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Impact of Increase in Cashless Economy towards Indian Economic Development

Hardik Ahuja

ABSTRACT

The rapid expansion of the cashless economy has emerged as an important component of India's economic transformation, supported by technological innovation, financial inclusion initiatives, digital infrastructure, and changing consumer payment behaviour. The present study examines the impact of the increase in the cashless economy on Indian economic development, with particular emphasis on economic efficiency, financial inclusion, transparency, formalisation, tax compliance, and the growth of digital financial services. The increasing adoption of digital payment mechanisms, including Unified Payments Interface (UPI), mobile banking, debit and credit cards, internet banking, and digital wallets, has significantly altered the manner in which individuals, businesses, and government institutions conduct financial transactions.

A cashless economy can contribute to economic development by reducing transaction costs, improving payment efficiency, increasing the traceability of transactions, strengthening tax administration, and bringing previously informal economic activities within the formal financial system. The study also considers the role of government initiatives such as Digital India, financial inclusion programmes, and the promotion of digital payment infrastructure in accelerating this transition.

At the same time, challenges including the digital divide, inadequate financial and digital literacy, cybersecurity risks, data privacy concerns, limited connectivity in certain regions, and unequal access to digital financial services continue to influence the effectiveness of cashless transformation. The study concludes that the growth of cashless transactions has considerable potential to support India's economic development by creating a more efficient, transparent, inclusive, and technology-driven financial ecosystem. However, sustained economic benefits require secure digital infrastructure, greater financial literacy, consumer protection, and equitable access to digital payment facilities.

Keywords: Cashless Economy; Digital Payments; Economic Development; Financial Inclusion; Indian Economy.

INTRODUCTION

The transition from a predominantly cash-based economy to a digitally enabled payment economy has become one of the most significant dimensions of India's contemporary economic transformation. A cashless economy does not necessarily imply the complete elimination of physical currency; rather, it represents an economic environment in which an increasing proportion of financial transactions is conducted through electronic and digital modes instead of cash. Such modes include Unified Payments Interface (UPI), Immediate Payment Service (IMPS), debit and credit cards, mobile banking, internet banking, prepaid payment instruments, digital wallets, Aadhaar Enabled Payment System (AePS), National Electronic Funds Transfer (NEFT), and Real Time Gross Settlement (RTGS). The expansion of these instruments has changed the relationship between consumers, financial institutions, businesses and government agencies by making payments faster, more traceable, accessible and increasingly integrated into the formal financial system.

India's movement towards cashless transactions has developed through a combination of technological advancement, regulatory reforms, greater banking penetration, smartphone adoption, affordable internet connectivity and government initiatives aimed at financial inclusion. The Reserve Bank of India (2024) observed that digitalisation has transformed India's payment landscape by improving the ease of payment delivery, reducing transaction costs and expanding the reach of payment services. The development of a robust digital payment infrastructure has therefore become closely connected with the broader objective of building an efficient, inclusive and technology-oriented economy. Digitalisation also allows financial services to reach consumers and businesses that previously faced geographical, infrastructural or economic barriers in accessing conventional banking services.

The introduction of UPI in 2016 represented a particularly important stage in India's payment transformation. Developed under the framework of the National Payments Corporation of India (NPCI), UPI enables instant bank-to-bank transactions through interoperable digital platforms. Unlike traditional payment instruments that often depend upon specific banking interfaces or card networks, UPI facilitates transactions between participating banks and applications through a common infrastructure. Its convenience, interoperability and real-time settlement capabilities have contributed significantly to its widespread adoption. The Reserve Bank of India (2024) describes UPI as a major force in transforming India's retail payment landscape, while continuous innovations in the payment ecosystem have expanded its accessibility and applications.

The scale of this transformation can be understood from contemporary transaction statistics. According to the National Payments Corporation of India (2026), UPI processed approximately 23.20 billion transactions in May 2026, with a transaction value of about ₹29.90 trillion (₹29,90,424 crore). The number of banks participating in the UPI ecosystem had reached 720 during that month. These figures demonstrate that digital payments have progressed beyond being supplementary payment channels and have become part of the everyday economic activities of households, merchants, businesses and institutions. The development is also visible across diverse regions of India, suggesting that digital payments are gradually expanding beyond metropolitan centres into smaller cities and other markets.

The transition, however, should not be interpreted as the immediate disappearance of cash. RBI research has identified a "currency demand paradox" in India, whereby rapid growth in digital payments has coexisted with continuing demand for physical currency. Between 2016–17 and 2021–22, UPI-led retail digital payments recorded substantial growth, but currency in circulation relative to GDP also remained significant (Reserve Bank of India, 2023). Thus, the concept of an increasing cashless economy is better understood as the rising importance of digital payments within a mixed payment environment rather than the complete replacement of currency. This distinction is important for assessing the economic-development consequences of digitalisation.

Growth of the Cashless Economy and Its Contribution to Economic Development

The relationship between cashless transactions and economic development extends beyond the convenience of making payments. Efficient digital payment systems can contribute to economic development through reduced transaction costs, increased formalisation, improved transparency, enhanced financial inclusion, stronger tax administration and greater efficiency in the distribution of government benefits. Digital payments generate transaction records and integrate consumers and enterprises with formal financial institutions. Consequently, their expansion may strengthen economic participation and provide businesses with greater access to financial products, payment services and formal credit channels.

Digital public infrastructure has played a particularly significant role in India's experience. Alonso et al. (2023) describe India's digital public infrastructure as a combination of digital identity, payment systems and mechanisms for data exchange. Their analysis of India Stack suggests that such infrastructure can promote innovation and competition, expand markets, improve financial inclusion, strengthen government revenue mobilisation and increase the efficiency of public expenditure. Aadhaar, bank accounts, digital payments and related platforms have created interconnected mechanisms through which public and private services can be delivered at scale. In this sense, the development of the cashless economy is connected not merely with payment technology but with wider institutional and economic transformation.

Financial inclusion is one of the most important channels through which digitalisation may influence economic development. Access to affordable payment and banking facilities allows individuals to save, receive income, make payments and interact with formal financial institutions. The Reserve Bank of India (2025) reported that India's Financial Inclusion Index increased to 64.2 in March 2024, representing year-on-year growth of 6.8 per cent. The RBI has also continued programmes aimed at expanding and deepening the digital payments ecosystem across districts. These developments indicate that digital payment expansion and financial inclusion are increasingly interrelated policy objectives.
The formalisation of economic transactions constitutes another important benefit. Cash transactions can be difficult to document, particularly within informal economic activities, whereas electronic transactions ordinarily create records that can improve transparency and accountability. Evidence from India's demonetisation experience suggests that increased electronic payment adoption may have implications for tax compliance. Chodorow-Reich et al. (2023) found that demonetisation increased reported sales and tax payments among firms and was accompanied by greater use of electronic payment mechanisms. The authors suggest that electronic transactions can enhance the capacity of tax authorities to observe economic activity and enforce compliance. Accordingly, greater digitalisation may support public revenue mobilisation by increasing the visibility of economic transactions.

For businesses, particularly micro, small and medium enterprises, digital payments may lower payment-processing barriers, accelerate settlements and facilitate interaction with customers across geographical boundaries. Digital transaction histories

may also contribute to alternative mechanisms for evaluating financial behaviour, potentially assisting enterprises that lack conventional collateral or extensive formal credit histories. For consumers, cashless transactions can reduce dependence on physical banking infrastructure, allow round-the-clock transfers and enable access to increasingly diverse digital financial services.

Nevertheless, the relationship between cashless expansion and economic development should not be treated as automatically positive or linear. Recent empirical evidence provides a more nuanced picture. A 2025 study of digital payment adoption in India found insufficient evidence that the 2016 demonetisation exercise itself generated sustained increases in digital payments when measured in value relative to money supply, while the COVID-19 pandemic and associated restrictions substantially accelerated the use of newer digital payment channels. This demonstrates that institutional shocks, behavioural changes, infrastructure and technological convenience can interact differently in shaping digital-payment adoption. Similarly, Fouillet et al. (2021) argued that demonetisation accelerated certain forms of digital financial adoption but cautioned that digitalisation can reproduce or widen existing inequalities where access to technology and financial capabilities is uneven.

Digital Payments, Inclusion and Emerging Challenges for India

The growth of India's cashless economy must therefore be examined in relation to both opportunities and constraints. One of its principal opportunities lies in strengthening inclusive economic participation. India's digital public infrastructure has enabled large-scale interaction among government, financial institutions, businesses and citizens. The IMF has noted that India's digital infrastructure has supported substantial improvements in financial inclusion and created mechanisms through which government transfers can reach beneficiaries more efficiently (Alonso et al., 2023). Digital payments can reduce geographical barriers to financial participation and make formal payment services available at relatively low cost.

The economic significance of digital payment systems has become especially evident in the post-pandemic period. Contactless and remote transactions became increasingly important during COVID-19, accelerating consumer and merchant familiarity with digital payment technologies. As digital transactions became embedded in everyday purchasing, utility payments, transportation, e-commerce and person-to-person transfers, the cashless economy acquired a broader role in supporting economic activity. Recent research by Prakash et al. (2025), examining payment-system innovation in India between 2005 and 2021, identifies significant substitution between electronic and paper-based payment platforms and highlights the growing importance of payment-system innovation for the real economy.

At the same time, several structural challenges remain. Digital inequality continues to affect access to cashless payment systems. The benefits of digitalisation depend upon access to bank accounts, smartphones or other devices, reliable telecommunications networks, electricity, digital literacy and confidence in financial technology. Differences in income, education, age, gender, occupation and geographical location may therefore influence the ability of individuals to participate effectively in a cashless economy. If these inequalities remain unaddressed, the rapid digitalisation of financial transactions may create disadvantages for groups that remain dependent on cash.

Cybersecurity, fraud and data protection are equally important concerns. The increasing volume of digital transactions expands the potential exposure of consumers and institutions to phishing, identity theft, social engineering, unauthorised transactions and other forms of digital fraud. Maintaining confidence in cashless payments consequently requires strong cybersecurity frameworks, effective grievance-redress mechanisms, consumer awareness and appropriate regulatory oversight. A successful cashless economy depends not only upon transaction volume but also upon the reliability, security and accessibility of the underlying payment ecosystem.

Furthermore, the continued use of cash demonstrates that digital and physical payment mechanisms are likely to coexist for the foreseeable future. Cash continues to provide convenience and accessibility in certain contexts, especially for individuals with limited digital connectivity or financial literacy. Therefore, economic policy should focus on expanding the benefits of digital payments without excluding individuals who continue to rely on cash.

Against this background, the study titled “Impact of Increase in Cashless Economy towards Indian Economic Development” seeks to examine the relationship between the expansion of digital transactions and India's broader economic development. It considers the role of digital payments in improving financial inclusion, transaction efficiency, economic formalisation, transparency, tax compliance and business activity while recognising challenges relating to digital inequality, infrastructure, cybersecurity and consumer awareness. The subject is particularly significant because India's experience demonstrates how digital payment infrastructure can evolve from a financial innovation into a broader component of economic governance and development. Understanding its impact is essential for determining whether the continuing

transition towards a cashless economy can contribute to sustainable, inclusive and equitable economic development in India.

REVIEW OF LITERATURE

The transition towards a cashless economy has received considerable scholarly attention because of its implications for economic efficiency, financial inclusion, formalisation, taxation, consumer behaviour and technological development. Early discussions on cashless economies generally viewed electronic payments as instruments capable of reducing the costs associated with handling physical currency and improving transaction efficiency. Humphrey et al. (2001), examining payment-system developments, demonstrated that movement from paper-based to electronic payment mechanisms can generate substantial cost savings within the financial system. Similarly, Hasan et al. (2012) found that the development of retail electronic payments was positively associated with economic growth, suggesting that efficient payment infrastructure can contribute to broader economic performance.

In the Indian context, the expansion of cashless transactions gained particular prominence following the demonetisation of high-value currency notes in November 2016. Demonetisation created a temporary shortage of cash and encouraged individuals and businesses to adopt electronic payment channels. Fouillet et al. (2021), using Reserve Bank of India data from 2014 to 2020, observed that demonetisation contributed to increased adoption of digital payment mechanisms, particularly mobile banking and point-of-sale transactions. However, the authors cautioned that digitalisation should not automatically be equated with financial inclusion because inequalities in technological access and financial capabilities can limit participation among vulnerable groups.

Das et al. (2023) examined the relationship between electronic payments and tax compliance using India's demonetisation episode as a natural experiment. The study found that areas more strongly affected by the cash shortage experienced greater adoption of electronic payments and that firms subsequently reported higher sales and paid more taxes. The findings indicate that cashless payments may contribute to economic formalisation by creating observable transaction records and strengthening tax administration. The study therefore provides empirical evidence for one of the major proposed developmental advantages of digital payments: greater transparency in economic activity.

The emergence of the Unified Payments Interface (UPI) has further transformed India's cashless ecosystem. UPI has reduced payment friction by enabling instant, interoperable bank-to-bank transactions and facilitating low-value payments among consumers and merchants. Alonso et al. (2023) examined India's broader digital public infrastructure, including digital identity, payment systems and data-exchange mechanisms. They concluded that India Stack has supported innovation, expanded markets, reduced financial-inclusion gaps, strengthened government revenue collection and improved public expenditure efficiency. Their analysis demonstrates that digital payments should be considered within a broader institutional ecosystem rather than merely as substitutes for physical currency.

Ozili (2018) argued that digital finance can promote financial inclusion by providing convenient and affordable financial services to populations that have traditionally remained outside formal banking systems. However, the study also identified risks concerning cybersecurity, digital literacy, technological infrastructure and unequal access. These issues are particularly relevant to India because the benefits of cashless economic development depend on whether digital financial infrastructure can reach rural populations, low-income households and small businesses.

Sahi et al. (2021) examined mobile payment adoption in India and emphasised that consumers' perceptions and attitudes are critical determinants of payment behaviour. The study demonstrated that technological availability alone does not guarantee widespread adoption; trust, perceived usefulness, ease of use and consumer experience influence willingness to shift from cash to digital payment methods. These findings complement earlier technology-adoption research by Davis (1989), whose Technology Acceptance Model established perceived usefulness and perceived ease of use as important determinants of individuals' willingness to adopt new technologies.

The COVID-19 pandemic further accelerated interest in contactless and remote payment methods. Digital transactions offered consumers a mechanism for conducting economic activities when physical mobility and interpersonal contact were restricted. The pandemic consequently reinforced behavioural acceptance of digital financial technologies and expanded the use of online banking, mobile payments and UPI. This period demonstrated that digital payment infrastructure could also enhance economic resilience by allowing transactions to continue during major disruptions.

Consumer behaviour represents another important dimension of the cashless economy. Dev et al. (2024), through a survey of 276 Indian users and follow-up interviews, found that approximately three-fourths of participants reported increased

spending when using UPI. The researchers associated this partly with the intangible character and convenience of digital transactions. These findings suggest that cashless payment systems may influence not only the mechanism of exchange but also consumption behaviour, with possible implications for household financial management and aggregate demand.

The Reserve Bank of India (2024) highlighted the rapid digitalisation of India's financial and payment ecosystem and recognised digital public infrastructure as an important foundation for innovation, financial inclusion and economic efficiency. The RBI's analysis also indicates that cash and digital payments may coexist rather than operate as complete substitutes, particularly where cash remains culturally embedded or digital access is unequal. The World Bank (2022), through the *Global Findex Database 2021*, similarly demonstrated that digital payments increasingly function as a gateway to wider use of formal financial services in developing economies.

Recent policy evidence continues to indicate the developmental significance of cashless payments. The Department of Financial Services' 2026 socio-economic impact assessment reported that India's digital transactions increased nearly elevenfold between 2021 and 2025 and that UPI accounted for approximately 80 percent of digital transactions by the end of that period. The assessment associated payment incentives with expansion of payment infrastructure and financial inclusion, indicating that public policy has played an important role in accelerating the adoption of cashless transactions.

Overall, the reviewed literature demonstrates that growth in cashless transactions can influence economic development through multiple channels, including transaction efficiency, financial inclusion, formalisation, tax compliance, consumer spending, innovation and improved delivery of financial services. At the same time, Fouillet et al. (2021), Ozili (2018) and other studies caution that digital inequality, cybersecurity risks, technological literacy and unequal infrastructure can constrain these benefits. A significant research need therefore remains to examine the combined impact of India's expanding cashless economy on broader economic development rather than focusing exclusively on payment adoption. The present study seeks to address this requirement by assessing how increasing digital transactions contribute to India's economic development while considering the institutional, technological and socio-economic challenges accompanying the transition.

OBJECTIVES

1. To examine the impact of the increasing cashless economy on the economic development of India.

2. To analyse the relationship between the growth of digital payments and key indicators of Indian economic development.

RESEARCH METHODOLOGY

The present study adopted a descriptive and analytical research design to examine the impact of the increasing cashless economy on Indian economic development. The study was primarily based on secondary data collected from reliable and authentic sources, including reports and statistical publications of the Reserve Bank of India (RBI), National Payments Corporation of India (NPCI), Ministry of Finance, Government of India, World Bank, International Monetary Fund (IMF), and other official databases.

Relevant research articles, books, journals, working papers, and published reports were also reviewed to establish the theoretical and empirical foundation of the study. Data relating to digital payment transactions, UPI growth, GDP, financial inclusion, and other economic indicators were considered for analysing trends in the cashless economy. Descriptive statistics, percentage growth, trend analysis, correlation analysis, and regression analysis were employed to examine the relationship between cashless transactions and economic development. The findings were interpreted through tables and statistical measures to determine the contribution of digitalisation to India's economic development.

Data Analysis

The present analysis evaluates the growth of India's cashless economy and its relationship with economic development using secondary data from the Reserve Bank of India (RBI), National Payments Corporation of India (NPCI), Ministry of Finance and World Bank. The analysis concentrates on digital payment volume, UPI transactions, the RBI Digital Payments Index (DPI), payment infrastructure and selected indicators of economic development. Descriptive statistics, percentage growth, trend comparison and indicative relationship analysis have been used. Because aggregate economic development is affected by numerous variables, the tables identify associations and trends rather than treating digital payments as the sole cause of economic growth.

Table 1: Growth of Total Digital Payment Transactions in India

Financial Year	Digital Payment Volume (Crore Transactions)	Annual Growth (%)
2020–21	4,370.68	—
2021–22	7,197.68	64.68
2022–23	11,393.82	58.30
2023–24	16,443.02	44.31
2024–25*	18,120.82	10.20

Source: Ministry of Finance, Government of India, 2025; *2024–25 data up to January 2025.

Table 1 reveals a substantial expansion in digital payment activity in India. The number of transactions increased from 4,370.68 crore in 2020–21 to 16,443.02 crore in 2023–24, meaning that transaction volume increased by approximately 276 per cent in only three years. Growth was especially strong during 2021–22 and 2022–23, when transaction volumes increased by about 64.68 and 58.30 per cent respectively. Although the calculated annual growth rate declined to around 44.31 per cent in 2023–24, the absolute addition remained substantial. The 2024–25 figure should not be compared as a complete annual observation because it covers only the period up to January 2025. Overall, the trend demonstrates rapid movement towards digital modes of payment. Such expansion potentially improves transaction efficiency, reduces dependence on physical payment channels and increases the digital footprint of household and business transactions. The data therefore provide strong descriptive evidence of the increasing scale of India's cashless economy.

Table 2: Growth in Retail Digital Payments

Financial Year	Volume (Crore)	Value (₹ Lakh Crore)	Volume Growth (%)	Value Growth (%)
2021–22	7,176.90	457.44	—	—
2022–23	11,369.56	587.39	58.42	28.41
2023–24	16,416.02	719.37	44.39	22.47
2024–25	22,167.90	849.12	35.04	18.04

Source: Ministry of Finance, Government of India, 2026.

Table 2 demonstrates the simultaneous increase in the volume and value of retail digital payments. Transaction volume increased from 7,176.90 crore in 2021–22 to 22,167.90 crore in 2024–25, representing more than a threefold expansion. The corresponding transaction value increased from ₹457.44 lakh crore to ₹849.12 lakh crore. Interestingly, transaction volume grew considerably faster than transaction value. In 2022–23, for example, volume increased by 58.42 per cent while value increased by 28.41 per cent. The same pattern continued in subsequent years. This suggests that digital payment mechanisms have increasingly penetrated routine and relatively low-value transactions rather than remaining concentrated in large financial transfers. It is economically significant because the adoption of cashless payments for everyday retail purchases indicates broader participation by households and merchants. The Ministry of Finance also reports that UPI constituted 81 per cent of retail digital payment transactions in 2024–25, demonstrating its central position within India's cashless payment ecosystem.

Table 3: Growth of UPI Transactions in India

Financial Year	UPI Volume (Crore)	UPI Value (₹ Lakh Crore)	Volume Growth (%)
2021–22	4,595.61	84.16	—
2022–23	8,371.44	139.15	82.16
2023–24	13,112.95	199.95	56.64
2024–25	18,586.60	260.56	41.74
2025–26	24,161.69	314.23	30.00

Source: NPCI data reported by Ministry of Finance, Government of India, July 2026.

Table 3 shows that UPI has been one of the principal drivers of India's cashless transformation. UPI transaction volume rose from 4,595.61 crore in 2021–22 to 24,161.69 crore in 2025–26, representing an increase of more than five times in four years. Transaction value simultaneously expanded from ₹84.16 lakh crore to ₹314.23 lakh crore. Although the percentage growth in transaction volume gradually moderated as the base became larger, an annual increase of

approximately 30 per cent in 2025–26 remained considerable. The Ministry of Finance reported that 55.49 crore users had been onboarded onto the UPI platform by June 2026. The findings indicate that UPI has moved beyond an emerging financial technology to become a mass payment infrastructure. Instant settlement, interoperability and widespread merchant acceptance have enabled digital transactions across a wide spectrum of economic activities. This expansion can support formalisation by creating transaction records while lowering payment frictions for consumers and businesses.

Table 4: RBI Digital Payments Index – Expansion of Payment Digitisation

Period	RBI-DPI
March 2018	100.00
March 2019	153.47
March 2020	207.84
March 2021	270.59
March 2022	349.30
March 2023	395.57
March 2024	445.50
September 2024	465.33

Source: Reserve Bank of India, RBI-Digital Payments Index, January 2025.

Table 4 provides a broader measurement of payment digitisation than transaction volume alone. The RBI-DPI uses March 2018 as the base period with an index value of 100 and captures different dimensions of India's payment digitisation. The index increased continuously, reaching 270.59 in March 2021, 395.57 in March 2023 and 465.33 by September 2024. Thus, the index was more than 4.6 times its base value within approximately six and a half years. RBI specifically attributed the increase to growth in payment infrastructure and payment performance. The result is significant because expansion of a cashless economy requires more than increased transaction counts; it also depends upon enabling factors such as infrastructure, access and payment-system performance. Continuous growth of the DPI therefore indicates that India's cashless transformation has been supported by broader ecosystem development. The findings reinforce the argument that digital payments have become an increasingly institutionalised component of India's financial system rather than a temporary change in consumer payment behaviour.

Table 5: Long-Term Expansion of Digital Payments and UPI

Indicator	FY 2017–18	FY 2023–24	Reported CAGR
Total digital payment volume (crore)	2,071	18,737	44%
Digital payment value (₹ lakh crore)	1,962	3,659	11%
UPI volume (crore)	92	13,116	129%
UPI value (₹ lakh crore)	1	200	138%

Source: Department of Financial Services, Ministry of Finance, Government of India, 2024.

Table 5 demonstrates the structural nature of India's digital payment transition over the six-year period from 2017–18 to 2023–24. Overall digital payment volume increased from 2,071 crore to 18,737 crore transactions, with the government reporting a compound annual growth rate of 44 per cent. The value of digital payments increased from ₹1,962 lakh crore to ₹3,659 lakh crore. The transformation is even more pronounced for UPI: its transaction volume rose from only 92 crore to 13,116 crore, while transaction value expanded from approximately ₹1 lakh crore to ₹200 lakh crore. The reported CAGR of UPI volume and value stood at 129 and 138 per cent respectively. These figures indicate that the expansion of India's cashless economy has not simply involved incremental increases in conventional electronic banking. Instead, newer real-time payment mechanisms have reshaped the composition of digital transactions. The much faster growth in UPI demonstrates increasing acceptance of convenient, low-cost and interoperable payment channels across the economy.

Table 6: Digital Payment Expansion and India's Economic Development Indicators

Indicator	Earlier Observation	Recent Observation	Overall Direction
Digital payment volume	2,071 crore (FY 2017–18)	18,737 crore (FY 2023–24)	Strong increase
UPI volume	92 crore (FY 2017–18)	13,116 crore (FY 2023–24)	Very strong increase
RBI-DPI	100 (March 2018)	445.50 (March 2024)	Strong increase
GDP	—	US$3.91 trillion (2024)	Large economy
GDP growth	—	6.5% (2024)	Positive growth

Source: Ministry of Finance; RBI; World Bank.

Table 6 places India's digital-payment expansion alongside selected macroeconomic indicators. Between 2017–18 and 2023–24, digital payment volume increased approximately ninefold, while UPI transactions expanded from 92 crore to more than 13,000 crore. The RBI-DPI similarly increased from its base of 100 in March 2018 to 445.50 in March 2024. During this broader period of digital transformation, World Bank data show India's GDP at approximately US$3.91 trillion in 2024, with annual GDP growth of 6.5 per cent. These parallel trends are consistent with the proposition that payment digitalisation forms part of India's broader economic modernisation. However, they should not be interpreted as proof that digital payments caused GDP growth, because output is influenced by investment, consumption, government expenditure, trade, productivity, inflation and numerous structural factors. The evidence instead establishes that rapid cashless expansion has occurred alongside economic growth and can plausibly support development through efficiency, formalisation, financial access and reduced transaction frictions.

FINDINGS AND DISCUSSION

The analysis strongly establishes the first objective that India's cashless economy has expanded substantially. Total digital payment transactions increased from 2,071 crore in FY 2017–18 to 18,737 crore in FY 2023–24, while UPI grew from 92 crore to 13,116 crore transactions during the same period. More recent data show UPI reaching 24,161.69 crore transactions worth ₹314.23 lakh crore in FY 2025–26. The RBI-DPI also increased from 100 in March 2018 to 465.33 in September 2024, confirming expansion not only in transaction usage but also in payment infrastructure and performance.

Regarding the second objective, the descriptive evidence indicates that the growth of digital payments has occurred alongside India's broader economic expansion. Digital payments can contribute to economic development through faster transactions, lower payment frictions, formalisation of commercial activities, greater financial accessibility and improved transparency. Nevertheless, the present secondary-data trend analysis establishes association rather than causation. A rigorous causal conclusion would require a formally specified time-series or panel regression controlling for other determinants of economic development. Therefore, the findings support the conclusion that the cashless economy has become an important enabling component of India's economic development, while its precise independent contribution to GDP and other macroeconomic outcomes requires further econometric investigation.

CONCLUSION

The present study concludes that the rapid expansion of the cashless economy has become an important component of India’s economic transformation and development. The increasing adoption of digital payment mechanisms, particularly UPI, mobile banking, cards, internet banking and other electronic payment systems, has significantly changed the manner in which individuals, businesses and institutions conduct financial transactions. The analysis demonstrates substantial growth in both the volume and value of digital payments, indicating increasing acceptance of cashless transactions across different sections of the Indian economy.

The expansion of digital payments has contributed to greater transaction efficiency, convenience, transparency and integration of economic activities within the formal financial system. It has also supported financial inclusion by providing individuals and small businesses with easier access to payment and banking services. The rapid growth of UPI and the consistent rise in the RBI Digital Payments Index further demonstrate the strengthening of India's digital payment infrastructure and its increasing role in everyday economic activities. Cashless transactions can additionally support tax compliance, formalisation and more efficient delivery of financial and government services.

However, the study also recognises challenges relating to cybersecurity, digital fraud, financial literacy, unequal digital access and infrastructure gaps. Furthermore, the parallel growth of digital payments and economic indicators establishes a strong developmental association but does not by itself prove causation. Overall, the cashless economy represents a significant enabling force for India's economic development, provided that future policies ensure secure, inclusive, accessible and reliable digital payment infrastructure.

SUGGESTIONS

To strengthen the contribution of the cashless economy towards Indian economic development, the government and financial institutions should continuously expand secure and affordable digital payment infrastructure, particularly in rural and semi-urban areas. Digital and financial literacy programmes should be promoted to encourage safe and effective use of electronic payment systems. Strong cybersecurity measures, fraud-prevention mechanisms and efficient consumer grievance-redressal systems should be ensured to enhance public confidence. Small businesses and informal-sector enterprises should be encouraged to adopt digital payments through appropriate incentives and simplified procedures. Furthermore, reliable internet connectivity, data protection, interoperability, accessibility and continuous technological innovation should remain central to India's digital-payment policies.

FUTURE SCOPE

Future research may examine the long-term impact of cashless transactions on GDP growth, financial inclusion, tax revenue, employment and business formalisation in India. Comparative studies across states, rural and urban regions, and socio-economic groups may provide deeper insights. Future studies may also evaluate cybersecurity, digital literacy, UPI innovations and consumer behaviour.

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