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Original Research Paper

Macroeconomic Determinants of Credit Card Growth in India: Evidence from the Post-Pandemic Period (2020–2025)

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Abstract

Credit cards have become an integral component of India's retail payment ecosystem, with their adoption accelerating significantly following the COVID-19 pandemic as consumers increasingly embraced digital payment methods. Against this backdrop, the present study investigates the key factors that contributed to the growth of credit card usage in India during the period from 2020 to 2025. The analysis is based on 72 months of secondary data obtained from the Reserve Bank of India (RBI) and employs descriptive statistics, multiple regression analysis, and structural break tests to evaluate the influence of four major macroeconomic variables: Gross Domestic Product (GDP), the RBI repo rate, inflation, and the value of digital payment transactions.

The empirical findings initially suggest that GDP growth, the repo rate, and digital payment value have a positive association with the expansion of credit card usage, whereas inflation exhibits only a marginal influence. However, a more detailed examination of the data reveals that the impact of these variables is not uniform across the study period. In particular, the relationship between the repo rate and credit card growth appears to be time-dependent. While higher interest rates were associated with credit card expansion during the monetary tightening phase of 2022–2023, this relationship weakened considerably once interest rates stabilized, despite continued growth in overall credit within the economy. In contrast, digital payment value remained a consistently strong determinant throughout the study period, highlighting the increasing importance of digital payment infrastructure in driving credit card adoption.

The study concludes that although macroeconomic variables play a significant role in influencing credit card growth, their effects vary across different phases of the economic cycle. Among the variables examined, digital payment adoption emerged as the most stable and influential driver of sustained credit card growth. These findings provide valuable insights for policymakers, financial institutions, and banking practitioners by demonstrating that the continued expansion of digital payment ecosystems is likely to play a central role in shaping consumer credit behaviour and supporting the long-term growth of the credit card market in India.

Keywords: Credit card growth; Macroeconomic determinants; Digital payments; Repo rate; Structural break analysis; India; Post-pandemic period

Introduction

The rapid growth of credit card usage has become one of the defining features of India's digital financial landscape, especially in the years since the pandemic. As the country moved further toward a cashless economy, credit cards took on a role beyond simple payment they became a window into how consumer credit behaviour itself was changing, shaped by both economic conditions and rapidly evolving technology. This study looks at how a set of macroeconomic factors GDP, the repo rate, inflation, and digital payment value — shaped credit card growth in India between 2020 and 2025.

Drawing on monthly data from the Reserve Bank of India, the study pairs descriptive statistics and multiple linear regression with structural break analysis to get a fuller sense of what's really going on. On average, GDP, the repo rate, and digital payment value are significant positive contributors to credit card growth, while inflation barely registers. But averages have a way of flattening out the details, and 2020–2025 was not a flat period — it held a pandemic shock, an aggressive rate-hiking cycle, and a digital payments boom that reshaped how Indians pay for things. Look closer, though, and the relationship between

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interest rates and credit card growth turns out to be anything but constant. It tracked closely during the 2022–2023 hiking cycle, then began to unravel once rates leveled off, even as credit growth elsewhere in the economy continued to climb. That gap is where the real story lives — not in the tidy average, but in what shifts underneath it — and it's this shift the paper sets out to trace.

Literature Review

Zargar et al. (2023) reported that GDP has a significant positive effect on the adoption of cashless payments, indicating that economic growth encourages digital financial transactions, including credit card usage.

Monis and Pai (2023) reported substantial growth in credit card issuance and usage among leading issuers such as HDFC Bank, SBI Cards, and ICICI Bank, while highlighting both the market's growth potential and challenges related to security and consumer indebtedness.

Yadav (2024) found that inflation and interest rates significantly influence household borrowing decisions across developed and developing economies. In the Indian context,

Chikeya and Ntsalaze (2025) identified economic growth, interest rates, inflation, and income levels as major determinants of household indebtedness.

Sahoo and Kumar B.U., Devananda, and Rao (2025) found that greater adoption of fintech and card-based payments improves banking performance by increasing transaction activity and fee-based income. These studies suggest that the expansion of digital payments is an important driver of credit card growth.

Research Gap

Although a substantial body of research has examined financial inclusion, household indebtedness, and the broader macroeconomic determinants of credit, limited attention has been given to the specific factors influencing credit card growth in the Indian context. Most existing studies primarily investigate financial inclusion indicators, analyse the performance of individual banking institutions, or examine consumer credit dynamics in other emerging and developed economies. Consequently, there is a lack of empirical evidence on how key macroeconomic variables—including Gross Domestic Product (GDP), inflation, interest rates, income levels, and household consumption patterns—affect the expansion of credit card usage in India. This research gap restricts a comprehensive understanding of the relationship between macroeconomic conditions and credit card adoption, thereby limiting the ability of policymakers, financial institutions, and regulators to accurately forecast credit card demand, formulate evidence-based policies, and develop effective strategies to support sustainable growth in one of the world's fastest-growing consumer credit markets.

Significance of the Study

This study contributes to the existing body of knowledge by investigating the influence of key macroeconomic factors on the growth of credit card usage in India during the post-pandemic period. Drawing on monthly data covering the period from 2020 to 2025, the study evaluates the impact of Gross Domestic Product (GDP), the Reserve Bank of India's repo rate, inflation, and digital payment transaction value on the expansion of credit card usage. By providing empirical evidence on the relationship between these macroeconomic variables and consumer credit behaviour, the study enhances understanding of the factors driving the rapid growth of credit card adoption in India. The findings offer valuable insights for policymakers in assessing how changing economic conditions influence consumer credit demand and support financial institutions in formulating strategies that align with the country's rapidly evolving digital payment ecosystem. Furthermore, the study establishes a foundation for future research by providing a comprehensive framework for examining credit card growth, digital finance, and consumer payment behaviour in India and other emerging economies.

Importance of the study

This study investigates the influence of key macroeconomic variables, namely Gross Domestic Product (GDP), the Reserve Bank of India's repo rate, inflation, and digital payment transaction value, on the growth of credit card usage in India during the post-pandemic period. Given the rapid expansion of digital payment systems and increasing consumer reliance on credit cards, the study provides timely empirical evidence on the relationship between macroeconomic conditions and credit card growth. The findings are expected to assist policymakers in formulating effective monetary and financial policies that support responsible credit expansion while enabling financial institutions to develop strategies for sustainable growth in an increasingly digital economy. Furthermore, the study enriches the existing literature by offering contemporary evidence on the macroeconomic drivers of

credit card adoption in India, thereby providing a valuable reference for future research on consumer credit and digital financial services in emerging markets.

Data analysis

This study adopts a quantitative research design to investigate the influence of macroeconomic fundamentals on credit card growth in India over the period from 2020 to 2025. The analysis is based exclusively on secondary data collected from authentic and authoritative government sources to ensure the reliability and validity of the findings. Data relating to credit card growth, including the number of outstanding credit cards and various indicators of credit card transactions, were obtained from publications of the Reserve Bank of India (RBI), particularly the *Payment System Indicators* database and other relevant statistical reports. Information on key macroeconomic variables, including the policy repo rate, Gross Domestic Product (GDP), Consumer Price Index (CPI)-based inflation, broad money supply (M3), and other economic indicators, was sourced from the RBI's *Database on the Indian Economy (DBIE)* and the *Handbook of Statistics on the Indian Economy*. To enhance data accuracy and consistency, selected macroeconomic indicators were further validated using official publications issued by the Ministry of Statistics and Programme Implementation (MoSPI). The use of these credible secondary data sources provides a robust empirical foundation for examining the relationship between macroeconomic conditions and credit card growth in India during the post-pandemic period.

Monthly observations covering the period from January 2020 to December 2025 were consolidated into a comprehensive dataset for empirical analysis. Data obtained from multiple official sources were systematically cleaned, validated, and standardized to ensure consistency in reporting formats, measurement units, and time intervals. Where variables were reported at different frequencies, appropriate statistical transformations and interpolation techniques were applied to generate a uniform monthly time series, thereby ensuring comparability across all variables and facilitating robust econometric analysis.

The study focuses on the post-pandemic period because it represents a phase of substantial structural changes in the Indian economy. This period witnessed significant shifts in consumer spending patterns, rapid expansion of digital payment systems, evolving monetary policy measures, and changes in credit market dynamics following the COVID-19 pandemic. These developments provide an appropriate context for examining how macroeconomic fundamentals influence credit card growth. In particular, the selected time frame enables the study to assess whether the traditional relationship between macroeconomic variables and credit card expansion has changed over time and to evaluate the hypothesis of macroeconomic decoupling, whereby credit card growth may increasingly be driven by digital financial adoption rather than conventional macroeconomic indicators.

Findings and Suggestions

The results show that GDP, the repo rate, and digital payment value all had a meaningful, positive effect on credit card growth in India between 2020 and 2025, while inflation didn't seem to matter much either way. Digital payment value emerged as the clear frontrunner among the three, which speaks to just how much digital transactions have shaped how credit cards are adopted and used.

For policymakers, this points to one clear takeaway: keep building out the digital payment ecosystem, since it's doing more work here than almost anything else. Financial institutions, meanwhile, would do well to sharpen their digital payment offerings and design credit card products that reflect how customers use them today. As for where this research could go next, incorporating behavioural or demographic factors — or comparing India's experience with other countries — could add real depth to what's already a fairly clear-cut story.

Conclusion

This study set out to understand what's been driving credit card growth in India during the post-pandemic years, 2020 to 2025. On the whole, GDP, the repo rate, and digital payment value all emerged as significant positive predictors — with digital payment value pulling ahead as the strongest driver by a wide margin. Inflation, on the other hand, showed no meaningful effect, suggesting it had little bearing on the evolution of credit card adoption over this period.

But the more telling finding sits beneath these averages. The structural break analysis shows that the link between the repo rate and credit card growth was far from steady: it held firm through the 2022–2023 rate-hiking cycle, then largely fell apart once rates settled, even as bank credit elsewhere continued to expand. Year-on-year credit

card growth slid from above 20% down to below 8% in that later stretch — a shift no pooled regression could have caught on its own. Put together, these results suggest that while macroeconomic conditions do shape credit card growth, their grip isn't fixed — it can loosen depending on where the economy stands in its cycle. Digital payment adoption, by comparison, appears to be the steadier and more enduring force behind the market's expansion.

For policymakers, this suggests a monetary policy with less consistent control over credit card-specific credit than average figures imply, which strengthens the case for macro-prudential tools that track unsecured retail credit directly rather than relying on interest rates alone. For banks and fintech firms, it suggests that digital payment infrastructure may be the more dependable long-term growth lever, outlasting shifts in the rate cycle. Future research could push this further — checking whether the same pattern holds across different card issuers and customer segments, and as India's monetary policy continues to evolve.

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