

India Digital Payments Report

H2 2023



Preface

Dear Readers

We are pleased to bring you the latest edition of the 'India Digital Payments Report' for H2 2023. Like the previous edition, this semester's report focuses on India's dynamic digital payments industry. We have analyzed transactions available in public databases and transactions processed by Worldline India during the period July 2023 - December 2023 to derive interesting insights.

The report highlights the changing payment preferences of consumers that are compelling stakeholders to adapt and evolve. UPI continues to remain the undisputed leader, supported by robust growth in mobile transactions – signifying the users' increased comfort and trust with payments through smartphones. The number of PoS terminals has witnessed a record high while mobile payments have become a dominant payment channel. This highlights that Fintechs need to adapt to multiple payment channels.

Worldline India is a beacon of innovation and reliability, offering solutions to meet the payment needs of businesses across all sectors and sizes. This report also features an article on the paramount importance of compliance and its integral role in the fintech business.

We are confident you will find this report to be an insightful read.

Regards



Ramesh Narasimhan
Chief Executive Officer – India, Worldline

Compliance: The Critical Component for Fintech Success¹

While 'compliance' has always been considered important and the mantra to be 'compliant' is non-negotiable, it is often only privy to those within the industry. It has of late become 'news-worthy' and more in the public eye because of the recent action by the Reserve Bank of India against an institution.

So what exactly is compliance and why is it so important for the Fintech industry? Fintech compliance is defined as "The adherence to regulatory laws that govern new business models and technologies in the financial industry. It refers to the processes and policies fintech companies implement to ensure their operations comply with applicable laws, regulations, and industry standards. This may involve managing risks associated with data privacy, cyber security, and consumer protection."²

While it is well known that funding, innovation and agility drive the fintech industry, another crucial factor underpins its success: compliance. Financial regulations are a complicated landscape and might seem like a hurdle, but embracing compliance offers several key benefits that can propel a fintech forward.

First, **compliance acts as a shield against multiple risks**. Failing to adhere to regulations can lead to hefty fines, operational shutdowns among other penalties. These consequences can severely cripple a fintech, jeopardizing its financial health and future prospects not to mention damage to their brand. Conversely, a robust compliance framework demonstrates a company's commitment to responsible practices in writing and practice which mitigates the risk of legal issues while safeguarding itself financially.

Second, **compliance promotes trust with customers**. In an industry that handles sensitive financial data, nurturing trust is paramount. Implementing robust data security measures, complying with privacy regulations, and adhering to practices committed to safeguarding customer information are key. This transparency and accountability not only foster trust but also attract customers who value their financial privacy and security.

Furthermore, **compliance can be good for growth**. Being compliant allows Fintechs to access new markets, forge partnerships with established financial institutions, and attract investors. Regulatory approval opens doors to previously unavailable opportunities because it is deemed as a seal of approval. Additionally, compliance can streamline operations by ensuring processes align with established standards, leading to increased efficiency and cost savings.

However, navigating the complex world of fintech regulations can be a challenge. The regulations themselves may be intricate and constantly evolving, and keeping up with the changing landscape requires dedicated effort.

By prioritizing compliance, Fintechs can build a strong foundation for sustainable growth. It is just not about checking boxes but a strategic initiative that promotes trust, mitigates risks, and increases opportunities for new partnerships and success. In conclusion, compliance should never be seen as a burden but THE cornerstone for building a secure, trustworthy, and thriving business.



Sunil Rongala
SVP – Strategy, Innovation and Analytics

¹ The author has drawn on and synthesized a variety of publicly available resources

² <https://www.linkedin.com/pulse/what-fintech-compliance-how-maintain-cyberarrow/>

Executive Summary

We have analyzed transactions available in public databases* as well as the transactions processed by us in H2 2023 (July – December) and derived some unique insights.

1. The number of PoS terminals breached the 8.5 million mark.
2. 10 banks accounted for 94% of total PoS terminals deployed.
3. UPI continues to dominate payment system and is fast expanding outside India.

Payment Channel	Volume (Million) – H2 2023	Value (INR Billion) – H2 2023
UPI	65770.63	99677.73
UPI P2M	38730.58	25432.12
UPI P2P	27040.05	74245.61
Credit cards	1780.20	9399.86
Debit Cards	1145.84	3020.93
Prepaid Cards	780.33	242
Mobile App	62957.7	152333
Net Banking	2258.22	509595.5

4. Average Ticket Size (INR)

UPI	1515
UPI P2M	656
UPI P2P	2744
Credit card	5276
Debit card	2642
Prepaid Cards	310
Net Banking	223891

5. Credit card transactions (volume and value) have been increasing steadily solidifying its position as the preferred channel for high value transactions. This is being observed on both PoS as well as online transactions.
6. Debit card transactions (volume and value) have been falling steadily – the UPI effect.
7. NETC Fastag is constantly growing and will continue seeing constant growth.

*Sources:

<https://rbi.org.in/>

<https://www.npci.org.in/>

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Worldline India – Data Trends

In H2 2023, the most frequently visited In-Store merchant categories were grocery stores, restaurants, service stations, clothing stores, government services, pharmacies and hospitals which accounted for around 65% in terms of volume and nearly 50% of the total transaction value.

In the online space, e-commerce, gaming, utilities, government and financial services amounted to about 80% of the total transaction volume and about 74% of the total transaction value.

The top 10 states and UTs with the highest number of transactions at physical touch points in 2023 were

Maharashtra, Kerala, Tamil Nadu, Karnataka, Delhi, Telangana, Uttar Pradesh, Gujarat, Jharkhand and West Bengal.



Grocery Stores



Pharmacies



Clothing Stores



Restaurants



Hospitals



Service Stations

Top Merchant Categories: In-Store Transactions

Volume: 65%

Value: 50%



Government Services

Top Merchant Categories: Online transactions

Volume: 80%

Value: 74%



E-Commerce



Gaming



Financial Services



Utilities

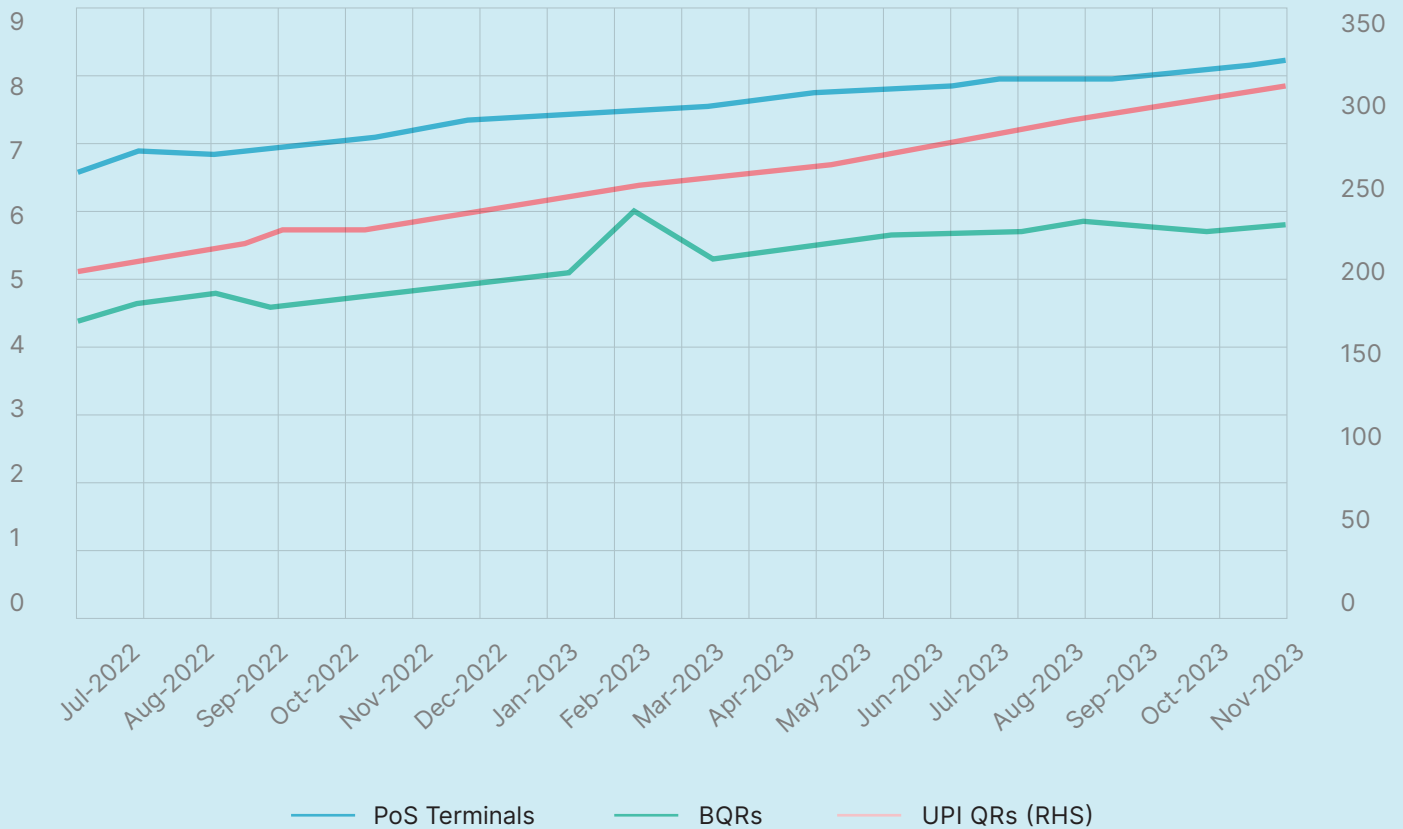


Government

Payments Acceptance Infrastructure

Across the board, payments acceptance infrastructure channels have grown at a good clip. Between July 22 and December 2023, PoS terminals grew by 26% to 8.56 million while BQRs grew by 32% to 5.96 million. The standout, as expected, is UPI QRs which grew by 57% to 317 million. This growth in UPI QRs is also reflected in UPI transactions.

PoS Terminals and QRs (millions)



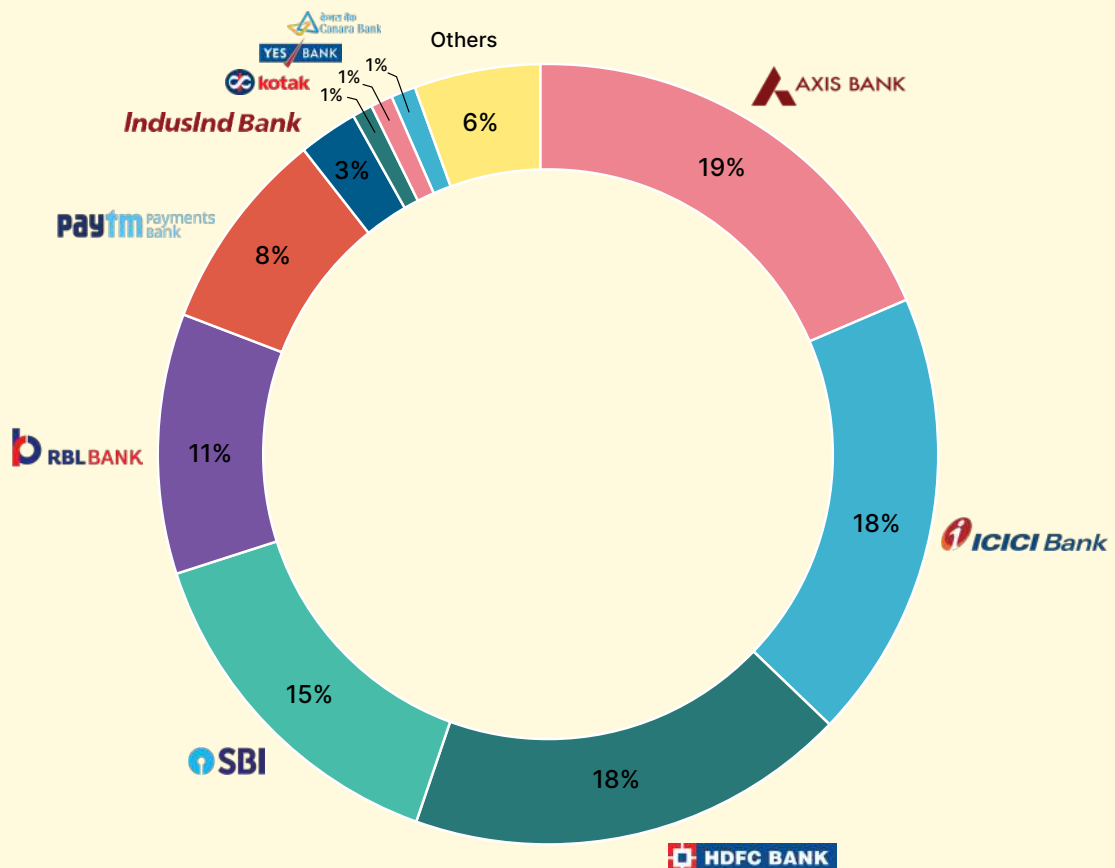
1 trillion = 1,00,000 crore, 1 billion = 100 crore, 1 million = 10 lakh

PoS Market Share

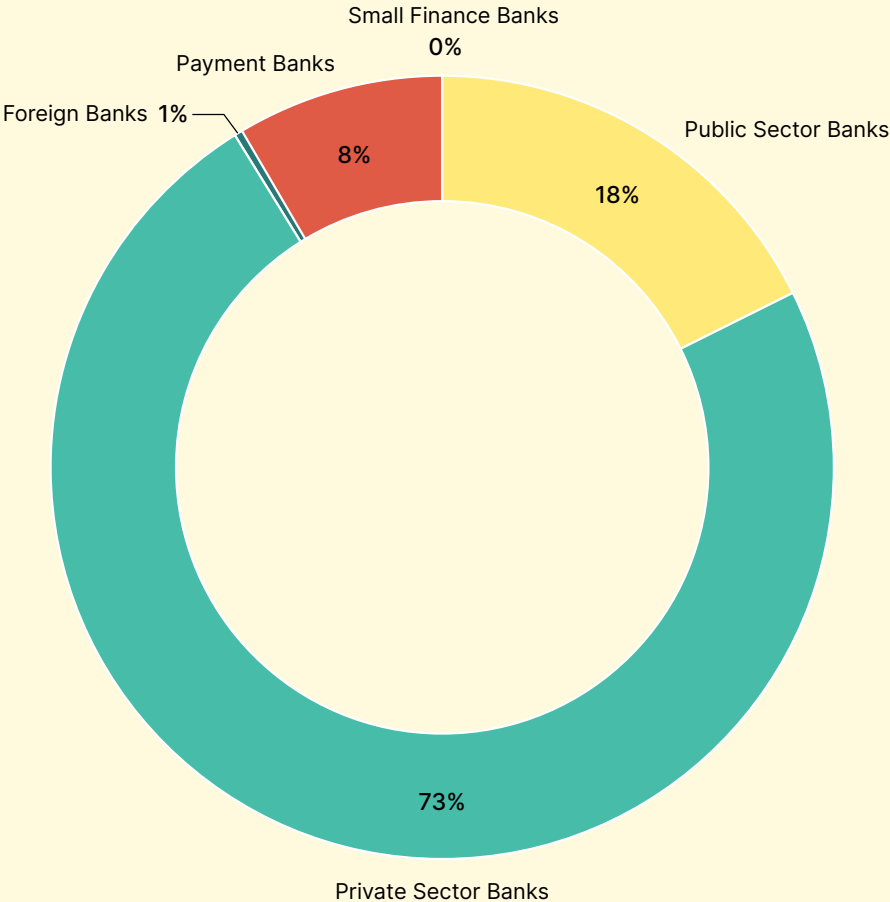


Top PoS deployers:

Axis Bank, ICICI Bank, HDFC Bank, State Bank Of India, RBL Bank, Paytm Payments Bank, IndusInd Bank, Kotak Mahindra Bank, Yes Bank, and Canara Bank accounted for 94% of terminals deployed as of December 2023.



Private Sector banks dominated the space with 73% market share while Public Sector Banks accounted for 18%. Payments and foreign banks continued to have a 8% and 1% market share respectively.



Unified Payments Interface

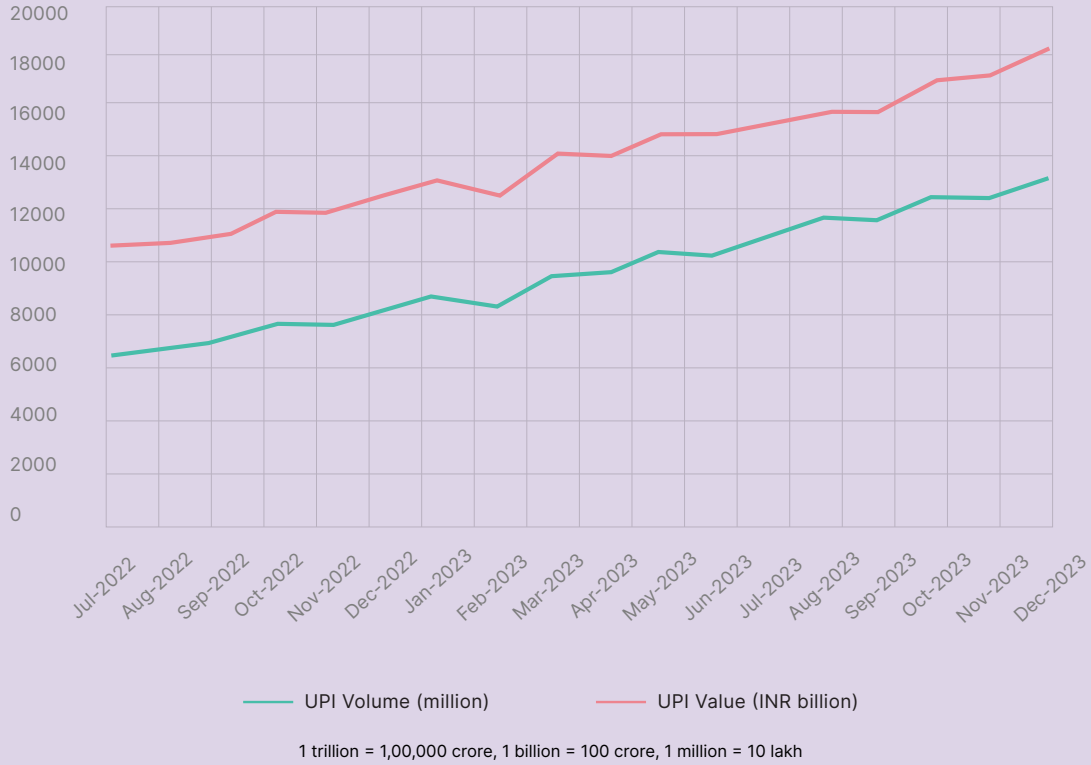


UPI continues to be the ubiquitous payments choice dwarfing other payment options. UPI transactions volume has increased from 8.03 billion transactions in January 2023 to 12.02 billion in December 2023. Correspondingly, the transaction value has exhibited a parallel upward trajectory; it increased from INR 12.98 trillion in January 2023 to an impressive INR 18.22 trillion in December 2023.

When comparing the volume of UPI transactions in H2 2023 to H2 2022, it increased by 56% from 42.09 billion to 65.77 billion. During the same timeframe, the value of transactions increased by 44% from INR 69.36 trillion to INR 99.68 trillion.

However, the interesting number continues to be the average ticket size (ATS) which reduced by 8% from INR 1648 in H2 2022 to INR 1515 in H2 2023. The ATS continues to be on a secular downtrend suggesting a deeper embedding of UPI – it is being used for smaller or micro transactions and this dip is being primarily driven by the growth in person-to-merchant (P2M) transactions.

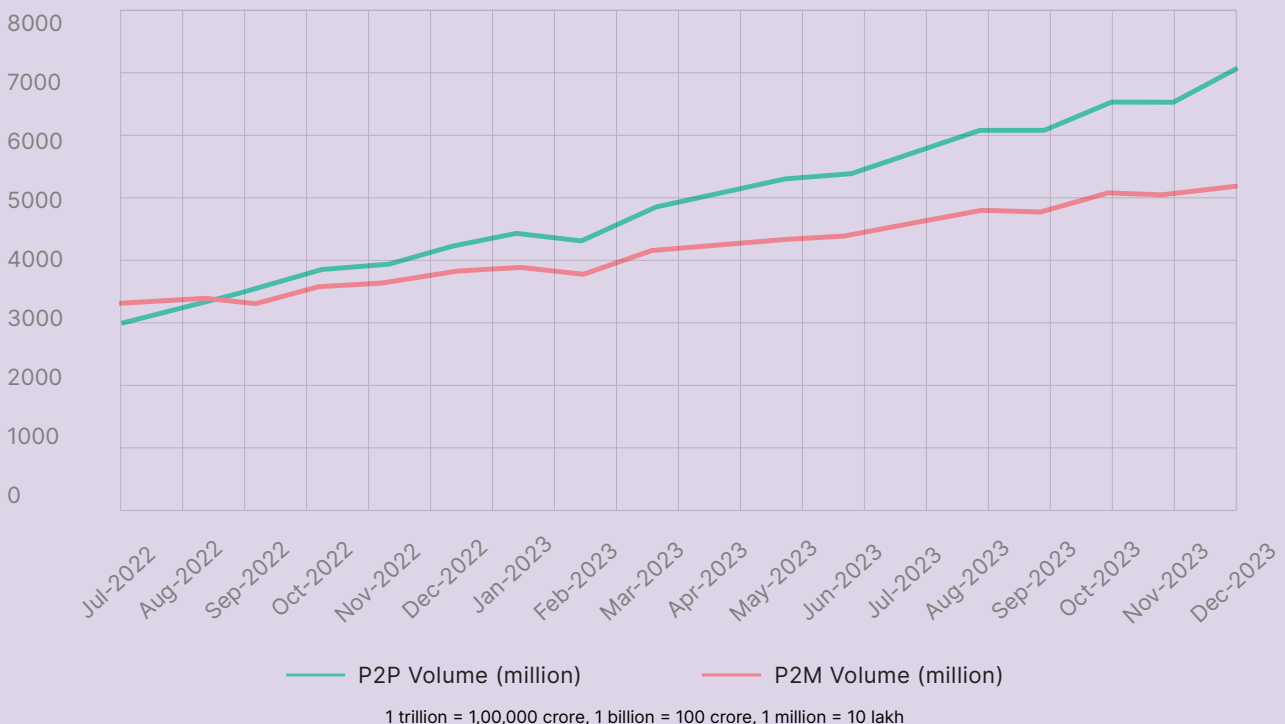
UPI Transactions - Volume & Value



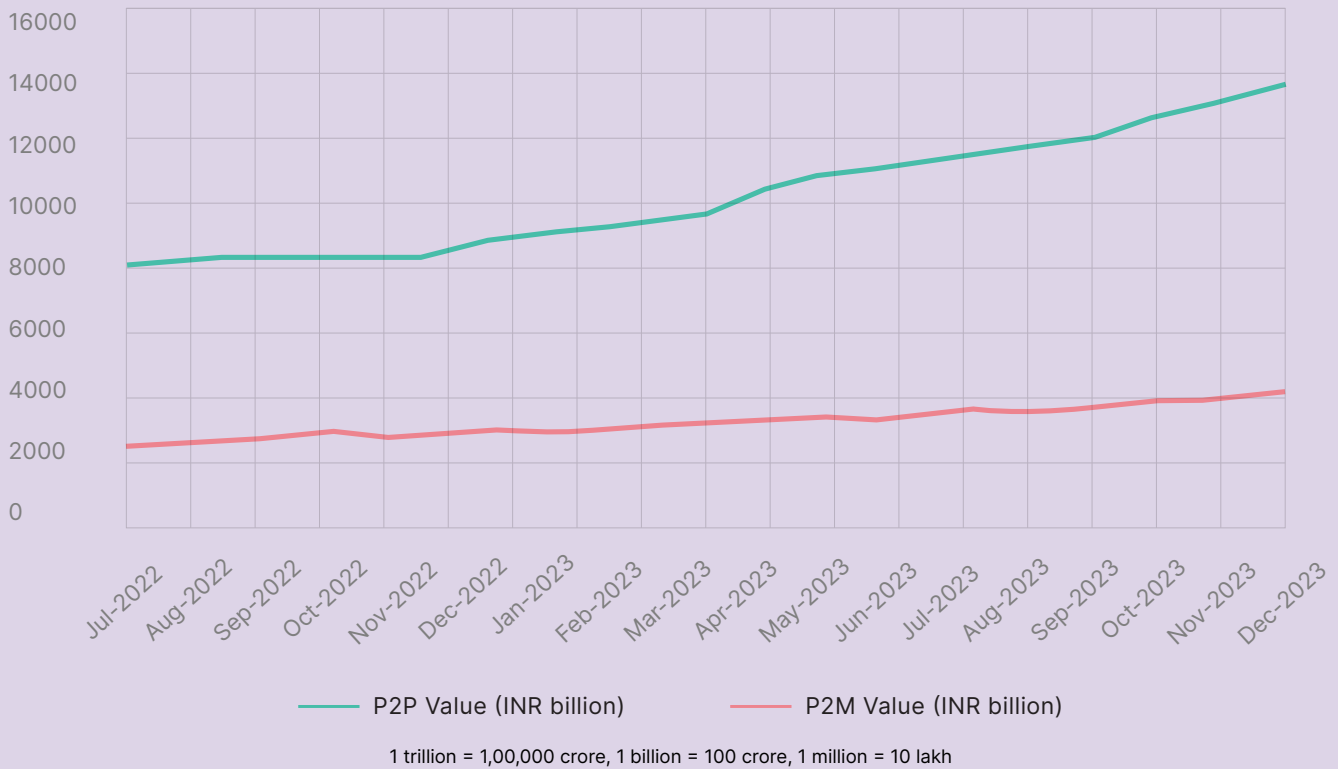
P2P and P2M Transactions

UPI transactions are made up of person-to-person (P2P) and person-to-merchant (P2M) transactions. P2P transactions grew from 20.25 billion transactions in H2 2022 to 27.04 billion in H2 2023; a 34% increase. During the same period, the value of P2P transactions grew from INR 53.69 trillion to INR 74.24, a 38% increase. During the same period, P2M transactions volume grew from 21.84 billion to 38.73 billion, a fantastic 77% increase while the value grew from INR 15.66 trillion to INR 25.43 trillion, a 62% increase.

UPI P2P & P2M Transactions - Volume



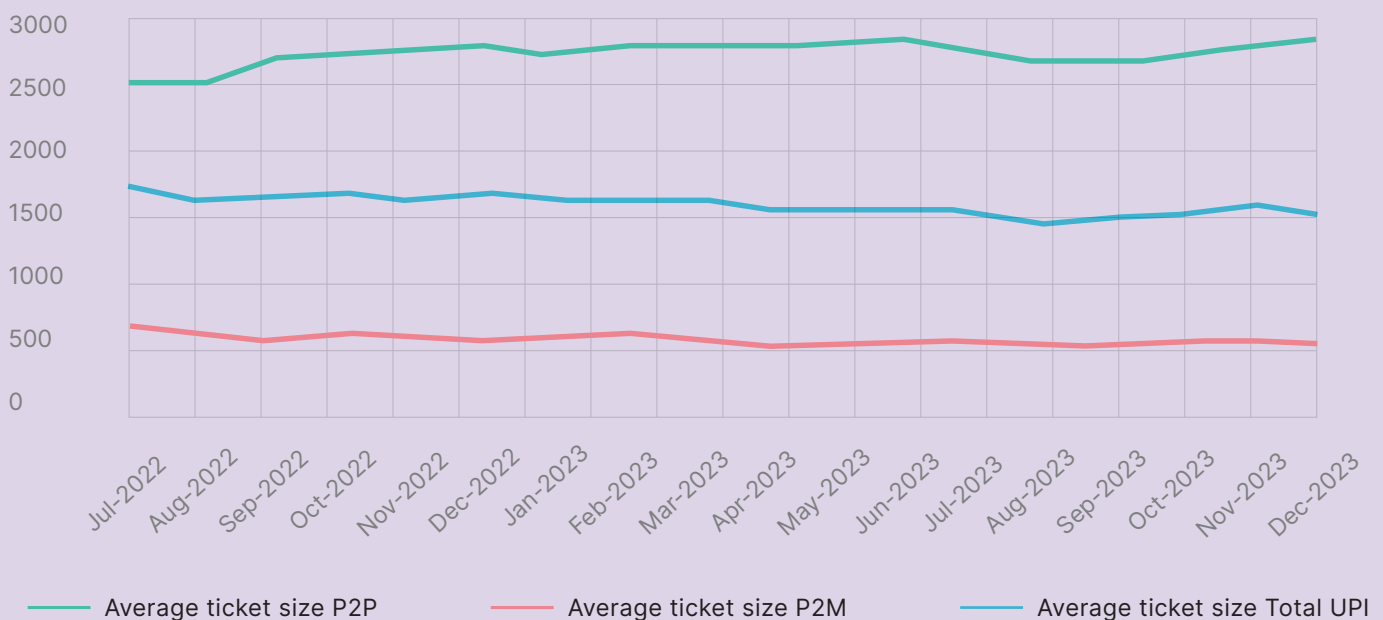
UPI P2P & P2M Transactions - Value (INR billion)



Average Ticket Size

The average ticket size (ATS) of all UPI transactions in H2 2022 was INR 1648 compared to INR 1515 in H2 2023, an 8% decrease. When P2P transactions are considered, during the same period, the ATS grew from INR 2649 to INR 2745, a 4% increase. It is clear that the reduction in overall ATS has been driven by P2M transactions. During the same period, the ATS of P2M transactions fell from INR 720 to INR 656, a 9% reduction. This is a good trend since the future of UPI is going to be P2M transactions and indicates the rise of micro transactions indicating an increasing willingness to use UPI.

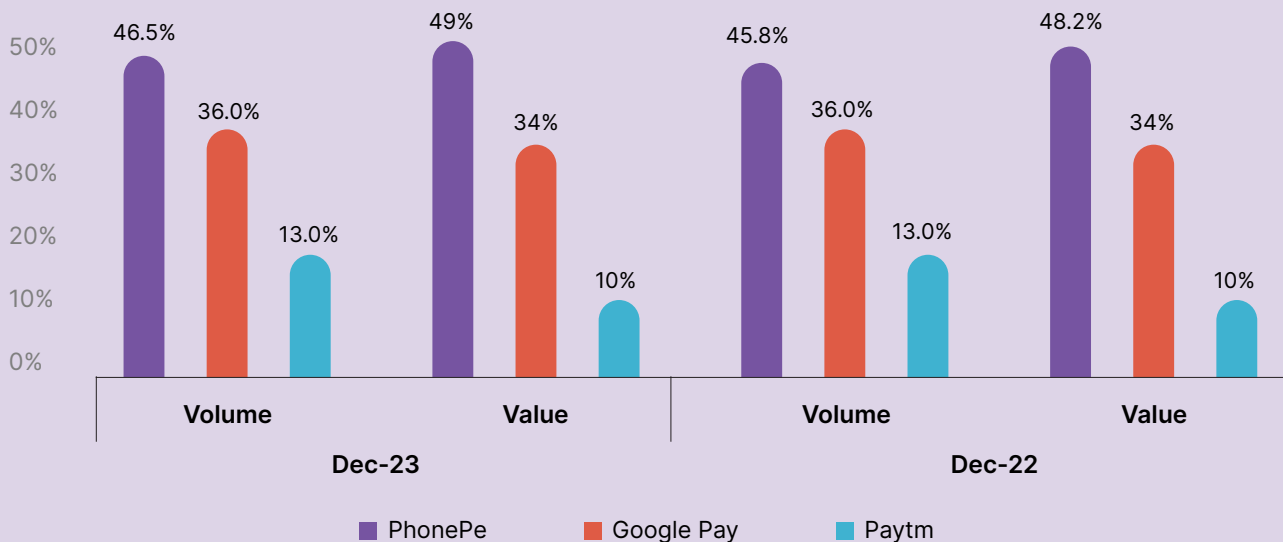
UPI Transactions Average Ticket Size



Top UPI apps, Remitter and Beneficiary banks

3 UPI apps are dominant in terms of volume and value; PhonePe, Google Pay, and Paytm. In terms of transaction volume, in December 2023, the 3 apps accounted for 95.4% of all transactions compared to 94.8% a year before. In terms of transaction value, the 3 accounted for 93% in December 2023 compared to 92.2% in Dec 2022. The dominance is likely a mixture of early mover advantage as well as ease of use and features/discounts/deals offered on the apps.

Top UPI Apps – percentage of volume and value contribution



The top 5 remitter and beneficiary banks (in December 2023) are the below and are being driven by PhonePe and Google Pay; Paytm rides on the rails of Paytm Payments Bank rails while the other 2 use the rails of other banks (Note: this report is for H2 2023 and therefore before the RBI action on Paytm Payments Bank.)

UPI Remitter Banks	Total Volume (In million)
State Bank Of India	3073.2
HDFC BANK LTD	1040.8
Bank of Baroda	766.81
Union Bank of India	745.87
Punjab National Bank	607.36

UPI Beneficiary Banks	Total Volume (In million)
Paytm Payments Bank	2835.3
Yes Bank Ltd	2269.5
State Bank Of India	1252.2
Axis Bank Ltd.	967.52
ICICI Bank	647.97

Highest Transactions MCCs (December 2023)

The top 10 MCCs where the most UPI P2M transactions were done reflect why the average ticket sizes have been reducing while volumes have been increasing. The below MCCs are typically where ticket sizes are smaller but have high transactions volume.

Type	Description
High Transacting Categories	Groceries and supermarkets
	Eating places and restaurants
	Telecommunication services
	Fast food restaurants
	Department stores
	Service stations
	Digital Goods: Games
	P2PM changes
	Bakeries
	Drug stores and pharmacies
Debit card to wallet credit (Wallet top-up)	
Utilities electric, gas, water and sanitary	

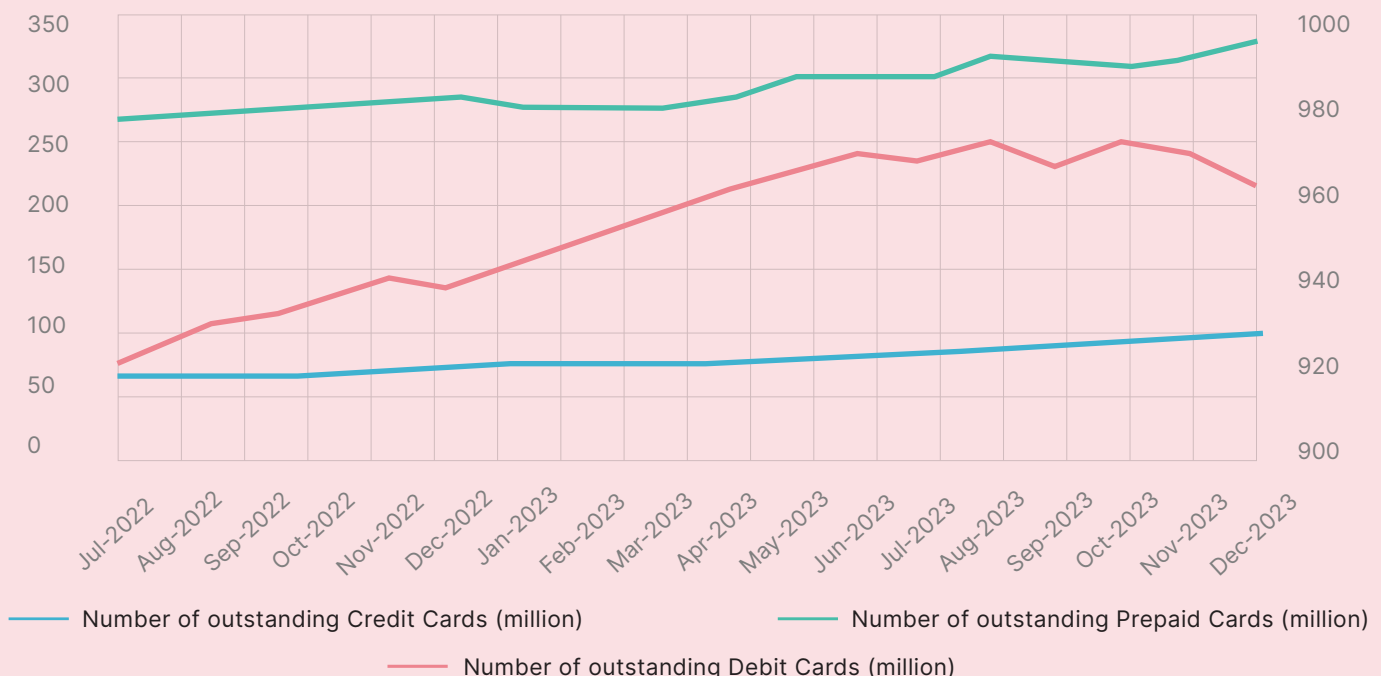
Card Issuance – Credit, Debit & Prepaid Cards

In December 2023, the total number of cards was 1.384 billion, a 6% YoY increase; the number of credit cards was 97.9 million, 960.8 million debit cards and 325 million prepaid cards. This corresponds to a YoY growth of 21%, 2% and 13% respectively. Credit cards have seen an uptick – the YoY growth in June 2023 was 13%.

The top 5 issuers of credit cards were HDFC, SBI, ICICI, Axis and Kotak respectively and the top 5 issuers of debit cards were SBI, Bank of Baroda, Canara Bank, Union Bank of India and HDFC. The contrast between private sector banks dominating credit card issuance and public sector banks dominating debit card issuance is clear suggesting the risk appetite among the former is higher while the latter is focused on providing accounts to a larger section of the population including the unbanked. 71% of credit cards were issued by private sector banks and 24% were by public sector banks while 65% of debit cards were issued by public sector banks and 24% by private sector banks. The balance was issued by payment banks, small finance banks and foreign banks.

That said, given recent notifications from the RBI on credit cards regarding co-branded cards, penalties for late payments, P2P transactions, it remains to be seen whether this will have a negative impact on card issuance, transactions among others.

Credit, Debit & Prepaid cards (millions)



1 trillion = 1,00,000 crore, 1 billion = 100 crore, 1 million = 10 lakh

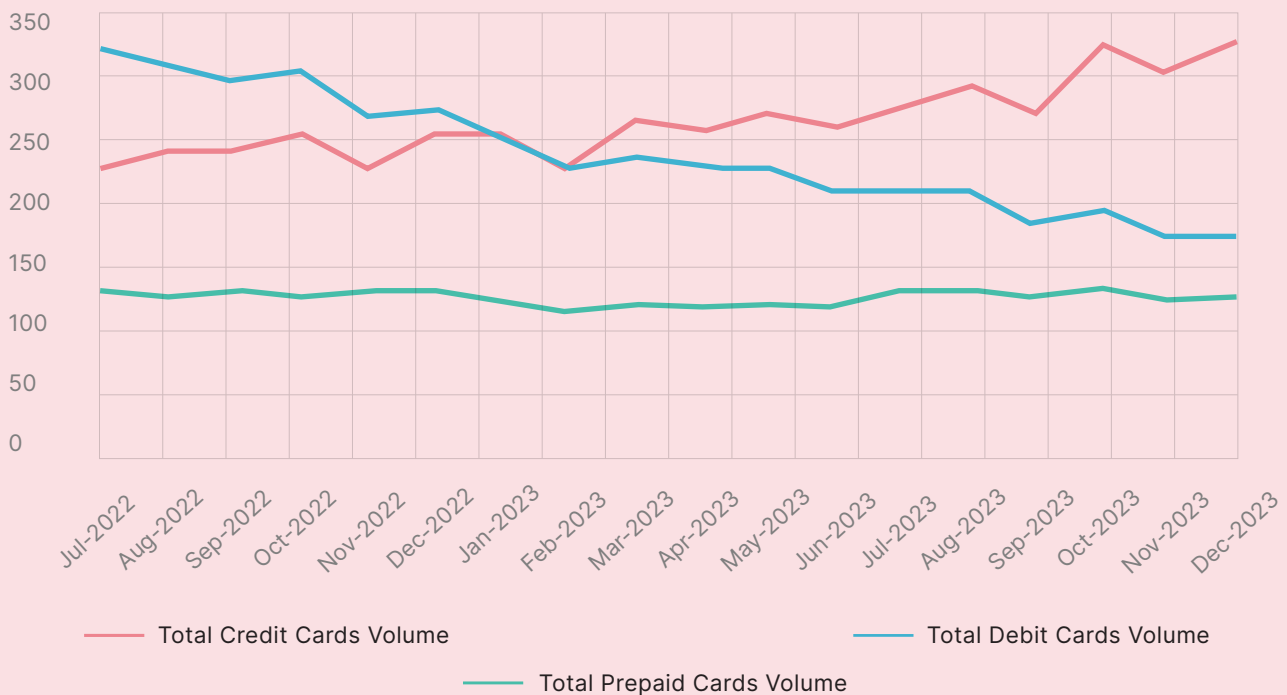
In contrast to card issuance, the volume of card transactions in H2 2023 was 3.70 billion, a fall of 7% from H2 2022. The fall was driven primarily by debit cards; credit card transactions saw an upswing.

Debit card transactions in H2 2023 were 1.15 billion, a 34% drop off from H2 2022 while prepaid card transactions were 0.78 billion, a drop of 2%. Meanwhile, credit card transactions were 1.78 billion, a significant increase of 21% when compared to H2 2022.

The value of card transactions in H2 2023 was INR 12.66 trillion, an increase of 13% from H2 2022. This growth was largely supported by credit cards. Credit card transactions value in was INR 9.39 trillion, a strong rise of 11% from H2 2022 while, during the same period, debit cards transaction value was INR 3.02 trillion, a fall of 16% and prepaid cards were INR 241 billion, a fall of 30%. Credit card have been consistently on the rise; in H1 2022, credit transactions increased by an impressive 30.5% YoY.

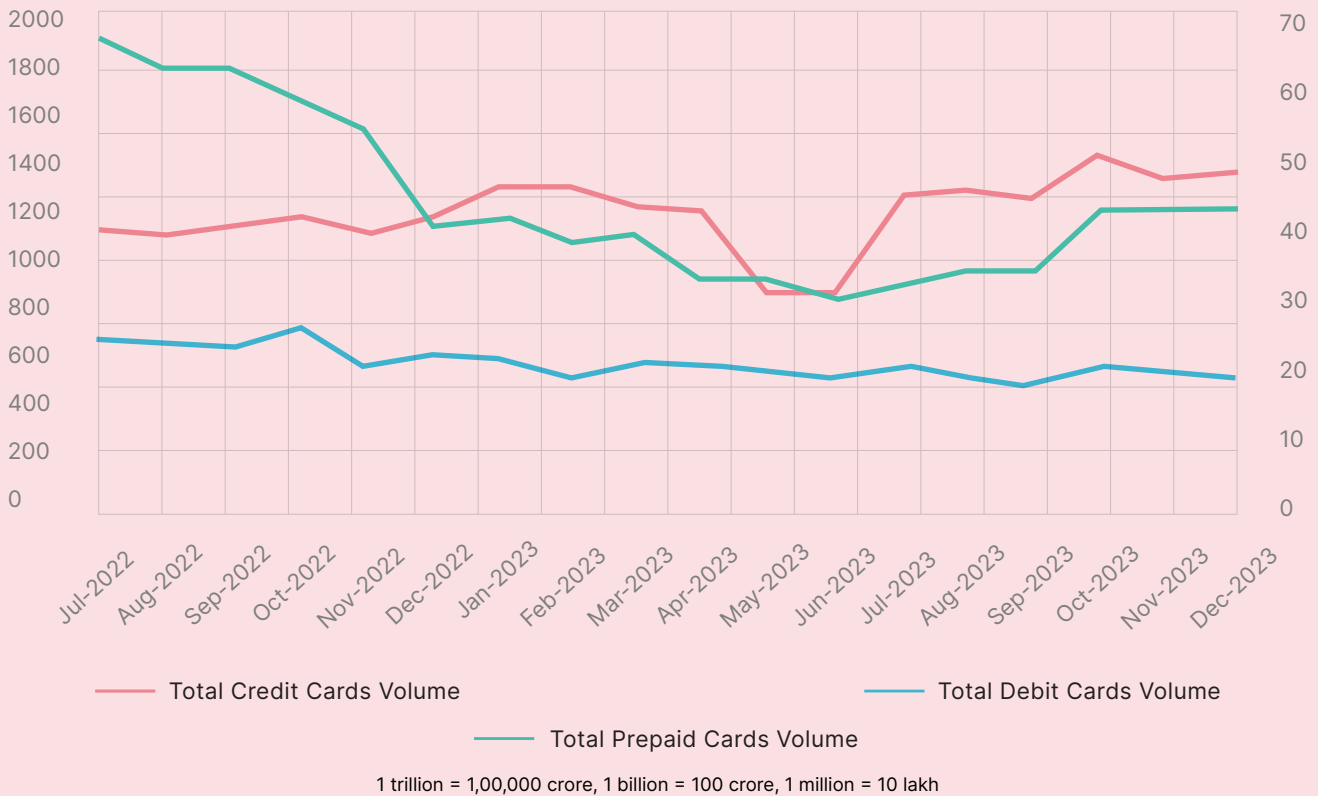
The average ticket size (ATS) for all cards was INR 2742, a 10% YoY increase. This growth was primarily driven by debit card ATS growth. Credit cards ATS in H2 2023 was INR 5276, an 8% growth and prepaid cards ATS was INR 310, a 28% decrease and debit cards ATS was INR 2642, a strong 24% growth. Like the previous half, the growth in debit card ATS suggests that while debit card transactions volume fell, there was still a significant population that used debit cards for their purchases and that ensured that transactions value did not fall parallelly.

Card Transactions Volume (Millions)



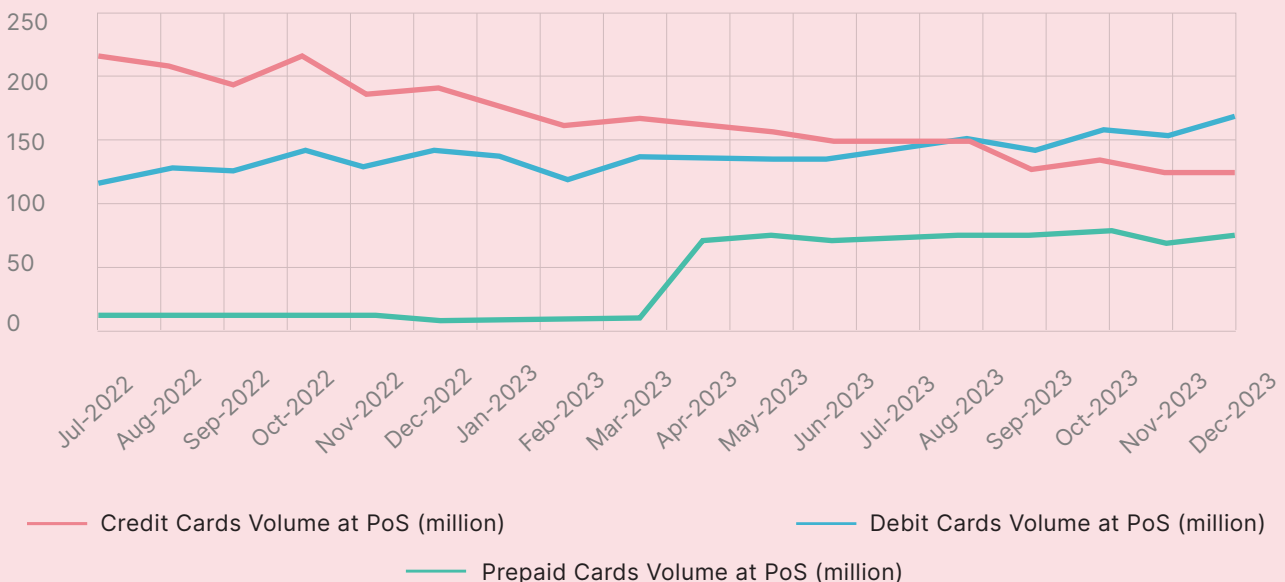
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Card Transactions Value (INR Billion)



Total card transactions volume on PoS terminals in H2 2023 was 2.18 billion, a 8% YoY increase. During the same period, credit card transactions were 925 million, a 14% rise while debit card transactions were 828.75 million, a 29% fall. The fall in debit card transactions can be more or less directly correlated to the rise on UPI transactions. The anomaly in H2 2023, like the previous half, was prepaid card transactions. They were 433 million transactions, an increase of 800% YoY. The data answers why this growth has happened but a clear explanation is not there. The data indicates that in April 2023, the number of prepaid transactions was 67.6 million, a jump from 6.42 million in March 2023. This higher number was more or less steady with 70.9 million transactions in December 2023. The interesting thing here though is that prepaid card transactions for Online have seen a commensurate dip. It is likely that the RBI is considering these transactions as in-store; they were previously considered online transactions.

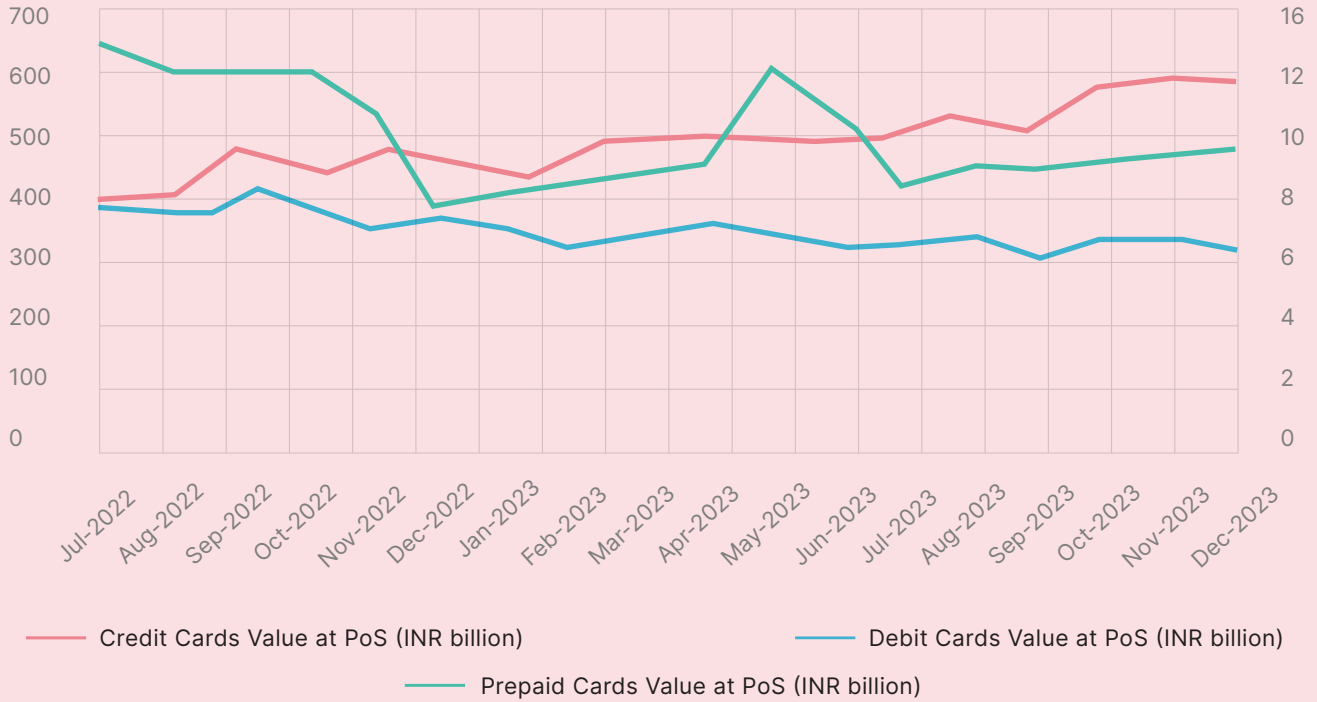
Card Transactions Volume on PoS (Millions)



1 trillion = 1,00,000 crore, 1 billion = 100 crore, 1 million = 10 lakh

The value of card transactions on PoS in H2 2023 was INR 5.31 trillion, compared to INR 5.33 trillion a year before. During the same time period, the value of credit card transactions was INR 3.27 trillion, a very healthy growth of 16% while debit card transactions value was INR 1.99 trillion, an 18% drop while prepaid cards was INR 52 billion, a fall of 20%.

Card Transactions Value on PoS (INR Billion)

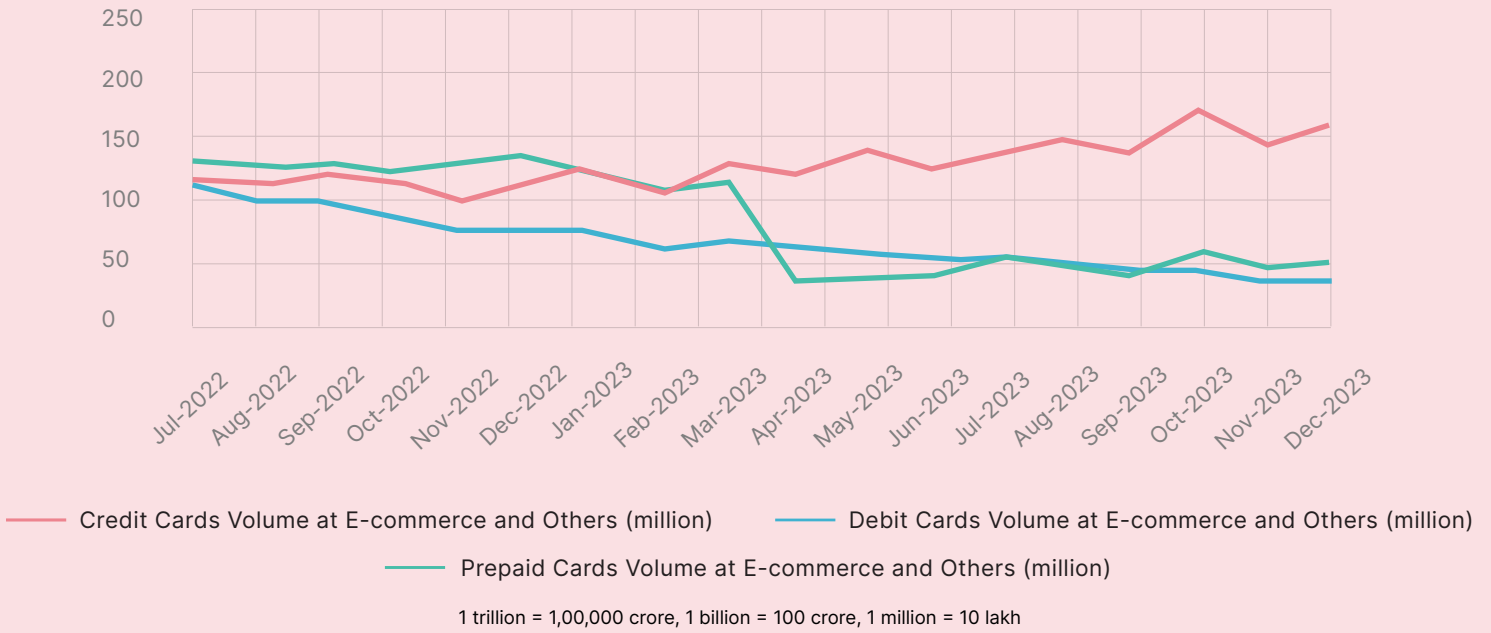


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The ATS for PoS transactions was stable for credit and debit cards while prepaid cards had a precipitous fall. The ATS for credit cards at PoS was INR 3533 for H2 2023 (INR 3511 in H1 2023) while it was INR 2401 for debit cards (INR 2083 in H1 2023). The ATS growth of debit cards is actually positive despite a fall in transactions volume and value. Prepaid cards ATS was INR 120 in H2 2023 compared to INR 1393 in H2 2022 but it is a result of the increased transactions volume.

Total card transactions volume for online transactions in H2 2023 saw a dip of 23% to 1.51 billion when compared to H2 2022. During the same time period, credit card transactions increased by 29% to 854.5 million while debit cards fell by 44% to 317 million and prepaid cards fell by 54% to 347 million. As mentioned earlier, between April and December 2023, prepaid card transactions rose sharply for PoS transactions but fell sharply for online transactions.

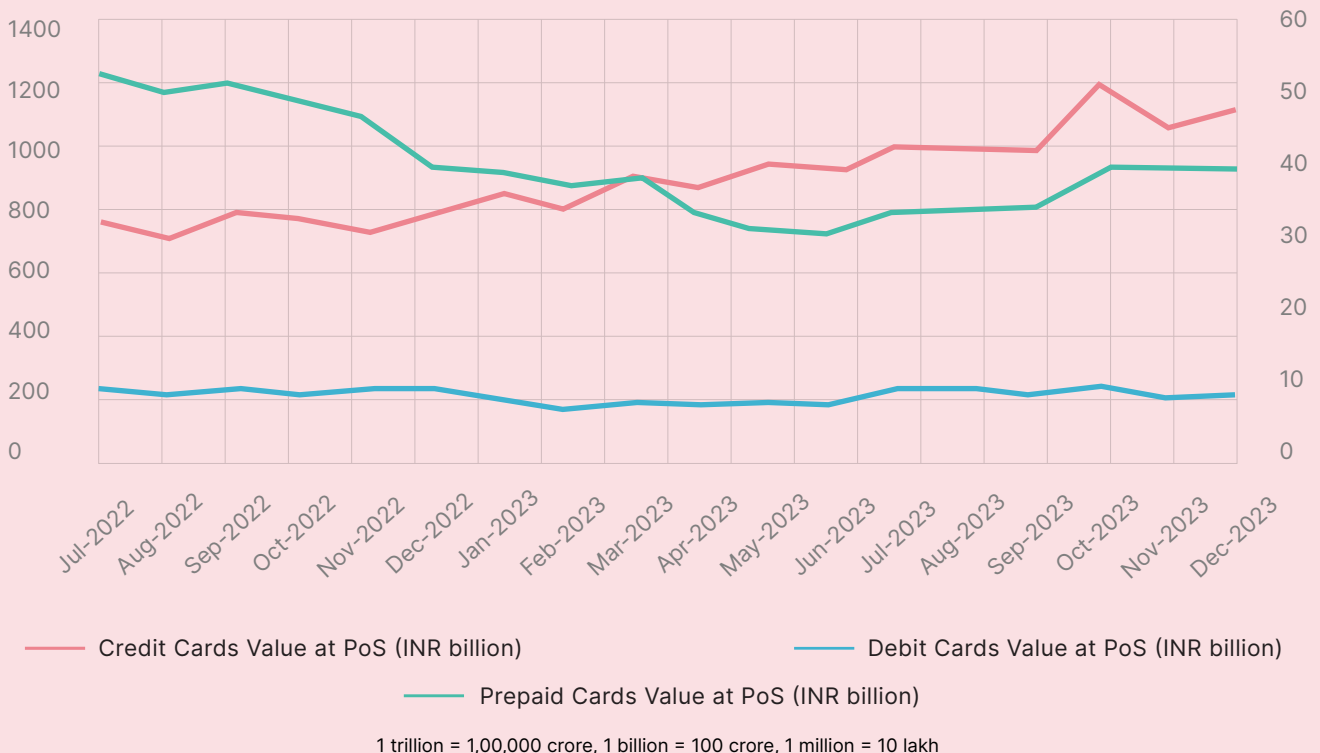
Card Transactions Volume for Online (Million)



In contrast, the value of total card transactions in H2 2023 for online transactions rose by 24% to INR 7.34 trillion when compared to H2 2022. During the same time period, credit card transactions value rose by 40% to INR 6.12 trillion while debit cards fell by 18% to INR 1.03 trillion and prepaid cards fell by 32% to INR 190 billion. This is largely indicative that UPI transactions are crowding out other channels on both PoS and Online but credit cards spends are increasing because of increased consumption for higher value goods and services.

The ATS for online transactions saw a positive jump in H2 2023 when compared to H2 2022 for all categories; credit cards – INR 7172 (9%), debit cards – INR 3250 (47%), prepaid cards – INR 546 (47%).

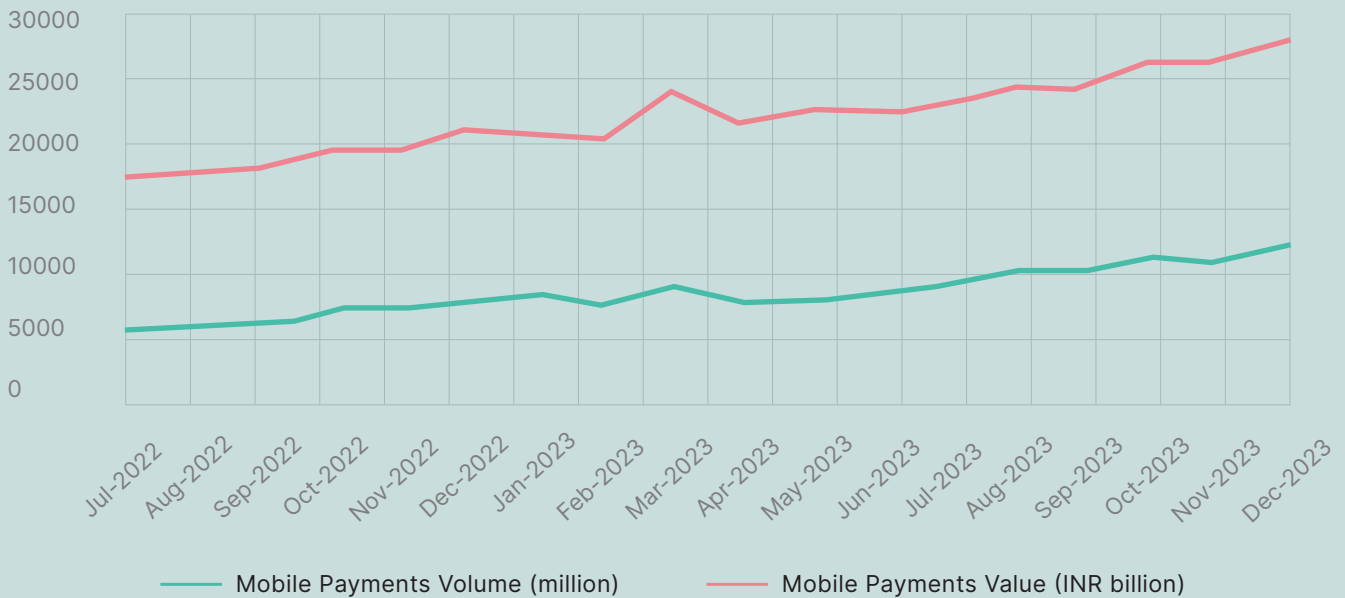
Card Transactions Value for Online (INR Billion)



Mobile Payments

Mobile payments, which are transactions done using mobile phone apps, have seen solid growth. A significant number of these transactions are UPI-based but could be a whole host of payments using bank accounts etc. The volume of mobile transactions in H2 2023 was 62.95 billion compared to 45.58 billion in H2 2022, a 38% increase while the value of mobile transactions in H2 2023 was INR 152.33 trillion compared to INR 116 trillion in H2 2022, a 31% increase. Another comparison shows the real growth; between January 2023 and December 2023, the volume was up 34% while the value was up 33%.

Mobile App Payments



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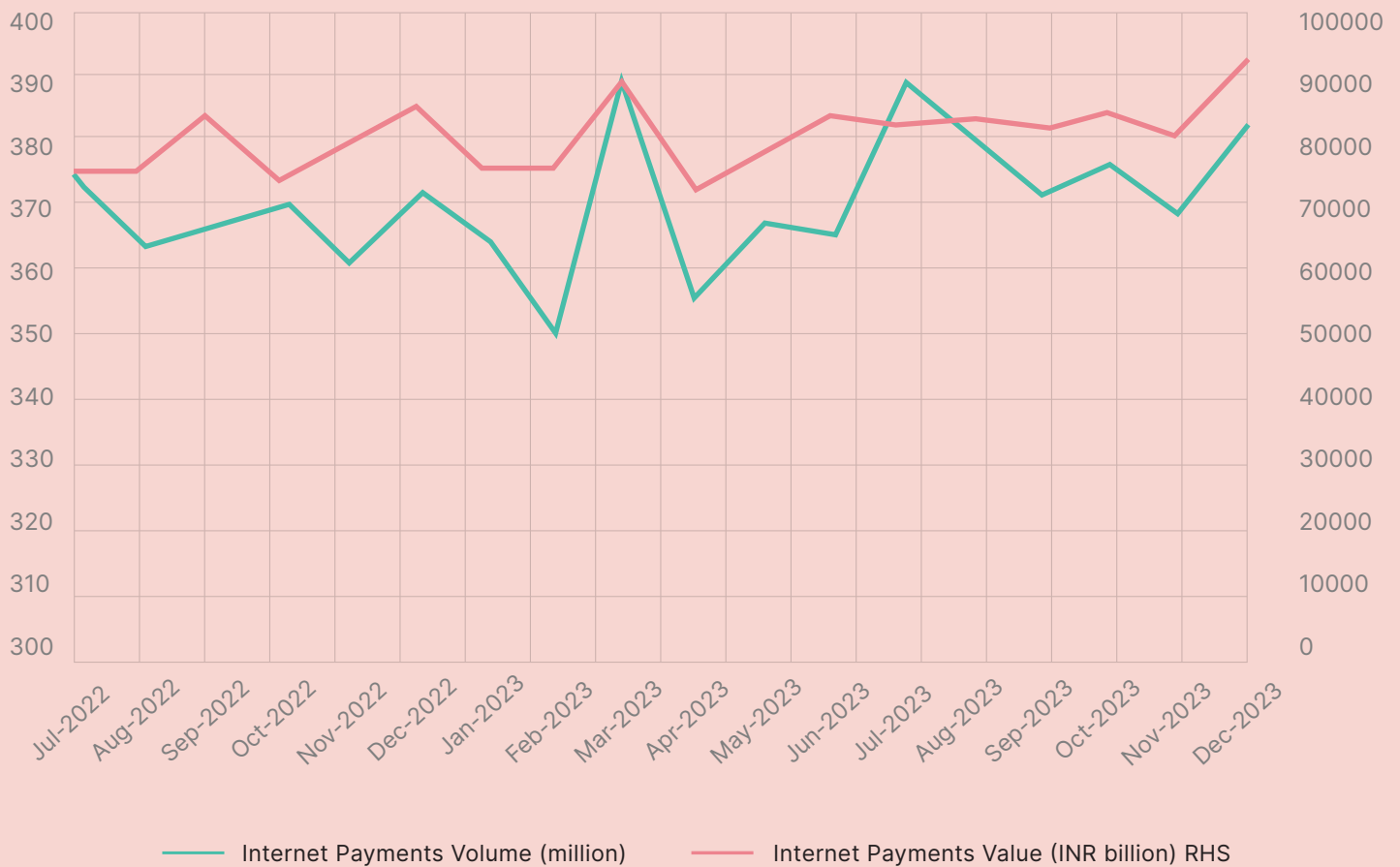
The ATS of mobile app transactions in H2 2023 was INR 2419.60, a 5% reduction compared to H2 2022. What this really shows is how Indians have taken to their mobile phones to make payments for multiple goods and services using multiple channels. The growth in this channel also indicates how stable this method of payment will be and how it will continue to power the future of payments in India.

Net Banking

While Net Banking (NB) is traditionally thought of to be where one pays for their goods and services, it also includes payments made by corporates for taxes among many other things explaining the very high numbers. In H2 2023, the volume of NB transactions was 2.25 billion, a 4% increase from H2 2022 (2.16 billion). In terms of value, NB transactions was H2 2023 amounted to INR 505.5 trillion compared to INR 467 trillion in H2 2022, an 8% increase.

In terms of ATS, it was a massive INR 223891 in H2 2023 compared to INR 215771 a year before. Net Banking, given its usage, will continue its upward trajectory but the percentage growth will be small just given the base effect.

Net Banking

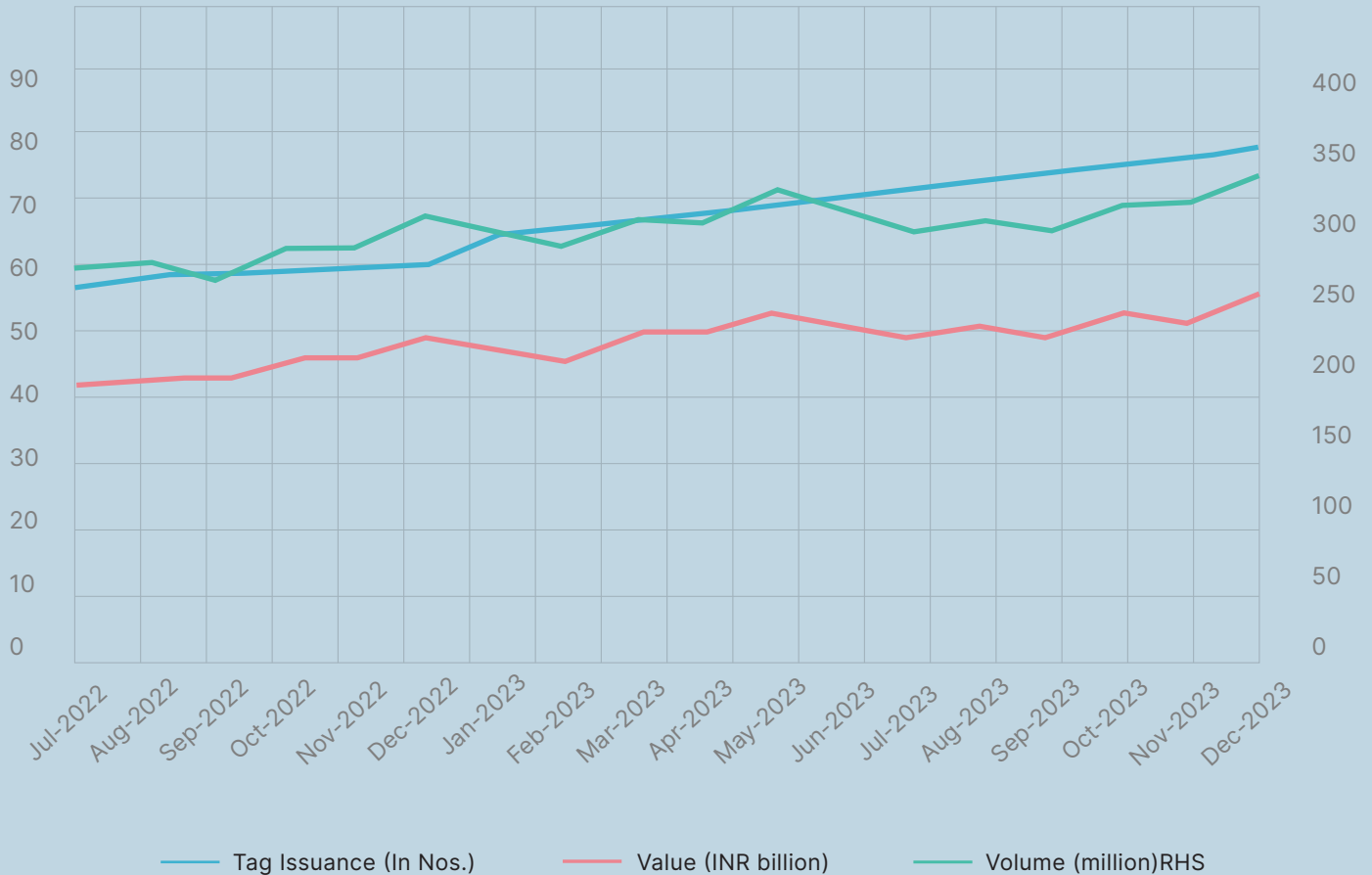


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Electronic Toll Collection

The number of tags issued has grown from 55.94 million in July 2022 to 81.24 million in December 2023, a 45% growth. In terms of volume, transaction in H2 2023 were 1.89 billion compared to 1.67 billion in H2 2022, a 13% growth while the value of ETC transactions in H2 2023 was INR 319.48 billion, a 20% increase when compared to H2 2022 (INR 267 billion).

Electronic Toll Collection



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About Worldline

Worldline [Euronext: WLN] helps businesses of all shapes and sizes to accelerate their growth journey – quickly, simply, and securely. With advanced payments technology, local expertise and solutions customised for hundreds of markets and industries, Worldline powers the growth of over one million businesses around the world. Worldline generated a 4.6 billion euros revenue in 2023..

In India, Worldline is building a robust payment ecosystem and a Buland Bharat for over 26 years. Our PayTech offering in India encompasses the entire payment value chain – in-store and online - and aligned with our commitment to building a less cash economy in India and boosting economic growth. Today, Worldline is acknowledged as one of the foremost PayTech organisations in India and is a preferred partner for 30+ leading public and private sector banks along with NBFCs, Insurance Companies, E-commerce, Start-up's, Retail brands and SMBs.

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