

Digital Payments and GST Revenue in India: An Exploratory Analysis of FY 2025–26

Dr. Koushik D.R.

Department of Commerce of Management, Taproot Group of Colleges, Bengaluru, Karnataka

Email: kkdr12@gmail.com

Abstract

This study looks at the connection between India's gross Goods and Services Tax (GST) revenue in FY 2025–2026 and Unified Payments Interface (UPI) activity. From April 2025 to March 2026, the analysis makes use of monthly data on gross GST collections, UPI transaction volume, and UPI transaction value. Simple linear regression, growth analysis, Pearson and Spearman correlations, and descriptive statistics are used.

According to the analysis, GST collections varied between months, but UPI activity increased over the study period. The study's 12-month dataset revealed a weak and statistically negligible correlation between UPI transaction value and gross GST revenue. The regression model accounted for roughly 7.59 percent of the fluctuation in GST revenue, and Pearson's correlation coefficient was -0.2756. The idea that a larger UPI transaction value inevitably results in a higher monthly GST income is not supported by the data. However, given the study is based on only 12 months and does not account for economic activity, inflation, imports, changes in tax policy, or seasonal impacts, the results should be regarded as exploratory.

Keywords: Digital payments, UPI, GST revenue, tax mobilisation, India, correlation, regression, FY 2025–26.

1. Introduction

India's financial and economic infrastructure now heavily relies on digital payments. The Unified Payments Interface is utilised for both person-to-person and person-to-merchant transactions and allows real-time account-to-account payments. While RBI offers more comprehensive payment-system statistics including UPI, NEFT, RTGS, IMPS, cards, and other payment instruments, NPCI releases monthly data on the volume and value of UPI transactions.

With online registration, return filing, e-way bills, e-invoicing, electronic ledgers, and data analytics, India's GST administration has also grown more digital. In order to compare GST revenues and digital payment activity, the GST Council releases monthly revenue statistics.

By boosting transaction traceability, promoting formal accounting, enhancing payment records, and supporting invoice-payment reconciliation, digital payments may aid in tax mobilisation. However, taxable turnover and digital-payment value are not the same. Exempt supplies, non-GST transactions, personal transfers, refunds, advances, loan receivables, and other payments that do not result in a GST liability are examples of UPI transactions.

Therefore, this study does not make the assumption that an increase in UPI will inevitably result in an increase in GST income. Rather, it looks at whether monthly UPI activity and gross GST collections for FY 2025–2026 were statistically correlated.

2. Background of the study

UPI reported about ₹31,425,252.59 crore during FY 2025–2026. This illustrates how digital payments are still growing in India. During the fiscal year, gross GST collections also stayed high. The study's monthly values range from ₹1,70,276 crore in November 2025 to ₹2,36,716 crore in April of the same year. Year-end filings, domestic consumption,

imports, seasonal demand, tax compliance, refunds, and shifts in economic activity are some of the elements that contribute to the fluctuation.

It is theoretically possible for digital payments and GST income to be positively correlated. However, rather than the customer's chosen payment method, GST revenues may react more directly to taxable supply, business turnover, imports, tax rates, compliance enforcement, and economic growth.

Using ARDL techniques, earlier studies looked at the relationship between digital payments and GST income and found a favourable long-term correlation. Nevertheless, these techniques necessitate a larger time series than the current exploratory study's 12 monthly observations.

3. Research problem

The perception that digital payments directly boost GST revenues may arise from the concurrent expansion of digital payments and GST revenue. However, common factors like economic growth, inflation, holiday demand, imports, and tax administration reforms may have an impact on both variables.

Is there a statistically significant relationship between UPI transaction activity and gross GST revenue in India during FY 2025–26?

4. Objectives of the study

- To examine the monthly trend of gross GST revenue during FY 2025–26.
- To analyse the monthly trend of UPI transaction value and volume.
- To calculate the growth of GST revenue and UPI activity during the financial year.
- To measure the correlation between UPI transaction value and GST revenue.
- To estimate the explanatory association between UPI transaction value and gross GST collections.
- To discuss the implications and limitations of using digital-payment data as an indicator of tax mobilisation.

5. Hypotheses

- H_0 - Null hypothesis: There is no significant relationship between UPI transaction value and gross GST revenue during FY 2025–26.
- H_1 - Alternative hypothesis: There is a significant relationship between UPI transaction value and gross GST revenue during FY 2025–26.

6. Data and methodology

6.1 Research design: The study adopts a quantitative and exploratory research design based on monthly secondary data.

6.2 Study period: The study covers April 2025 to March 2026, representing FY 2025–26.

6.3 Variables

Variable	Measurement	Role
Gross GST revenue	₹ crore	Dependent variable
UPI transaction value	₹ crore	Independent variable
UPI transaction volume	Million transactions	Additional explanatory variable
Month	April 2025–March 2026	Time identifier

The UPI data are based on official NPCI related statistics and published data compilations. GST revenue data are based on GST Council and government monthly revenue information.

6.4 Statistical tools

The study uses:

- Descriptive statistics.
- Pearson correlation.
- Spearman rank correlation.

Because only 12 monthly observations are available, the study does not apply ARDL, cointegration, or Granger-causality testing.

6.5 Regression model

The simple regression model is:

$$GST_t = \beta_0 + \beta_1 UPI\ Value_t + E_t$$

Where:

GST_t = Gross GST revenue in month t

$UPI\ Value_t$ = UPI transaction value in month t

B_0 = intercept

B_1 = estimated relationship between UPI value and GST revenue.

E_t = error term.

7. Data presentation

Month	Gross GST revenue (₹ crore)	UPI volume (million)	UPI value (₹ crore)
April 2025	236,716	17,890.00	2,395,000
May 2025	201,050	18,680.00	2,514,000
June 2025	184,597	18,390.00	2,403,000
July 2025	195,735	19,470.00	2,508,000
August 2025	186,564	20,010.00	2,485,000
September 2025	189,017	19,630.00	2,490,000
October 2025	195,936	20,700.00	2,728,000
November 2025	170,276	20,470.00	2,632,000
December 2025	174,550	21,630.00	2,800,000
January 2026	193,384	21,703.46	2,833,481.26
February 2026	183,609	20,394.20	2,684,229.30
March 2026	200,064	22,641.14	2,952,542.03

8. Results

8.1 Descriptive statistics

Statistic	Gross GST revenue	UPI value
Number of observations	12 Months	12 Months
Total	₹23,11,498 crore	₹31,425,252.59 crore
Mean	₹1,92,624.83 crore	₹26,18,771.05 crore
Minimum	₹1,70,276 crore	₹24,03,000 crore
Maximum	₹2,36,716 crore	₹29,52,542.03 crore

The highest GST collection occurred in April 2025, while the lowest occurred in November 2025. The highest UPI value occurred in March 2026, while the lowest occurred in June 2025.

8.2 Correlation analysis

Pearson correlation $R = -0.2756$

The Pearson correlation indicates a weak negative linear relationship between UPI transaction value and gross GST revenue during FY 2025–26.

The significance level was: $P = 0.386$

Since $p > 0.05$, the relationship is not statistically significant at the 5 percent level.

Spearman correlation $P = -0.091$

The Spearman result indicates an almost negligible negative rank relationship. The significance level was:
 $P = 0.779$

This also fails to reject the null hypothesis.

8.3 Regression analysis

The regression equation was:

$$\text{GST}_t = 259635.65 - 0.02559 (\text{UPI Value}_t)$$

The estimated slope coefficient was: $\beta_1 = -0.02559$

The coefficient of determination was: $R^2 = 7.59\%$

Thus, UPI transaction value explained approximately 7.59 percent of the observed variation in monthly gross GST revenue in this sample. The negative coefficient should not be interpreted as evidence that UPI reduces GST revenue. The relationship was statistically weak, the sample was very small, and the model excluded important variables such as industrial production, inflation, imports, taxpayer registrations, and GST-policy changes.

8.4 Hypothesis decision

H_0 - Null hypothesis: There is no significant relationship between UPI transaction value and gross GST revenue during FY 2025–26. - Not rejected

H_1 - Alternative hypothesis: There is a significant relationship between UPI transaction value and gross GST revenue during FY 2025–26. - Not supported

The results do not provide sufficient evidence of a statistically significant relationship between UPI transaction value and gross GST revenue during FY 2025–26.

9. Discussion

The findings indicate that while UPI activity rose during FY 2025–2026, GST income fluctuated monthly. For instance, GST revenue varied independently during the same period, whereas UPI value rose near the end of the fiscal year and peaked in March 2026.

Economically, this outcome is conceivable. The value of UPI transactions falls into a number of categories that don't always generate GST income. These may include:

- Person-to-person transfers.
- Payments for exempt goods and services.
- Payments for non-GST supplies.
- Loan repayments.
- Transfers between a person's own accounts.
- Refunds and reversals.
- Payments already included in another transaction record.

Additionally, early supply, late return filing, tax payments thru various channels, import taxes, input-tax-credit adjustments, refunds, and enforcement actions may all be included in GST income. Therefore, it is not possible to use the monthly UPI value as a straight stand-in for taxable sales.

Example: Suppose a customer pays ₹11,800 for a restaurant bill:

- Taxable value: ₹10,000.
- GST at 18 percent: ₹1,800.
- Total invoice: ₹11,800.

If the customer pays through UPI, the payment creates a digital trail. However, the UPI transaction itself does not establish:

- Whether the restaurant issued an invoice.
- Whether the supply was taxable.
- Whether the correct GST rate was applied.
- Whether the transaction was reported in GSTR-1.
- Whether the tax was paid after considering input tax credit.

Therefore, invoice data, GST returns, and payment data must be matched before digital payments can be used as a strong tax-compliance indicator.

10. Policy implications

10.1 UPI should not be treated as taxable turnover

Tax authorities should not assume that every UPI receipt represents taxable business sales. A reliable compliance system should distinguish personal transfers, exempt supplies, refunds, advances, and taxable business receipts.

10.2 Invoice-payment matching may be more useful

A future digital tax system could match: GSTIN + Invoice number + Payment reference + Amount + Date

Such matching would be more meaningful than simply comparing aggregate UPI value with GST collections.

10.3 Data privacy must be protected

Any integration between payment data and GST systems should be:

- Purpose-specific.
- Consent-based where appropriate.
- Limited to relevant metadata.
- Protected through strong cybersecurity.
- Subject to audit and access controls.

11. Limitations of the study

1. There are just 12 monthly observations in the study.
2. Instead of using the entire digital payment ecosystem, the analysis employs UPI as a stand-in for digital payments.
3. Inflation, industrial production, imports, taxpayer registrations, and changes in GST policy are not taken into account in this study.
4. The results cannot be applied to every year, company, state, or industry.
5. Individual taxpayer behaviour cannot be explained by aggregate monthly data.

12. Conclusion

The relationship between UPI transaction value and gross GST income for FY 2025–2026 was investigated in this study. Despite a significant increase in UPI activity, a statistically significant positive relationship between UPI value and GST collections was not found in the 12-month analysis.

The simple regression model accounted for about 7.59 percent of the variation in GST revenue, with a Pearson correlation of -0.2756 and a Spearman correlation of -0.091 . Consequently, the results do not support the assertion that higher UPI transaction values inevitably result in higher short-term GST revenue.

The outcome should not be seen as proof that digital payments have no bearing on tax compliance. Transaction traceability, formalisation, accounting quality, and invoice-payment reconciliation could all be enhanced by digital payments. However, comparing the total UPI value and GST revenue over a 12-month period is insufficient to quantify these effects.

Industrial production, inflation, imports, taxpayer registrations, e-way bills, e-invoices, and other GST-compliance indicators should all be included in a future study using monthly data. More reliable time-series and causal analysis would be possible with such a dataset.

References

- [1]. Dandona, I. (2026). Impact of digital payments on GST revenue in India. In *Digital Transformation and Economic Governance in India* (pp. 112–128). Taylor & Francis.
- [2]. Dandona, I., & Purohit, S. (2026). Digital transformation and GST reforms in India: An empirical analysis. Zenodo, 19519477.
- [3]. Jerome, J., & Ramalingam, A. (2024). Do digital payments enhance tax revenue? Evidence from India. GIFT Working Paper Series, DP_13.
- [4]. Joseph, J., & Ramalingam, A. (2023). Do digital payments spur GST revenue: Indian experience. *Bulletin of Business and Economics*, 27(3), 456–472.
- [5]. Kumar, S., & Singh, R. (2025). An empirical analysis of GST determinants in India (2017–2024). *International Journal of Innovative Research and Technology*, 12(4), 45–52.
- [6]. Patel, R. (2018). UPI adoption among SMEs and GST compliance in India. *Journal of Digital Finance*, 15(2), 89–104. [ijfmr](#)
- [7]. Sharma, V. (2019). Digital payment volume and direct tax collections: An empirical study. *Indian Journal of Public Finance*, 34(1), 67–82. [ijfmr](#)
- [8]. Tiwari, A., & Singh, P. (2024). An assessment of digital payment trends and their impact on GST collection in India. *The International Journal of Indian Psychology*, 10(2), 112–125.
- [9]. Uppal, R., & Chawla, N. (2025). The influence of UPI on tax revenue and economic formalization. *International Journal of Progressive Research in Engineering Management and Science*, 6(1), 23–31.
- [10]. Yadav, M., & Kumar, A. (2025). A study on digitalisation and its impact on direct and indirect tax collection in India. *International Journal of Creative Research Thoughts*, 13(5), 78–89.
- [11]. Goods and Services Tax Council. (2026). GST revenue data. Government of India. <https://gstcouncil.gov.in/all-gst-revenue>
- [12]. Ministry of Electronics and Information Technology. (2025). Digital payment growth in India: Annual report 2024–25. Government of India.
- [13]. Ministry of Finance. (2026). Direct tax collection for FY 2025–26 as on 31.03.2026. Government of India. <https://www.incometaxindia.gov.in>
- [14]. Ministry of Finance. (2026). Revenue collection during the current year (indirect taxes). Department of Revenue, Government of India. <https://dor.gov.in>
- [15]. Ministry of Statistics and Programme Implementation. (2026). Index of Industrial Production: Monthly data. Government of India. <https://mospi.gov.in/iip>
- [16]. National Payments Corporation of India. (2026). Unified Payments Interface product statistics. <https://www.npci.org.in/product/upi/product-statistics>

- [17]. Press Information Bureau. (2026). Nearly 55.49 crore users onboarded on UPI as in June 2026. Government of India. <https://www.pib.gov.in>
- [18]. Reserve Bank of India. (2026). Payment system indicators. Database on Indian Economy. <https://dbie.rbihub.in/payments/payment-system-indicators>
- [19]. Gupta, R., & Bansal, S. (2021). Role of digital technologies in tax administration: Evidence from India. *Proceedings of the International Conference on Digital Governance*, 234–245.
- [20]. Homiga, U., & P., S. (2025). The role of GST in accelerating digital payments adoption in India. *International Journal of Research Publication and Reviews*, 6(5), 112–120.
- [21]. Joseph, J., & Ramalingam, A. (2023). Digital payments and GST revenue: An ARDL approach. GIFT Working Paper Series, DP_08. [ijfmr](https://www.ijfmr.com)
- [22]. Rao, K., & Mukherjee, S. (2019). Economic impact of GST and digital technology in India. *Conference Proceedings of the Indian Economic Association*, 156–168.
- [23]. Kumar, P., & Sharma, A. (2025). Digital economy and taxation: A new era of fiscal governance. *International Journal of Financial Management Research*, 11(2), 45–58. [ijfmr](https://www.ijfmr.com)
- [24]. NITI Aayog. (2023). Digital public infrastructure and financial inclusion in India. Government of India.
- [25]. Purohit, S. (2018). GST as a comprehensive tax reform in India. *Journal of Indian Taxation*, 45(3), 23–35.
- [26]. Singh, R., & Kumar, M. (2025). Impact of UPI on cashless economy in India: A secondary data analysis. *Journal of Advanced Accounting and Financial Research*, 14(4), 12–25. [rjwave](https://www.rjwave.com)
- [27]. World Bank. (2022). India development update: Digital payments and financial inclusion. World Bank Group.
- [28]. Central Board of Indirect Taxes and Customs. (2026). GST gross and net collections as on 31/12/2025. Government of India. <https://tutorial.gst.gov.in>
- [29]. Economic Times. (2026, April 1). UPI nears record Rs 30 lakh crore in March, caps strong FY26 growth. BFSI Economic Times. <https://bfsi.economictimes.indiatimes.com>
- [30]. Moneycontrol. (2026, April 1). UPI monthly transaction value approaches 30 lakh crore, closes FY 26 with over Rs 300 lakh crore in value. <https://www.moneycontrol.com>
- [31]. OECD Development Centre. (2023). Economic outlook for Southeast Asia, China and India: Digital transformation and growth. OECD Publishing.
- [32]. Reserve Bank of India. (2025). Report on currency and finance 2024–25: Digital payments in India. RBI Publications.
- [33]. TaxDev. (2024). Electronic payments and tax compliance: Research project summary. International Centre for Economic Research.
- [34]. Institute for Fiscal Studies. (2022). Does going cashless make you tax-rich? Evidence from India's demonetisation. IFS Working Paper W2022/03.
- [35]. Emerging Investigators. (2025). India's digital public infrastructure: Analyzing UPI and tax compliance. *Journal of Emerging Investigators*, 25(46), 1–12.

Cite this Article:

Koushik D.R. (2026). Digital payments and GST revenue in India: An exploratory analysis of FY 2025–26. *International Journal of Multidisciplinary Research in Arts, Science and Technology (IJMRAST)*, 4(8), 44–50.

Journal URL: <https://ijmrast.com/> **DOI:** <https://doi.org/10.59828/ijmrast.v4i8.303>



This work is licensed under a [Creative Commons Attribution-Non-Commercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

© The Author(s) 2026. IJMRAST Published by Surya Multidisciplinary Publication.

Disclaimer/Publisher's Note: The author(s) are solely responsible for the content and claims of this article. The publisher and editors assume no legal liability for any errors, copyright violations, or damages arising from its use.