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2000 RUPEE NOTE WITHDRAWAL A NON EVENT: FAVOURABLE IMPACT ON DEPOSITS AND YIELDS

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The withdrawal of 2000 rupee note is likely to be a non event. In digital payments, India has been witnessing new milestones, in both value and volume terms, which indicate the robustness of our payment ecosystem and acceptance by a wide stratum of consumers. If we look at the 'total digital payments' % to Nominal GDP, it has increased to 767% in FY23 from 668% in FY16. The retail digital payments (excluding RTGS) as % GDP has reached 242% in FY23 from 129% in FY16. **Among all, UPI has emerged as the most popular and preferred payment mode in India pioneering Person to Person (P2P) as well as Person to Merchant (P2M) transactions in India accounting for ~73% of the total digital payments.** The volume of UPI transactions has increased multi-fold from 1.8 crore in FY17 to 8375 crore in FY23. The value of UPI transactions has also increased handsomely, from just Rs 6947 crore to Rs 139 lakh crore during the same period, a jump of 2004 times. **Interestingly, CIC has moderated to reach 12.4% of GDP in FY23, almost same level as 2015-16. The yearly growth in CIC has also declined to 7.9% in FY23 from 16.6% in FY21.**

Our research suggests that Rural and Semi-Urban areas are now accounting for 60% of share in UPI value/ volume, dismantling the popular perception that metro/urban areas are hotbeds of digital payment adoption and innovations. Top 15 states accounted for ~90% of share in value/volume. UPI has not only altered the payment landscape of India but is also significantly altering the purpose for which currency is used hitherto acting as investment to speculation (trading) conduit. Last, our research found that cash withdrawal through debit cards at ATMs has declined from Nov 18, ceding way to UPI. **On the basis of monthly time series data analysis for the period of April 2016 to April 2023, it has been observed that every Rs 1 increase in value of UPI transactions leads to 18 paisa decline in debit card transactions, indicating a person is now making a visit to ATM on a an average 8 times a year, down from 16 visits earlier.**

Even though the impact of Rs 2000 rupee note withdrawal is a non event, there will be a favorable impact on liquidity, bank deposits and interest rates. Decoding exchange/deposit dynamics, we understand, banks will already be holding some of these notes in their currency chests, thus the impact on deposits will be limited. **We believe that the almost the entire amount of Rs 3.6 trillion will come back (~ Rs 3 trillion excluding the amount in currency chests) to the banking system.**

Assuming that 10-15% of the total Rs 2000 notes are in currency chests, then of the remaining ~Rs 3 trillion if we assume MPC of 0.7, ~Rs 2-2.1 trillion would be spent by the consumers (either direct purchase or by exchanging it with smaller denominations notes), approximately ~Rs 1 trillion is destined deposits in banks. Moreover, balance of payment surplus in FY24 is expected to the tune of $1.5-2.0 billion thus providing further liquidity support.

Importantly, the transitory change in the liquidity would lead to decline in yields, more at the shorter end of the curve. The favorable position in Forward Premia, and the range bound movement in USD/INR also moots aggressive Dollar selling from the Mint street, preferably through S/B swaps in forwards, checkmating any unwarranted depreciation from these levels. We understand there should be fall of 25-30 bps in money market rates due to incremental deposits flow. This should lead to short end forward points collapsing which RBI may use to square off its existing short end positions.

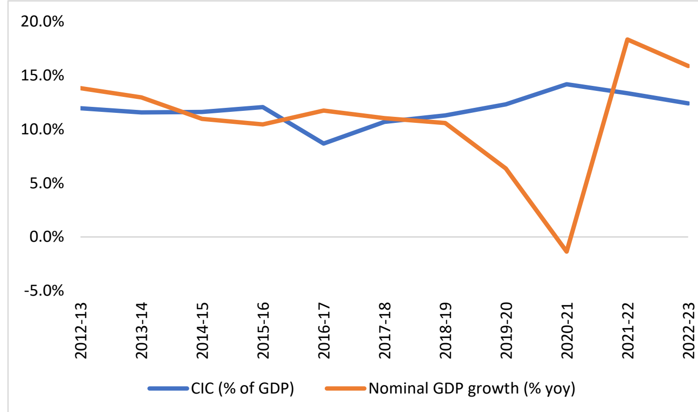
CURRENCY IN CIRCULATION MOVED TANDEM WITH NOMINAL GDP GROWTH

- Currency in circulation has moved in tandem with the nominal GDP growth. Average CIC as % of GDP since FY13 has been 11.8%, however there have been certain years where it has moved opposite to the direction of nominal GDP growth. For instance, in 2016-17 during the demonetization period, the nominal GDP growth was 11.8% while CIC dipped 19.7% yoy that year taking it to 8.7% of GDP.
- The nominal GDP growth turned negative that year and thereby CIC as % of GDP increased significantly. However, with the improved momentum of GDP and enhanced usage of UPI and other digital modes of payment, **CIC has moderated since then to reach 12.4% of GDP in FY23, almost same level as 2015-16. The yearly growth in CIC has also declined to 7.9% in FY23 from 16.6% in FY21.**

CHANGE IN COMPOSITION OF BANKNOTES IN CIRCULATION

- There has been a change in composition of banks notes post demonetization. The share of small denomination notes (upto Rs 100) in total has declined progressively to 9.0% from 26.7% in 2017 in value terms and to 58.8% from 90.8% in 2017 in volume terms.
- Meanwhile, currently Rs 500 note has become the major bank note among the masses and constitutes 73.3% of the total value of currency notes by Mar'22. The Rs 200 notes has stabilized around 4% of the total value of bank notes. The central bank has ensured that the share of the biggest Rs 2000 note moved down gradually, thus paving their way for the removal from the circulation altogether. Its share has declined to 13.8% in value by Mar'22 and the RBI has recently informed that it has declined to 10.8% of the total value of currency notes or Rs 3.62 trillion by Mar'23.

Currency in circulation & GDP



Source: SBI Research

- Banks will already be holding some of these notes in their currency chests, thus the impact on deposits will be limited. Assuming that 10-15% of the total Rs 2000 notes are in currency chests, then of the remaining Rs 3 trillion if we assume MPC of 0.7, Rs 2-2.1 trillion would be spent by the consumers (either direct purchase or by exchanging it with smaller denominations notes).
- **Thus, not more than Rs 1 trillion would be additional deposits in banks. Accordingly, this might lead to additional SLR demand of Rs 180 billion from banks. However, as the banks are currently maintaining SLR around 28% of NDTL as against the mandatory 18% of NDTL, this is unlikely to huge increase the demand of government securities from banks.**
- The decline in CIC or the consequent increase in banking liquidity will ensure that there is no immediate need for CRR cut. Even the need for OMO is reduced, now that RBI has provided greater than expected dividend of Rs 874 billion which will boost durable liquidity as and when the Government spends it. Moreover, balance of payment surplus in FY24 is expected to the tune of $1.5-2.0 billion thus providing further liquidity support.
- The transitory change in the liquidity will lead to decline in yields, more at the short end of the curve.

- With system liquidity increasing owing to the deposits of Rs 2000 note, RBI may sell dollars instead of buying dollars, either in spot or through sell buy swaps in forwards. The latter being a better tool as it will not only help in sucking liquidity during the tenure of the swap but also increase the carry of INR leading to its defense against further depreciation.

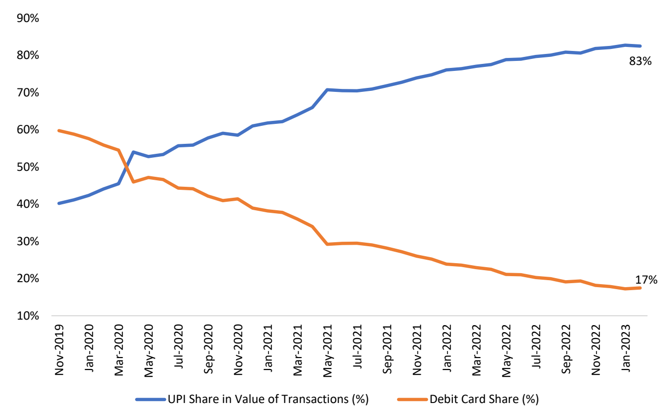
DIGITAL TRANASACTIONS REPLACING CASH ECONOMY

- In digital payments, India has been witnessing new milestones, in both value and volume terms, which indicate the robustness of our payment ecosystem and acceptance by a wide stratum of consumers.
- If we look the 'total digital payments' % to Nominal GDP, it has increased to 767% to in FY23 from 668% in FY16. The retail digital payments (excluding RTGS) % GDP has reached 242% in FY23 from 129% in FY16.
- Among all, UPI has emerged as the most popular and preferred payment mode in India pioneering Person to Person (P2P) as well as Person to Merchant (P2M) transactions in India accounting for ~73% of the total digital payments. The volume of UPI transactions has increased multi-fold from 1.8 crore in FY17 to 8375 crore in FY23. The value of UPI transactions has also increased handsomely, from just Rs 6947 crore to Rs 139 lakh crore during the same period, a jump of 2004 times.

A DETAILED ANALYSIS OF UPI LANDSCAPE

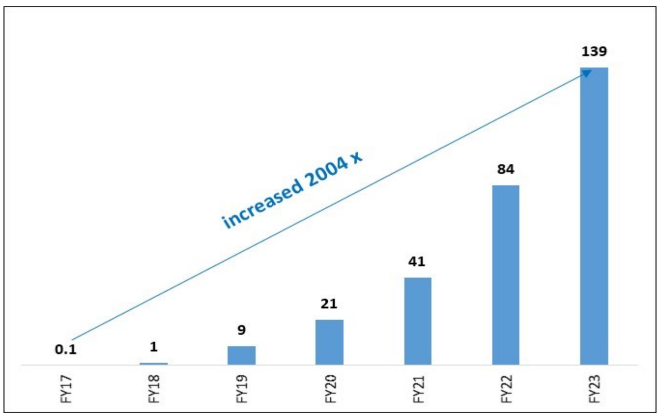
- The withdrawal of Rs 2000 denomination currency note will not impact the payment ecosystem in India, which has already revolutionised by UPI. Launched in 2016, it has emerged as one of the most popular tools in the country for carrying out digital transactions. It has gone a long way in making digital payments a habit, and in firmly placing India on the track toward a cashless economy. In the month of April 2023, 414 banks/PPI were live on the UPI interface, with 8.9 billion financial transactions being carried out for a total value of nearly Rs 14.1 trillion, clocking average ticket size of Rs ~1600.

ATM Cash withdrawal vs UPI Transactions Share (%)



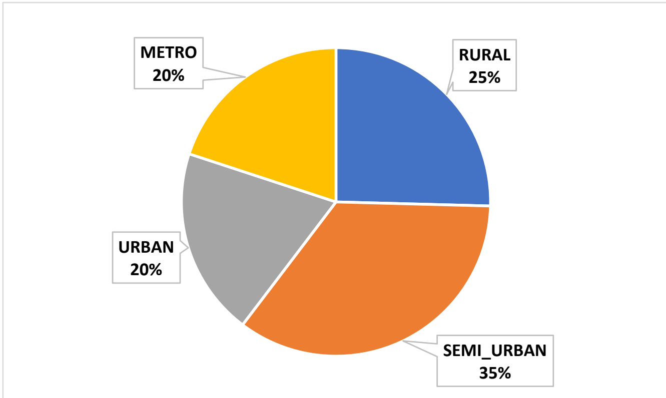
Source: SBI Research

UPI Transactions Value (Rs Lakh Crore)



Source: SBI Research

Region-wise UPI Value/Volume share(%)



Source: SBI Research

- Today, there is no doubt that the digital payment landscape in India has been transformed primarily due to UPI. Our research suggests that against the popular perception that UPI is popular in Metro areas only, Rural and Semi-Urban areas accounting for 60% of share in UPI value/volume. This result is quite astonishing and indicating greater participation of digital means of payment in non-Metro areas and less reliance on cash. However, the average ticket size of Metro region is Rs 200 more than the Rural region, which is quite obvious.
- When we analyze the performance of States, we have found that top 15 states accounted for almost 90% of share in value/volume The average ticket size of these 15 states ranges between Rs 1600 to Rs 2200.
- District-wise analysis indicate that the top 100 districts of India accounted for ~45% share in UPI value/volume. UPI not only altered the payment landscape of India but also significantly altered the purpose for which currency is used, hitherto.

IMPACT OF UPI ON DEBIT CARD TRANSACTIONS

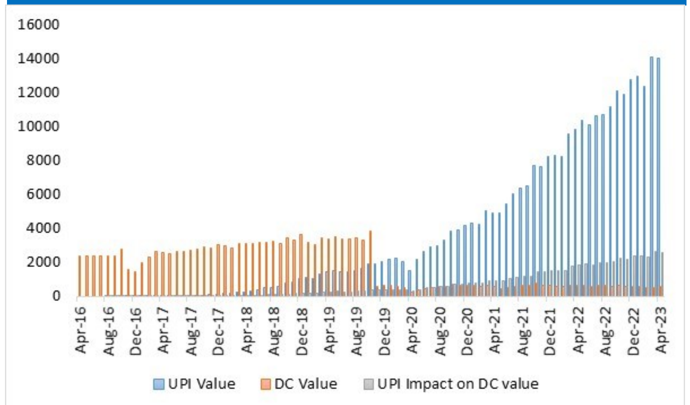
- In the retail demand for money, the share of UPI in value has increased to 83%, while ATM cash withdrawal share declined to 17%. This is clear indication that people are replacing cash with UPI.
- The significance of UPI can be judged from the fact that while the size of GDP has increased by 1.8x to Rs 272 lakh crore in FY23 as compared to FY17, the total ATM transactions value (using Debit card only) has remained constant around Rs 30-35 lakh crore. ATM Transactions declining from 15.4% of GDP in FY 17 to 12.1% of GDP in FY 23.
- Both Debit Card Transactions and ATM Withdrawals have actually declined due to UPI. It has been observed with the time series analysis for the period of April 2016 to April 2023 that 1 Rs increase in UPI Transactions has actually decreases the debit card value transactions by 18 paisa **indicating a person is now making a visit to ATM on a an average 8 times a year, down from 16 visits earlier.**

Share of 15 Major States in UPI Value/Volume Terms & Average Ticket Size

Share	State	Avg Ticket Size (Rs)
8-12%	AP, Maharashtra, Telangana, Karnataka	2000-2200
5-8%	UP, Rajasthan, TN, Bihar, WB	1800-2000
2-5%	Odisha, Kerala, MP, Gujarat, Assam, Haryana	1600-1800

Source: SBI Research

Impact of UPI on Debit Card Transactions



Source: SBI Research

Impact of UPI Value Transactions on Debit card Value Transactions

ARDL Model: Dependent Variable: Debit Card Transactions (Value in Rs Mn)			
Time Period: April 2016 to April 2023			
Variable	Coefficient	Std Error	P Value
Adjustment factor	-0.098	0.051	0.059*
UPI Transactions (Value in Rs Mn)	-0.1854	0.108	0.09*

Source: SBI Research * Significant at 10%

Nominal GDP and Cash Withdrawal at ATMs

FY	Nominal GDP (Rs lakh crore)	Cash Withdrawal at ATMs Value (Rs lakh crore)	ATM/GDP
FY17	154	23.6	15.4%
FY18	171	29.0	17.0%
FY19	189	33.2	17.5%
FY20	201	34.3	17.0%
FY21	198	28.9	14.6%
FY22	235	31.1	13.3%
FY23	272	33.0	12.1%

Source: SBI Research

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