

Comparative Study on Digital Transactions among Public Sector Banks in India

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Abstract

The present study visualizes the digital transactions among public sector banks in India. government of India had announced Digital India Programme in 2015 which means everything digitalised. Banking is one of the primary sectors which deals with money transaction and application of digital mode of transaction helps to empower the people digitally. Digitalisation in banking operation is one of the key vision areas of digital India programme. The main objective of the study is to compare the digital transaction among public sector banks in India from 2018-2022 and it also emphasize digital transaction progress of public sector after merger of banks happened 2019 and 2020. Digital transaction includes NEFT, RTGS and Mobile transactions were considered for measuring digital transactions and data were gathered from secondary sources like online websites like RBI websites, NPCI. etc. Study shows drastic progress of mobile transaction in terms of volume and amount of transaction among public sector banks especially from 2020 and amount of RTGS transaction was more among other mode of transaction like NEFT and mobile and it is concluded that the overall progress of digital transaction through NEFT, RTGS and mobile from 2018-2022 was shown as significant growth level through Indian public sector banks.

Key words: NEFT, RTGS, Mobile transaction, Digital transaction and public sector banks etc.

1.1 Introduction:

This comparative study explores the digital transaction among public sector banks in India. There are 12 public sector banks in India which contribute major financial and banking operations to the nation's economy. In the digital scenario Nowadays, banking sector also need to focus their attention on digitalised transaction in their daily banking operations. In India the concept of online banking was initiated by ICICI bank in 1996 and followed by many others private banks like HDFC, City bank and Indus bank were introduced online transaction in India. India owns 17.7% of the total world population and estimated more than 140 crores of population as per the latest statistics. In 2015 government of India announced Digital India Programme which means everything digitalised. Banking is one of the primary sectors which deals with money transaction and application of digital mode of transaction helps to empower the people digitally and avoid corruption, prevent black money circulation etc. The total number of public sector banks in India was 27 in 2017 and it has been reduced to 12 due to major mergers were happened in periods like 2017, 2019 and 2021.

1.2 History of public sector banks and its merger

Before 2017 Associate banks of SBI like State Bank of Bikaner and Jaipur, State Bank of Hyderabad, State bank of Mysore, State bank of Patiala, State bank of Travancore and Bhartiya Mahila were included in the list of public sector banks in India but after 1st April 2017 these associate banks were merged with State bank of India due to various reasons. This was considered the first merger announcement of public sector bank in India for the last 5 years. Followed by the second announcement of merger was happened in 1st April 2019 about merging of Dena bank and Vijaya bank with Bank of Baroda. Final announcement of merger was taken place on 1st April 2020 that Allahabad bank was merged with Indian bank, Syndicate bank was merged with Canara bank, Andhra bank and corporation bank were merged with Union bank of India, Oriental bank of commerce and United bank merged with Punjab National bank.

After these mergers in the last five years, the sum of public sector banks shrinks from 27 to 12 of which 6 banks are considered as merged banks like State bank of India, Bank of Baroda, Punjab National bank, Canara bank, Union bank of India and Indian bank and rest of the six banks were considered as independent banks which are Bank of India, Bank of Maharashtra, Central bank of India, Indian Overseas bank, Punjab and sind bank and UCO bank. Among 12 public sector banks in India, State bank of India is the largest bank which has 22,405 branches 65,627 ATMs till 2022 and it has received best bank award in 2021 by Global finance

1.3 Digital Transactions

The scope of this study is to measure digital transaction of public sector banks in India and researcher have taken the three modes of digital transaction like NEFT, RTGS and mobile transaction. Total number and number of transactions were considered to find the progress and movement of digital transaction among public sector banks for the period 2018-2022, besides for NEFT and RTGS calculation both inward and outward number and amount of transactions were taken in to consider and mobile transaction includes both number and amount of transactions.

Figure shows the modes of Digital transaction

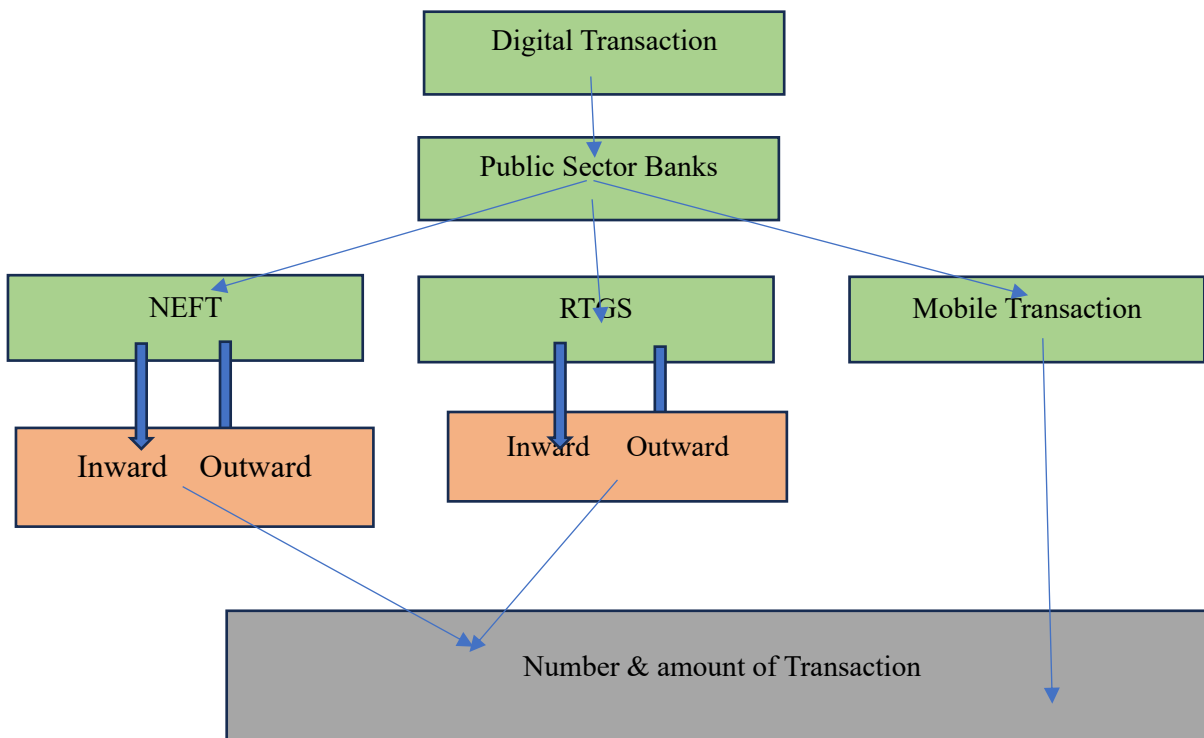


Figure: Authors own

1.4 Nations Electronic Fund Transfer (NEFT)

NEFT was introduced in India in November 2005 and in this mode, money transaction can be done between banks where they offer NEFT facility, besides the transaction cannot be done immediately and entire completion of transaction will take some days.

As per the RBI Guidelines initially NEFT facility was given during limited time duration like on week days Monday to Friday from Morning 8 AM to 6 PM and on Saturday it was 8 AM to 12 PM, it was followed till 2019. afterwards (in 2020) this service is extended to 24 hours on every day. Banks are normally collecting transaction charges for NEFT but there is no maximum amount of transaction under NEFT process besides transaction fee collected from Rs.2.5 to Rs. 25 based on the amount of transaction.

1.5 Real Time Gross Settlement (RTGS)

RTGS was initiated in 2004 as fastest interbank transaction in India, under this method, minimum amount of transaction is Rs.2 lakhs and there is no maximum amount of transaction and transaction fee minimum of Rs. 30 between 2 lakhs to 5 lakhs and Rs.55 for above Rs. 5 lakhs amount of transaction.

1.6 Mobile Transaction

Mobile transaction is an easy mode of money transaction which include BHIM-UPI, IMPS, NETC till Jan 2023, IMPS achieved 8.036 billion number of digital payments and 12.98 lakh crore amount of transaction in Jan 2023. In India IMPS (Initiate Payment Systems) was initiated in 2010 onwards and currently 777 members are live in serving IMPS which includes both bank and PPIs and BHIM UPI (Bharat Interface for Money-Unified Payment Interface) was launched by our Prime Minister in December 2016.

Union bank of India was the first public sector banks who initiated and offered mobile transaction facility to their customer.

2. Review of Literature

Rao & Kumar (2019) have taken the key samples of State Bank of India and HDFC to analyse the impact of digital banking system on Operational profitability and their study was traced 5 years of data from 2012 to 2018. This study applied the VEC (Vector Error Correction) Model to know the effect of long run and short run relation and study revealed NEFT, RTGS and mobile transaction were positively influenced on operational efficiency through least square method besides the study spotted the future growth of digital transaction through VAR model. Due to vast spreading of Covid-19 given more space for digital transaction: A study conducted by Sharma & Mathur (2022) explored the impact of digitalisation of public Vs private banks before and after Covid-19. Their study primarily focussed on finding increased number of customers and amount of revenue through digital transaction due to Covid-19 epidemic and its growth in banking sector further the study taken up top five public sector and private sector banks in India. Results were depicted that HDFC has highest market capitalisation among private sector banks and SBI has highest market capitalisation among public sector banks in India and shows increased number of active users in 2019.

Shaikh & Anwar (2023), study examined the performance of banking sector in India due to digital transaction. They viewed financial and operational performance of 32 banks from public sector and private sector period covers 2011 to 2020. It discloses digital transaction on the part of public sector banks is declined due to the counter part of private sector banks and explained changes in RTGS and NEFT have an impact on deposit ratio and advances and credit card transaction through ATM and POS have reverse impact on the cost of funds. Ming Pey Lu et al., (2020) Another study toughed the digital transaction in different perspective, Yes does the digital transaction system created value to the banking sector and four digital mode of payment system were taken as identification of value creation. This study covers the nations like Malaysia, Singapore and Thailand and the study analysed the four methods digital payment methods like e-money, Credit and charge card, debit card, internet and mobile transactions and these were taken for analysis like regression, correlation. Further the results shows that four digital payment system in those country banks were not significantly influencing on the revenue growth of the banks and the concluded that digital transaction methods offered by banks in these countries will not be economically sustainable in the futuristic scenario.

2.1. Research Objectives

- ❖ To Study the growth and development of digital transaction mode like NEFT, RTGS and Mobile transaction among public sector banks in India from 2018-2022.
- ❖ To Compare the progress of digital transaction among Indian public sector banks after merger of public sector banks in 2019 onwards.

3. Research Methodology

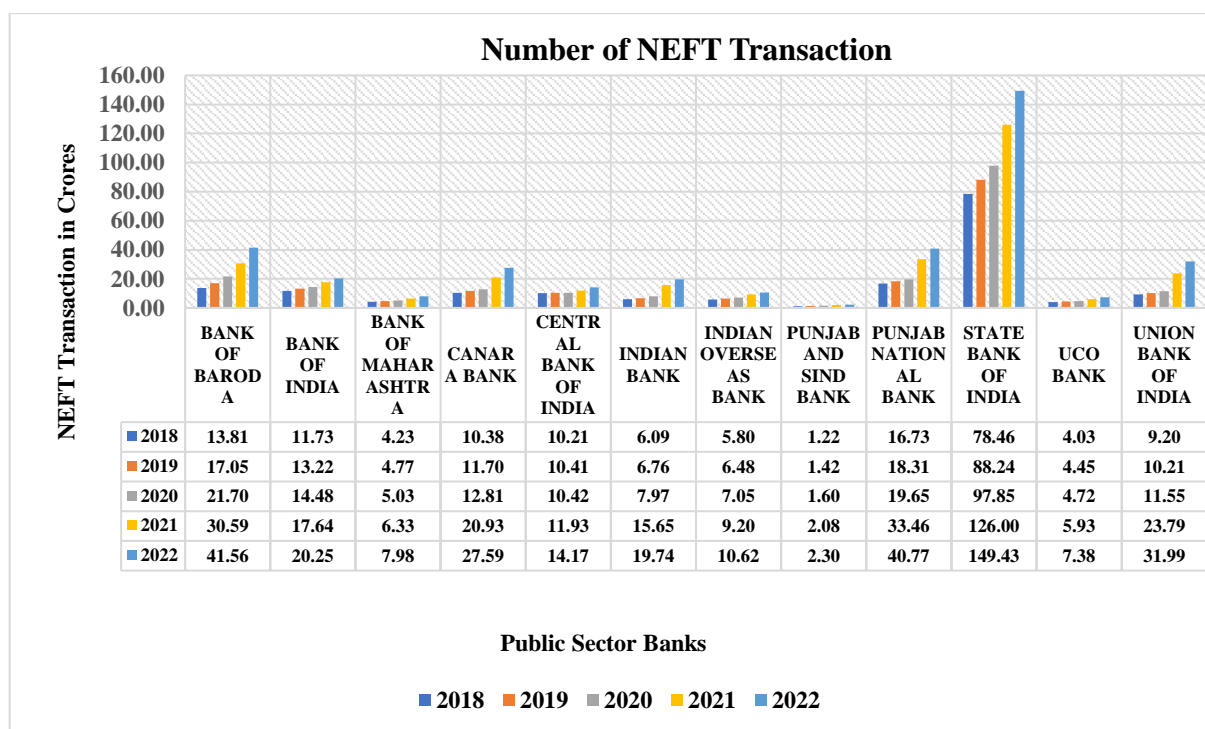
The entire process of this study is completely relied upon secondary sources which are collected from RBI websites, internet and previous articles etc., With fulfilling the aim of analysing the digital transaction of public sector banks in India the past five years from 2018 – 2022 NEFT, RTGS and Mobile transaction were mainly considered.

RBI websites facilitates monthly transaction of NEFT, RTGS and Mobile transaction of banks in India and researchers made an extensive data collection of monthly transaction of 12 specified public sector banks every year and consolidated year wise from 2018 to 2022 which helps to move on further valuable analysis in this area.

4. Comparative Analysis and Interpretation

Figure 4.1

Number of NEFT Transaction from 2018-2022



Sources: Author's compiled from RBI

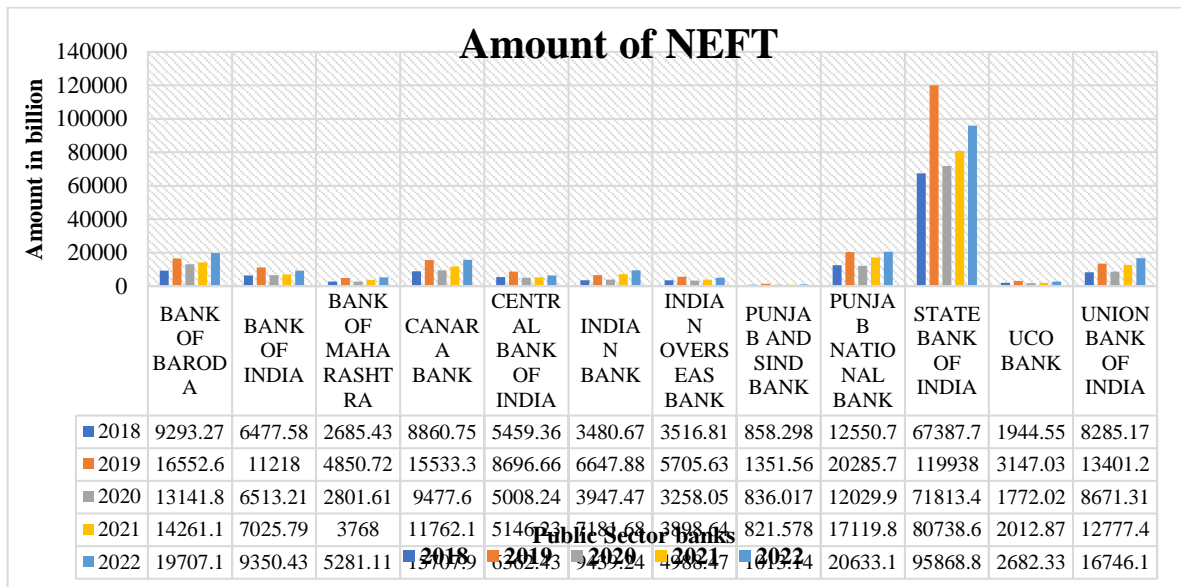
Note: Number of transactions include both inward and outward transaction.

From the above figure it can be understood that the number of NEFT transaction which includes both inward and outward number from 2018 to 2022 through 12 public sector banks in India were shows increasing trend. Furthermore after 2020 there were massive growth rate in majority of the public sector banks except independent banks like Bank of Maharashtra, Central bank of India, Indian Overseas bank, Punjab and sind bank and UCO bank shows less growth rate of NEFT transaction comparatively with other public sector banks in India. This could be justified that after merger of banks were happened in different periods like 2017, 2019 and 2020 and also accompanied with Covid-19 which was restricted people engage in physical mode of financial transaction. banking transaction through NEFT were shown massive increase from 2020 onwards.

State bank of India is the leading position in maintaining number of NEFT transaction in all five years among public sector banks.

Figure 4.2

Amount of NEFT transaction from 2018-2022



Sources: Author's compiled data from RBI

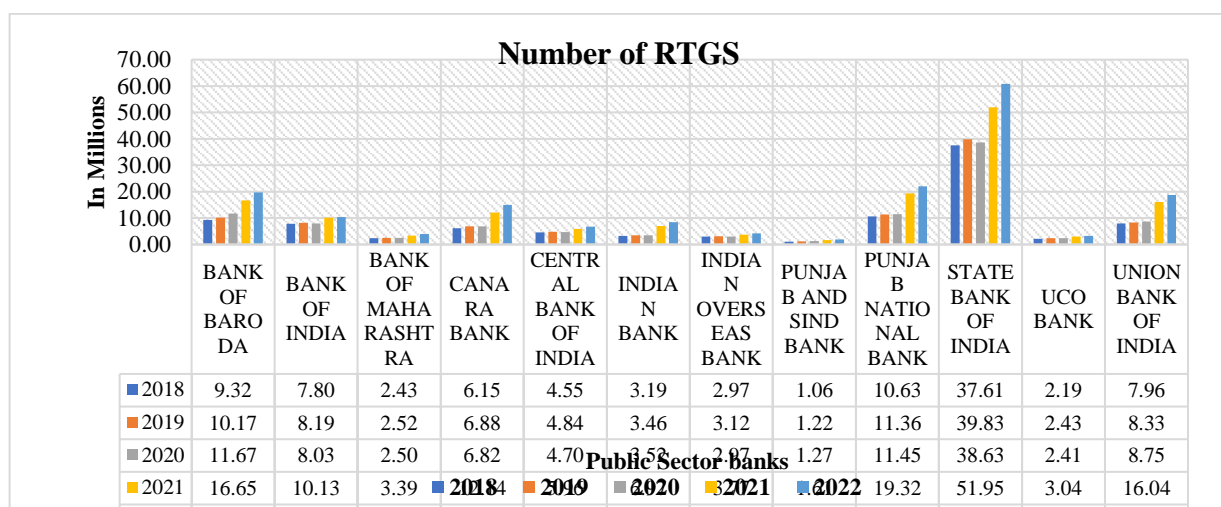
Note: Amount of transaction include both inward and outward transaction.

From the above figure it is depicted that the amount of NEFT transaction from 2018-2022 through public sector banks were shows increasing trend. Amount of NEFT transaction were increasing from 2018-2019 in all public sector banks but from 2019-2020 it shows decreased trend further more in 2020-2022 shows consistent increasing trend in amount of NEFT transaction among all public sector banks in India.

On the other side the number of NEFT transaction was remarked with high number especially after 2020. But in terms amount in billion it shows declining rate among public sector banks.

Figure 4.3

Number of RTGS transaction from 2018-2022



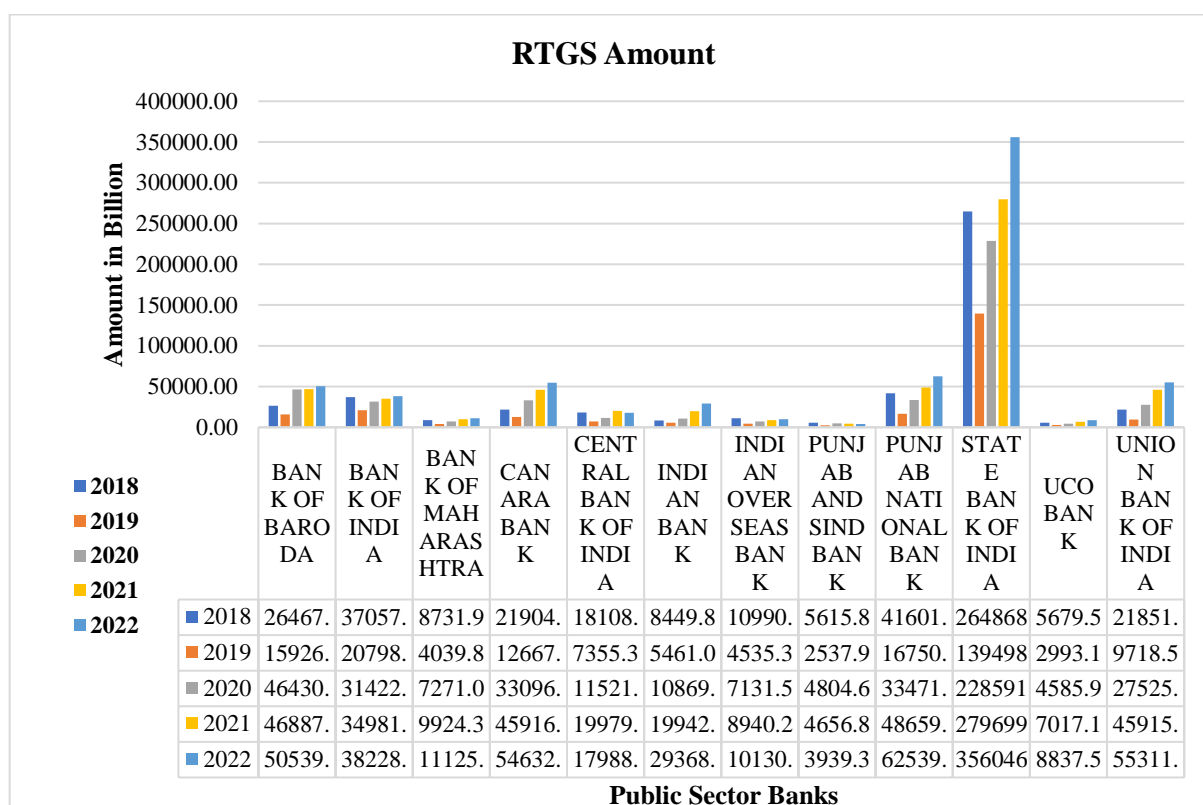
Sources: Author's compiled data from RBI

Note: Number of transactions include both inward and outward transaction of inter bank and customer transaction.

From the above figure it is depicted that the number of RTGS transaction from 2018-2022 through 12 public sector banks. It shows increasing trend in all public sector banks except from 2019-2020 marked with small fluctuations in public sector banks particularly independent banks like Bank of India, Bank of Maharashtra, Central bank of India, UCO and Union bank of India. Furthermore, in all years SBI stands leading position in number of RTGS transaction, followed by Punjab National bank, Bank of Baroda, Union bank of India and Canara bank.

Figure 4.4

Amount of RTGS transaction from 2018-2022

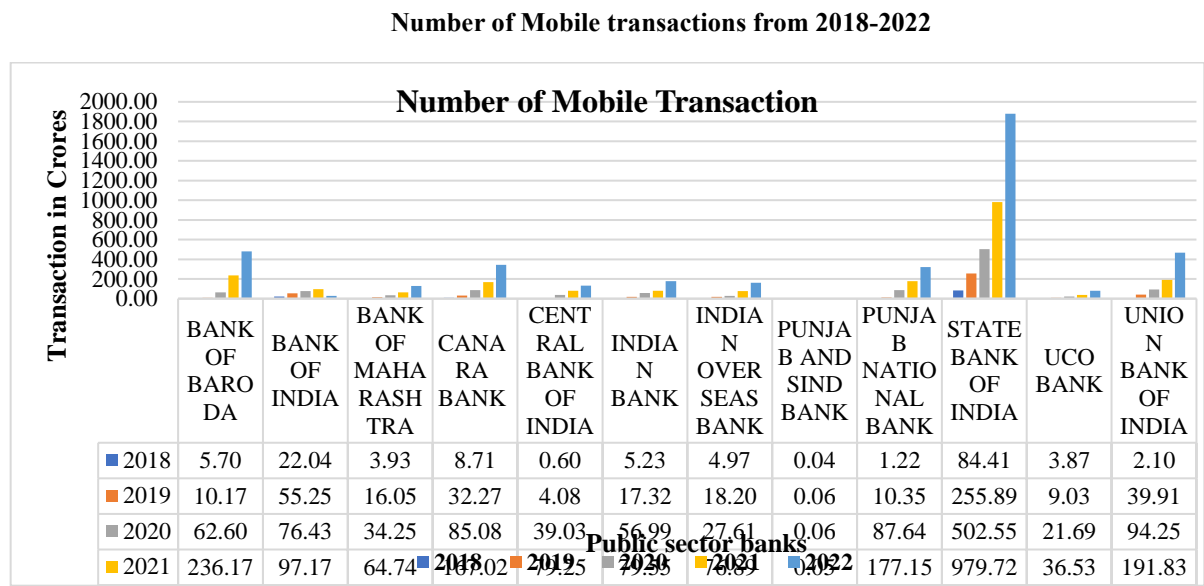


Sources: Author's compiled data from RBI

Note: Number of transactions include both inward and outward transaction of interbank and customer transaction

From the above figure it discloses the amount of RTGS transaction done by 12 public sector banks from 2018-2022. The amount of RTGS transaction in all public sector banks in India shows increasing level in all the period except in 2019 which shows decreasing amount of RTGS transaction almost in all the banks but it has been raised till 2022. The highest amount of transaction done by State bank of India followed by Punjab national bank, Union bank of India, Canara bank and Bank of Baroda etc., rest of the banks RTGS transaction are comparatively less among public sector banks.

Figure 4.5

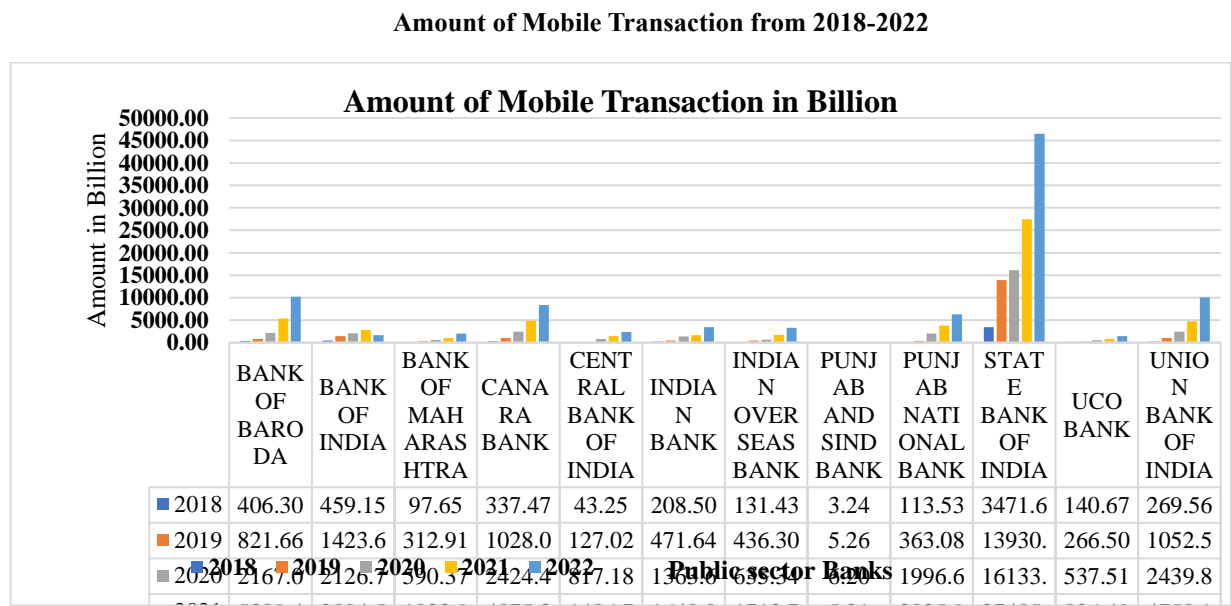


Sources: Author’s compiled data from RBI

From the above figure it can be understood that number of mobile transactions in 12 public banks from 2018-2022. It shows drastic improvement in mobile transaction done from 2020-2021 in public sector banks except Bank of India. SBI is in the top level of number of mobile transactions in all the years followed by bank of Baroda, Union bank of India and Canara bank etc Punjab and sind bank shows least number of mobile transactions comparing with other public sector banks.

It is also can be understood that after 2019 the progress of digital transaction in all public sector bank is exemplary which was due to massive spread of covid-19 in 2020 and 2021 in India and people were started to use mobile transaction through BHIM-UPI more.

Figure 4.6

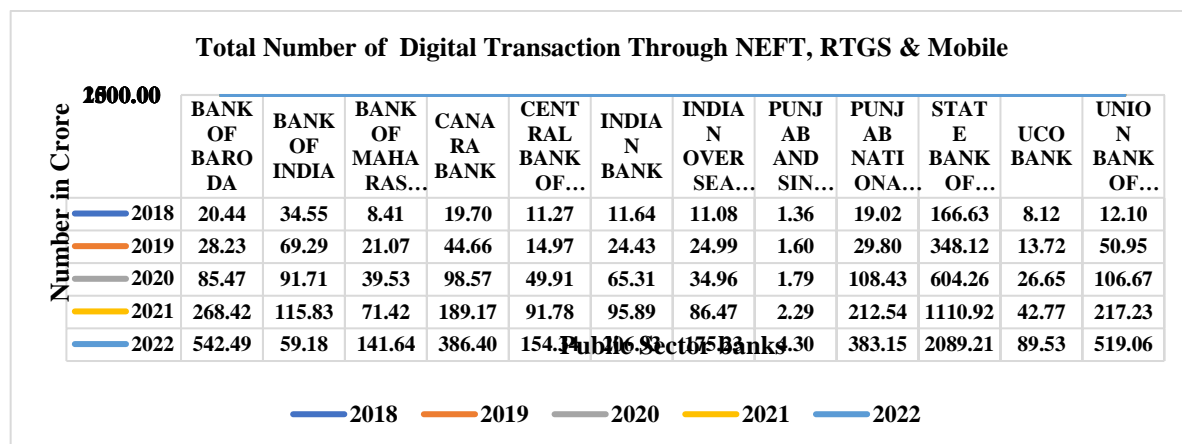


Sources: Author’s compiled data from RBI

From the above figure it is depicted that the amount of mobile transaction in 12 public sector banks from 2018-2022 shows increasing trend. State bank of India, Bank of Baroda, union bank of India and Canara bank are in the order performing well in amount of mobile transactions. Punjab and sind banks mobile transaction is very less among other public sector banks in India.

Figure 4.7

Number of Digital Transaction through NEFT, RTGS and Mobile Transaction from 2018-2022.



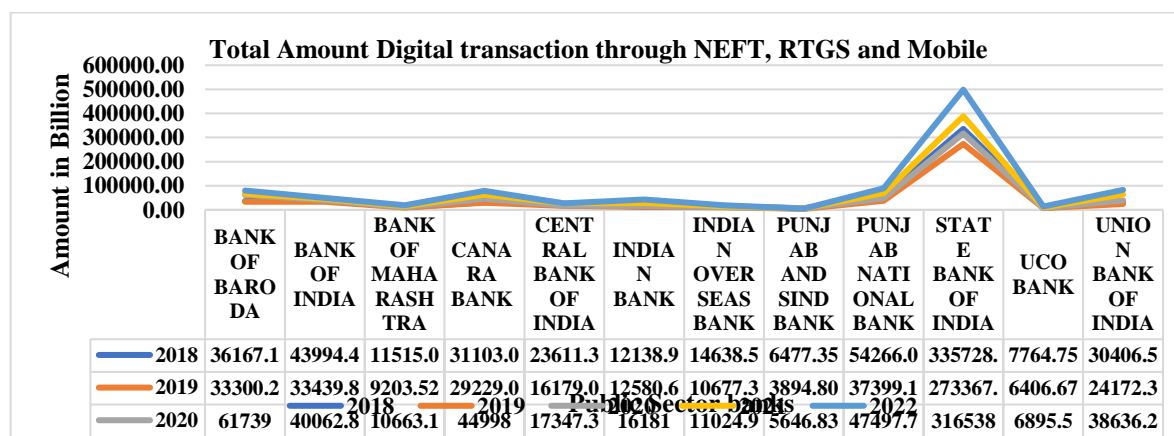
Sources: Author's compiled data from RBI

From the above figure it is represents the number of digital transactions in crore among public sector banks in India from 2018-2022. All the public sector banks transactions were in increasing level from 2018-2022. None of the banks shows decreasing level and real progress and growth of transactions were drastically improved after 2020 which might be due to mass spreading of Covid-19 in India.

All the year, State bank of India's transaction was high from 2018-2022 among other public sector banks which has 2089.21 crores number of transactions in 2022 and least transactions were made in Punjab sind bank, bank of India and UCO bank comparing with other public sector bank

Figure 4.8

Amount of Digital transaction through NEFT, RTGS and Mobile Trsanction from 2018-2022



Sources: Author's compiled data from RBI

From the above figure it shows the amount of total digital transaction in billion from 2018 to 2022 among public sector banks in India. All public sector banks amount of digital transaction shows increasing trend from 2018 – 2022 except in the year 2019. In 2018 state bank of India's digital transaction amount was high among public sector banks which has 335728 billion amount of transaction was made through SBI bank followed Punjab national bank, Union bank of India and bank of Baroda etc. least amount of transaction done by Punjab and sind bank has the value of 6477.35 billion and UCO bank has the value of 7764.75 in 2018.

In 2019 all the banks digital transaction amount was decreasing trend except in Indian bank, on the other side from 2019 to 2022 all the banks digital transaction amount was increasing level except Punjab and sind bank shows some fluctuations. It can be found that from 2018-2022 state bank of India's digital transaction was high among all other banks since it is largest public sector bank in India.

5. Findings and Discussion

From the above comparison among public sector banks in India with respect to digital transaction through NEFT is growing in terms of number of transactions from 2018-2022 but in terms of amount of NEFT it was decreasing in 2020 in all public sector banks. With respect to number of RTGS transaction is shows slight fluctuation in 2020 in some of the public sector banks and in terms amount of transaction is consistently growing from 2018-2022.

With respect to mobile transaction in terms of number and amount from 2018-2022 shows positive growth especially from 2020-2022 period was drastic development of mobile transaction and this was due to covid-19 given a path to adopt cashless transaction among people particularly people in rural areas started and using mobile payments as one of the easy mode of payments.

Among NEFT, RTGS and mobile transaction, the highest number of transactions were done through public sector banks is mobile transaction specifically in 2020 onwards followed by NEFT and RTGS, but in terms of amount of transactions were done through RTGS mode followed by NEFT and mobile transaction. Variation between the highest number of mobile transaction and lowest amount of transaction was due to people were using mobile transaction for small payments in their routine life.

Total number of digital transactions through NEFT, RTGS and mobile transaction in 2018 and 2019 shows constant growth in all public sector banks, afterwards it was massive improvement in using digital mode of transaction through all public sector banks except bank of India which shows slight fluctuation in 2022. With respect to total amount of digital transaction in Indian public sector banks from 2018-2022 shows tremendous growth which ensured India is moving towards digitalised country.

6. Conclusion

After Covid-19 and merger of public sector banks happened in 2019 and 2020 given a route to the growth of digital transaction among public sector banks in India and mobile transaction takes the benefit of easy mode of transaction among people in recent periods like people from rural areas, small shops, vendors now accessing mobile payment system well. Digital transaction helps developing nations like India to avoid black money circulation, corruption besides it helps to achieve India to reach digitalised economy.

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