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# Merchant discount rate (MDR) on UPI in India: Policy shift and implications in 2026

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**Abstract**
The Unified Payments Interface (UPI) has emerged as a central component of India's digital payment ecosystem, transforming the manner in which consumers, merchants, banks and payment service providers conduct transactions. Its rapid expansion has been supported by an institutional framework that has historically emphasized affordability and widespread adoption, including a blanket zero-Merchant Discount Rate (MDR) framework for UPI transactions. However, the extraordinary growth in transaction volume, transaction value, merchant payments and participating institutions has increasingly raised questions regarding the long-term financial sustainability of the UPI ecosystem. Against this background, the present study examines the proposed 2026 shift from the blanket zero-MDR framework towards a selective, threshold-based and regulated MDR structure. For this, it adopts a descriptive and analytical research design based primarily on secondary data and policy documents. Quantitative analysis covers UPI transaction volume, transaction value, participating banks and average transaction value, along with P2P and P2M transaction data. The study period covers the evolution of UPI from 2016–17 to 2025–26, with P2P/P2M analysis beginning from 2020–21 and incorporating available 2026 data where applicable. Relevant information from official institutional and regulatory sources is used to examine the policy and legal dimensions of MDR reform. The findings demonstrate the exceptional expansion of UPI during the study period. The number of banks live on UPI increased from 44 in 2016–17 to 705 in 2025–26, while annual transaction volume increased from 17.86 million to 241,616.88 million transactions and transaction value increased from ₹6,952.14 crore to ₹31,423,249.71 crore. The P2M segment also expanded substantially, with transaction volume increasing from 578.15 million in 2020–21 to 12,388.11 million in 2025–26 and transaction value increasing from ₹39,392.67 crore to ₹7,34,012.36 crore. These trends demonstrate the increasing importance of merchant payments within the UPI ecosystem and provide an empirical basis for reconsidering the sustainability of a blanket zero-MDR framework. Finally, it concludes that the proposed MDR shift represents a structural movement towards selective and regulated cost recovery rather than an unrestricted imposition of charges. The policy must balance ecosystem financial sustainability with consumer affordability, small-merchant protection and digital-payment inclusion. Accordingly, a threshold-based and differentiated MDR framework, supported by transparent revenue allocation, regulatory oversight, periodic review and protection for low-value transactions, is recommended to ensure the long-term sustainability and resilience of India's UPI ecosystem.

**Keywords:** Unified Payments Interface (UPI), Merchant Discount Rate (MDR), zero-MDR, digital payments, P2P transactions, P2M transactions, financial sustainability, merchant payments, payment infrastructure, India

## Introduction

India has witnessed a profound transformation in its payment landscape over the past decade, driven by digitalisation, expanding internet and smartphone penetration and interoperable infrastructure. At its centre is the “Unified Payments Interface (UPI)”, developed by the “National Payments Corporation of India (NPCI)”, a component of India’s digital payment ecosystem. UPI enables real-time bank-to-bank payments through mobile applications while ensuring inter-operability among banks and payment service providers. Its simplicity, speed and accessibility have expanded digital payments, supported financial inclusion and reduced dependence on cash. A distinctive feature of the Indian UPI model has been the absence of “Merchant Discount Rate (MDR)” on specified UPI transactions. “MDR refers to the fee for processing digital payments, paid by merchants and distributed among ecosystem participants for processing, infrastructure, settlement and services”. This conventional merchant-fee model was altered through the zero-MDR framework. Section 10A of the Payment and Settlement Systems Act, 2007, alongside Income-tax Act provisions, established a legal framework preventing charges on prescribed electronic payment modes, including BHIM-UPI. The Government introduced incentive schemes to compensate participating entities and encourage adoption.

Zero-MDR made UPI attractive by removing payment-processing charges and encouraging adoption, particularly among small businesses. However, it also created concerns about financial sustainability. Payment processing involves costs for technology, infrastructure, cybersecurity, settlement and support. Without merchant charges, these costs must be absorbed by banks, payment service providers, technology platforms and partly through government support. The Reserve Bank of India has recognised this sustainability challenge. The rapid expansion of UPI has made this issue increasingly important. As transaction volumes and values have grown, maintaining zero MDR has increased financial implications for participants and the Government. Approximately ₹8,730 crore was provided during financial years 2021–22 to 2024–25 to support UPI services. The Union Budget 2026–27 also supports RuPay debit cards and low-value BHIM-UPI transactions.

Against this background, 2026 represents an important turning point. The Union Government has initiated

legislative changes that could permit MDR for selected UPI and RuPay debit card transactions. Proposed amendments seek to modify Section 10A of the Payment and Settlement Systems Act, 2007, allowing participants to recover transaction-related costs. Discussions have considered MDR for higher-value transactions and larger merchants while protecting low-value transactions and smaller businesses. This shift represents movement from universal zero MDR towards a differentiated payment-cost structure. High-value transactions form a small share of volume but a substantial share of value, supporting a calibrated model. Charges could therefore be concentrated on transactions or merchants with capacity to bear processing costs. However, the precise rate, threshold, merchant categories and revenue-sharing arrangements remain subject to policy and regulatory determination.

The proposed framework raises economic, legal and social questions. Economically, MDR could create additional revenue for banks and payment service providers, reduce dependence on incentives and support investment. Legally, amendments would reconsider the statutory framework underpinning zero MDR since 2020. For merchants and consumers, charges could raise concerns about costs, transparency and pass-through. Effects may vary by merchant size, transaction value, sector and bargaining power. The policy debate involves balancing affordability and inclusion against sustainability. A poorly designed MDR framework could increase digital-payment costs and discourage adoption, especially among smaller merchants. Conversely, a calibrated model could strengthen sustainability without substantially affecting low-value transactions or UPI's affordability advantages.

**Literature Review**

Merchant Discount Rate (MDR) on UPI in India—Policy Shift and Implications in 2026. The literature on Merchant Discount Rate (MDR) and India's Unified Payments Interface (UPI) highlights a fundamental trade-off between digital-payment adoption, financial inclusion and the financial sustainability of payment infrastructure.

- The theoretical foundation for understanding MDR comes from the two-sided market literature. Rochet and Tirole (2003) [10] argue that payment platforms must balance pricing between consumers and merchants because participation on one side increases the value of participation on the other. Thus, charging merchants zero fees can be a strategic mechanism for building network effects and increasing overall payment adoption. This framework is particularly relevant to UPI because its rapid growth has depended on widespread merchant acceptance and consumer usage.

- Recent empirical literature supports the importance of merchant acceptance. Rao and Upadhyaya (2026) [8] identify several factors influencing small-scale merchants' acceptance and continued use of UPI payment applications, highlighting the importance of digital inclusion and merchant-level adoption. Similarly, recent research on India's digital-payment ecosystem suggests that zero MDR reduced an important economic barrier for small vendors and contributed to the expansion of the merchant network.

- However, Hegde (2026) [5] argues that zero MDR did not necessarily make UPI commercially unsustainable; instead, it shifted monetisation by encouraging payment platforms to rely on embedded financial services and alternative revenue streams. This creates a tension between public objectives of affordable digital payments and private-sector requirements for sustainable revenues.

- The financial-inclusion literature further suggests that pricing changes must be carefully designed. Gupta *et al*. (2025) [4] find that wealth inequality influences UPI adoption, particularly in areas with higher levels of digital-payment penetration. Therefore, imposing MDR indiscriminately could disproportionately affect smaller merchants and potentially weaken inclusive adoption.

- In 2026, India moved toward a potential policy shift. The amendment to Section 10A of the Payment and Settlement Systems Act creates an enabling framework for future MDR but does not itself impose a universal UPI charge. As of August 2026, the government has stated that consumers and most merchants will continue to use UPI without charges, while any future MDR would potentially apply only to selected, higher-value merchant transactions.

**Research Gap**

Existing literature on UPI in India has largely focused on digital-payment adoption, merchant acceptance, financial inclusion and the sustainability challenges associated with zero-MDR. However, limited research has systematically examined the 2026 shift from blanket zero-MDR toward a potentially calibrated MDR framework. In particular, the legal and structural mechanisms underlying the proposed policy, including transaction thresholds, merchant categories and stakeholder responsibilities, remain underexplored. Further, existing studies discuss economic sustainability and financial inclusion separately, with limited integration of the economic, institutional and social rationales for departing from zero-MDR. There is also insufficient evidence on how the proposed MDR may affect consumers, small and large merchants, banks, payment service providers and the wider payment infrastructure ecosystem. Therefore, the present study addresses these gaps by examining the structure of the 2026, MDR-proposal, the rationale for the policy transition and its potential systemic implications. It thereby extends existing UPI literature from analysing the benefits and limitations of zero-MDR to evaluating the emerging post-zero-MDR policy framework.

**Research Questions**

The Present study evaluates transition by addressing three core research questions:

1. What are the key UPI transaction metrics and their trends during the study period?
2. What legal, regulatory and structural mechanisms characterize the proposed 2026 UPI MDR policy?
3. What economic, institutional and social rationales support the proposed shift from the blanket zero-MDR framework?

4. What are the systemic implications of this shift across consumers, merchant categories and the broader payment infrastructure ecosystem?

**Research Objectives**

The study and provide a clear direction for examining the 2026 shift in the Merchant Discount Rate (MDR) framework for UPI in India. They are focussed on the policy structure, rationale and systemic implications of the proposed MDR transition.

1. To analyse the key UPI transaction metrics and their trends during the study period.
2. To examine the structural and legal mechanisms characterizing the 2026 Merchant Discount Rate (MDR) policy proposal for UPI in India.
3. To analyse the economic, institutional and social rationales underlying the proposed departure from the blanket zero-MDR framework.
4. To assess the systemic implications of the proposed MDR policy shift for consumers, different categories of merchants and the broader UPI payment infrastructure ecosystem.

**Research Methodology**

The study adopts a systematic methodology to examine the policy shift and implications of Merchant Discount Rate (MDR) on UPI in India in 2026. The methodology is structured in line with the research objectives and questions.

- **Research Design:** The study follows a descriptive and analytical research design to examine the structure of the 2026 MDR proposal and analyse its economic, institutional, social and systemic implications.

- **Research Type:** The study is primarily qualitative and quantitative in nature, supported by relevant evidence from official statistics and industry reports.

- **Data Collection:** Data are collected through a systematic review of secondary sources relevant to UPI, MDR, digital payments and payment-system regulation.

- **Sources of Data:** Data are obtained from "RBI, NPCI, Ministry of Finance, Government of India, PIB, parliamentary documents, academic journals, research papers, industry reports and credible financial news sources".

- **Study Period:** The study covers 2016–2026, with particular emphasis on 2025–2026, to examine the transition from the zero-MDR framework to the proposed 2026 policy.

- **Sampling Technique:** Purposive sampling is used to select relevant and credible documents, reports, academic studies and policy materials.

- **Data Analysis:** Data are analysed using thematic and comparative analysis, focusing on policy structure, policy rationale and systemic implications.

- **Analytical Framework:** The study examines three dimensions:
  - Legal and structural mechanisms,
  - Economic, institutional and social rationale and
  - Implications for consumers, merchants and the payment ecosystem.

**The Evolution of UPI in India**

The evolution of the Unified Payments Interface (UPI) represents a major transformation in India's digital payment ecosystem. Since its introduction, UPI has developed from a relatively small-scale payment platform into a large, interoperable and widely adopted national payment infrastructure. Its growth during 2016–17 to 2025–26 can be assessed through three major indicators: the number of participating banks, transaction volume and transaction value. Collectively, these indicators demonstrate the rapid expansion and increasing economic significance of UPI.

**Table 1:** Growth of UPI Transactions and Participating Banks, 2016–17 to 2025–26

| Year | No. of Banks live on UPI | No. of UPI Tr(In Mn.) | Value (In Cr.) | |
|---|---|---|---|---|
| 2016-17 | 44 | 17.86 | 6952.14 | |
| 2017-18 | 91 | 915.22 | 109831.8 | |
| 2018-19 | 142 | 5391.52 | 876970.7 | |
| 2019-20 | 148 | 12518.61 | 2131730.14 | |
| 2020-21 | 216 | 22330.65 | 4103653.58 | |
| 2021-22 | 314 | 45967.53 | 8417572.48 | |
| 2022-23 | 399 | 83751.14 | 13920676.35 | |
| 2023-24 | 572 | 131129.8 | 19995085.51 | |
| 2024-25 | 661 | 185866.02 | 26056954.65 | |
| 2025-26 | 705 | 241616.88 | 31423249.71 | |

**Source:** Compiled from NPCI UPI product statistics.

- **Expansion of Institutional Participation:** The number of banks participating in UPI increased substantially during the study period. From only 44 banks in 2016–17, participation increased to 91 in 2017–18, 142 in 2018–19 and 216 in 2020–21. The expansion accelerated thereafter, reaching 314 banks in 2021–22, 399 in 2022–23, 572 in 2023–24, 661 in 2024–25 and 705 banks in 2025–26. Thus, institutional participation increased more than sixteen-fold over the study period. This expansion strengthened interoperability by enabling customers and merchants of different banks to transact seamlessly through a common payment infrastructure. The increasing number of participating banks also contributed to stronger network effects, wider accessibility and greater integration of UPI within India's formal digital payment system.

- **Rapid Growth In Transaction Volume:** UPI transaction volume increased exceptionally rapidly during the study period. Annual transactions rose from only 17.86 million in 2016–17 to 915.22 million in 2017–18 and 5,391.52 million in 2018–19. By 2019–20, the volume had reached 12,518.61 million transactions. Growth became particularly pronounced thereafter, increasing from 22,330.65 million in 2020–21 to 45,967.53 million in 2021–22 and 83,751.14 million in 2022–23. It further increased to 131,129.80 million in 2023–24, 185,866.02 million in 2024–25 and 241,616.88 million in 2025–26, equivalent to approximately 241.62 billion transactions. This expansion reflects growing consumer adoption, wider merchant acceptance and increasing integration of UPI into routine economic activities.

- **Expansion In Transaction Value:** The growth in transaction value further demonstrates the increasing

economic importance of UPI. Transaction value increased from ₹6,952.14 crore in 2016–17 to ₹1,09,831.80 crore in 2017–18 and ₹8,76,970.70 crore in 2018–19. It reached ₹21,31,730.14 crore in 2019–20 and continued to rise to ₹41,03,653.58 crore in 2020–21, ₹84,17,572.48 crore in 2021–22 and ₹1,39,20,676.35 crore in 2022–23. The value subsequently increased to ₹1,99,95,085.51 crore in 2023–24, ₹2,60,56,954.65 crore in 2024–25 and ₹3,14,23,249.71 crore in 2025–26. The simultaneous increase in transaction volume and value indicates that UPI has evolved beyond a platform primarily associated with small digital payments and has become an important channel for a broad range of economic transactions. This increasing scale is particularly relevant to the MDR debate because payment infrastructure costs are influenced by both transaction volumes and the value and nature of transactions processed.

Overall, the three indicators demonstrate the structural transformation of UPI during the study period. Participating banks increased from 44 to 705, annual transaction volume rose from 17.86 million to 241,616.88 million and transaction value increased from ₹6,952.14 crore to ₹3,14,23,249.71 crore. These trends reflect a mutually reinforcing network effect: greater institutional participation expanded accessibility and interoperability, which encouraged wider consumer and merchant adoption, thereby generating higher transaction volumes and values. Consequently, UPI has evolved into a large-scale national payment infrastructure. The magnitude of this expansion also provides an important empirical basis for examining the financial sustainability of the UPI ecosystem and the policy rationale underlying the proposed shift from a blanket zero-MDR framework towards a more differentiated and regulated approach.

**P2P and P2M evolution**

The overall growth of UPI becomes more analytically meaningful when transactions are classified into Peer-to-Peer (P2P) and Peer-to-Merchant (P2M) transactions. P2P transactions generally involve transfers between individuals, whereas P2M transactions represent payments made by customers to merchants. This distinction is particularly relevant to an MDR-focused study because MDR is primarily associated with merchant transactions. The available data demonstrate a significant

**Table 2:** P2P and P2M Transactions under UPI, 2020–21 to 2026–27

| Year | Total | | P2P | | P2M | |
|---|---|---|---|---|---|---|
| | Volume (In Mn.) | Value (Cr) | Volume (In Mn.) | Value (Cr) | Volume (In Mn.) | Value (Cr) |
| 2020-21 | 1,497.36 | 2,90,537.86 | 919.21 | 2,51,145.19 | 578.15 | 39,392.67 |
| 2021-22 | 3,247.82 | 6,06,281.14 | 1,781.79 | 4,93,664.08 | 1,466.03 | 1,12,617.06 |
| 2022-23 | 6,288.40 | 10,62,991.76 | 3,289.15 | 8,32,265.84 | 2,999.25 | 2,30,725.92 |
| 2023-24 | 9,964.61 | 15,33,645.20 | 4,184.42 | 11,48,397.97 | 5,780.19 | 3,85,247.22 |
| 2024-25 | 14,435.55 | 20,64,292.40 | 5,435.96 | 14,71,369.99 | 8,999.59 | 5,92,922.41 |
| 2025-26 | 19,467.95 | 25,08,498.09 | 7,079.84 | 17,74,485.73 | 12,388.11 | 7,34,012.36 |
| 2026-27* | 23,658.35 | 29,87,880.49 | 8,686.50 | 20,81,267.30 | 14,971.85 | 9,06,613.19 |

**Source:** Compiled from the available UPI P2P/P2M transaction data.

Change in the composition of UPI activity. In 2020–21, the reported dataset recorded 919.21 million P2P transactions and 578.15 million P2M transactions, indicating the initial dominance of P2P activity. However, P2M transactions subsequently expanded rapidly, increasing to 1,466.03 million in 2021–22, 2,999.25 million in 2022–23, 5,780.19 million in 2023–24, 8,999.59 million in 2024–25 and 12,388.11 million in 2025–26. The available 2026–27 figure further increased to 14,971.85 million. This sustained expansion demonstrates the growing integration of UPI into commercial transactions and highlights the increasing importance of merchant payments within the ecosystem.

- **Changing balance between P2P and P2M transactions:** The data indicate that P2M transactions grew considerably faster than P2P transactions during the reported period. P2P volume increased from 919.21 million in 2020–21 to 7,079.84 million in 2025–26, while P2M volume increased from 578.15 million to 12,388.11 million. Consequently, the relative contribution of P2M transactions changed substantially. P2M transactions accounted for approximately 38.6% of reported transactions in 2020–21, compared with 61.4% for P2P. By 2025–26, P2M transactions represented approximately 63.6%, while P2P transactions accounted for 36.4%. The available 2026–27 data indicate that this pattern continued, with P2M constituting approximately 63.3% of reported transactions. This shift demonstrates that UPI has evolved beyond its initial role as a person-to-person transfer mechanism and has increasingly become an important channel for everyday commercial payments

- **Growth in P2M transaction value:** The increasing importance of merchant payments is also reflected in their transaction value. P2M transaction value increased from ₹39,392.67 crore in 2020–21 to ₹1,12,617.06 crore in 2021–22, ₹2,30,725.92 crore in 2022–23, ₹3,85,247.22 crore in 2023–24, ₹5,92,922.41 crore in 2024–25 and ₹7,34,012.36 crore in 2025–26. Thus, P2M growth has occurred not only in transaction volume but also in monetary value. This increasing scale strengthens the economic significance of merchant-facing payment infrastructure and makes questions concerning the financial sustainability and pricing of UPI increasingly relevant to MDR policy.

The evidence indicates that UPI has transformed from an emerging digital payment platform into a mature, high-volume national payment infrastructure. Its evolution has been characterized by expanding institutional participation, rapidly increasing transaction volume and value and a significant rise in merchant-oriented P2M activity. The initial phase of 2016–17 to 2018–19 established the UPI

network, while 2019–20 to 2021–22 witnessed rapid expansion in adoption and transaction activity. From 2022–23 onwards, UPI entered a scaling phase marked by very high transaction volumes, broad institutional participation and increasing merchant usage.

**2026 MDR Policy: Legislative and Structural Mechanisms**

The proposed 2026 Merchant Discount Rate (MDR) framework for the Unified Payments Interface (UPI) represents a potential shift from India's existing zero-MDR model towards a differentiated and regulated pricing structure. The proposed framework seeks to balance three objectives: maintaining affordable digital payments, protecting small merchants and improving the financial sustainability of the UPI ecosystem. Its structural design can be understood through the evolution of zero MDR, legislative reform, institutional regulation, threshold-based pricing, merchant classification, MDR rates and caps and revenue settlement.

- **Evolution of Zero MDR:** "Section 10A of the Payment and Settlement Systems Act, 2007, introduced through the Finance Act, 2019", prohibited charges on specified electronic transactions. While zero-MDR encouraged rapid UPI adoption, payment infrastructure continues to involve processing, technology, cybersecurity and settlement costs. The proposed framework therefore considers selective cost recovery rather than universal charges.

- **Legislative Mechanism:** Amendment of Section 10A would provide the legal foundation for regulated MDR on eligible UPI transactions. It could enable the Government and regulators to distinguish between zero-MDR transactions and those subject to prescribed rates, merchant categories and transaction limits.

- **Regulatory and Institutional Mechanism:** Implementation would involve the "Government, RBI, NPCI, banks, payment service providers and merchants". The Government would establish the legal framework; RBI would provide regulatory oversight and NPCI and participating institutions would manage operational and settlement arrangements. Transparency and monitoring would be essential to prevent excessive charges.

- **Threshold-Based Pricing:** The proposed model focuses mainly on higher-value P2M transactions, with discussions referring to a threshold of approximately ₹2,000. Transactions below the threshold would remain zero-MDR, while eligible transactions above it could attract regulated MDR. Reported rates of around 0.25%–0.40% should be treated as proposed rather than formally notified rates.

- **Merchant Classification and Exemptions:** P2P transactions would generally remain outside the MDR mechanism, while eligible higher-value P2M transactions could be charged. Classification based on transaction value, merchant size, turnover, or business category could protect small and low-margin merchants.

- **MDR Rates and Caps:** MDR represents the financial charge on eligible transactions and can be calculated as: **MDR = Transaction Value × Applicable MDR Rate**. Transaction caps can further limit the maximum charge and prevent excessive costs on large transactions.

- **Revenue Settlement:** MDR revenue would be distributed among eligible ecosystem participants, including acquiring institutions, banks and payment service providers, according to the applicable settlement mechanism. Effective revenue allocation could support infrastructure sustainability and reduce dependence on government incentives.

Overall, the proposed 2026 MDR framework represents a potential transition from universal zero MDR towards a regulated, threshold-based and differentiated pricing model. Its effectiveness will depend on maintaining an appropriate balance between affordability, merchant protection and ecosystem sustainability. Key indicators for evaluating the framework would include MDR revenue, merchant costs, UPI transaction volumes and values, small-merchant participation, payment-provider sustainability and continued government support. The central policy challenge is therefore to achieve sufficient cost recovery without undermining the affordability, accessibility and widespread adoption that have been fundamental to UPI's success.

**Economic, Institutional and Social Rationale for the MDR Shift**

The proposed shift from the blanket zero-Merchant Discount Rate (MDR) framework for Unified Payments Interface (UPI) transactions needs to be understood in the context of the rapid expansion and increasing complexity of India's digital payment ecosystem. The empirical evidence presented in Sections 4.1 and 4.2 demonstrates that UPI has evolved from a relatively small payment platform into a large-scale payment infrastructure. This expansion provides an important economic and institutional context for considering whether the existing zero-MDR framework remains appropriate for all categories and values of transactions. At the same time, the rationale for MDR reform cannot be based solely on transaction growth; it must balance financial sustainability with merchant affordability, consumer interests and the objective of maintaining widespread digital-payment adoption.

- **Increasing Scale of UPI and the Need for Financial Sustainability:** The number of banks live on UPI increased from 44 in 2016–17 to 705 in 2025–26, while annual transaction volume increased from 17.86 million to 241,616.88 million and transaction value from ₹6,952.14 crore to ₹31,423,249.71 crore. This expansion requires continuing investment in transaction processing, infrastructure, cybersecurity, fraud monitoring, maintenance and technological innovation. Therefore, the question of sustainable cost recovery has become increasingly relevant to MDR reform.

- **Increasing Importance of Merchant Transactions:** P2M activity has grown substantially alongside overall UPI expansion. P2M transaction volume increased from 578.15 million in 2020–21 to 12,388.11 million in 2025–26, while its value increased from ₹39,392.67

crore to ₹7,34,012.36 crore. Its share of reported transaction volume rose from approximately 38.6% to 63.6%. This increasing merchant orientation is particularly relevant because MDR is directly associated with merchant payment transactions and their acceptance costs.

- **Institutional Sustainability of Banks, PSPs and Payment Infrastructure:** UPI involves banks, payment service providers, technology infrastructure and other institutions. Rising transaction volumes increase dependence on reliable processing, authentication, settlement, cybersecurity and fraud-management systems, all of which require continuous investment. A selective MDR mechanism could therefore provide an avenue for cost recovery from specified merchant transactions while maintaining affordable access for routine payments.

- **Merchant Affordability and the Need for Differentiated Pricing:** Merchants differ considerably in size, transaction volume, margins and capacity to absorb payment costs. A uniform MDR could disproportionately affect small businesses compared with larger merchants. Therefore, the evidence supports a threshold-based approach in which low-value merchant transactions remain free or highly subsidized, while specified higher-value transactions may bear regulated MDR.

- **Social Rationale: Preserving Digital-Payment Inclusion:** Preserving Digital-Payment Inclusion: Pricing reform must ensure that increased charges do not weaken digital-payment inclusion. Maintaining zero-MDR or preferential treatment for lower-value transactions can protect consumers and small merchants using UPI for frequent, low-value payments. Selective MDR can simultaneously support greater ecosystem sustainability without undermining the affordability that contributed to UPI's adoption.

- **Limitations of the Blanket Zero-MDR Framework:** The rapid increase in institutional participation, transaction volume, value and merchant usage raises questions about the long-term suitability of a uniform zero-MDR model. Although zero-MDR has supported adoption and merchant acceptance, it provides limited scope for transaction-linked cost recovery as the ecosystem becomes larger and more complex. The proposed shift therefore represents movement towards selective and regulated pricing rather than unrestricted charges.

Overall, the rationale for reconsidering blanket zero-MDR is threefold. Economically, UPI's scale highlights the need for sustainable cost recovery; institutionally, expanding bank participation and P2M activity demonstrate increasing ecosystem complexity; and socially, affordability and digital-payment inclusion must remain protected. Therefore, the evidence supports a targeted, threshold-based and differentiated framework in which routine and low-value transactions remain protected while eligible merchant transactions may contribute towards ecosystem sustainability. The central policy challenge is to balance financial sustainability, institutional viability, merchant affordability and social inclusion.

**Systemic Implications of the Proposed MDR Shift**

The proposed shift from the blanket zero-Merchant Discount Rate (MDR) framework towards a differentiated and regulated MDR structure has implications extending beyond the immediate pricing of merchant transactions. UPI functions as an interconnected payment ecosystem involving consumers, merchants, banks, Payment Service Providers (PSPs), NPCI and supporting technological infrastructure. Therefore, any change in MDR can influence transaction costs, merchant acceptance, institutional sustainability, payment behaviour and the long-term development of India's digital payment infrastructure. The implications need to be assessed separately across consumers, small merchants, large merchants, banks and PSPs and the broader UPI infrastructure.

- **Implications for Consumers:** The consumer impact depends largely on whether MDR is absorbed by merchants or passed to customers. If charged only to merchants, consumers may not face an explicit payment fee, although businesses could incorporate costs into prices. Keeping low-value and routine transactions outside MDR can reduce this risk and preserve UPI's affordability. Broad charges on low-value payments, however, could reduce UPI's attractiveness and encourage cash usage.

- **Implications for Small and Micro Merchants:** Small merchants may be particularly sensitive to MDR because of narrow margins and frequent low-value transactions. P2M volume increased from 578.15 million in 2020–21 to 12,388.11 million in 2025–26, highlighting the growing importance of merchant payments. Uniform MDR could therefore increase payment-acceptance costs. Thresholds, exemptions and preferential treatment for small merchants could protect their viability and continued digital-payment adoption.

- **Implications for Large and High-Volume Merchants:** Large merchants generally have greater financial capacity to absorb payment costs. With P2M transaction value increasing from ₹39,392.67 crore to ₹7,34,012.36 crore between 2020–21 and 2025–26, regulated MDR on specified higher-value transactions could facilitate partial ecosystem cost recovery. However, its impact would depend on the final rates, thresholds, competition and merchants' ability to absorb or pass on costs.

- **Implications for Banks and Payment Service Providers:** Banks and PSPs support transaction processing, authentication, customer services, risk management and payment infrastructure. UPI transaction volume increased from 17.86 million in 2016–17 to 241,616.88 million in 2025–26, while participating banks increased from 44 to 705. This expansion requires continuous investment in technology, cybersecurity and fraud management. MDR could provide additional ecosystem revenue, but transparent revenue-sharing and settlement mechanisms would be essential.

- **Implications for UPI and Payment Infrastructure:** UPI's scale requires continuous investment in network capacity, cybersecurity, fraud prevention, resilience, interoperability and technological innovation. A carefully designed MDR mechanism could enable partial cost recovery and support infrastructure development. However, excessive charges could discourage merchant usage, while insufficient charges may fail to achieve sustainability objectives.

- **Implications for the Overall UPI Ecosystem:** Selective MDR could strengthen financial sustainability and support technological investment while allowing higher-value merchant transactions to contribute towards infrastructure costs. Conversely, poorly calibrated MDR could increase merchant costs, affect consumer prices and encourage alternative payment methods. Therefore, thresholds, exemptions, merchant classifications, maximum rates, revenue allocation and consumer safeguards are critical to the policy outcome.

The proposed MDR shift represents a trade-off between financial sustainability and affordability. Consumers need low-cost payments, small merchants require protection, large merchants may absorb regulated charges, banks and PSPs need sustainable incentives and infrastructure requires continuous investment. Accordingly, MDR should be selective, threshold-based and proportionate rather than universal. Protecting low-value transactions and small merchants while applying regulated charges to eligible higher-value transactions, supported by transparent revenue allocation and periodic review, can help balance consumer affordability, merchant viability, institutional sustainability and the long-term resilience of India's digital payment infrastructure.

**Findings of the Study**

The analysis of the evolution of UPI, the composition of P2P and P2M transactions, the structural and legal mechanisms of the proposed 2026 MDR framework and its economic, institutional, social and systemic implications leads to the following major findings:

1. **Exceptional growth of UPI:** UPI expanded significantly, with participating banks increasing from 44 to 705, transaction volume from 17.86 million to 241,616.88 million and transaction value from ₹6,952.14 crore to ₹31,423,249.71 crore.

2. **Deepening of UPI adoption:** The simultaneous growth in banks, transaction volume and value indicates deeper ecosystem adoption and increasing requirements for processing capacity, cybersecurity, fraud management and technological investment.

3. **Growing importance of merchant payments:** P2M transactions increased from 578.15 million in 2020–21 to 12,388.11 million in 2025–26, while their value rose from ₹39,392.67 crore to ₹7,34,012.36 crore, highlighting UPI's growing role in commercial payments.

4. **Greater relevance of MDR reform:** The rapid expansion of P2M transactions strengthens the relevance of MDR reform, as eligible merchant transactions could potentially contribute to the financial sustainability of the payment ecosystem.

5. **Structural shift in MDR policy:** The proposed 2026 MDR framework represents a shift from blanket zero-MDR towards selective, regulated and differentiated pricing based on transaction characteristics, merchant categories and applicable thresholds.

6. **Legislative reform as a prerequisite:** The proposed MDR transition requires modification of the existing statutory framework, creating legal space for determining where and under what conditions MDR may be introduced.

7. **Financial sustainability as a key rationale:** The growing scale of UPI infrastructure and operations creates a need for sustainable cost recovery. Selective MDR could support ecosystem sustainability, particularly for eligible higher-value merchant transactions.

8. **Need to protect merchant affordability:** Uniform MDR could disproportionately affect small and micro merchants. Thresholds, exemptions and merchant classifications are therefore important for preventing MDR from discouraging digital-payment acceptance.

9. **Differentiated stakeholder impacts:** MDR effects may vary across stakeholders: consumers may face indirect price effects, small merchants may be more sensitive to charges, while larger merchants and payment institutions may have greater capacity to absorb or manage costs.

10. **Balancing sustainability and inclusion:** The findings support protecting low-value transactions through zero or preferential pricing while applying selective MDR to eligible higher-value merchant transactions, thereby balancing financial sustainability with digital-payment inclusion.

11. **Implementation determines policy effectiveness:** MDR alone will not ensure sustainability. Transparent revenue allocation, settlement arrangements, regulatory oversight, transaction caps and periodic review of rates will be critical to the framework's effectiveness.

12. **Need for a proportionate MDR framework:** Overall, the evidence supports a regulated and differentiated approach that protects low-value transactions and small merchants while applying appropriate charges to eligible merchant transactions, without undermining UPI's affordability and adoption.

**Conclusion**

The study examined the proposed transition from the blanket zero-MDR framework towards a differentiated and regulated MDR structure, focusing on UPI's growth, P2P and P2M composition, legal and structural mechanisms and economic, institutional, social and systemic implications. The findings establish that MDR is not merely a transaction-pricing issue but a broader question of the long-term financial sustainability, accessibility and resilience of

India's digital payment ecosystem. UPI experienced extraordinary expansion, with participating banks increasing from 44 in 2016–17 to 705 in 2025–26, transaction volume from 17.86 million to 241,616.88 million and transaction value from ₹6,952.14 crore to ₹31,423,249.71 crore. This transformation has increased the need for sustained investment in transaction processing, cybersecurity, fraud prevention, technology and institutional capacity. The growing importance of merchant payments further strengthens the MDR debate, as P2M volume increased from 578.15 million in 2020–21 to 12,388.11 million in 2025–26, while its value rose from ₹39,392.67 crore to ₹7,34,012.36 crore. The proposed 2026 MDR framework represents a structural and regulatory shift rather than universal transaction charges, moving towards selective, threshold-based and regulated pricing. Its effectiveness will depend on appropriate transaction categories, merchant classifications, thresholds, exemptions, regulated rates and effective implementation and oversight. Financial sustainability is the principal rationale for reconsidering zero-MDR; however, reform must protect merchant affordability and digital-payment inclusion. Uniform MDR could disproportionately affect small and micro merchants, particularly those processing low-value transactions. Therefore, protecting routine and low-value payments while applying regulated charges to eligible higher-value merchant transactions offers a more balanced approach. Overall, the study concludes that the central challenge is how MDR can be introduced without undermining UPI's affordability, merchant acceptance and inclusion. A selective, proportionate and regulated framework, supported by transparent revenue allocation, effective oversight and periodic review, can balance ecosystem sustainability with consumer interests, merchant viability and institutional resilience, making it more appropriate to UPI's growing scale and complexity than either unrestricted MDR or uniform pricing.

**Policy-Recommendations**

Based on the study findings, the following recommendations are proposed:

1. **Adopt a threshold-based and differentiated MDR framework:** MDR should not apply uniformly to all UPI transactions. Low-value and routine merchant payments should remain zero-MDR or minimally charged, while eligible higher-value transactions may attract regulated MDR.

2. **Protect small and micro merchants:** Exemptions or preferential rates should be provided to small, low-margin businesses based on transaction value, business size and transaction frequency.

3. **Maintain consumer affordability:** MDR should primarily remain a merchant-side cost, with safeguards against inappropriate consumer surcharging and clear disclosure of applicable charges.

4. **Ensure transparent revenue sharing:** MDR revenue allocation among banks, PSPs and other eligible participants should be clearly defined and monitored to strengthen institutional sustainability.

5. **Support infrastructure and cybersecurity:** A portion of MDR revenue should support transaction-processing capacity, cybersecurity, fraud prevention, system resilience and technological upgrades.

6. **Review rates and thresholds periodically:** MDR rates, thresholds and merchant classifications should be periodically reassessed according to transaction growth, ecosystem costs, merchant impact, technological developments and market conditions.

7. **Strengthen regulatory monitoring:** RBI, NPCI and relevant authorities should monitor MDR's effects on transaction volumes, merchant acceptance, consumer behaviour and payment costs through periodic impact assessments.

8. **Preserve UPI's inclusive character:** MDR reform should protect low-value transactions, vulnerable merchant segments and digital-payment inclusion while creating sustainable revenue mechanisms for eligible transactions.

Overall, MDR policy should balance financial sustainability with affordability through a transparent, proportionate, threshold-based and regularly reviewed framework rather than a universal transaction charge.

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