of cashless economy the usage, performance and improvement of different electronic settlement indicators like: Total Electronic Settlement, Total Paper Clearing, Total Retail Payments, National Electronic Funds Transfer (NEFT), Immediate Payment Service (IMPS), Unified Payment Interface (UPI), Total Card Payments and Total Debit Cards for the period of six years from 2012 to 2018 have considered. Secondary data on Payment and Settlement Systems and Information Technology are compiled from different annual reports of Reserve Bank of India (RBI) since 2012 to 2018[5].

## 3. Result and Discussion

### 3.1. Total electronic settlement

Figure 1 explains the Total Electronic Settlement of India for the periods of 2012-2018 and shows an increased result in electronic payments and receipts. Recently in 2017-18, total turnovers crossed 25 Billion rupees (25, 27,539.00) very quickly; actually it was only 13, 12,554.50 Billion in 2012-13. It is clear that after 2015 there is an extra jump in the total electronic settlement compared to prior session of cashless economy. It indicates that India improving in their electronic settlement status in every year.

Figure 1. Status of total electronic settlement



### 3.2. Total paper clearing

Table 1 shows a decrease in the total paper clearings in electronic payments which means, clearing of paper based transactions/ paper mode financial settlement (usually cheque) has been decreased. In 2012-13 the paper clearing almost more than one lakh billion (1, 00,182) were reduced to 81,893 Billion rupees in 2017-18 financial year. A major falls can be identified by total paper clearing status of 1, 00,182 Billion rupees to 81,893 Billion Rupees. The decreased operation in paper clearing denote that all the monetary transactions are transforming from paper to paper less which means electronic mode of operations were demanded than paper tools of payments and receipts.

Table 1. Total paper clearing

Year	Amount (in Billion)
2012-13	1,00,182
2013-14	93,316
2014-15	85,439
2015-16	81,861
2016-17	80,958
2017-18	81,893

Source: Compiled from the various reports of RBI

### 3.3. Total retail payments

Figure 2 emphases the electronic transactions in Retail Sector of India. Rupees 2, 85,612 Billion were transacted in 2017-18 which were only rupees 1, 34,115 Billion in 2012-13. The amount has been doubled with in last two consecutive years. The figure shows continues and massive usage of electronic payment facilities in retail sectors. There is a higher improvement in electronic settlements in retail sector after 2016 than before. It indicates those cashless payment methods in retail payments are getting popularized and opted.

Figure 2. Total retail payments

(Amount in Billion)



**3.4. National Electronic Funds Transfer (NEFT)**

Table 2 represents the individual status of one of the electronic payment method National Electronic Funds Transfer (NEFT). It has been resulted that there is continues improvements in the usage of NEFT during these 2012-18 and in 2017-18 financial year the total value of Rupees 1,72,229.00 Billion were settled in this individual system of electronic payment. Notably in 2012-13 it was only rupees of 29,022.40 Billion. A consecutive improvement had achieved through this mode of operation. The data shows a clear cut improvement in and after the financial year of 2015-16 on National Electronic Funds Transfer.

Table 2. National Electronic Funds Transfer (NEFT)

Year	Amount (in Billion)
2012-13	29,022.40
2013-14	43,785.50
2014-15	59,803.80
2015-16	83,273.00
2016-17	1,20,040.00
2017-18	1,72,229.00

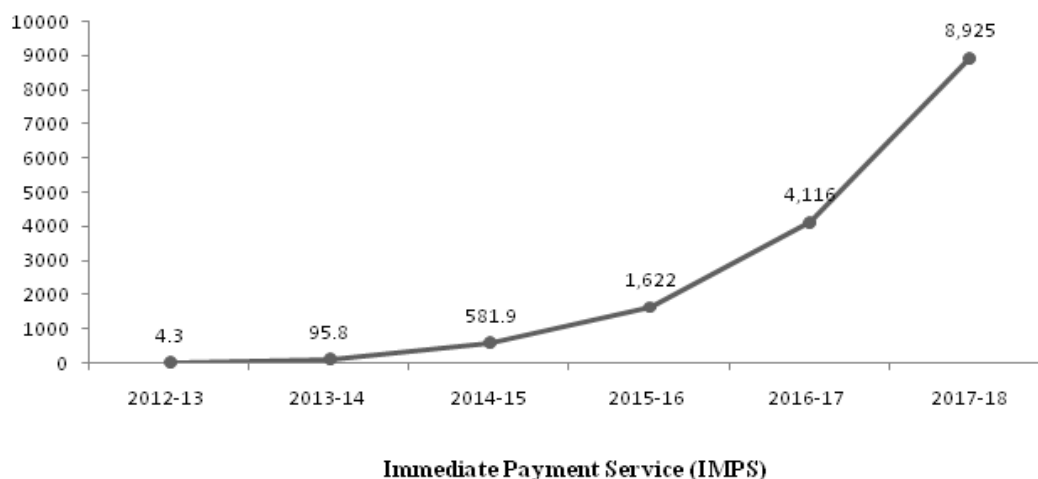
Source: Compiled from the various reports of RBI

**3.5. Immediate Payment Service (IMPS)**

Figure 3 represents one of the another utility of electronic settlement that is Immediate Payment Service (IMPS) which is 24X7 interbank electronic fund transfer service through mobile phones method of electronic payment, which shows that facility had much preferred by the customers or users in e-transactions and it reflected in the total value of operation. In 2012-13 the total value of operation of IMPS was only rupees 4.3 Billion and after the end of fifth year it becomes rupees 8,925 Billion in 2018. Figure clearly shows the improvement of IMPS electronic facility after the 2015 i.e. after the launching of cashless economy concept in India.

Figure 3. Immediate Payment Service (IMPS)

(Amount in Billion)



### 3.6. Status of Unified Payment Interface (UPI)

Unified Payment Interface (UPI) is electronic settlement utility platform through mobile application which was recently introduced and within short span of period it reached the position of one of the major utility electronic fund settlement facilities (Table 3). The utility started in 2016-17 and 69 Billion Rupees were transacted in the starting year. Within a year, the UPI facility crossed Rupees 1000 (1,098) Billion of operation. The improvements and acceptance by the people of this utility can easily be identified.

Table 3. Status of Unified Payment Interface UPI

Year	Amount (in Billion)
2012-13	***
2013-14	***
2014-15	***
2015-16	***
2016-17	69
2017-18	1,098

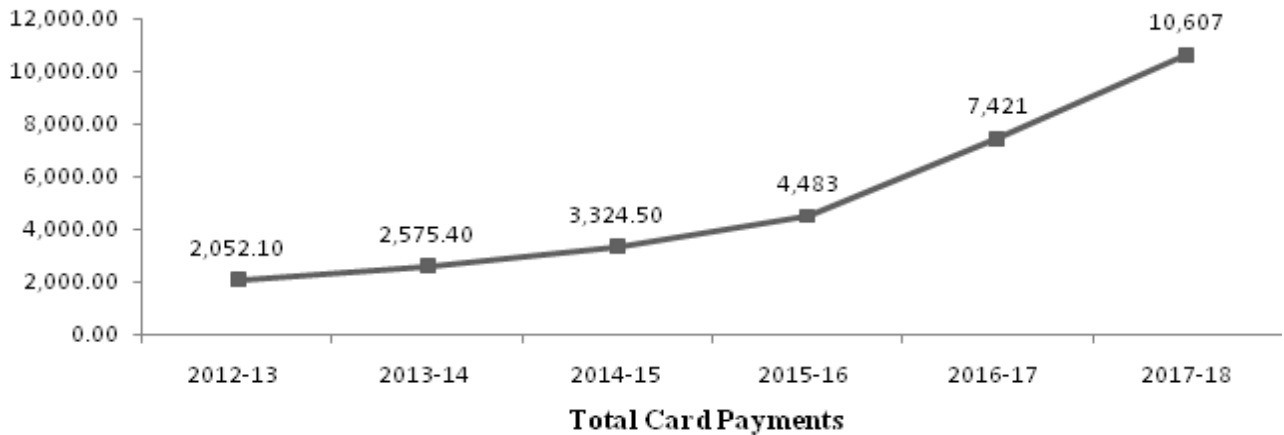
Source: Compiled from the various reports of RBI

### 3.7. Status of total card payments

Figure 4 reveals the aggregate usage of electronic cards for financial transaction. A regular increase in the card payments were reported in each year since 2012. The total card payments were only Rupees 2,052.10 Billion in 2012-13. An increased usage of different cards, the total financial operations through cards were reached Rupees 10,607 Billion in 2018. From the Data Figure, it is clear that the cards based settlements were majorly popularized and used after the period of 2015-16 and highlights the difference in improved usage of card based settlements prior and after 2015.

Figure 4. Total card payments

(Amount in Billion)

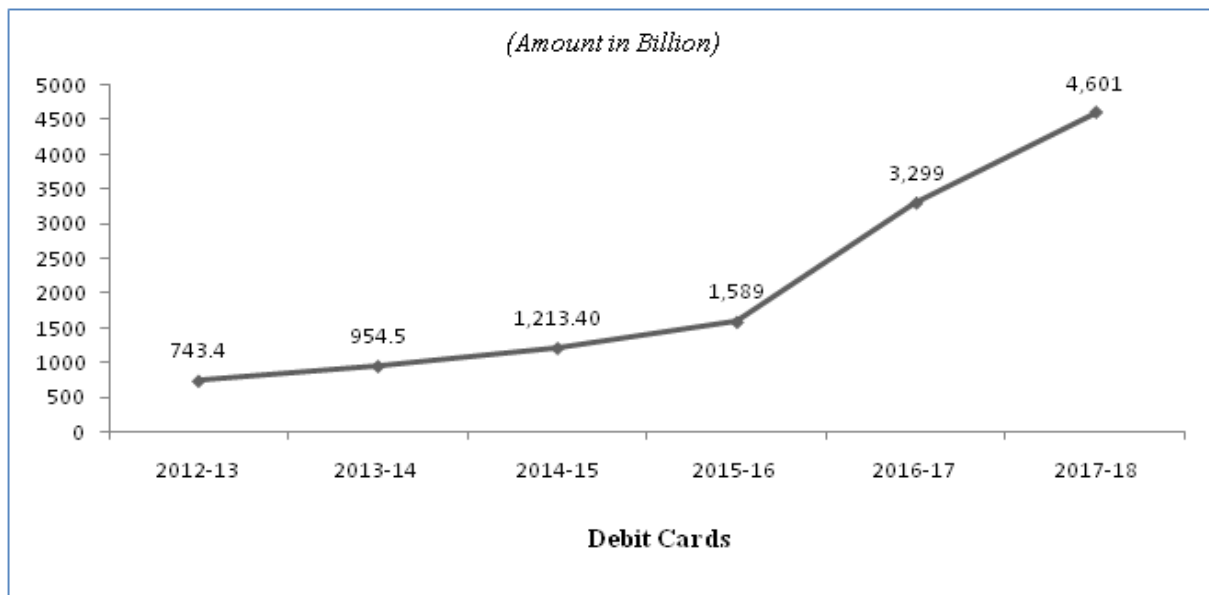


**3.8. Total debit card based transactions**

Debit card based electronic settlements are one of the common payment utility used by common people regularly. Figure 5 represents the debit card contributions in electronic settlement. In 2012-13 rupees 743.4 Billion Rupees were transacted through debit card and the same utility reported that Rupees 4,601 Billion in 2017-18 through the same. It can state that people become more familiar with debit card operations. Figure 5 shows the operational improvements of Debit card based electronic settlements and it highlights positive improved results from the 2015-16 financial years. A strong change has shown in the figure during 2015-16. The total amount through debit card settlement reached Rupees 1,589 Billion rupees in 2015-16 and it doubled during 2016-17 as 3,299 Billion rupees. The improvements of Debit card utility contribute to the success of Cashless economy concept of India.

Figure 5. Total debit card based transactions

(Amount in Billion)



#### 4. Conclusion

This study is an attempt made to evaluate the status of “Cashless Economy” program in Indian scenario which launched in 2015. Based on the secondary data collected from the different annual reports of Reserve Bank of India (RBI) from 2012 to 2018 the study has conducted. Different electronic settlement indicators like: Total Electronic Settlement, Total Paper Clearing, Total Retail Payments National Electronic Funds Transfer (NEFT), Immediate Payment Service (IMPS), Unified Payment Interface (UPI), Total Card Payments and Total Debit Cards for the period of six years have been considered for the analysis and the data set covers both the pre and post period details of cashless economy. This contributes a comparative analysis nature for the study.

Considering major eight electronic settlement utilities in analysis, the result of the study found that Cashless Economy program of India is successful economic development program since its birth. It also found that different electronic settlements utilities were withdrawn from the market with an effect of launching kind varieties of customer friendly utilities and improvements in technology infrastructures i.e., which indicate success of Digital India program .The result of various factors analysis identified that major variations in the performance of different electronic settlement utilities in pre and post periods of Cashless Economy, with the results of decreased value operation of total paper clearing and the positive progress of all other e-payment facilities. The decreased value operation of total paper clearing represents that total paper based payments and receipts were reduced in persistent years from the end of 2015 and e-payments utilities has been opted. Notably UPI form of electronic settlement is the fast growing trend electronic form among those modes of e-settlements. Status of the total electronic settlements is increasing at positive range. Improvement in the performance of all other electronic settlement utilities result that people accepted the change of cashless from cash and the nation is going to be a beneficiary of the policy.

The study concluded after the analysis of different e-payment settlements that the “Cashless Economy” concept in Indian scenario has been a success. Various positive results of those e payments utilities show the acceptance of cashless economy concept by the citizens of India as well as advantages of cashless policy will have a contribution in the economic development of the nation.

#### 5. Acknowledgement

This work has been done in partial fulfillment of academic and career objective. The background of this study derived from the part of academic references and current market condition as well. This will help to know about the status and success of Cashless India program.

#### 6. References

1. M.P.A. Shendge, M.B.G. Shelar, A.P.S.S. Kapase. Impact and importance of cashless transaction in India. *International Journal of Current Trends in Engineering & Research (IJCTER)*. 2017; 3(4), 22-28.
2. S. Patil. Impact of plastic money on banking trends in India. *International Journal of Management Research and Business Strategy*. 2014; 3(1), 34-51.
3. P. Garg, M. Panchal. Study on introduction of cashless economy in India 2016: benefits & challenges. *IOSR Journal of Business and Management*. 2017; 19(4), 116-120.
4. P.B. Metri, D. Jindappa. Impact of cashless economy on common man in India. *Imperial Journal of Interdisciplinary Research*. 2017; 3(3), 1-3.
5. Annual Reports of Reserve Bank of India. <https://www.rbi.org.in/scripts/AnnualReportPublications.aspx?Id=1239>. Date accessed: 29/08/2018.

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