

A Comparative Study of NEFT and IMPS as Retail Payments Instruments in India

Satyendra Timilsina* and Prof Ch. Appa Rao&

Abstract

Retail Payments are essential component of overall payment system of any country. As retail payments are larger in volume with comparatively smaller transaction size, specialized separate products are used to carry out these payments all over the world. In India there are basically three types of specialized retail payments products - National Electronic Fund Transfer (NEFT), Immediate Payments System (IMPS) and National Automated Clearing House (NACH), that are popular amongst its people. While NACH is mostly preferred amongst the corporate and institutions mainly for bulk fund transfers, NEFT and IMPS are most preferred instruments for fund transfer in the country. The latest data on volume and value of transactions carried out through these two modes suggest that the IMPS is gaining its edge over NEFT, mainly because of its advantage due to accessibility, multi-modes and real time payments. This paper makes a comparative study of payments trends through these two instruments in India.

JEL Classification: E 42

Key Words: Retail Payments, NEFT, IMPS, NACH, RBI

Introduction

Electronic Payments can be segregated as retail payments and wholesale payments on the basis of origin and volume of transactions. ‘Wholesale payments are generally large payments made by corporations, including banks, whereas retail payments are most commonly made by individuals and are each of low value’ (Sar and Porteous, 2013). Retail payments originate from individuals and therefore represent overall impression of the national payment systems, whereas wholesale payment system are generally considered as systemically important as they affect overall payments landscape.

* Ph.D. Scholar, Department of Economics, Andhra University, Corresponding Author, stimilsina@gmail.com
& Professor, Department of Economics, Andhra University

While the global history of retail payments can be linked with the era when money was invented, the history of electronic retail payments dates back to little more than 50 years. It can be agreed that the modernization of retail payments begun with the introduction of card banking for the first time in United States in 1966 after the Bank for Delaware piloted the concept (Collins, 2011). This was followed by e-banking in early 80's of the 20th century. The global e-banking, however, grew rapidly only after the start of the 21st century. In India, the banks and financial institutions started offering card banking in 1987 and electronic banking in 1997. The technology to interlink card banking and electronic banking offered by several banks and financial institutions, however, came into existence only after the modernization of national payments system in the country.

Retail electronic banking services are provided through the products designed and controlled by Reserve Bank of India (RBI) and National Payments Corporation of India (NPCI). There are currently four products - Electronic Clearing Services (ECS), National Electronic Fund Transfer (NEFT), Immediate Payments Service (IMPS) and National Automated Clearing House (NACH) - that are operational in India. While the usage of ECS has reduced gradually in the recent time, other three instruments are interchangeably preferred in the country for retail electronic payments.

Research Motivation

All the three products used for retail payment services in India – NEFT, IMPS and NACH – are similar in nature. Technically, an individual can use any of them to transfer their funds to any other account. However, there are several differences amongst these products and the differences are mainly due to their control and regulations. For instance, NEFT does not have any higher limit for fund transfer, whereas one can transfer a maximum of INR 2 lakhs only through IMPS platform. NACH is open for bulk transfers only.

The reserve bank monthly data release on payments and settlement system for the past six years indicate that the share of transactions and volume carried out through NEFT has reduced gradually whereas the share of transaction and volume carried out through IMPS has gradually increased. There is a need to analyze this phenomenon and evaluate if the growth rates of these two products, over these periods, are statistically different. The analysis of these products will help understand the trends in overall retail payments system of the India and would also explain if there has been a shift on consumer's preferences.

Objective:

The general objective of this paper is to review the NEFT and IMPS related transactions in India. The paper aims at reviewing the nature of the products and statistical trends in the last six years.

Methodology:

The methodology of this research is primarily a desk-method as the analysis has been done on the basis of information collected through various sources. The information, has also been gathered from personal interview of the experts and field observation at various bank branches. The field observation, however, was limited to bank branches in Visakhapatnam, Andhra Pradesh during the month of November 2019.

The required secondary data for data analysis was collected from several issues of RBI bulletin from June 2014 to November 2019.

Besides descriptive statistics, an ANOVA test has been conducted to check if the mean growth of NEFT transaction and IMPS transactions are statistically similar.

Overview of the NEFT, IMPS and NACH

National Automated Clearing House (NACH), National Electronic Fund Transfer (NEFT) and Immediate Payments Service (IMPS) are the three widely used electronic payments products for retail payments in India. The RBI operates Electronic Clearing Services (ECS) for all the funds transmitted through several electronic modes. These ECS transactions are classified as ECS debit and ECS credit. The following is the brief overview of these three products.

National Electronic Fund Transfer (NEFT)

Reserve Bank of India explains NEFT as, “a nation-wide payment system facilitating one-to-one funds transfer. Under this Scheme, individuals, firms and corporates can electronically transfer funds from any bank branch to any individual, firm or corporate having an account with any other bank branch in the country participating in the Scheme.”¹ The service can be availed only from NEFT enabled bank branches in the country. There is no any minimum and maximum limit for fund transfer through NEFT and runs from 8 am to 7 pm on every

¹Retrieved November 25, 2019 from FAQ-NEFT (<https://m.rbi.org.in/Scripts/FAQView.aspx?Id=60>)

working day. The following charges are levied on the customer for fund transfer through NEFT².

There are no charges for inward transactions at destination bank. However, the outward transactions are subject to four different charges. For a transaction up to INR 10,000 the charges are INR2.50, transaction above INR 10,000 up to INR 1 lakh is INR 5, transactions for above INR 1 lakh up to INR 2 Lakhs is INR 15 and all other transactions above INR 2 lakhs is INR 25. These charges are subject too applicable taxes.

According to the RBI, originating banks are required to pay a charge of 25 paise each per transaction to the clearing house as well as destination bank as service charge. However, these charges cannot be passed on to the customers by the banks. It normally takes 2 hours to complete the transfer process.

Immediate Payment System (IMPS)

This service is run under the platform of National Payments Corporation of India (NPCI). It is an innovative real time payment service that is available round the clock. Customers can transfer funds instantly through banks and RBI authorized Prepaid Payment Instrument Issuers (PPI) across India.

The advantage of this services over other services is that it can be initiated online through Mobile banking, internet banking and ATM channels without physically appearing to the bank branches. The customer willing to access IMPS services without visiting a bank branch must have enabled their mobile banking services and AADHAAR number linked bank account.

Charges for IMPS are decided by Individual banks and PPIs³. It is found that the charges imposed by banks for IMPS transactions ranges up to INR 25. Some banks have even waived the service charges for lower amounts of fund transfer made through IMPS platform. The NPCI had set the maximum limit for IMPS transactions at INR 1 million in August 2013⁴ and has not formally revised the limit. However, the banks and financial institutions are limiting the transaction to INR 2 hundred thousand if routed through IMPS platform.

² Ibid.

³ Abstracted on December 5, 2019 from IMPS FAQs from NPCI (<https://www.npci.org.in/imps-faq-s>)

⁴IMPS Circular no 24 (<https://www.npci.org.in/imps-circular>)

IMPS payments are becoming popular mainly due to its flexibility in terms of access, availability and real-time nature. It is accessible from multiplatform, available all the time and conducts on a real time basis. The service was also available for P2M and M2P transactions before 2017 February. The NPCI stopped these two transactions mainly owing their growth and transaction volume.

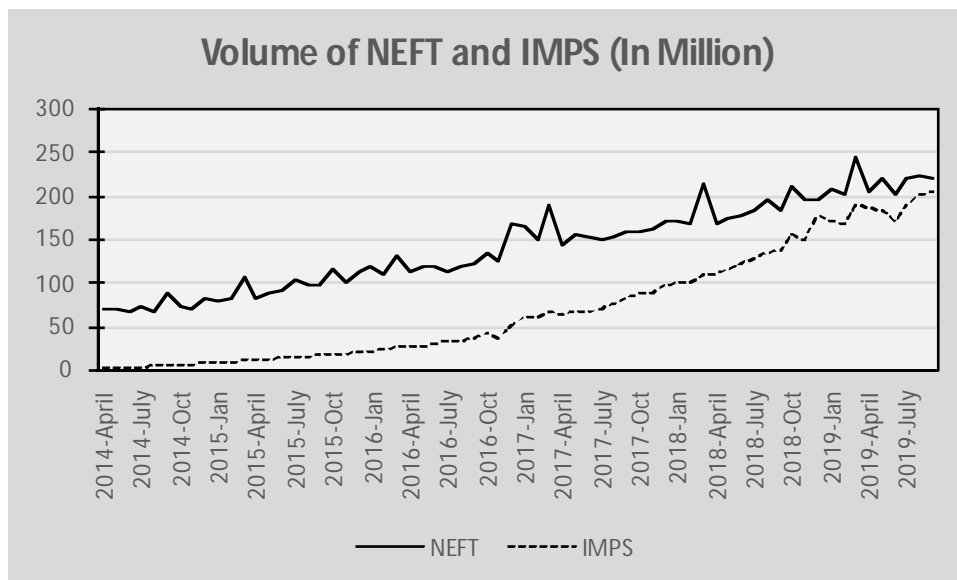
National Automated Clearing House (NACH)

NACH is another retail payments product available in Indian payments industry. This, however, is focused towards carrying out transactions initiated by banks, financial institutions, corporates and governments for those which are repetitive and periodic in nature. According to NPCI, which runs the NACH system, it can be used for making bulk transactions towards distribution of subsidies, dividends, interest, salary, pension etc. and also for bulk transactions towards collection of payments pertaining to telephone, electricity, water, loans, investments in mutual funds, insurance premium etc. ACH, all over the world, is considered as a product that provides platform for all retail payments initiated electronically.

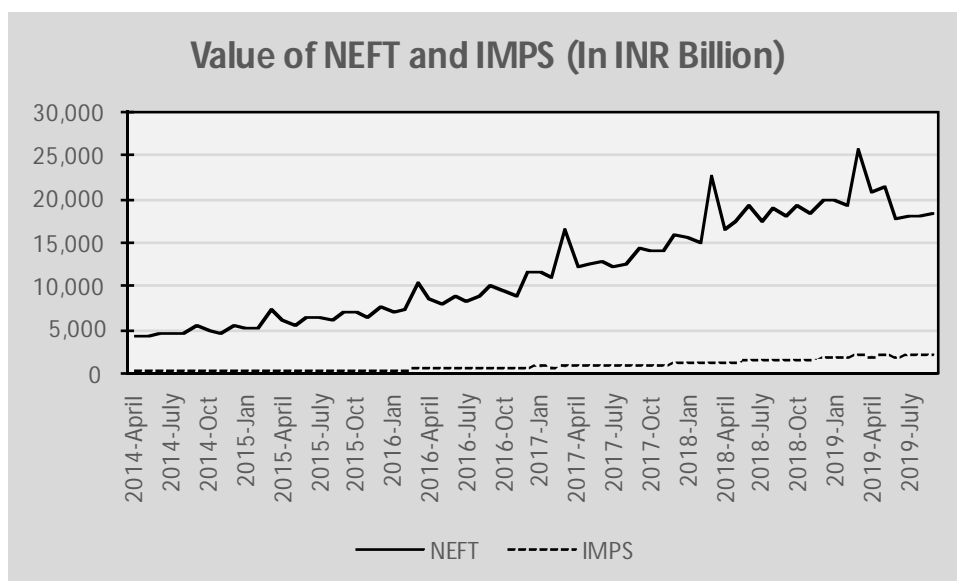
Comparative statistics for NEFT and IMPS

The Reserve Bank of India (RBI) releases several statistical information through RBI bulletin on a monthly basis. This publication includes data on Indian payments and settlement system, along with several other data related to the Indian economy. The data on volume and value of components related to retail payments was collected from several monthly bulletins. Since the current format used for releasing data related to retail payments in Indian payments and settlement started from April 2014, the current analysis also includes data since then only. The analysis is therefore based on the data for 66 months since April 2014 to September 2019.

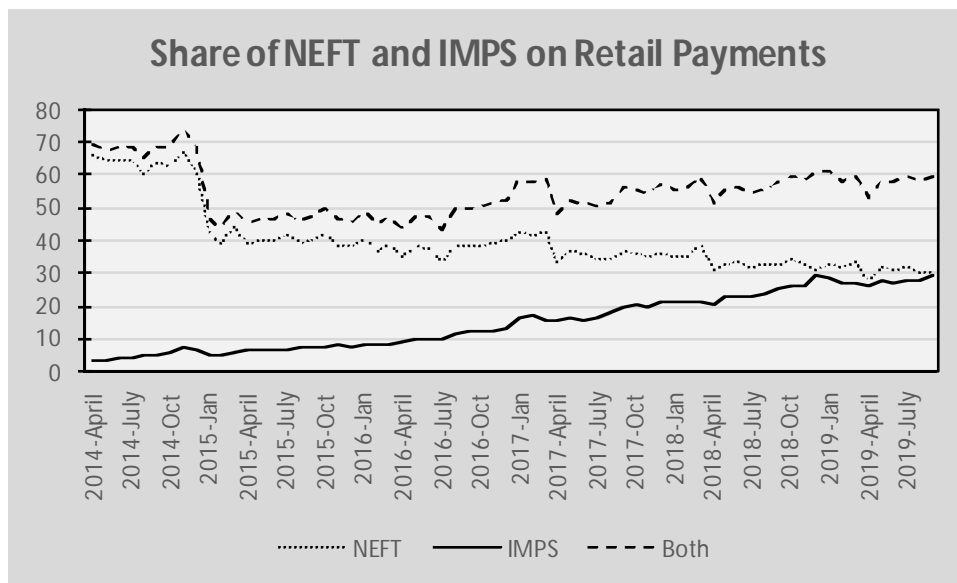
The volume of transactions carried out through IMPS has increased substantially in the review period when compared to the volume of transactions carried out through NEFT. The volume of transactions carried out through IMPS grew from 3.1 million to 204.2 million (increase by 65.6 times) within April 2014 to September 2019. In the same review period the number of NEFT transactions increased by 3.1 times from 70.6 million in April 2014 to 216.7 million in September 2019. The Chart below shows the volume of NEFT and IMPS transactions.



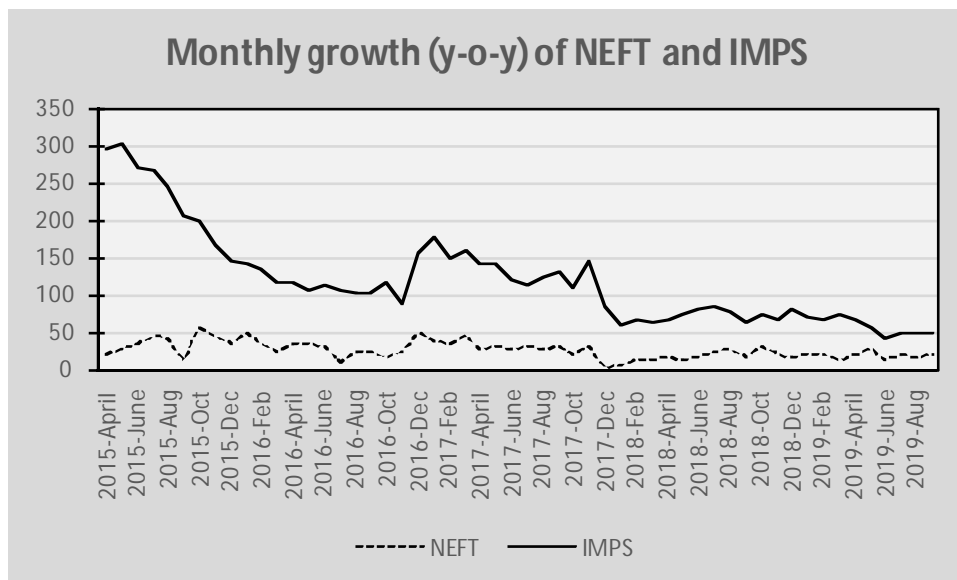
In terms of value of transactions carried out through NEFT and IMPS, the proportion between the two has reduced significantly in the last six years. The value of NEFT transactions, however, is still dominant. Despite being almost equal in the volume of transactions in September 2019, the transaction value of NEFT is almost 10 times than that of IMPS transactions. In September 2019, the value of transactions carried out through NEFT and IMPS were respectively INR 18.11 trillion and INR 1.84 trillion. In April 2014, the value of NEFT transactions was almost 200 times bigger than that of IMPS transactions. The following table shows the value of transactions carried out through these two modes in the review period.



The number of transactions carried out through NEFT and IMPS stood at around 60 percent of the total retail payments through banking channel in September 2019. The remaining transaction was carried out through NACH. The share of NEFT-transactions has reduced significantly over the period, while the share of IMPS transaction has increased. The following table shows the composition of NEFT and IMPS transactions on total retail transactions.



In terms of growth of transactions carried out through NEFT and IMPS mode, the growth rate of IMPS transactions is substantially higher than that of the growth of NEFT transactions. The growth rate of IMPS transactions, however, seems to have stabilized at around 50 percent in the later period of the review month. The growth rate of NEFT transactions is at around 20 percent. The following graph shows the monthly growth (y-o-y) of NEFT and IMPS transactions.



Comparison between the growth of NEFT and IMPS transactions: ANOVA

The average growth rate of these two instruments are different. However, to check if these growth rates are statistically different a hypothesis test is conducted using one-way ANOVA. The following is the test result.

Null Hypothesis: growth rate of NEFT transactions = growth rate of IMPS transactions

Alternative Hypothesis: growth rate of NEFT transactions ≠ growth rate of IMPS transactions

SUMMARY

Groups	Count	Sum	Average	Variance
Growth-NEFT	54	1385.130746	25.65056938	139.9875
Growth-IMPS	54	6511.314344	120.5798953	4126.028

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	243312.5766	1	243312.5766	114.0702	1.632E-18	3.9306919
Within Groups	226098.809	106	2133.007632			
Total	469411.3856	107				

Since the calculated F statistics (114.0702) is higher than the critical F statistics for 5 percent confidence (3.9307) the null hypothesis is rejected. Which means the average growth rate of both the transactions are statistically different.

Observations:

Both NEFT and IMPS are similar products with common characteristics in terms of personal fund transfer through banking channel. These are the two retail payment products

differentiated by regulatory controls only. People, therefore, use these products interchangeably.

Because of the convenience and real time fund transfer facility, IMPS has become popular over the years when compared to the NEFT. Field observation and experts' interviews showed that IMPS is popular amongst youngsters, mainly because of its accessibility through mobile banking platforms.

The increased preference of IMPS over NEFT is also justified statistically as the average monthly growth of IMPS transactions in the last five years is above 120 percent compared to that of less than 26 percent average annual growth of transactions through NEFT platform.

There is a settlement risk in IMPS transactions to the destination bank, as it has to pay the beneficiary in a real time without receiving it from the originating bank. National Payment Corporations of India (NPCI), states that it has constituted Settlement Guarantee Mechanism comprising of pledged cash collaterals and pooling of funds by way of committed line of credit for payment systems to address any adverse impact of liquidity/credit risk⁵. There is no such settlement risk in NEFT transactions.

The preference of IMPS over other retail payments products in the banking industry is likely to increase in the days to come, mainly due to increased awareness amongst people on internet based banking services. Many people are said to have remained skeptic over the use of IMPS due to safety and security concerns of the transaction and information.

Conclusion

The two most popular payments products for fund transfer in retail banking are different due to regulatory controls. If there were no limits for transactions carried out through IMPS, much more people would have switched towards IMPS from NEFT. The current payments trend is indicating that NEFT product would gradually phase-out as it is continuously losing its share to IMPS. Despite being run by RBI and protection through imposition of transaction-limits on other products, the share of NEFT is continuously decreasing. This indicates that without protection, it is hard to continue NEFT as an alternate mode of fund transfer. NPCI, being promoted as an umbrella institution to operate retail payments and settlement system in India, has promoted IMPS much better.

⁵Retrieved on December 4, 2019 on Settlement Risk Management from NPCI (<https://www.npci.org.in/node/602>)

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