



ROLE OF COVID-19 PANDEMIC IN FOSTERING CASHLESS TRANSACTIONS: AN ANALYSIS ON UPI-PAYMENTS IN INDIA

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Abstract: The world economy has come into terms with the Covid-19 Pandemic. Outbreak of Covid-19 has disrupted the economic flows in almost all the countries of the world and they responded to this economic shock by implementing various crisis oriented economic policies in their respective countries. Due to the pandemic, people have started move away from handling currency in hand for meeting transaction requirements and have adapted digital platforms for the same. The present study has explored and investigated the role of pandemic in fostering cashless transactions in India by analysing the volume and value of UPI transactions from the financial year 2018-19 to 2021-22. The study has found that there was a remarkable hike in both the volume of UPI transactions and the amount of money transacted after the outbreak of the Covid-19 pandemic in India. Hence, the pandemic situation has initiated a revolutionary change of witnessing a sudden growth in enhancing the number of users of digital banking services resulting in the decline of cash transactions across the country.

Key words - Covid-19, Online Payment, Digital platform, UPI, Digital banking, pandemic

I. INTRODUCTION

Financial institutions are crucial pillar of growth and development of an economy. It plays an important role in fostering the overall economic activity of a nation. The world's widespread technical development opened the door for encouraging digitalization in India's banking industry as well. The outbreak of Covid-19 pandemic made a revolutionary change in the enhancement of digitalization in the banking sector all over the world. Due to the epidemic, individuals began using digital platforms on a broader scale to conduct their everyday financial transactions rather than dealing in cash in hand to satisfy demands for economic money transactions. Since the outbreak of Covid-19 Pandemic, there has been a deliberate shift in India from conventional cash-in-hand transactions to cashless transactions.

Unified Payments Interface (UPI) adoption significantly rose nationwide throughout the Covid-19 epidemic era. National Payment Corporation of India (NPCI) has defined UPI as 'a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood. It also caters to the "Peer to Peer" collect request which can be scheduled and paid as per requirement and convenience.' UPI form of transaction is unique for dealing as banking service as it has certain unique characteristics including quick money transfer through mobile devices for 24x7, access to many bank accounts in a single mobile application, one-click two factor authentication, unique virtual payment Ids for each banking clients, bill sharing among friends, utility bill payments, over the counter payments, QR code scan facility, etc.

Customers of banks tried to utilise UPI payment enabled mobile applications like PhonePe, Google Pay, Paytm, etc. widely for making payments under 10,000 because of these distinctive advantages and easier method of usage. India observed a substantial increase in UPI transaction volume and value during the Covid-19 epidemic.

II. LITERATURE REVIEW

Shatter (2019) made an effort to examine the role of digitization and its development in Indian banking, and the results showed that digital banking has a considerable potential to alter the financial inclusion landscape. The rapid adoption of digital banking can hasten the mainstreaming of the unbanked economy.

Kolte and Humbe (2019) made an effort to study how UPI and the BHIM app have improved the Indian digital payment system. The study conducted among 200 students studying in the Dr. Babasaheb Ambedkar Marathwada University, Aurangabad found that students are well-versed in the use of UPI/BHIM through various third-party apps like PhonePe, Google Pay, Paytm, etc. and they primarily use such apps to make payments between one and ten thousand rupees. It was observed further that the most popular third-party application for UPI payments is PhonePe.

Anjali and Suresh (2019) conducted a study among 130 BHIM Application users to determine the degree of customer satisfaction among the users of such applications. The BHIM application's customer satisfaction levels are primarily influenced by the speed of transactions, security, customer services, and perceived ease of use. It has been found that there is a substantial positive correlation between transaction speed and customer satisfaction.

III. OBJECTIVES OF THE STUDY

- To highlight the impact of Covid-19 Pandemic on Unified Payments Interface (UPI) transactions in India.
- To identify the growth rate trend of volume and value of UPI transactions in India in view of Covid-19 pandemic.

IV. METHODOLOGY

The study is solely based on secondary data published by the National Payment Corporation of India (NPCI) on UPI payments in India. The study analyzed the pattern before and after the Covid-19 outbreak by using the monthly number of transactions and amount transacted using UPI Payments in India between April 2018 and September 2021.

V. DATA ANALYSIS AND ELUCIDATION

The table below illustrates the monthly volume and value of UPI payments in India between April 2018 and September 2021. Volume refers to the monthly number of UPI transactions stated in millions, while value refers to the total amount of money transacted through UPI payments in India for the specified time.

Table 5.1 Monthly Wise Volume and Value of UPI Payments In India (April 2018 – September 2021)

2018-19 FY			2019-20 FY		
Month	Volume (Mn)	Value (In Cr)	Month	Volume (Mn)	Value (In Cr)
Apr-18	190.08	27021.85	Apr-19	781.79	142034.39
May-18	189.48	33288.51	May-19	733.54	152449.29
Jun-18	246.37	40834.03	Jun-19	754.54	146566.35
Jul-18	273.75	51843.14	Jul-19	822.29	146386.64
Aug-18	312.02	54212.26	Aug-19	918.35	154504.89
Sep-18	405.87	59835.36	Sep-19	955.02	161456.56
Oct-18	482.36	74978.27	Oct-19	1148.36	191359.94
Nov-18	524.94	82232.21	Nov-19	1218.77	189229.09
Dec-18	620.17	102594.82	Dec-19	1308.40	202520.76
Jan-19	672.75	109932.43	Jan-20	1305.02	216242.97
Feb-19	674.19	106737.12	Feb-20	1325.69	222516.95
Mar-19	799.54	133460.72	Mar-20	1246.84	206462.31
Total	5391.52	876970.72	Total	12518.62	2131730.13
2020-21 FY			2021-22 FY		
Month	Volume (Mn)	Value (In Cr)	Month	Volume (Mn)	Value (In Cr)
Apr-20	999.57	151140.66	Apr-21	2641.06	493663.68
May-20	1234.50	218391.60	May-21	2539.57	490638.65
Jun-20	1336.93	261835.00	Jun-21	2807.51	547373.17
Jul-20	1497.36	290537.86	Jul-21	3247.82	606281.14
Aug-20	1618.83	298307.61	Aug-21	3555.55	639116.95
Sep-20	1800.14	329027.66	Sep-21	3654.30	654351.81
Oct-20	2071.62	386106.74			
Nov-20	2210.23	390999.15			
Dec-20	2234.16	416176.21			
Jan-21	2302.73	431181.89			
Feb-21	2292.90	425062.76			
Mar-21	2731.68	504886.44			
Total	22330.65	4103653.59			

Source: National Payments Corporation of India (NPCI), September 2021

Fig.1 Monthly wise Volume of UPI Payments in India (Apr 2018 – Sep 2021)

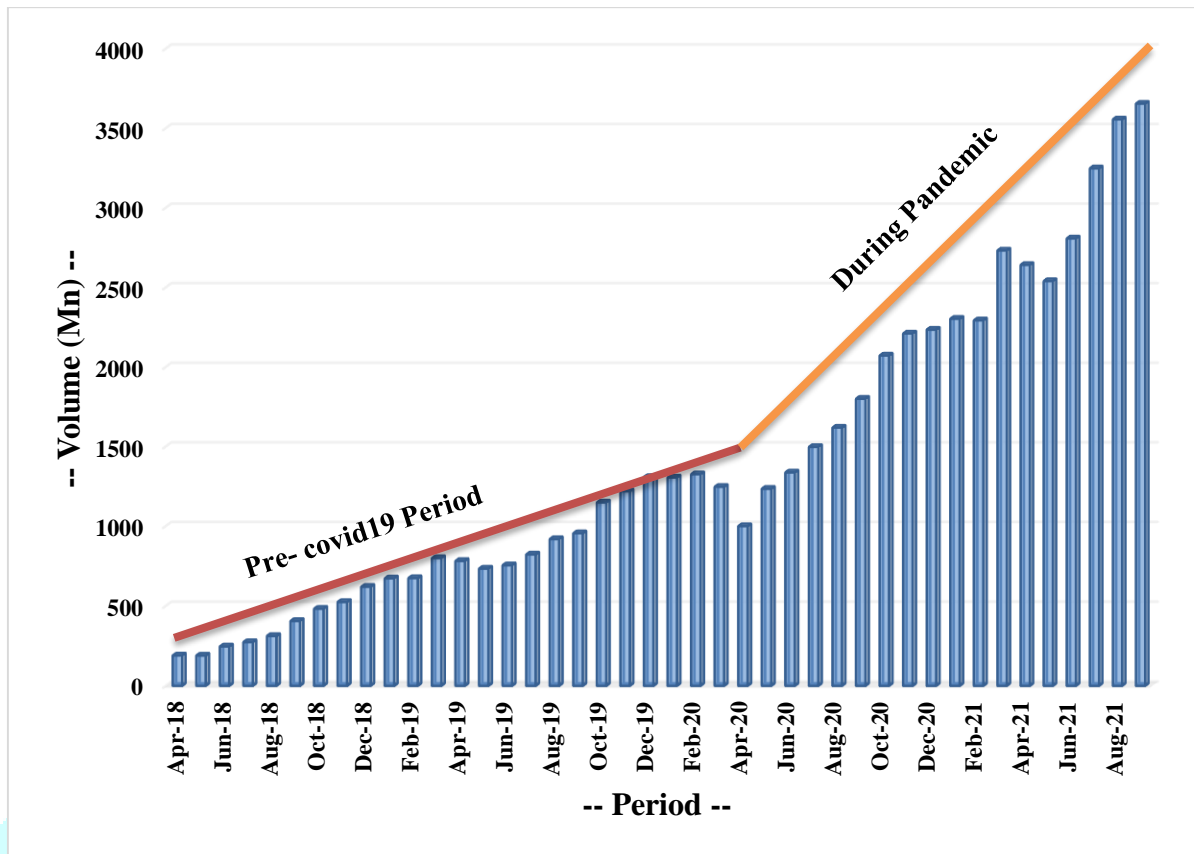
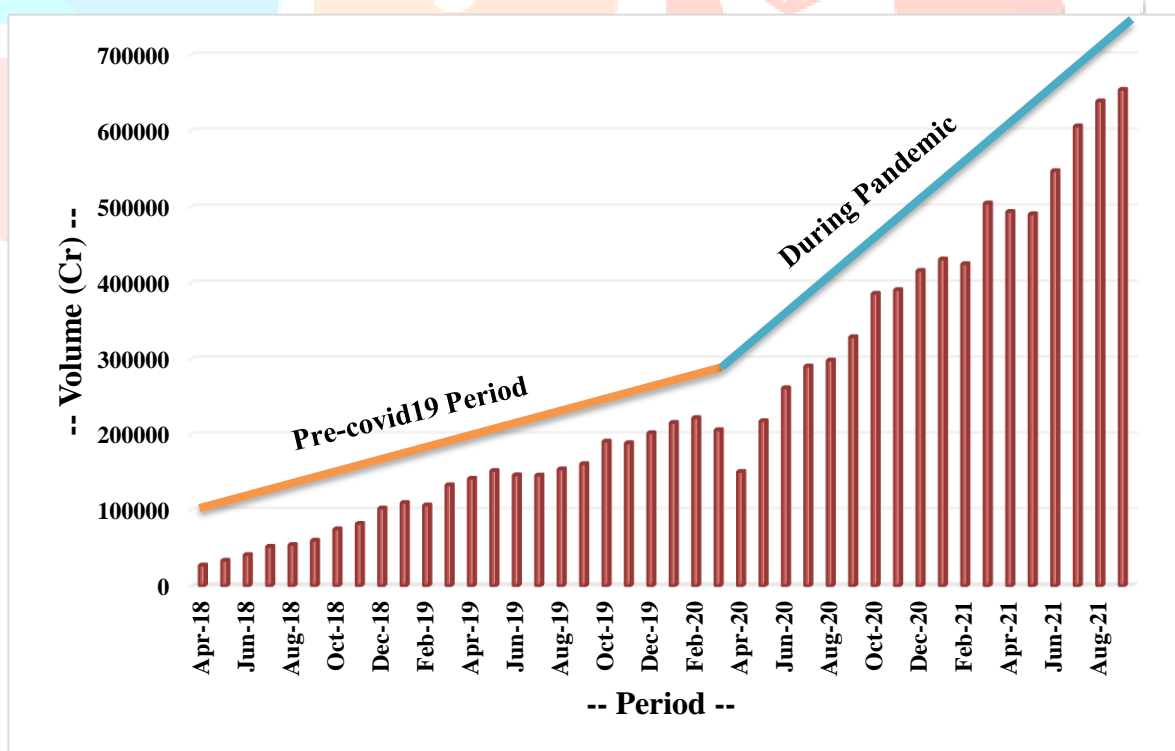


Fig.2 Monthly wise Value transacted through UPI Transactions in India (Apr 2018 – Sep 2021)



Figures 1 and 2 show the total number of UPI transactions and the value transacted monthly across the country from April 2018 to September 2021 respectively. The number of UPI transactions in India increased at a diminishing rate from 190 million in April 2018 to 1247 million in March 2020, and then increased at an increasing rate after the Covid-19 pandemic breakout, from 999 million in April 2020 to 3654 million in September 2021. Similarly, the value transacted through UPI increased at a diminishing pace from 27022 crore in April 2018 to 206462 crore in March 2020 and increased at an increased pace from 151141 crore in April 2020 to 654352 core in September 2021. So, the figure itself

reveals that, the advent of the Covid-19 pandemic prepared the door for supporting paperless monetary banking transactions in broader forms via UPI-like modes of payment.

Table 5.2 Growth Rate of UPI Transactions In India (Apr 2018 – Sep 2021)

Financial Year	Term	Volume (Mn)	Growth Rate (Volume)	Value (In Cr)	Growth rate (Value)
2018-19	1st Half	1617.57	----	267035.15	----
	2nd Half	3773.95	1.33	609935.57	1.28
2019-20	1st Half	4965.53	2.07	903398.11	2.38
	2nd Half	7553.09	3.67	1228332.02	3.60
2020-21	1st Half	8487.33	4.25	1549240.39	4.80
	2nd Half	13843.32	7.56	2554413.19	8.57
2021-22	1st Half	18445.80	10.40	3431425.39	11.85

Source: NPCI, Sep 2021 and Calculated Data

Fig. 3 Trend of UPI Transactions in India (Apr 2018 – Sep 2021)

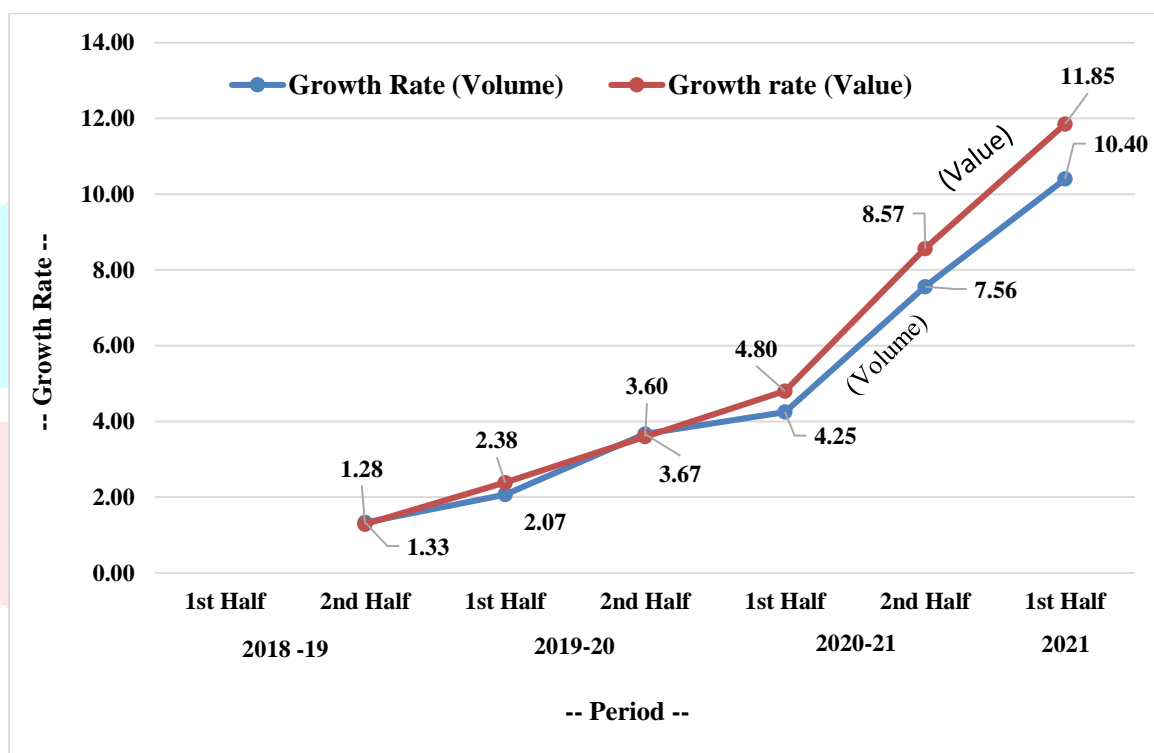


Table 2 depicts the growth rate of volume and value of UPI Transactions in India over the selected time period. To determine the growth rate, the study period was divided into two terms (1st half and 2nd half) of each fiscal year beginning in 2018-19. The value of both the number of transactions and the amount transacted in the first half of the 2018-19 fiscal year was used as base year to compute the growth rate of UPI Transactions over each half of the various fiscal years from 2018-19 to 2021-22. The table clearly shows that there is a significant increase in the growth rate of both volume and value of UPI transactions following the breakout of the Covid-19 pandemic in India when compared to the pre-Covid-19 era.

The growth rate of both volume and value transacted increased at a diminishing rate from 1st half of 2018-19 financial year (1.33 & 1.28 respectively) to 1st half of 2020-21 (4.25 & 4.80) and, after onwards the growth rate got increased at increasing rate. The growth rates of volume and value were 10.4 and 11.85, respectively, at the end of the first half of 2021–2022. The trend lines plotted based on its values over various periods reveal this dramatic revolutionary transformation, showing that after the first half of 2020–21, the trend lines of growth rates of both volume and value of UPI payments got shaped more steeper than the preceding period or pre-Covid19 era in India.

VI. FINDINGS

- After the Covid-19 pandemic outbreak, the number of UPI transactions in India surged at an increasing rate from 999 million in April 2020 to 3654 million in September 2021, after expanding at a diminishing rate from 190 million in April 2018 to 1247 million in March 2020 (pre-Covid-19 period).
- During the Covid-19 era, the amount transacted through UPI increased at an increasing pace from 151141 crore in April 2020 to 654352 core in September 2021, after increasing at a declining at a pace from 27022 crore in April 2018 to 206462 crore in March 2020.
- The growth rate of both volume and value transacted increased at a diminishing pace from the first half of 2018–19 (1.33 & 1.28 respectively) to the first half of 2020–21 (4.25 & 4.80), while during the Covid–19 pandemic period the growth rate increased at an increasing rate.
- The growth rates for volume and value were 10.4 and 11.85, respectively, at the end of the first half of 2021–2022.

VII. CONCLUSION

A revolutionary shift in the transition of cash transactions to cashless transactions was brought about by the Covid-19 pandemic's outbreak in India. Due to the pandemic, individuals have been relying on various digital platforms on a larger range of forms for dealing demand for money transactions, shifting away from handling cash in hand for satisfying the same. The number of UPI transactions and the amount transacted in India during the pandemic period dramatically increased as a consequence of consumers starting to utilise various UPI enabled smartphone applications for receiving and requesting payments.

REFERENCES

- [1] Shettar, M. (2019). Digital Banking An Indian Perspective. IOSR Journal of Economics and Finance (IOSR-JEF), 10(3), 01-05.
- [2] Kolte, D. M., & Humbe, D. V. R. (2020). Study of UPI/BHIM Payment System in India. International Journal of Science and Research (IJSR), 9(12), 228-232.
- [3] Anjali, R., & Suresh, A. (2019). A Study on Customer Satisfaction of Bharat Interface for Money (BHIM). International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN, 2278-3075.
- [4] UPI: Unified Payments Interface – Instant mobile payments, NPCI. online, accessed from <https://www.npci.org.in/what-we-do/upi/product-overview> on 10 October 2021
- [5] UPI: Unified Payments Interface – Instant mobile payments, NPCI. online, accessed from <https://www.npci.org.in/what-we-do/upi/product-statistics> on 12 October 2021