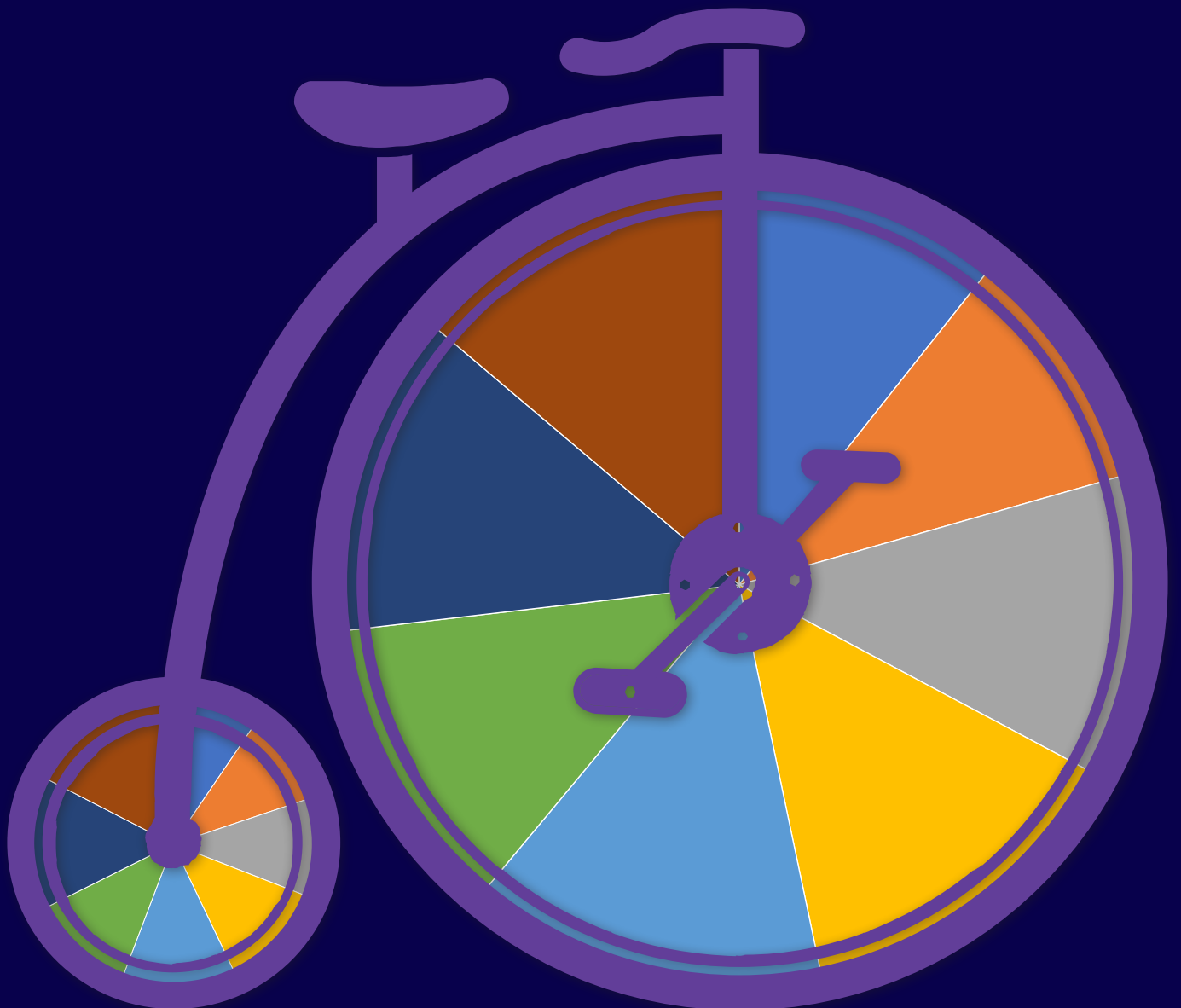


India Cash Vibrancy Report 2023





The data-backed cover of CMS India Cash Vibrancy Report 2023 has been themed around penny-farthing, the first ever bicycle created by British inventor James Starley in 1871, which is also known as a high-wheel bicycle. The revolutionary invention at the time provided high speeds and high levels of shock absorption due to the unusually high front wheel. Interestingly, the cycle's name has a cash connection too. Penny and farthing were British coins in circulation during the 1800s. While the penny was four times the value of a farthing, it was much bigger in size compared to the latter. The bigger 'penny' wheel in the cover captures the total value of ATM cash withdrawals using debit cards in India, from FY 2016 to FY 2023. The smaller 'farthing' wheel represents the annual amount of cash replenished by CMS Info Systems across its ATM network in the same period. Each spoke in the wheel manifests the eight-year period. In this duration, CMS Info Systems has replenished an average of 24.8% of the overall debit card-based cash withdrawals across the ATMs in the country.



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Foreword



Rajiv Kaul

Executive Vice Chairman,
Whole Time Director and CEO,
CMS Info Systems

The journey to a \$5-trillion economy will require a strong and stable financial infrastructure. Unlike many countries, the financial sector, in India, has emerged resilient and robust despite the NPA & Covid crisis and the Russia-Ukraine war. This was possible because of an increased risk absorption capacity and a healthy banking system balance sheet both in terms of asset quantity and quality. However, a boost in bank deposits is crucial for growth, and banks have been expanding their branch and ATM networks, as these play a crucial role in customer absorption and thereby deposit growth.

Over the last decade, CMS has built a deep logistics network covering the length and breadth of the country, to help banks deliver a comprehensive cash-management solution with high quality, dependability, and safety.

I am pleased to bring to you our very first report on consumers' cash usage trends – **CMS India Cash Vibrancy Report 2023**. The report is underpinned by our CMS Cash Index™ which was launched in 2016 to track the infusion of cash back into the economy across various commerce points. It highlights multiple areas where cash is seen as a critical enabler for a commerce transaction by consumers and establishes the megatrend of its co-existence in the digital world.

Our deep-dive analysis illustrates the strong demand for cash-based transactions in India. From ATM cash withdrawal patterns across metropolitan, semi-metropolitan, semi-urban, and rural centers to sector-level analysis of business activity through our retail cash management data, this report will help you understand the pulse of cash in the economy. It will also help you gauge the relevance and importance of cash despite the acceleration in India's digital transformation journey.



Executive Summary

Cash is a key enabler of an economy that allows every individual, irrespective of his/her socioeconomic status to participate in economic transactions through the exchange for goods and services.

Unlike other forms of payment, such as credit cards or mobile payments, cash is universally accepted and does not require any special infrastructure or technology, making it particularly useful for people who may not have access to these payment systems.

In the event of an emergency or contingency, or in the event of a technical issue or hacking or any other reason, cash is the only means that is fail-proof by helping in the purchase of essential goods and services.

In the Indian context, where the target is to become a \$5 trillion economy by FY 2025, payments and settlements assume a more crucial role. Rural India, which contributes around 35% to the country's gross domestic product (GDP) is bound to be the biggest enabler for the \$5 trillion economy dream to be realised. While urbanisation is on the rise, the GDP contribution from Rural India is estimated to contribute nearly 25% of the expanded GDP in FY 2030.

The urban-rural divide in the Indian financial ecosystem is visible from the growth in the no-frill bank accounts opened under the Pradhan Mantri Jan Dhan Yojana (PMJDY), the biggest financial inclusion initiative in the world, launched by the Government of India in August 2014.

While the total number of Jan Dhan accounts have grown over 68.7 times, from 7.07 million in September 2014 to 486.54 million in March 2023, the absolute growth in Rural India is over 76.7 times, at 324.5 million in March 2023 against 4.23 million in September 2014. In contrast, Urban India saw over 56.9 times growth in the number of accounts from 2.85 million in September 2014 to 162.04 million in March 2023.

While digital payments have been witnessing a superfast adoption in India, the relevance of cash as a medium of payment and settlement in India still has lot of steam. Amidst the ongoing boom in digital payments, demographic factors like limitations from unbanked and underbanked population, digital literacy, and internet penetration are some of the key factors which will keep cash relevant in the longer run.

The Global Findex Database 2021, from the World Bank Group, reveals that account ownership—which has more than doubled in a decade from 35% to 78%—still leaves a sizeable 22% of Indians out of the financial inclusion scope. While 80 million Indian adults made their first digital payment during the COVID-19 pandemic, 70% of account owners used cash, and not used payment cards nor a mobile phone or the internet for merchant payments.

70%

Account holders in India used cash for merchant payments in 2021

First edition of the **CMS India Cash Vibrancy Report 2023**, based on cash-usage analysis at the global, national, state, and sector levels, aims to highlight the relevance of cash as a medium of payment and settlement as well as an important yardstick for gauging the economic health of the country and of Indian states.

Globally, all leading economies have witnessed an expansion in economic activities accelerating their gross domestic product (GDP) which translates into an increase in monetary liquidity and thus high currency in circulation (CIC).

- At \$421 billion in 2021, India saw the third-highest annual growth of 7.95% in CIC, following UK (+11.76%) and China (+10.19%).
- After touching 8.7% in 2016, India's CIC to GDP ratio has averaged around 12.4% which is higher than the 10-year average of 11.8%.

At the national level, following the demonetisation exercise in November 2016, there was a sharp decline in CIC to GDP ratio to 8.68% in FY 2017. Subsequently, the CIC to GDP ratio has moved in the range of 10.7% to 14.39% between FY 2018 and FY 2023.



- On a cumulative basis, FY 2023 saw over 694.5 million debit card-based Automated Teller Machines (ATMs) cash withdrawals which were 7.10% higher FY 2022. In terms of value, the cumulative cash withdrawal amount of ₹32.86 lakh crore in FY 2023 was nearly 6.09% higher than ₹30.98 lakh crore in FY 2022.
- The relative performance of the CMS Cash Index™ (CCI) and the S&P Global India Composite PMI highlights that the CCI and S&P Global India Composite PMI nearly mirror each other except for unusual macroeconomic events.
- The pan-India ATM cash replenishments carried out by CMS Info Systems witnessed an annual growth of 16.59% in FY 2023.

State-level analysis of ATM cash replenishments reveals that Karnataka saw the highest annual average cash replenishment per ATM at ₹1.73 crore in FY 2023, which was 18.14% higher than ₹1.46 crore cash replenished per ATM during FY 2022. While Chhattisgarh saw the second highest cash replenishment of ₹1.58 crore in FY 2023, there was a decline of 2.10% over ₹1.62 crore in FY 2022.

- Maharashtra, Gujarat, Tamil Nadu, Karnataka, and Uttar Pradesh are the Top 5 states with maximum gross state domestic product (GSDP) in FY 2022 according to MoSPI. During FY 2023, these five states together accounted for 43.10% of the total ATM cash replenished by CMS Info Systems across the country.
- Beyond the Top 5 states; Bihar, Andhra Pradesh and West Bengal witnessed annual average growth in ATM cash replenishments at 28.13%, 25.84% and 17.89%, respectively, while their GSDP grew by a respective 10.98%, 11.23% and 10.76% in FY 2022.
- In India, the festive and wedding seasons between October to December in FY 2022, and during October, December and March of FY 2023 witnessed maximum cash usage and demand.

\$421 Bn
India saw the 3rd highest
annual growth of 7.95%
in CIC in 2021

The sectoral picture around cash vibrancy in India is best reflected in the cash collection data from the retail cash management (RCM) points covered by CMS Info Systems across India. The data analysis highlights its importance as the apt barometer to gauge the pulse of the sectors through the lens of cash collected owing to increase or decrease in cash transactions at these RCM points.

- During FY 2023, transportation, organised retail and BFSI sectors saw annual increase of 36.89%, 14.44% and 5.60% in average cash collection per RCM point.
- The 1.38 times higher average cash collection per RCM point within the transportation sector clearly depicts the opening of the economy post COVID-19 pandemic.
- Wedding and festive season across October-November 2021 and May-June 2022 saw the monthly RCM collections rising in the discretionary sector.

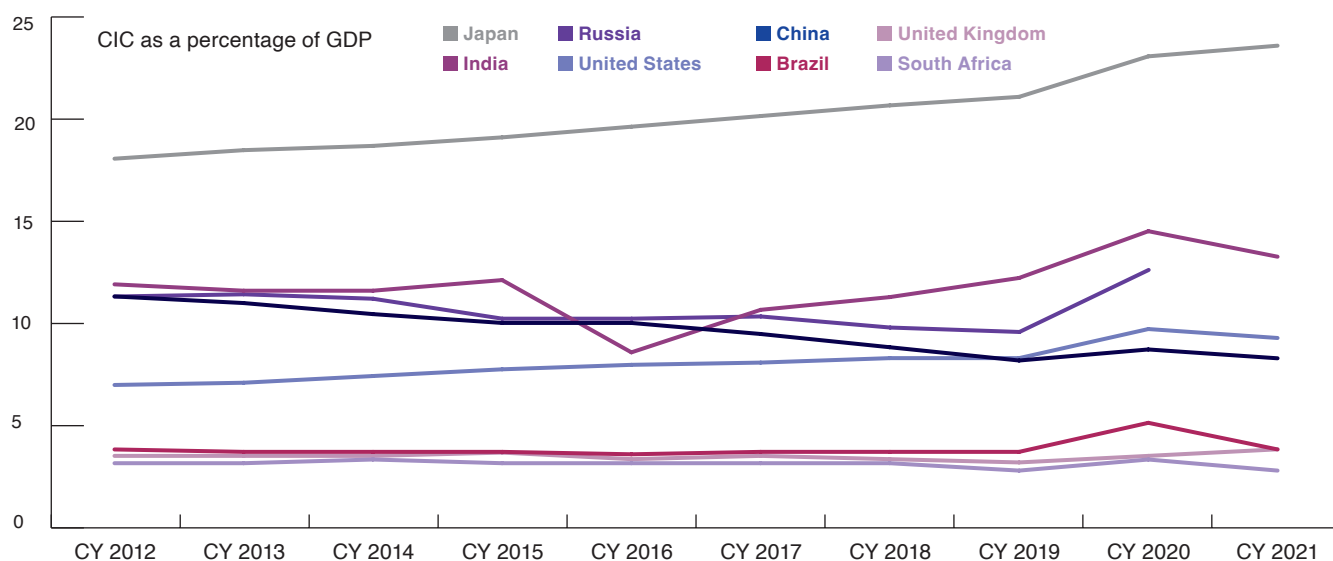
While India has been witnessing a potent increase in digital payments, multiple factors such as an unbanked population, cultural influences, infrastructure challenges, and a slower pace of financial and digital literacy keeps cash relevant and vibrant, thereby ensuring its co-existence along with new-age tech solutions for payments and settlements.



The Global Picture

The faster adoption of digital payments is a global phenomenon. According to the Bank for International Settlements (BIS), which publishes statistics on payments and financial market infrastructures (FMIs) in member jurisdictions of the Committee on Payments and Market Infrastructures (CPMI), widely known as the Red Book statistics, while the volume and value of fast payments reached record levels in 2021, digital payments have not yet fully replaced cash.

CIC/GDP ratio of leading economies accentuates the steady demand for cash



Source: BIS CPMI Red Book statistics

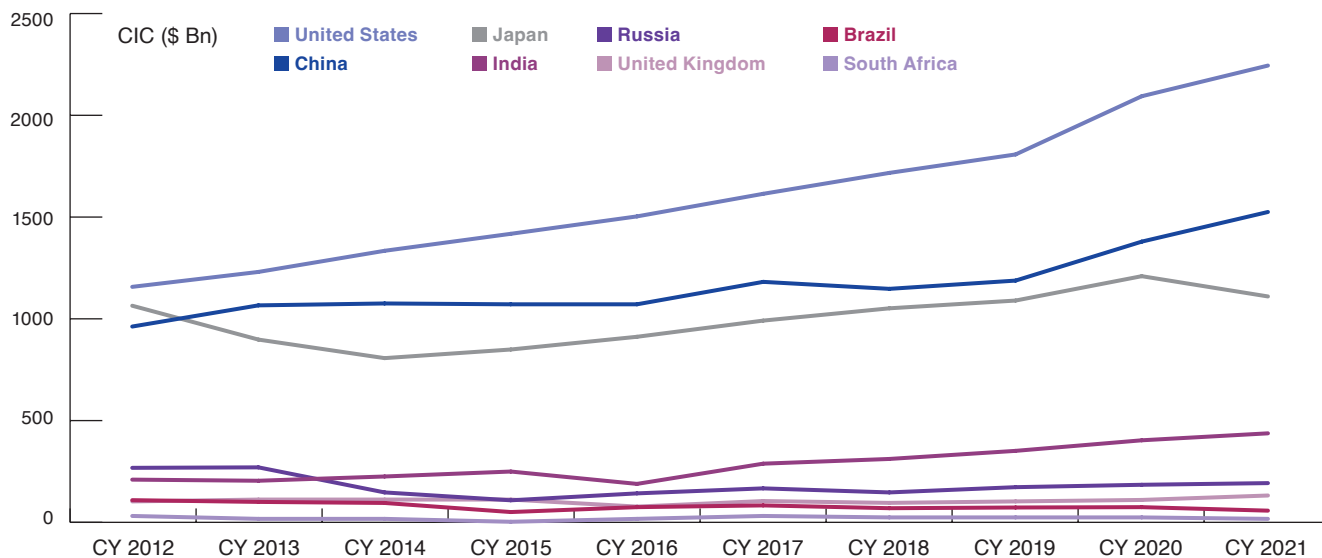
Across the BIS CPMI member countries, currency in circulation (CIC) as a percentage of GDP (CIC to GDP ratio) saw a decline in 2021, partly reversing the trend seen in the first year of the pandemic when the value of coins and banknotes in circulation grew to an all-time high. However, CIC exceeded its pre-pandemic levels in most of the CPMI member economies. While the CIC to GDP ratio has held itself steady in both, advanced economies (AEs) and emerging market & developing economies (EMDEs), 2021 saw significant differences within each country group. For instance, CIC exceeded 23% of the GDP in Japan, while the ratio was little over 13% in the Euro area.

In India, after touching 8.7% in 2016, the CIC to GDP ratio has averaged close to 12.40% which is higher than the 10-year average of 11.80%. In comparison, China saw its CIC to GDP ratio averaging around 10.50% between 2012 to 2016, while the 2017-2021 period saw the ratio averaging around 8.80%.



In 2021, 7 out of the 11 leading CPMI member economies saw their CIC values at the highest levels since 2012. At \$421 billion in 2021, India saw third-highest annual growth of 7.95% in CIC, while UK (+11.76%) and China (+10.19%) respectively saw the highest and second-highest annual growth over 2020. Compared to \$196 billion in 2016 – the year of demonetisation – the CIC growth in India in 2021 was close to 2.15 times, or 114.8%, in absolute terms.

Currency in circulation has been on uptrend across the leading economies



Source: BIS CPMI Red Book statistics

According to an Asian Development Bank Institute (ADBI) working paper published in September 2019, India's cash to GDP ratio remained stable until the fourth quarter of 2016, suggesting that India's cash growth is more or less in sync with transaction demand growth.

The ADBI paper articulated that the value of cash is stable in an economy where a Central bank successfully conducts monetary policy in accordance with the price stability (inflation management) mandate – mostly, specified at around 2% in advanced economies – and thus avoids substantially high inflation or serious deflation. The working paper also concluded that the low interest rate environment propelled by massive monetary easing contributed to increasing demand for cash not only in advanced economies, but also in emerging/developing economies.

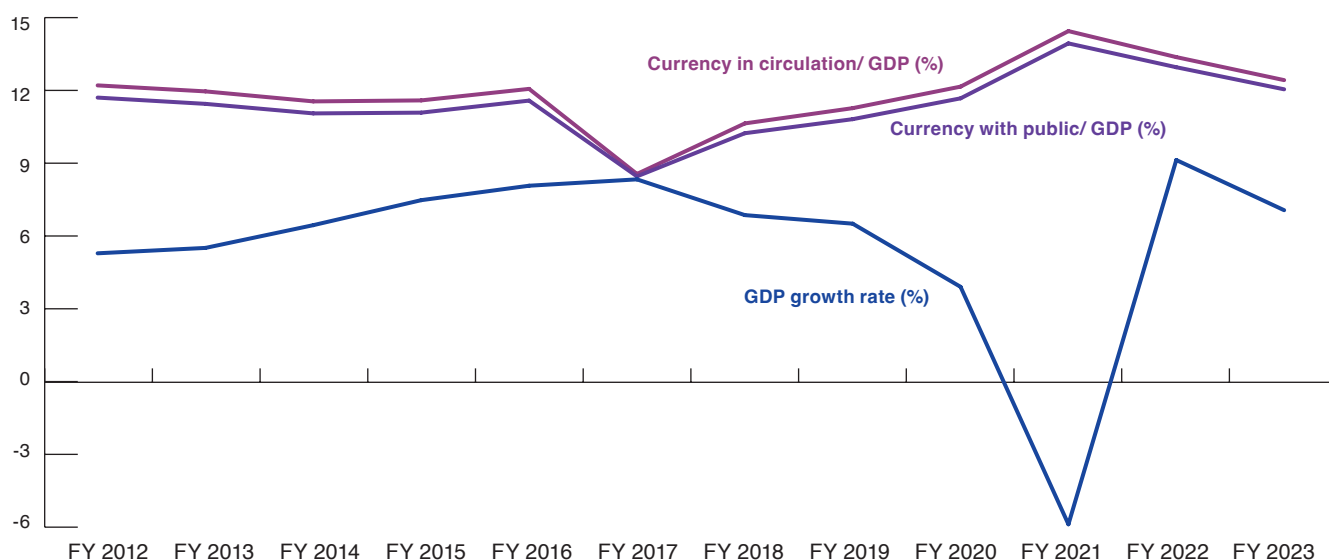
Japan presents a curious case owing to the consecutive increase in the CIC along with relatively higher CIC to GDP ratio compared to other economies. While high cash demand is not usual in case of advanced economies, in the case of Japan this could reflect cultural habits such as high levels of public trust in the stable government and legal tender in the face of persistently low inflation. Unwillingness to accept credit cards, debit cards, or other cashless payment instruments by some small retail stores and taxi drivers – because of high installation cost and/or card processing fees – also discourages the public from shifting to a fully cashless economy, the ADBI working paper has pointed out. Furthermore, Japan's long-standing mild deflation or low inflation has reduced the frequency of retail price changes so that the public find it comfortable to use cash.



The National Picture

Cash circulating in the economy is no different from blood circulating in the human body. This claim is anything but an exaggeration, as the growth in CIC has a direct relationship with the growth of an economy. From FY 2012 to FY 2016 when the economy was on a steady growth path, the CIC to GDP ratio was consistently in the range of 11.58% to 12.22%.

Growth in currency in circulation has a direct relation with economic growth



Source: RBI's Database on Indian Economy (DBIE)

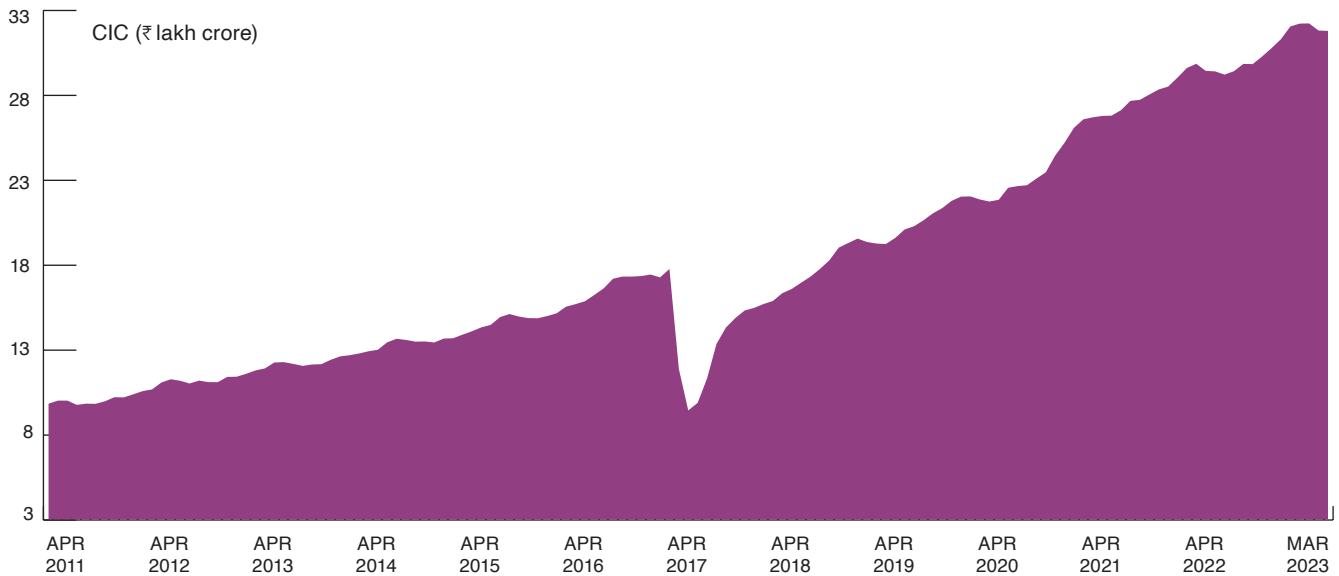
14.39%

**India's highest annual
CIC to GDP ratio, since
demonetisation, in FY 2021**

Following the demonetisation in November 2016, there was a sharp decline in CIC to GDP ratio to 8.68% in FY 2017, and subsequently the CIC to GDP ratio has traversed in the 10.70% to 14.39% range between FY 2018 and FY 2023. The direct relation between CIC and GDP is adequately captured in FY 2021 when GDP saw an annual degrowth of 5.83%, compared to 3.87% growth in FY 2020, while CIC to GDP ratio increased from 12.17% in FY 2020 to 14.39% in FY 2021.



Currency in circulation grew by 5.33% and 33.98% on 1-year and 3-year horizon in March 2023



Source: RBI's Database on Indian Economy (DBIE)

While the CIC to GDP ratio may have a reflection of stagnancy, degrowth, or both, there is merit in looking at the build-up of the CIC in isolation to get a sense of importance of cash. At ₹33.80 lakh crore at the end of March 2023, there is an annual growth of 5.33% in CIC from ₹32.09 lakh crore at the end of April 2022. And, on a three-year basis, the absolute CIC growth is 33.98% in comparison to ₹25.23 lakh crore at the end of April 2020.

After demonetisation, CIC had witnessed a monthly decline of 33.14% from ₹17.78 lakh crore in October 2016 to ₹11.88 lakh crore in November 2016. In the post-demonetisation era, the lowest CIC was recorded at ₹9.43 lakh crore in December 2016, and ₹33.80 lakh crore in March 2023 is an increase of over 3.58 times, or 258.39% on an absolute basis in a matter of 76 months.

While CIC to GDP ratio and absolute CIC provides a macroeconomic credence to the importance of cash in the economy, a closer look at the volume and value of cash withdrawal at ATMs using debit cards showcases a stronger emphasis on the vibrancy of cash in India.

Debit card-based cash withdrawals at ATMs were severely hit during the first wave of the COVID-19 pandemic, which saw the unprecedented nationwide lockdowns to curtail the movement of people in order to contain the spread of the deadly virus. Compared to ₹2.84 lakh crore withdrawn during March 2020, there was a 48.04% monthly fall at ₹1.28 lakh crore in April 2020. The volume tumbled 45.74% at 293.53 million transactions in April 2020 compared to 540.96 million transactions during March 2020.

In May 2021, when the second wave of the pandemic hit, there was another impact on the debit card-based cash withdrawals. However, the intensity was much lesser as value and volume saw respective annual decline of only 20.61% and 20.73% compared to April 2021.

Compared to these pandemic induced lows, debit card-based ATM cash withdrawal value and volume have posted a strong recovery. At ₹2.84 lakh crore in March 2023, the cash withdrawal value has grown by an absolute 121.33% and 40.88% each compared to withdrawals values of April 2020 and May 2021. On the volume front, while there is 100% recovery compared to April 2020 levels, the absolute growth over May 2021 stood at 41.84%.

Interestingly, during the last eight financial years since FY 2016 (April 2015 onwards), compared to ₹84,934 crore withdrawn during December 2016 – the lowest monthly ATM cash withdrawal using debit cards following the November 8, 2016 demonetisation drive – the ATM cash withdrawal of ₹2.85 lakh crore in March 2023 is an absolute growth of 235.01% in a matter of 76 months after demonetisation.

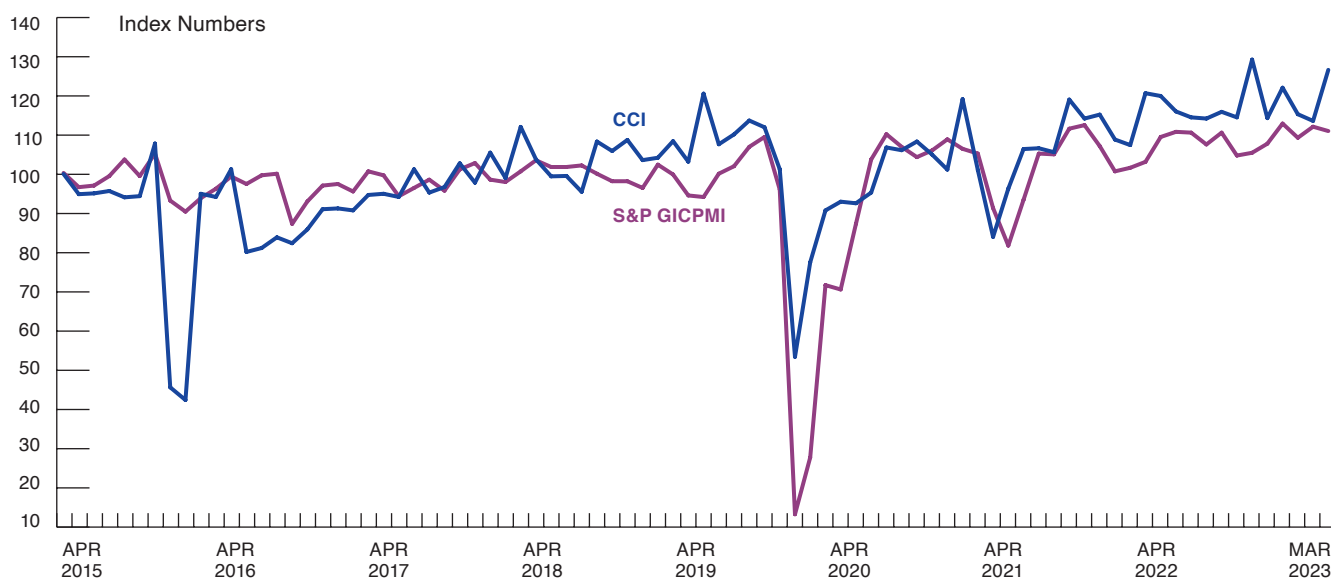
235%

Absolute growth in India's debit card-based ATM cash withdrawals in March 2023 compared to December 2016



In value terms, the cash withdrawal at ATMs using debit cards has been improving from the pre and post pandemic levels as well from the pre-demonetisation levels by a visibly fair margin.

CMS Cash Index™ and S&P Global India Composite PMI show a strong correlation



Source: CMS Info Systems, S&P Global

Note: The S&P Global India Composite PMI readings are rebased to 100 in April 2016, when CMS Cash Index™ was launched, to derive the correlation between the two indices.

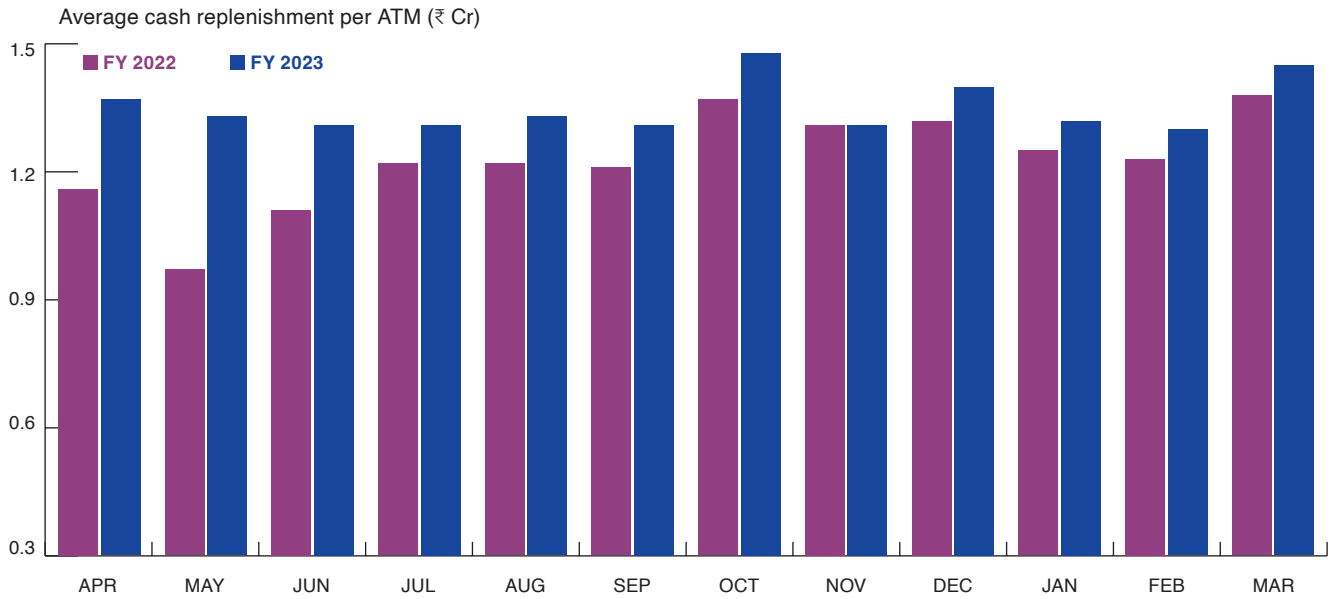
The relative performance of CMS Cash Index™ (CCI) – weighted index constructed on the basis of cash that goes into circulation via the ATM channels covered by CMS Info Systems and the cash collected from retail channel points covered by CMS Info Systems – and the S&P Global India Composite PMI – the purchase managers index based on weighted averages of comparable manufacturing output index and the services business activity index that gauges the expansion and contraction in economic activity – highlights that the CCI and S&P Global India Composite PMI nearly mirror each other except for unusual macroeconomic events.

In November-December 2016, after demonetisation, there was a sharp fall in CCI while S&P Global India Composite PMI saw much lesser decline. Subsequently, the CCI saw a spell of relative underperformance until cash supply stabilised. At the peak of the COVID-19 pandemic and the lockdown, the fall in S&P Global India Composite PMI was much starker compared to the decline seen in the CCI.

The strong relativity between CIC to GDP ratio – GDP growth rate and S&P Global India Composite PMI–CMS Cash Index, establishes CCI as a fair proxy for gauging valid measure of vitality and economic health of India as well as consumption behaviour across states and sectors, as the underlying data from ATMs and retail channels covers 97% Indian districts and 16,000+ Indian pin codes. The CMS Cash Index is undisputedly a key barometer for tracking the cash vibrancy in the country.



Monthly average value of cash replenishment at ATMs grew by 10.08% in FY 2023



Source: CMS Info Systems

The average value of cash replenishment per ATM during FY 2023 was ₹1.35 crore; 10.08% higher than the average cash replenishment per ATM of ₹1.23 crore during FY 2022. The monthly look at the average ATM replenishments reveals the tinge of the second wave of the COVID-19 pandemic. During FY 2023, the first quarter saw monthly changes in replenishment per ATM higher by an average 24.92% compared to April–June 2021. In comparison to May 2021, when replenishments dipped to average ₹0.97 crore per ATM, the average replenishment of ₹1.33 crore per ATM during May 2022 was an absolute growth of 37.69%.

10.08%

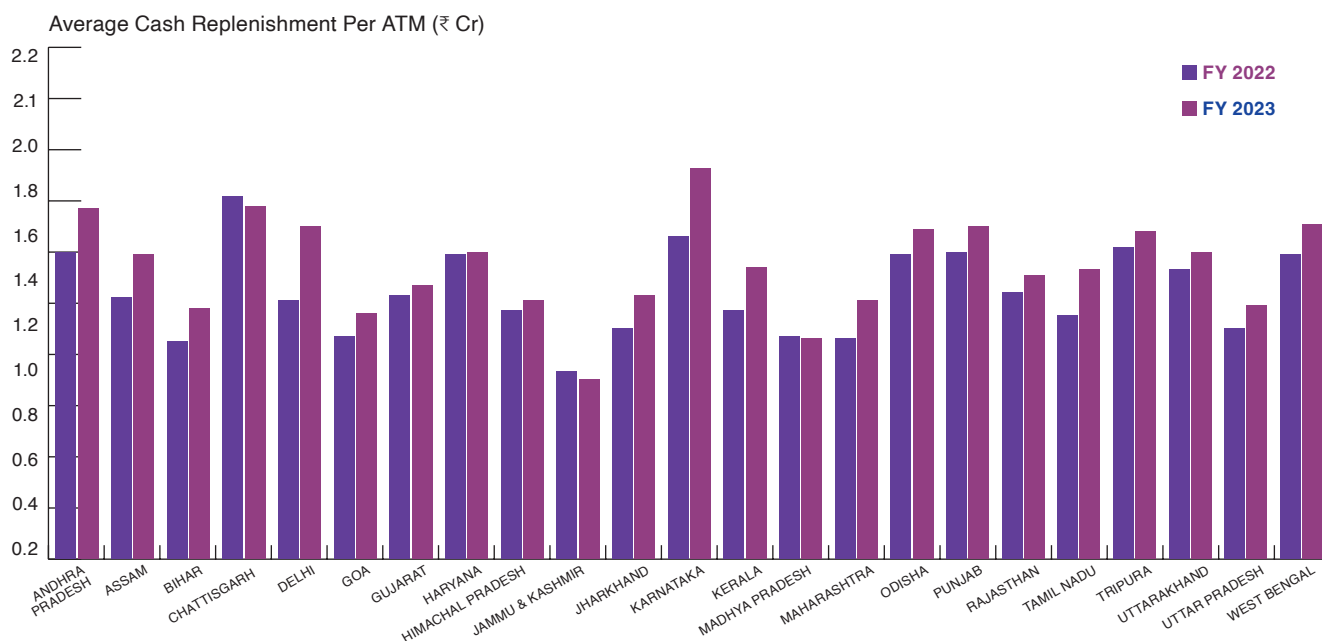
Annual growth in monthly average cash replenishment per ATM by CMS Info Systems during FY 2023



The States' Picture

In FY 2023, ATMs in the state of Karnataka saw the highest average cash replenishment per ATM at ₹1.73 crore, which was 18.14% higher than the average ₹1.46 crore cash replenished per ATM during FY 2022. While Chhattisgarh saw the second highest cash replenishment of ₹1.58 crore in FY 2023, there was a decline of 2.10% over ₹1.62 crore in FY 2022. Andhra Pradesh saw the third-highest average cash replenishment of ₹1.57 crore during FY 2023—12.27% higher compared to ₹1.40 crore in FY 2022.

Barring Jammu & Kashmir, all states witnessed growth in ATM cash replenishments during FY 2023



Source: CMS Info Systems

When seen from the lens of the highest annual growth in average ATM cash replenishment per ATM, Delhi, Karnataka, Tamil Nadu, Kerala and Maharashtra saw a respective annual growth of 23.78%, 18.14%, 15.77%, 14.67% and 13.69% during FY 2023. Interestingly, according to the Ministry of Statistics and Programme Implementation (MoSPI), the gross state domestic product (GSDP) of these states (at constant prices) in FY 2022 has seen an annual growth of 9.14%, 10.96%, 7.99%, 12.01% and 9.13% respectively.

Also, according to MoSPI, Maharashtra, Gujarat, Tamil Nadu, Karnataka, and Uttar Pradesh are the Top 5 states with maximum GSDP in FY 2022. Together these states accounted for 43.10% of the ATM cash replenished by CMS Info Systems during FY 2023.

Outside the league of the leading and industrial states, Bihar, Andhra Pradesh and West Bengal witnessed respective annual growth in ATM cash replenishments at 28.13%, 25.84% and 17.89% while their GSDP grew 10.98%, 11.23% and 10.76%. At ₹1.18 crore, ₹1.57 crore and ₹1.51 crore, these three states saw 11.87%, 12.27% and 8.72% growth in average value of ATM cash replenishment during FY 2023.

While percentage of growth in the GSDP have the effect of different bases, which vary from state to state, the importance of cash is prime facie endorsed by the fact that the relative growth in the state economy and cash utilisation have a fair degree of correlation.



Highest cash replenishments are observed during wedding and festive seasons across all the states

FY 2022												
STATES	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
ANDHRA PRADESH	10.0	9.2	10.5	11.4	11.6	11.2	12.3	11.8	13.0	12.3	11.9	12.8
ASSAM	10.0	6.7	7.1	8.2	8.5	9.2	10.6	10.9	11.4	10.5	10.0	11.9
BIHAR	10.0	8.3	8.6	8.6	8.2	8.5	9.4	10.4	9.5	8.6	8.9	10.6
CHATTISGARH	10.0	11.0	13.9	13.8	13.7	12.6	14.5	13.5	13.8	13.9	13.2	13.7
DELHI	10.0	7.5	9.4	10.7	10.8	11.2	13.6	12.5	12.6	11.2	11.5	13.2
GOA	10.0	6.7	7.9	8.7	9.1	8.6	10.3	9.3	10.4	9.0	8.2	9.7
GUJARAT	10.0	8.8	9.7	10.0	10.1	9.6	11.7	10.3	10.2	10.4	10.0	11.0
HARYANA	10.0	8.0	9.2	9.9	10.1	9.8	11.2	11.1	10.7	9.7	10.0	10.7
HIMACHAL PRADESH	10.0	6.9	9.0	10.1	9.7	10.0	11.4	11.3	10.7	9.1	9.5	10.8
JAMMU & KASHMIR	10.0	7.6	9.0	10.7	9.8	10.3	11.3	10.8	10.2	7.8	8.6	10.3
JHARKHAND	10.0	7.8	8.8	9.7	9.3	9.5	10.8	10.5	10.1	9.5	9.9	11.5
KARNATAKA	10.0	8.2	9.1	11.3	11.6	11.8	12.8	12.4	13.2	12.7	12.7	14.2
KERALA	10.0	6.2	9.0	9.9	11.3	10.5	10.8	10.5	11.6	10.7	10.3	11.5
MADHYA PRADESH	10.0	9.2	11.3	11.4	11.4	11.0	12.5	11.8	11.5	11.3	10.9	12.1
MAHARASHTRA	10.0	9.4	11.1	11.4	11.8	11.7	13.1	12.5	12.4	12.1	11.6	13.2
ODISHA	10.0	8.2	9.6	10.3	9.7	9.3	10.3	10.2	10.4	11.3	10.9	11.3
PUNJAB	10.0	9.1	9.7	10.4	10.3	10.3	11.6	11.9	11.1	10.1	10.4	11.9
RAJASTHAN	10.0	7.2	9.0	9.9	10.0	9.3	10.9	11.2	10.4	9.8	10.0	10.8
TAMIL NADU	10.0	7.8	8.7	11.3	11.4	11.5	12.1	10.4	11.8	10.7	10.7	12.5
TRIPURA	10.0	8.1	7.4	8.5	8.8	9.1	11.4	10.7	10.7	10.2	9.7	11.2
UTTARAKHAND	10.0	7.3	8.6	9.7	9.5	9.8	10.9	11.2	10.1	9.2	9.0	10.5
UTTAR PRADESH	10.0	8.7	8.8	9.2	8.8	9.2	10.3	10.5	9.8	9.2	9.3	10.1
WEST BENGAL	10.0	8.2	8.9	10.4	10.0	9.9	11.7	11.1	11.0	10.4	9.7	11.9

FY 2023												
STATES	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
ANDHRA PRADESH	10.0	10.0	10.3	10.5	10.6	10.1	11.0	10.3	11.7	10.9	10.1	11.3
ASSAM	10.0	9.2	8.7	9.9	9.7	9.9	9.4	9.6	10.0	9.0	8.6	9.6
BIHAR	10.0	9.1	8.0	8.2	7.9	7.6	8.8	8.7	8.6	7.9	8.1	7.8
CHATTISGARH	10.0	9.9	10.0	9.6	9.7	9.2	11.5	9.3	10.6	9.9	9.2	10.0
DELHI	10.0	9.9	9.5	10.2	10.6	10.6	12.7	11.1	11.4	11.0	10.7	11.3
GOA	10.0	9.5	9.2	8.8	9.8	8.4	9.8	9.2	10.8	9.7	8.9	10.4
GUJARAT	10.0	9.8	9.7	9.1	9.5	10.0	11.6	8.9	10.0	9.8	9.4	10.5
HARYANA	10.0	9.9	9.5	9.9	10.0	9.5	11.0	9.7	9.9	9.0	9.2	10.0
HIMACHAL PRADESH	10.0	9.6	9.8	9.2	8.9	9.1	10.6	9.1	9.3	7.9	8.2	9.1
JAMMU & KASHMIR	10.0	9.2	9.1	9.7	8.8	8.5	9.3	8.3	8.3	6.4	7.4	8.7
JHARKHAND	10.0	8.6	8.3	8.3	8.2	8.5	9.4	8.5	9.1	8.6	8.6	9.5
KARNATAKA	10.0	9.8	9.9	9.7	10.0	9.9	10.6	9.6	10.5	10.2	10.0	11.4
KERALA	10.0	9.1	8.8	9.2	9.5	9.5	9.8	9.3	10.3	9.7	9.2	10.6
MADHYA PRADESH	10.0	10.0	9.7	9.2	9.6	9.0	10.9	8.9	9.3	8.8	8.9	9.8
MAHARASHTRA	10.0	9.8	9.5	9.0	9.5	9.2	11.1	9.0	9.8	9.4	9.0	10.4
ODISHA	10.0	9.8	10.3	9.1	9.2	9.1	9.9	9.2	10.2	10.0	10.0	11.3
PUNJAB	10.0	9.3	8.8	9.2	9.3	9.1	10.4	10.0	9.7	9.0	9.2	10.4
RAJASTHAN	10.0	10.0	9.7	10.2	10.1	10.0	11.5	10.0	10.1	9.7	9.9	10.9
TAMIL NADU	10.0	10.3	10.8	10.7	10.9	10.7	11.7	10.1	11.2	10.7	10.5	12.1
TRIPURA	10.0	9.8	10.0	10.3	10.9	11.8	9.6	10.7	10.2	10.3	9.3	9.8
UTTARAKHAND	10.0	9.6	9.4	8.9	9.3	8.7	10.9	9.5	9.6	8.9	8.9	9.2
UTTAR PRADESH	10.0	9.1	8.6	8.5	8.9	8.5	10.5	9.6	9.7	9.0	9.4	10.1
WEST BENGAL	10.0	9.1	9.1	9.5	9.0	10.3	9.6	8.9	9.8	9.3	9.1	10.8

Note: Monthly average cash replenishment per ATM is rebased to 10.0 in April of both the fiscals.

Source: CMS Info Systems

LOW HIGH

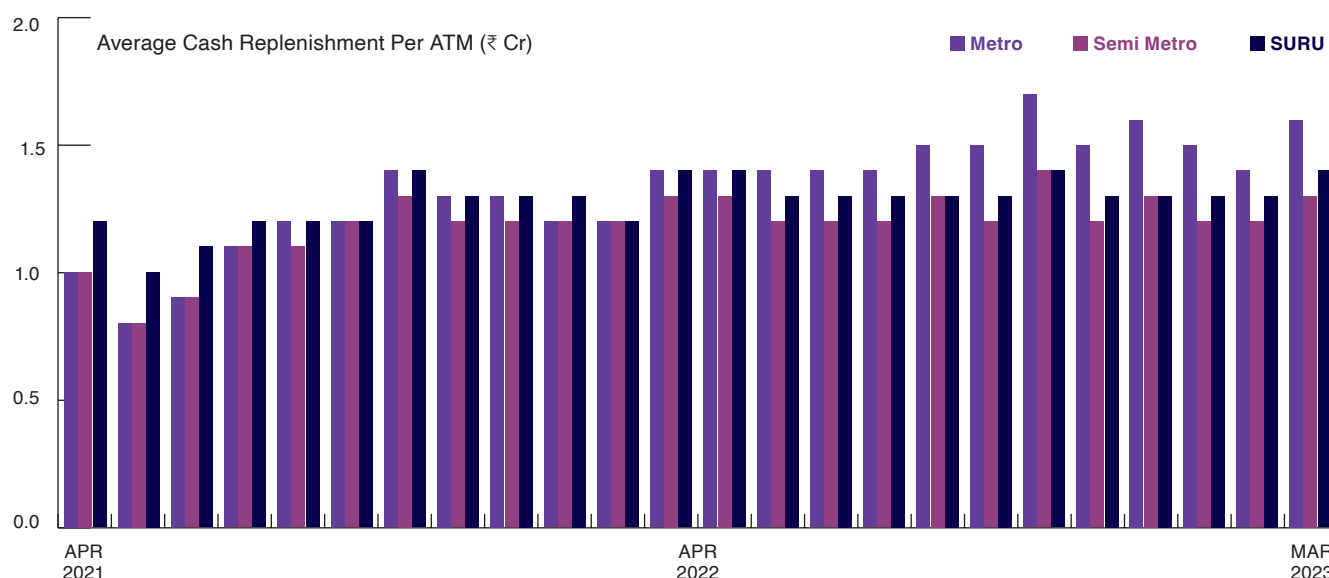
A monthly view of average value of cash replenishments per ATM for FY 2022 and FY 2023 highlights that May 2021 took the brunt of the second wave of COVID-19 pandemic, and the cash replenishments were lowest for almost all the states. Interestingly, the festive and wedding seasons between October to December in FY 2022, and during October, December, and March of FY 2023, saw the maximum cash utility and demand. Culturally, there is a long-standing tradition of gifting cash during festivals and weddings, and the higher-than-usual ATM cash replenishments endorse the societal behaviour along with increased usage of cash for shopping during the festive and wedding seasons.



The Demographic Picture

While average monthly ATM cash replenishments have seen steady growth, a closer look through the demographic lens reveals that semi-urban and rural (SURU) have been growing steadily while cash replenishments in metropolitan locations have grown at a higher pace.

ATM cash replenishments in metropolitan cities have seen higher growth, followed by SURU



Source: CMS Info Systems

The most important indicator of higher cash usage, and hence higher ATM cash replenishments is seen between April–July 2021, when the second wave of the COVID-19 pandemic had taken a turn. During these four months, ATM cash replenishments in SURU locations were higher by an average 15.47% compared to ATM in metropolitan and semi-metropolitan locations.

15.47%

Growth in average cash replenishment per ATM in SURU compared to metro and semi-metro locations during April-July 2021

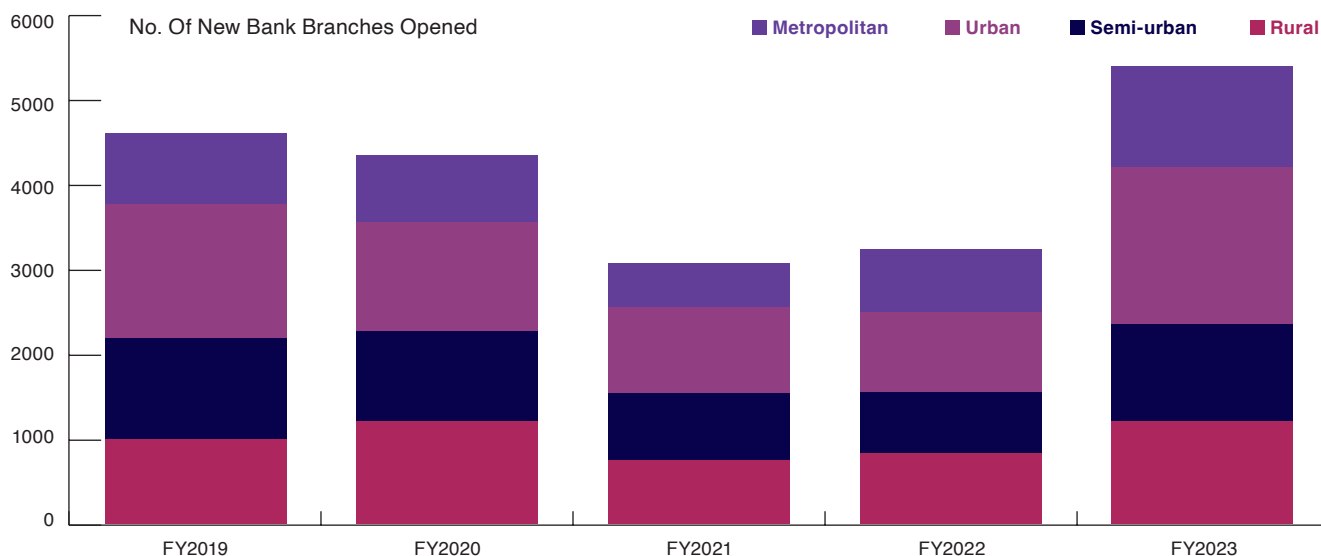
The lower average ATM cash replenishments in metropolitan locations compared to SURU during the second wave can be related to availability of alternate digital payment channels for consumers. However, given the lower penetration of financial and digital literacy in SURU locations, there is a relatively higher dependence on cash.



At a macroeconomic level, the higher ATM cash replenishments – to service higher cash withdrawals – can be attributed to higher inflation during most of FY 2023. Usually, consumer inflation in rural locations is relatively lower than that in the urban locations, and food inflation has the tendency to benefit the rural economy in varying degrees. In that context, average ATM cash replenishments holding their ground in the SURU locations indicates higher usage and need for cash owing to challenges inherent to digital payment usage in lower tier markets.

In the thrust on providing banking access to a wider population there is a boost towards opening of new bank branches, and rural and semi urban markets have seen much higher growth in opening of new branches.

New bank branches opening in semi-urban and rural locations would provide boost to cash usage



Source: RBI's Database on Indian Economy (DBIE)

FY 2021 – the period which bore the full brunt of the pandemic, saw a respective opening of 782 and 1,292 bank branches in rural and semi-urban locations. In comparison, the 1,201 and 1,858 branches that were opened in the respective locations during FY 2023 registered an absolute growth of 128.33% and 82.16% compared to FY 2021.

The metro and urban locations saw a relatively lower 62.92% and 43.72% growth in the same period from 747 and 796 each in FY 2021 to 1,217 and 1,144 each during FY 2023. The upcoming banking infrastructure expansion drive in the country presents a strong opportunity for ATM network due the multiplier effect ratio of 1:2 between a new branch and new ATMs. This will aid basic banking service access to a wider population and support cash usage behaviour.



The Sectoral Picture

The sectoral picture around cash vibrancy in India is best depicted by the cash collection data from the Retail Cash Management (RCM) points covered by CMS Info Systems.

While the early part of FY 2022 faced the challenges of the COVID-19 pandemic's second wave, the latest fiscal had multiple macroeconomic headwinds to withstand; from the Russia-Ukraine War to stiffer inflation, pushing central banks across the world to hike interest rates.

Monthly analysis of RCM collection also shows uptrend during wedding and festive season

Key Industry Segments	FY 2022													FY 2023												
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar		
BFSI	10.0	8.6	12.3	13.3	12.3	13.1	11.7	12.2	14.9	13.8	13.7	18.5	10.0	10.1	10.7	10.2	9.7	10.6	9.3	10.6	11.4	11.1	10.3	13.6		
Discretionary spends	10.0	5.2	6.9	13.6	16.1	12.9	14.9	14.9	13.3	11.3	10.9	11.0	10.0	12.4	9.4	9.7	10.0	8.7	10.7	7.7	8.0	8.5	7.3	7.5		
E-commerce logistics	10.0	8.7	11.2	12.9	12.3	10.7	12.6	8.6	8.8	7.6	7.2	7.4	10.0	12.1	10.8	10.9	11.7	12.0	13.5	10.5	11.4	11.7	10.1	11.2		
Non-discretionary spends	10.0	9.2	9.0	9.9	10.0	10.9	10.2	9.3	8.9	8.3	8.0	9.2	10.0	10.1	11.1	10.7	11.5	9.9	10.4	9.5	9.7	9.8	8.7	8.8		
Organised retail	10.0	7.2	9.2	11.6	13.6	11.5	13.6	13.9	13.1	12.8	12.2	14.3	10.0	10.9	10.2	10.1	10.9	9.7	12.2	9.1	9.4	8.8	7.2	8.1		
Transportation	10.0	5.6	15.5	18.1	18.3	18.0	20.0	19.1	18.0	15.1	16.5	18.5	10.0	11.0	11.5	10.4	12.2	12.2	12.6	12.3	12.5	12.2	11.9	12.3		

Note: Monthly average cash collection per RCM point is rebased to 10.0 in April of both the fiscals.



Source: CMS Info Systems

The 1.38 times higher average cash collection per RCM point within the transportation segment in FY 2023 clearly depicts the opening of the economy from the COVID-19 pandemic standpoint.

At a key industry segment, at monthly levels, the second wave of the COVID-19 pandemic had its imprint on the average cash collected per RCM point. Four out of the six key industry sectors saw lowest monthly cash collection in May 2021, while the January-March 2022 quarter within FY 2022 was relatively rough for e-commerce logistics and non-discretionary sectors.

In contrast, during FY 2023, four of the six sectors saw their lowest monthly RCM collections in February 2023 and the gloom continued in March 2023 too. Rising interest rates, which have been propelled by tougher inflation, is one of the major reasons impacting consumer spending.

Across FY 2022 and FY 2023, the transportation sector shows a common trend – the October to December period witnesses highest monthly cash collections. Similarly, March – the closing month of the financial year – sees the highest monthly cash collection from the BFSI sector.

A deeper look at the sub-segments within the key industry sectors catered through RCM reveals an interesting picture. As seen at the broader level, majority of the sub-segments saw the lowest monthly cash collection, across FY 2022, in the month of May 2021 when the second wave of the COVID-19 pandemic saw an uptick. Similarly, in FY 2023, barring all the sub-segments within the transportation sector, three out of the four sub-segments within the BFSI sector saw lower cash collections in the months of February and March 2023.

1.38 X
Annual increase in average cash collection per RCM point in transportation sectors during FY 2023



Collection from discretionary segments rises during wedding and festive season and falls during high inflation periods

Key Industry Segments	Sectors	FY 2022												FY 2023											
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
BFSI	Banking	10.0	11.4	13.6	14.9	12.8	11.2	11.1	11.9	10.7	10.6	11.0	11.4	10.0	10.2	11.9	10.3	9.1	9.8	11.1	10.2	8.6	7.7	7.2	7.1
	Financial services	10.0	4.9	10.0	13.3	12.3	12.8	14.0	12.0	15.0	11.7	13.9	18.5	10.0	9.2	9.2	8.7	7.9	8.9	6.9	7.8	8.7	8.2	8.0	9.6
	Insurance	10.0	8.2	12.1	12.8	11.8	13.5	11.2	11.6	15.6	14.4	14.1	20.6	10.0	9.9	10.1	9.8	9.4	10.4	8.3	10.4	12.0	12.3	11.2	16.3
	NBFC	10.0	7.3	10.8	12.1	11.8	11.7	11.7	11.5	13.4	11.7	11.5	13.8	10.0	10.8	11.4	11.1	10.6	11.3	9.9	11.3	12.0	10.4	10.2	11.8
Discretionary spend	Accessories	10.0	4.1	10.0	14.8	18.1	16.5	20.6	20.8	15.0	12.6	13.6	12.7	10.0	12.8	8.8	9.4	10.6	9.2	13.8	8.2	8.5	9.3	8.3	7.1
	Apparels	10.0	3.5	8.6	16.9	20.2	17.4	22.8	23.4	20.2	14.7	15.0	16.2	10.0	10.1	8.6	8.4	8.7	6.9	10.2	7.9	8.8	8.5	6.1	6.4
	Durables	10.0	3.3	8.2	12.5	12.9	11.7	12.3	13.8	14.1	14.1	13.5	14.3	10.0	9.8	8.8	8.2	9.3	7.6	9.8	6.4	5.9	6.6	6.2	6.9
	Footwear	10.0	2.4	8.2	13.1	14.0	14.1	17.9	21.5	17.8	12.3	15.0	17.8	10.0	9.5	8.5	8.3	8.0	8.0	8.6	9.7	9.1	8.9	7.2	7.6
	Hospitality	10.0	5.9	10.1	12.6	13.8	14.1	15.9	14.6	13.1	9.8	9.8	11.4	10.0	12.4	10.6	9.8	10.1	9.1	9.4	8.5	9.5	9.3	7.7	8.3
	Jewellery	10.0	4.2	4.5	12.9	16.0	11.8	11.6	11.5	10.8	10.4	9.2	8.2	10.0	14.0	9.6	10.8	10.9	10.0	11.0	5.2	5.2	6.2	6.2	6.2
	Media & entertainment	10.0	3.4	4.0	7.6	7.6	6.7	8.5	14.3	20.2	12.1	12.3	22.0	10.0	11.4	11.6	8.2	8.6	7.4	10.3	8.7	8.6	10.4	7.0	7.7
E-commerce & logistics	E-commerce logistics	10.0	10.6	12.6	15.4	12.9	10.2	18.7	12.2	13.4	9.7	9.2	8.3	10.0	10.6	9.6	10.8	12.3	13.6	15.6	8.5	9.5	11.4	9.2	10.8
	Logistics & transportation	10.0	8.2	10.9	12.5	12.6	11.6	11.3	8.0	7.8	7.7	7.3	8.1	10.0	12.5	11.2	10.9	11.5	11.6	13.1	12.6	13.4	12.2	11.2	12.0
Non-discretionary spend	Education	10.0	7.3	9.3	12.3	17.9	30.1	21.1	15.4	14.7	15.3	16.3	15.5	10.0	7.9	17.1	13.9	11.2	7.7	13.5	7.1	7.5	12.2	6.7	6.8
	FMCG	10.0	8.4	9.2	10.2	10.4	9.9	10.9	9.0	7.2	6.8	7.3	8.9	10.0	10.0	9.3	9.1	9.6	6.7	8.0	7.1	7.5	7.0	6.0	6.3
Organised retail	Healthcare	10.0	10.0	8.9	9.6	9.3	9.7	9.2	8.9	9.2	8.4	7.7	8.8	10.0	10.4	10.7	10.7	12.2	11.9	10.7	11.1	11.2	10.6	10.5	10.5
	Large format retail	10.0	7.2	9.2	11.6	13.6	11.5	13.6	13.9	13.1	12.8	12.2	14.3	10.0	10.9	10.2	10.1	10.9	9.7	12.2	9.1	9.4	8.8	7.2	8.1
Transportation	Automobile	10.0	4.6	10.7	14.8	14.7	13.4	16.5	15.3	15.9	13.3	13.7	15.1	10.0	9.6	10.1	9.8	10.2	10.4	11.9	9.9	11.5	10.3	10.4	11.4
	Aviation	10.0	5.6	8.6	12.8	19.3	22.4	24.7	27.4	27.8	19.2	20.8	26.1	10.0	10.8	10.1	8.7	9.0	8.8	8.8	8.9	10.1	10.2	10.4	10.0
	Petroleum industry	10.0	7.1	10.5	12.5	13.2	12.7	14.8	14.4	14.5	13.4	15.7	18.9	10.0	9.2	10.8	10.8	11.4	11.0	11.0	11.0	11.3	10.7	10.4	10.3
	Railways	10.0	4.1	22.1	24.7	24.7	24.9	26.5	27.0	23.4	18.2	21.8	25.0	10.0	11.7	11.6	9.3	12.4	12.4	13.2	13.0	12.9	13.1	12.8	13.4

Note: Monthly average cash collection per RCM point is rebased to 10.0 in April of both the fiscals.



Source: CMS Info Systems

During the second half of FY 2023, burgeoning macroeconomic challenges like high inflation and rising interest rates, have been causing a strain on consumer spending especially in discretionary segments like durables, hospitality, accessories and apparels which saw the lowest monthly RCM cash collections over February and March 2023.

The data for earlier months reveals that wedding and festive season across May-June 2022 and October-November 2022 saw the monthly RCM cash collections rising in the discretionary sector. Overall, the RCM data analysis highlights its importance as the appropriate barometer to gauge the pulse of the sectors through the lens of cash collections driven by cash-led consumer spending.



The Future Lens

While financial inclusion and digital payments will make inroads owing to strong government focus, the importance of cash as a medium of payment and settlement would continue to retain its momentum and importance, and thus co-exist.

Traditionally, India has been a cash-led economy and cash has been a longstanding cultural norm in India. Many people still prefer to use it for various reasons, including the feeling of security and control it provides. At weddings or festivals, cash has been an integral part of the celebrations as blessing-gifts.

Infrastructure limitations is another reason to believe that cash will continue to be important even while digital payments have become more prevalent in recent years. India still faces infrastructure limitations, such as access to internet connectivity and scattered power outages, which can make digital payments difficult if not impossible.

It is noteworthy that a significant portion of the population in India is unbanked, with no access to formal banking services. These individuals rely on cash every day as their primary means of conducting transactions. Additionally, the Global Findex Survey 2021 highlights that the share of account owners with inactive accounts is very high at 35% in India, which is about seven times higher than the 5% average for all developing economies (excluding India).

Under penetration of financial and digital literacy leads to security concerns for digital payments despite the convenience offered. Many people in India are wary of digital payments and prefer to use cash to avoid potential fraud or theft, as the newer tech-enabled payment means come with their own set of security concerns and related trust issues.

On the digital payments front, the merchant discount rate (MDR) is a contentious issue. So far, the government has been subsidising the cost of keeping Unified Payments Interface (UPI) transactions free for use. Across the last three union budgets, the government has been allocating ₹1,500 crore every fiscal for the digital payments sector. The latest union budget highlighted that financial support for digital payments may double-up to ₹2,137 crore in FY 2024 in comparison to ₹1,044 crore spent during FY 2022.

₹1,500 Cr
Annual budget allocation for subsidising digital payments by Government of India

The Reserve Bank of India (RBI), in an August 2022 discussion paper on ‘charges in payment systems’ highlighted that stakeholders collectively incur an estimated cost of ₹2 for processing an average peer to merchant (P2M) UPI transaction of ₹800 which works out to 0.25% of the transaction value. RBI’s questions for stakeholders’ feedback were point-blank: “In the context of zero charges, is subsidising costs a more effective alternative? If UPI transactions are charged, should MDR for them be a percentage of transaction value or should a fixed amount irrespective of the transaction value be levied? If charges are introduced, should they be administered (say, by RBI) or be market determined?”

It is beyond doubt that stakeholders, including RBI, are aware about the costs of fulfilling digital payments and subsidising them will not remain a feasible approach in the long-term. In event of MDR getting introduced in the future, the jury is divided about the cost of convenience that consumers will be comfortable paying for using digital payments. Would P2M, as well as peer to peer (P2P), transactions up to ₹5,000 then be paid or settled in cash?

Until then, cash in India continues to be a critical resource with no equivalent substitute across all key parameters that completely meets the needs of consumers and businesses which are central to a commerce cycle in a growing economy. Cash continues to be an original instant payment which cuts across generations, economic status, digital literacy, geographical locations and most importantly, it provides a freedom of choice and right to consumers.



About CMS Cash Index™

The CMS Cash Index™ was created by CMS Info Systems in 2016, to track the infusion of cash back into the economy across various modes. Over time, this track of inflows and outflows of the currency has become a valid measure of the commerce and economic health of India, at any given point. The CMS Cash Index™ is a weighted index consisting of two factors; the cash that goes into circulation via the ATM channels and the cash collected from the organised retail channels, both covered by CMS Info Systems across cities and towns in India.



About CMS Info Systems

CMS Info Systems Limited (BSE: CMSINFO | 543441, NSE: CMSINFO) is a leading business services company providing logistics and technology solutions to banks, financial institutions, organized retail and e-commerce companies in India with presence across Cash Logistics, ATM Managed Services and Technology Solutions.

CMS businesses include ATM and Retail Cash Management, Currency Chest Automation, Bullion Logistics, Banking Automation Solutions, Brown Label ATM and Managed Services, Remote Monitoring Solution, Technology Solutions and Card Personalization.

CMS is India's largest cash logistics company based on number of ATM points and number of retail pick-up points covered today as well as one of the largest ATM cash management companies worldwide.

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