

## Banking Sector

23 December, 2022

### Payment ecosystem: Retail digital payment methods gaining market share

The Indian banking system's overall payment ecosystem value stood at Rs181trn in FY22 and was at Rs119trn for the first seven months of FY23. Within the payment system, large credit transfers constitute ~68% while retail payments constitute ~32%, as on Oct'22. In the past four years, a majority of the expansion in the payment ecosystem has been driven by retail payments while large credit transactions have witnessed only marginal growth. Total retail payments have reported a CAGR of 16.5% during FY18-FY22 while large credit transactions have increased at a CAGR of 2.5%. Large credit transfers witnessed a surge in FY22 because industrial activities picked up pace, reporting a growth of 22% as against a decline in FY20 and FY21. Moreover, retail payments witnessed 26% growth in FY22, leading to overall expansion in payment transactions at ~23%. Over a period of time, the overall payment ecosystem has witnessed a sharp increase in transaction volume, leading to lower ticket-sized payments. The payment ecosystem has become more granular in nature on the back of increasing volume in UPI, IMPS.

Total payments and retail payments (in volume terms) grew at a CAGR of ~46% each during FY18-FY22. Moreover, in value terms, these payments clocked a CAGR of 5.7% and 16.5%, respectively. Since the retail payments' share has increased from 19.6% in FY18 to 28.9% in FY22, the payment ticket size has seen further granularization.

#### Composition of retail payments increasing significantly

Overall, retail payment transactions have registered a strong CAGR of 16.5% over FY18-FY22, largely driven by digital payments. Composition of retail payments in the overall payments ecosystem has increased to 28.9% as on FY22 vs 19.6% in FY18. On further dissection of retail payments, we have learned that digital payments have increased at a CAGR of 18% over FY19-FY22 while paper-based transactions have reported a decline of 6.9%. As a result, the overall composition of digital payments in retail payments increased to 87.3% in FY22 vs 77% in FY19. Retail digital payments constitute 25.3% of the total payment ecosystem. Card payments constitute 3.3% of the total retail payment system as on FY22.

Retail credit transfers have been getting more broad-based on the back of new payment platforms such as UPI and IMPS. Total retail credit transfers have increased at a CAGR of 17.9% over FY19-FY22, of which NEFT / NACH / UPI / IMPS payments have increased at 8% / 21% / 112% / 38%. As a result, the composition of UPI has increased to 16.1% as on FY22 and further to 19.7% as on Oct'22 vs 2.4% in FY19. IMPS' composition has increased to 8% as on FY22 and 9% as on Oct'22 vs 4.4% in FY19. UPI payment system has witnessed a significant traction since the outbreak of Covid-19 and the momentum has remained strong. Moreover, paper-based transactions have declined at a CAGR of 6.9% over FY19-FY22. Composition of paper-based transactions within the overall retail payments has declined to 12.7% as on FY22 and has further declined to 10% as on Oct'22 vs 22.7% in FY19.

#### Digital banking ecosystem; large banks dominate and expanding market share

The Indian banking payment system has undergone a significant change on the back of the sharp surge in digital payment methods while dependence on paper-based transactions has declined. Large banks such as HDFC Bank, ICICI Bank, Axis Bank, Kotak Bank and SBI have been able to successfully build strong digital platforms, which has enabled them to garner high market share in transactions in volume as well as value terms. Large banks' continue to focus on technology and they have been successful in cross selling different products, thereby increasing their market share in digital transactions in both value as well as volume terms.

Among the top banks, barring SBI, most banks are private banks. PayTM had been losing market share within the mobile banking payment system in the past, but it has been able to reverse the trend in the last few months. Moreover, SBI has a leadership position in debit cards, UPI and IMPS. HDFC Bank has been gaining market share in credit cards after the RBI lifted the embargo while ICICI Bank has gained the highest market share during the same period.

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## Debit card issuances/ spends trend on a declining trajectory

The banking system's debit card base has increased at 3.7% CAGR in the last two years to 939.5mn as on Oct'22. The value of debit card transactions has increased at 3% CAGR during the same period. Moreover, the total value of debit card transactions has nearly reached the pre-pandemic level of Rs3.6trn (reported as of Jan.'20). The proportion of debit card transactions through ATM and POS stood at ~81% and 19%, respectively. The average ticket size per debit card withdrawal / spends through ATM and POS stood at Rs4,774 and Rs2,262, respectively.

Debit card issuances and spends/withdrawals in the banking system have been witnessing a declining trend. The total number of outstanding (o/s) debit cards increased by 0.1% MoM/0.7% YoY. In absolute terms, the industry issued the lowest number of debit cards MoM in the last five months at 0.9mn in Oct'22 with the total o/s at 939mn. Moreover, the declining trend in debit card spend/withdrawal has reversed on an incremental basis, increasing by 9.8% MoM while reporting a decline of 2.2% YoY at Rs3.35trn. Average withdrawals per debit card through the ATM inched up to Rs4,774 in Oct'22 from Rs4,640 in Sept'22 while spending through POS terminals increased to Rs2,262 from Rs2,018 during the same period.

SBI's continues to have the highest market share in terms of number of outstanding debit cards and total spending/withdrawals at 29.5%/33.2%. Among the large private banks, barring HDFC Bank, most other banks (KMB, AXSB, IIB and ICICIBC) have lost market share YoY. On an incremental basis, among the top 5 issuers of debit cards, SBI has issued the highest number at ~1.9mn followed by BOB at 0.7mn.

## Credit card base / spends rising at a faster pace as against debit card

Banking industry's credit card customer base has expanded at a much faster pace of 15.6% CAGR during Oct.'20 – Oct.'22 to 79.4mn. In value terms, spends on credit cards have increased at 41.4% CAGR during the same period to Rs1.3trn in Oct.'22.

In terms of spends per credit card, the banking industry has been witnessing an increasing trend and now stands at Rs16,343. For the banking industry, credit card spends – to-debit card spends ratio was at 0.36x in Oct.'22, which is much above the pre-pandemic level of 0.19x in Dec.'19 & Jan.'20. Within card transactions (in value terms), the share is tilting in favor of credit cards and the same is much above the pre-pandemic level. The proportion of average spend per credit card through POS terminals/online (e-commerce)/ ATM withdrawals stood at 35.9%/ 63.8%/ 0.3% vs 37.1%/ 62.6%/ 0.3% in June'22.

Top 5 banks have the maximum share in overall number of outstanding credit cards at ~74.1%. HDFCB, SBICARD, ICICIBC, AXSB and KMB held credit card market share of 20.9%, 19.1%, 17.1%, 11.5% and 5.7%, respectively in Oct'22. IDFCBK introduced credit card product from Jun'20, but it has witnessed a strong traction and its market share increased by 160bps in Oct'22.

Despite the RBI's ban on fresh issuance of credit cards, HDFCB still holds the pole position with 20.9% market share as on Oct'22 in terms of outstanding credit cards. However, the bank witnessed erosion in its market share to 20.9% in Oct'22 from 25.6% in Nov.'20.

In the last 8 months, SBICARD, KMB and ICICIBC have gained the most market share and remain in top 5 positions. SBICARD's market share increased to 19.1% in Oct'22 (from 18.8% in Nov'20) while ICICIBC's market share increased to 17.1% in Oct' 22 (from 16.2% in Nov'20). Post the RBI's relaxation to HDFCB for issue of new credit cards, HDFCB, ICICIBC and SBICARD franchise strength would be tested again. Also, recently, HDFCB has disclosed that it endeavours to issue 1mn credit card per month.

In terms of credit card transaction value, HDFCB is much ahead compared to other competitors with more than one-fifth market share (at ~29% as on Oct'22). SBICARD, ICICIBC, AXSB and CITI have market share of 18%/16.7%/8.7%/3.6% as on Oct'22.

Average credit card spends declined significantly to Rs3.7k in April'21 post the pandemic. However, with the pick-up in economic activities, credit card spending has increased and now the average per credit card spend has increased to Rs16.3k as on Oct'22.

IIB had the highest spends per credit card at ~Rs 37.9K in Oct'22 followed by American Express at Rs24.7K and KVB & SIB at Rs24K each. However, these banks' base is lower and hence their average credit card spend is relatively higher. Customer segmentation would also be an important determinant of spends per credit card. American Express, HDFCB and CITI with a higher customer base and customers per card spend stand in the range of Rs18k-23k.

## POS terminal based growth remains healthy

In the last two years, there has been no change in the banking system's overall ATM network, growing merely at 1.8% CAGR in the last two years to 2.2 lakhs as on Oct'22 while the ATM transaction value has increased at 4% CAGR during the same period. Of the total retail transactions (in value terms), the contribution of debit card transactions through ATM has fallen to ~5.5% in Oct'22 from 8.1% in May'20. SBIN has the highest market share in number of ATMs at 30.3% followed by HDFCB, ICICIBC and AXSB at 8.7%, 7.6%, and 7.3% as on Oct'22.

POS terminals' network expansion has been robust and the number of POS terminals has grown at a CAGR of 25.5% in the last two years to 72.1 lakhs as on Oct'22. The industry has added a total of 11.4mn POS terminals in the last 7 months vs 13mn in FY22. On an incremental basis, HDFCB has added the highest number of POS terminals in the last 7 months followed by AXSB and ICICIBC. The top 5 banks (HDFCB, AXSB, ICICIBC, RBK and SBIN) have recorded market share of 20.3%, 17.9%, 16.3%, 12.3% and 13.9%, respectively.

## Growth momentum in UPI / IMPS transactions continues to moderate

Banking sector's total UPI transactions in value/volume terms have been moderating and increased by 57% YoY/73% YoY in Oct'22 vs average growth of 85% YoY/102% YoY for the last 7 months. UPI transactions in value/volume terms now contribute 26%/7.63% of total retail payments (in value/volume terms). Average ticket size stood at Rs1,658 vs Rs1,777 in March'22 (Rs1,829 in Oct'21). In Oct'22, all the large banks held on to their market share in overall UPI volume. SBIN, HDFCB, AXSB, ICICIBC and PAYTM market share in terms of volume stood at 25.7%, 8.6%, 4.8%, 5.2% and 4.7%, respectively as on Oct'22.

Total IMPS transactions in volume/value terms have been declining and are at more than two years' low of 25.7% YoY/12% YoY as on Oct'22. The composition of IMPS transactions (in value terms) in total retail payments increased to 8.57% from 7.6% in Mar'22. Moreover, the average ticket size increased to Rs9,661 vs Rs9,396 in Mar'22 while in Oct'21 it was at Rs8,608. The market share of key large banks remained largely stable on MoM basis. SBIN, HDFCB, BOB, PNB and ICICIBC market share in terms of volume stood at 22.6%, 8.3%, 7.4%, 5.6% and 4.6%, respectively as on Oct'22.

## Mobile transactions; SBIN and large PVBs have gained significant market share

Overall mobile banking transactions have been witnessing a significant traction for the last couple of years post pandemic and have increased at a CAGR of 58%. Total mobile banking transactions by value have increased from Rs3.64trn in April'20 to Rs198.1trn in Oct'22. There has been a contraction in average ticket size of this platform to Rs2,532 as on Oct'22 vs Rs3,005 in Oct'21.

PayTM had been gaining market share at a fast pace in terms of volume and its market share remained above 20% prior to Oct.'18. But, over a period of time, its share has gradually declined to 4.1% as on Oct'22. Moreover, SBIN, AXSB, HDFCB and ICICIBC have gained significant market share in mobile payment transactions and the same stands at 27.7%, 14.9%, 8.4% and 5.1%, respectively as on Oct'22.

In terms of transactional volume, SBIN and AXSB are the market leaders with a market share 23.7% and 15%, respectively while HDFCB has gained significant market share over the years to 8.4% as on Oct'22 (1.8% in Jan'2018).

Market share movement: No. of outstanding credit cards									
	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Mkt sh. (%) 31-10-2022
HDFCB	-169.15	-156.76	-141.59	-124.21	-91.54	-199.43	-203.39	-212.56	20.85
SBICARD	-35.39	-60.28	-76.01	-98.88	-119.51	-38.67	-26.30	-12.41	19.11
ICICIBC	56.96	23.65	-7.31	-37.76	-62.18	-5.26	-84.35	-98.17	17.06
AXSB	75.53	75.37	90.17	96.66	97.58	-5.16	-19.89	-20.62	11.45
RBK	22.85	16.74	11.85	7.72	15.05	48.26	51.02	35.48	5.25
CITI Bank	-77.92	-81.75	-86.72	-89.82	-92.65	-77.33	-80.85	-77.74	3.12
KMB	45.75	85.25	98.22	116.51	128.20	148.28	178.12	186.54	5.69
IIB	9.11	7.22	6.32	7.91	-23.75	-13.46	-5.87	-5.96	2.48
AMEX	-59.09	-59.67	-61.84	-63.19	-62.72	-54.44	-55.28	-52.71	1.64

Source: RBI, Nirmal Bang Institutional Equities Research

Market share movement: Credit cards transaction value									
	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Mkt sh. (%) 31-10-2022
HDFCB	-248.48	-88.57	-67.38	-72.16	54.95	238.72	140.54	275.58	29.03
SBICARD	76.96	-5.68	-53.29	-214.22	-243.43	-127.29	75.29	-85.89	18.00
ICICIBC	284.47	197.67	98.07	98.65	100.22	-175.56	-221.06	-465.60	16.72
AXSB	-36.94	-9.11	8.42	100.88	46.24	39.65	237.11	-36.50	8.74
CITI Bank	-141.69	-112.59	-98.00	-95.18	-121.13	-111.81	-135.37	-71.64	3.57
RBK	-58.77	-93.90	-108.75	-70.08	-57.34	-32.53	-35.11	7.53	4.20
KMB	41.72	33.28	39.20	62.21	67.82	76.75	-0.49	68.00	3.22
IIB	64.72	78.56	179.14	100.28	46.72	-45.48	-147.71	99.15	5.75
AMEX	-51.24	-40.03	-53.69	-12.56	-37.98	-46.83	-59.82	-46.47	2.49

Source: RBI, Nirmal Bang Institutional Equities Research

Market share movement: No. of outstanding debit cards									
	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Mkt sh. (%) 31-10-2022
SBIN	-258.76	-220.12	-232.95	-237.05	-214.73	-173.14	-160.72	-154.23	29.52
BOB	83.97	88.50	88.60	87.64	74.28	69.32	65.05	73.45	8.35
PayTM	-311.03	-312.32	-311.90	-308.16	-312.57	-321.10	-324.07	-322.49	4.02
UNBK	30.77	30.86	34.70	39.21	35.24	34.31	36.93	39.10	5.36
PNB	6.46	1.49	3.05	6.82	18.57	4.65	3.34	10.46	4.89
CBK	51.12	54.38	48.93	37.09	33.23	35.85	41.26	30.10	5.11
BOI	24.47	23.05	24.47	25.15	21.93	17.35	12.07	16.72	4.88
HDFCB	60.48	62.14	66.16	71.22	70.73	74.02	77.10	82.75	5.11
ICICIBC	-34.77	-34.52	-33.02	-35.21	-20.71	-22.92	-20.14	-16.92	3.80

Source: RBI, Nirmal Bang Institutional Equities Research

Market share movement: Debit cards transaction value									
	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Mkt sh. (%) 31-10-2022
SBIN	-56.02	-129.99	-181.04	-183.90	-84.86	-60.90	-16.32	-6.44	33.19
BOB	-3.49	-3.63	-20.07	-6.44	-40.67	-12.20	-17.70	-15.35	4.44
PayTM	13.93	9.53	7.21	6.17	5.02	3.24	-0.31	-2.46	0.28
UNBK	7.71	2.17	-25.72	3.02	25.90	26.51	15.27	23.56	5.08
PNB	-13.70	-16.64	-44.78	-73.33	-42.58	-3.72	-17.63	-23.19	5.08
CBK	-12.01	-8.51	4.02	4.79	-12.65	-1.72	1.11	18.58	4.98
BOI	-17.12	-12.71	-28.45	-27.75	-24.09	-20.49	-30.98	-10.13	2.42
HDFCB	53.62	96.34	102.38	89.96	130.13	94.61	76.66	76.10	10.49
ICICIBC	-16.75	1.31	13.52	-1.97	-8.99	-16.35	-14.99	-60.69	6.09

Source: RBI, Nirmal Bang Institutional Equities Research

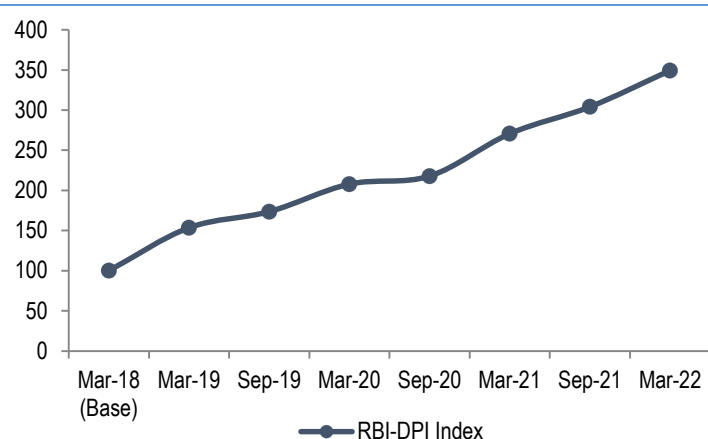
Growth YoY (%) across digital payment system								
	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
RTGS Volume	13.94	29.25	59.09	26.33	13.00	13.19	13.71	3.44
RTGS Value	14.37	29.46	36.61	21.98	6.87	14.98	22.92	11.82
NEFT Volume	23.92	30.56	48.65	37.60	26.76	29.45	28.96	27.86
NEFT Value	14.65	22.11	39.98	29.47	19.19	19.09	20.80	10.11
Mobile Transaction Volume	74.02	83.93	115.87	94.79	14.53	12.53	55.50	74.85
Mobile Transaction Value	32.62	67.29	95.24	65.94	6.13	4.22	52.70	47.32
IMPS Volume	35.48	46.03	73.26	50.02	31.76	23.54	20.22	12.03
IMPS Value	41.27	48.46	69.89	56.24	43.84	40.05	40.41	25.73
UPI Volume	97.89	111.39	134.50	108.82	93.62	85.05	85.56	73.17
UPI Value	90.26	99.18	112.28	85.32	75.33	67.86	70.62	57.05

Source: RBI, Nirmal Bang Institutional Equities Research

Avg. ticket size (Rs) across digital payment system								
	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
Debit card	3,115	3,096	3,020	2,929	2,916	2,859	2,810	3,086
Credit card	14,594	14,070	14,832	13,857	14,478	14,452	15,818	16,343
RTGS	571,537	503,865	506,410	561,187	527,866	549,684	613,605	529,422
NEFT	8,096	6,685	6,679	6,752	6,538	6,316	6,747	5,966
Mobile	2,881	2,817	2,732	2,740	2,610	2,531	2,584	2,532
IMPS	9,396	9,429	9,330	9,738	9,647	9,552	9,835	9,661
UPI	1,777	1,761	1,749	1,730	1,690	1,630	1,646	1,658

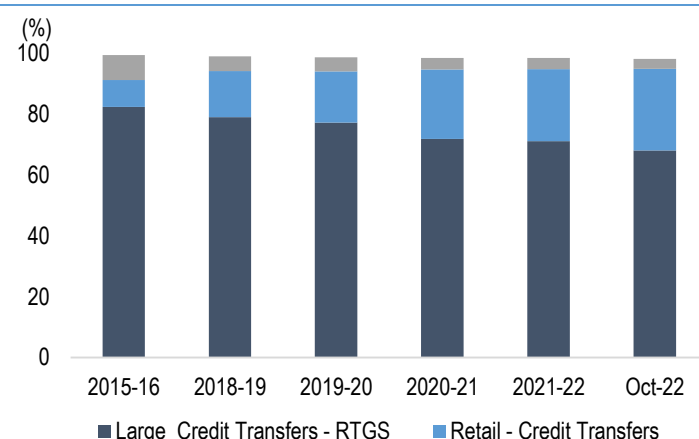
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 1: The RBI's Digital Payment Index has increased 3.5x in last 5 years**



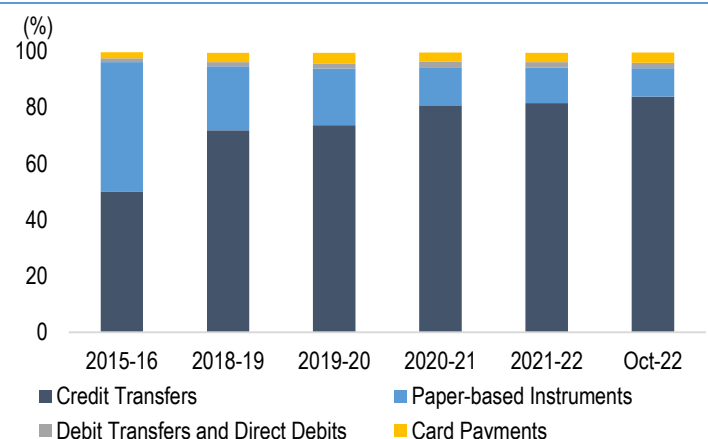
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 2: Proportion of retail transfers increasing gradually**



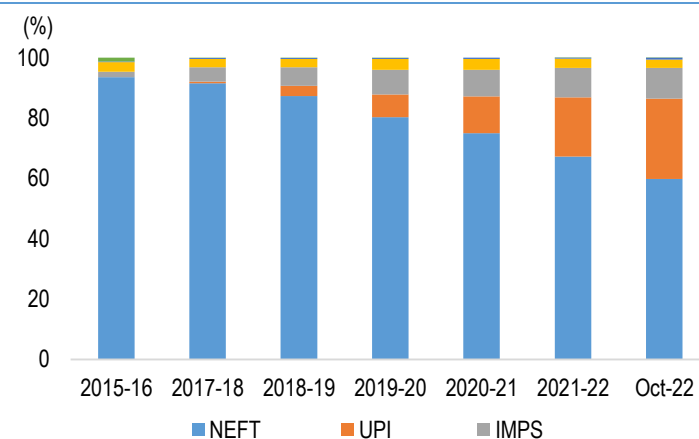
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 3: Paper-based transactions are being substituted by digital transactions**



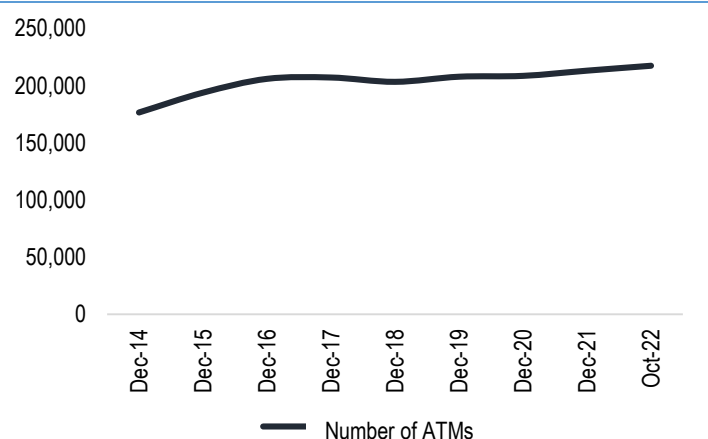
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 4: UPI/IMPS gaining market share in retail credit transfers**



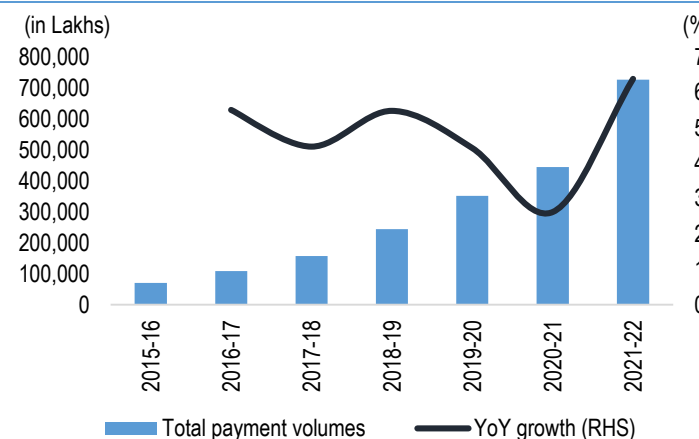
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 5: Number of ATMs increasing at lower pace**



Source: RBI, Nirmal Bang Institutional Equities Research

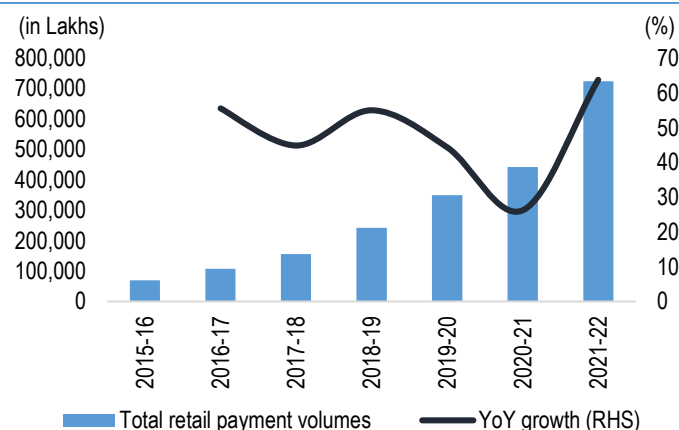
**Exhibit 6: Total payment volume growth has been strong**



Source: RBI, Nirmal Bang Institutional Equities Research

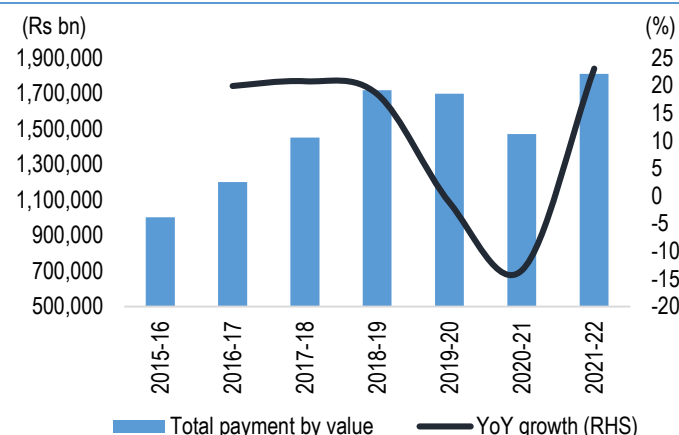


**Exhibit 7: Total retail payment volume growth being led by digital payments**



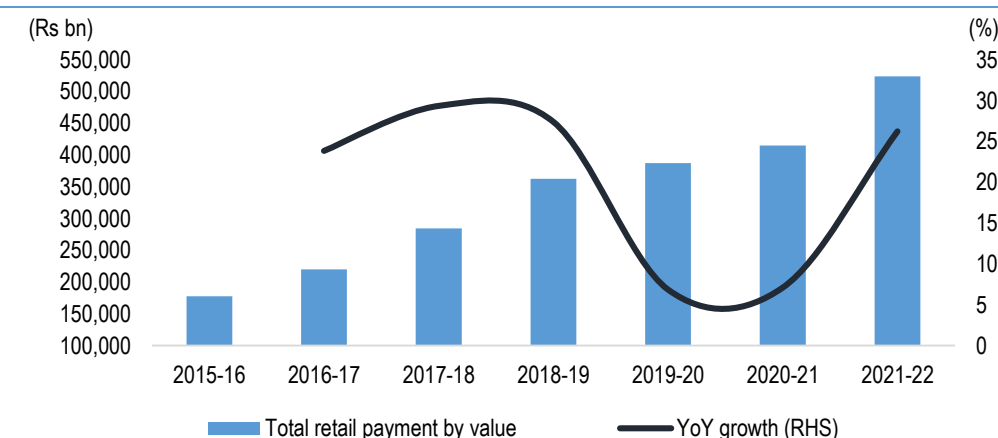
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 8: Total payment value increased at a CAGR of 8.5%**



Source: RBI, Nirmal Bang Institutional Equities Research

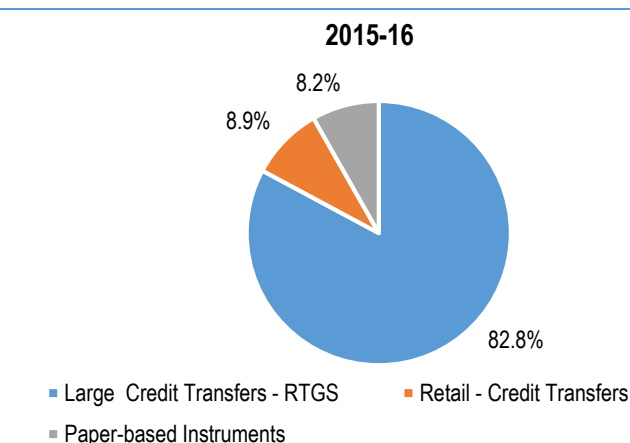
**Exhibit 9: Total retail payment value currently constitutes 32% of total payments and has increased at 16.5% CAGR over the last 5 years**



Source: RBI, Nirmal Bang Institutional Equities Research

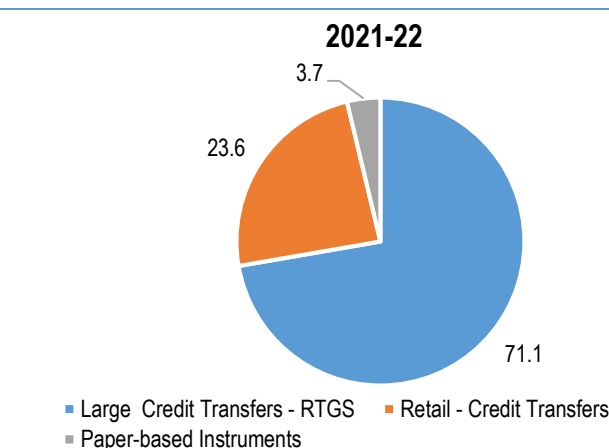
## Composition of retail payments in total payment ecosystem increasing significantly

**Exhibit 10: Market share 2015-2016**



Source: RBI, Nirmal Bang Institutional Equities Research

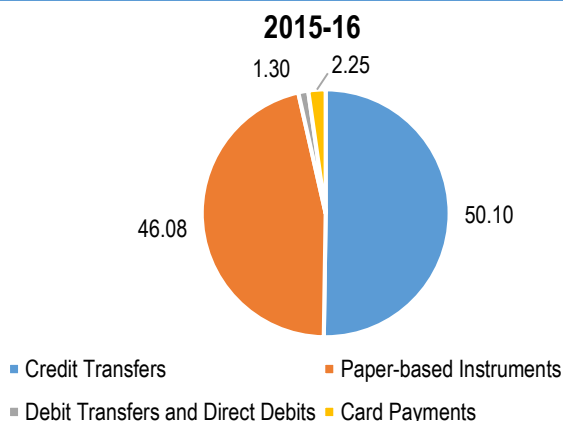
**Exhibit 11: Market share 2021-2022**



Source: RBI, Nirmal Bang Institutional Equities Research

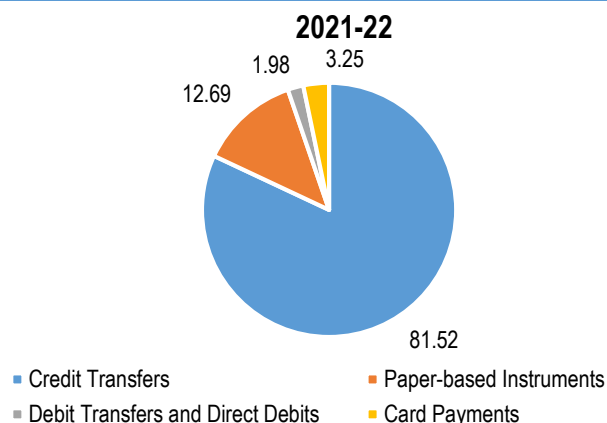
## Composition of paper based instruments declining in retail payments

**Exhibit 12: Total retail system break-up 2015-16**



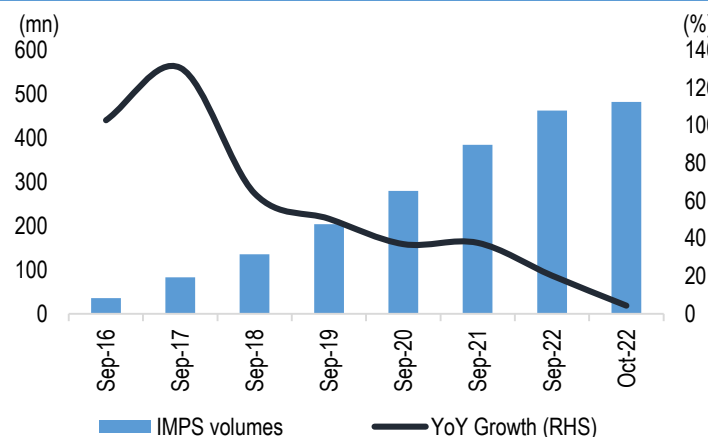
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 13: Total retail system break-up 2021-22**



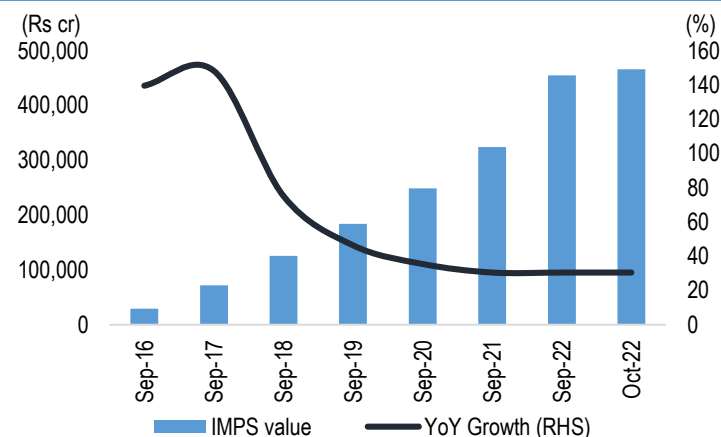
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 14: IMPS transaction volume has increased at 97% CAGR in last 9 years**



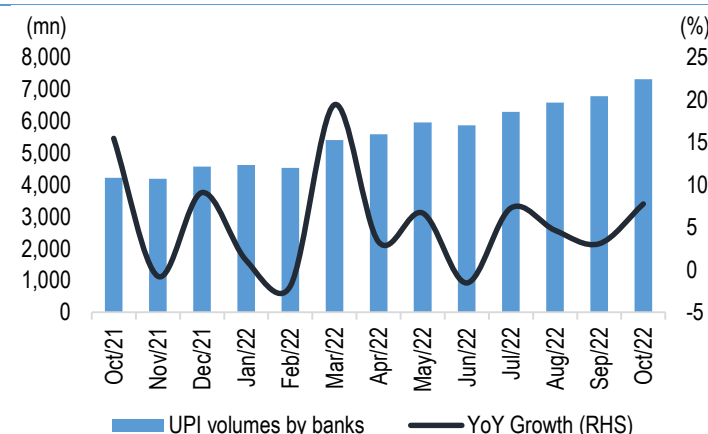
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 15: IMPS transactions volume has increased at 111% CAGR in last 9 years**



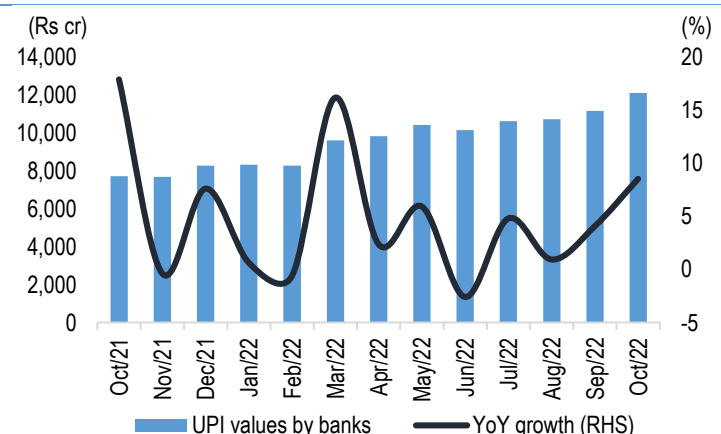
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 16: UPI volume has been increasing significantly**



Source: RBI, Nirmal Bang Institutional Equities Research

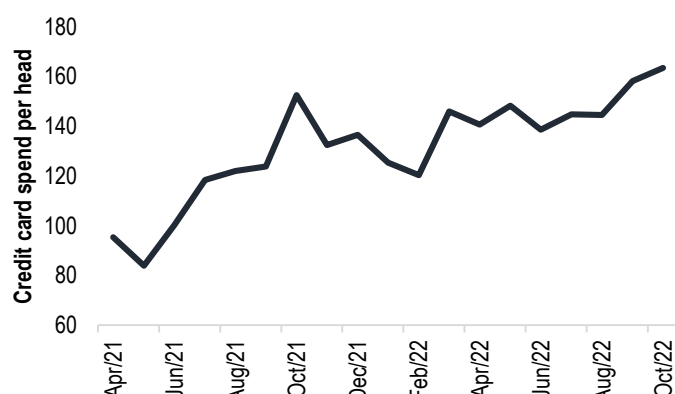
**Exhibit 17: UPI transaction value witnessing significant growth**



Source: RBI, Nirmal Bang Institutional Equities Research

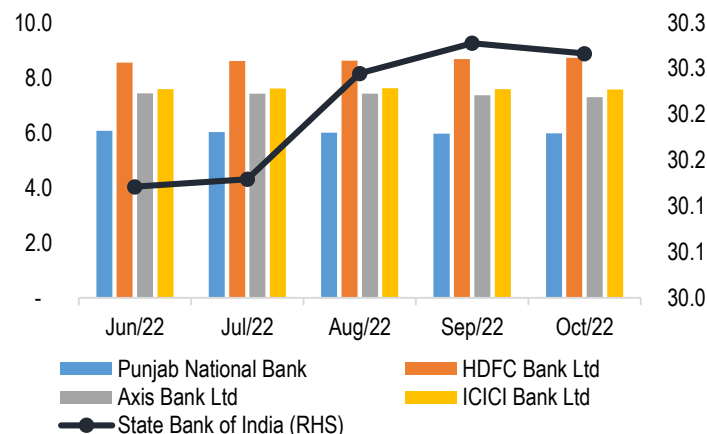


**Exhibit 18: Average spend per credit card (ATM+POS) (Rs in '000)**



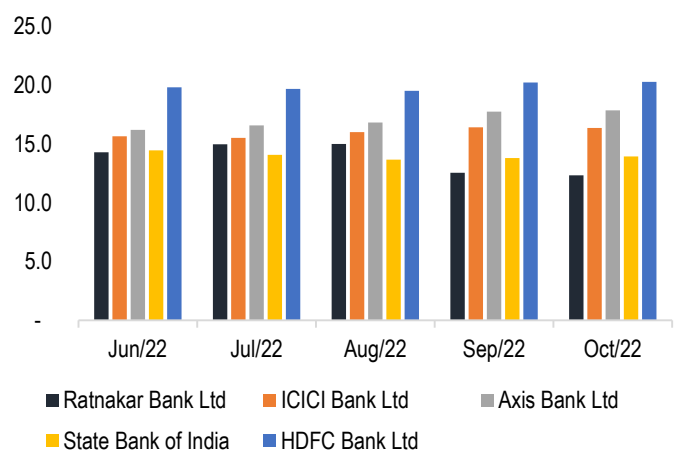
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 19: Top 5 banks constitute ~60% of ATM market share (%)**



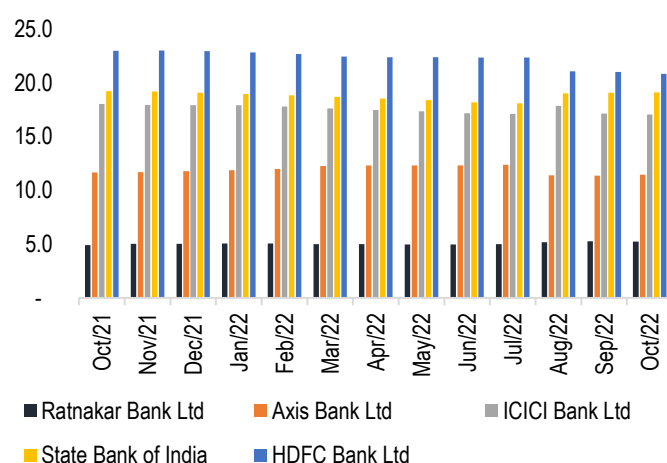
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 20: Top 5 banks constitute ~80% market share (%) in total POS**



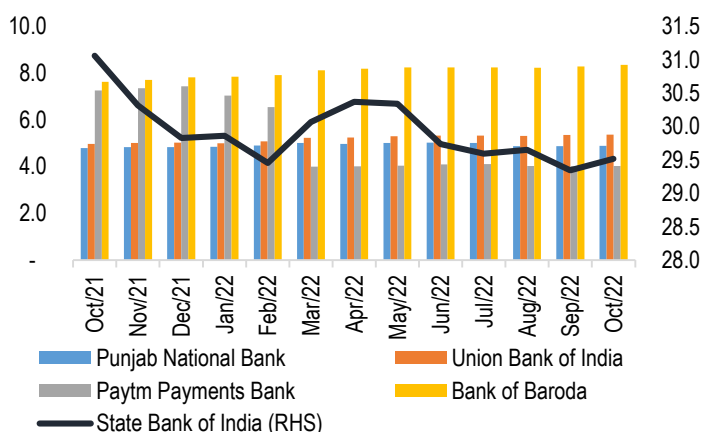
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 21: HDFCB continues to have highest market share (%) in credit cards**



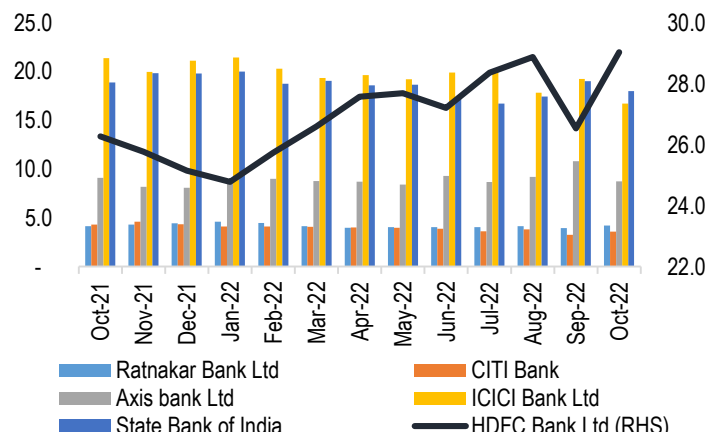
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 22: SBIN continues to have highest market share (%) in debit cards**



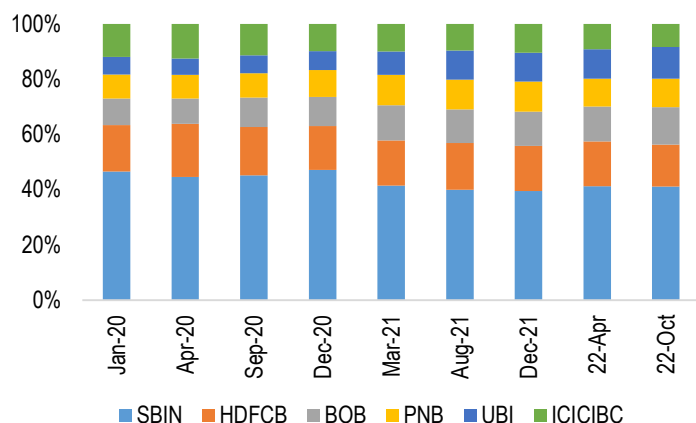
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 23: HDFCB witnessing increase in market share (%) of credit card transactions**



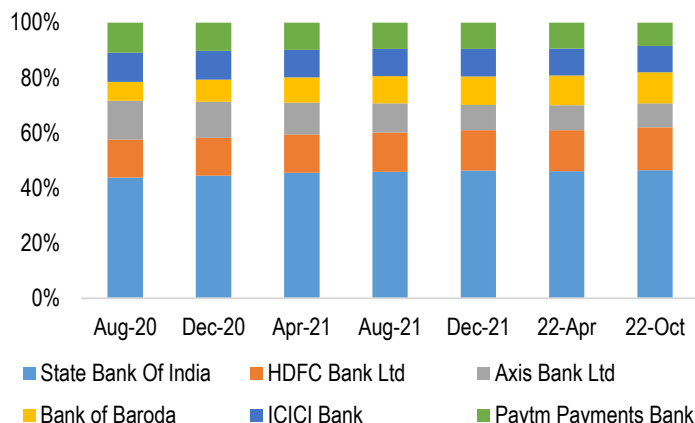
Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 24: SBIN losing IMPS market share (%) still remains at top**



Source: RBI, Nirmal Bang Institutional Equities Research

**Exhibit 25: UPI market share (%) remains relatively stable**



Source: RBI, Nirmal Bang Institutional Equities Research

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BUY > 15%

ACCUMULATE -5% to 15%

SELL < -5%

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