

An Evaluation Of Post Covid Financial Performance Analysis Of Selected Public Sector Banks In India - Literature Review

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ABSTRACT

The COVID-19 pandemic posed unprecedented challenges to the global banking system, significantly affecting asset quality, liquidity, profitability, and overall financial stability. In India, public sector banks (PSBs) were particularly vulnerable due to pre-existing structural issues such as high non-performing assets, moderate capital adequacy, and governance constraints. This study presents a comprehensive literature-based evaluation of the post-COVID financial performance of selected public sector banks in India, situated within the broader global and national banking context.

The paper synthesizes empirical and conceptual studies addressing key dimensions of banking performance, including asset quality, liquidity management, profitability, regulatory frameworks, sustainability, digital transformation, workforce capability, and risk management practices. The review highlights how pandemic-induced economic disruptions initially weakened banking fundamentals, while regulatory interventions, institutional reforms, and accelerated digital adoption facilitated gradual stabilization and recovery. Evidence from international and Indian studies indicates that post-COVID performance outcomes vary significantly across banks, influenced by pre-pandemic financial health, risk governance, capital strength, and operational adaptability.

The study further identifies critical research gaps, including the scarcity of longitudinal analyses covering pre-COVID, COVID, and post-COVID phases, limited sector-specific evaluations focusing exclusively on Indian public sector banks, and inadequate integration of sustainability, climate risk, and digital capability variables into traditional performance assessment models. By consolidating existing knowledge and outlining future research directions, this paper contributes to the academic discourse on banking resilience and provides policy-relevant insights for strengthening the long-term financial stability and performance of public sector banks in the post-pandemic era.

Keywords: COVID-19, Public Sector Banks, Financial Performance, Liquidity Management, Asset Quality, Sustainability, Digital Banking, India.

Introductionan

Evaluation of the post-COVID financial performance of selected public sector banks in India reveals a nuanced recovery trajectory marked by both challenges and resilience. The pandemic-induced economic disruptions initially strained asset quality and profitability due to increased non-performing assets and reduced credit demand. However, strategic interventions such as government support, regulatory forbearance, and accelerated digital transformation facilitated gradual stabilization. Key performance indicators, including net interest margins, return on assets, and capital adequacy ratios, demonstrate improvement trends, although variability persists across banks depending on their pre-pandemic health and operational agility. This analysis underscores the critical role of adaptive risk management and innovation in navigating post-pandemic uncertainties while sustaining growth and financial stability in the public banking sector.

The literature mapping of the review titled "An Evaluation of Post Covid Financial Performance analysis of Selected public sector banks in India" reveals a focused exploration of how the COVID-19 pandemic impacted the financial health and operational dynamics of public sector banks in India. Existing studies predominantly analyze key financial indicators such as profitability, liquidity, asset quality, and capital adequacy before and after the pandemic onset, highlighting trends of stress and recovery within the banking sector. The review situates these analyses within the broader context of economic disruptions caused by COVID-19, comparing pre-pandemic performance benchmarks to post-pandemic adjustments. It also identifies gaps in comprehensive longitudinal assessments and sector-specific comparative evaluations, emphasizing the need for more granular studies on policy interventions and risk management strategies adopted by these banks during the crisis. This mapping underscores the evolving nature of financial resilience research in Indian public sector banks, positioning the current study to contribute to filling empirical and analytical voids in post-pandemic financial performance literature.

The literature mapping of the review titled "An Evaluation of Post Covid Financial Performance analysis of Selected public sector banks in India" presents an in-depth examination of the multifaceted impact of the COVID-19 pandemic on the financial stability and operational efficacy of India's public sector banks. The existing body of research primarily concentrates on critical financial parameters such as profitability, liquidity, asset quality, and capital adequacy, analyzing their trajectories before and after the onset of the pandemic. These studies collectively highlight patterns of financial stress, adaptive recovery mechanisms, and the varying degrees of resilience exhibited by banks in response to unprecedented economic shocks. Furthermore, the review contextualizes these financial analyses within the broader macroeconomic disturbances induced by the pandemic, drawing comparisons between pre-COVID performance baselines and post-pandemic financial recalibrations.

In addition to outlining the prevailing analytical focus, the literature mapping identifies significant gaps, notably the scarcity of comprehensive longitudinal studies that track financial performance over extended periods encompassing the pandemic timeline. There is also a marked deficiency in sector-specific comparative evaluations that differentiate responses and outcomes among various public sector banks. The mapping emphasizes the necessity for more detailed investigations into the effectiveness of policy interventions, including government stimulus measures and regulatory adjustments, alongside the risk management strategies these banks deployed to mitigate adverse impacts during the crisis. This highlights an evolving research trajectory that moves beyond surface-level financial indicators to explore underlying strategic and operational adaptations.

By synthesizing these insights, the literature mapping underscores the dynamic and evolving nature of financial resilience research within the Indian public banking sector. It positions the current study as a critical contribution aimed at addressing empirical and analytical voids, particularly through granular, data-driven assessments of post-pandemic financial performance. This expanded focus not only enriches the academic discourse but also offers practical implications for policymakers and banking institutions striving to enhance stability and growth in a post-COVID economic environment.

Covid-19 And Global Banking Sector Performance

Extensive international literature has documented the multifaceted ways in which the COVID-19 pandemic undermined banking-sector fundamentals across jurisdictions. Early international assessments established that movement restrictions, social distancing and lockdown policies abruptly reduced economic activity and borrower cash flows, triggering deterioration in loan repayment and asset quality.

Alber and Dabour (2021a, 2021b) provide foundational cross-country evidence showing that pandemic-related containment measures significantly increased credit delinquencies and impaired banks' loan portfolios; they document that the initial shock manifested first as higher probabilities of default among

retail and small-business borrowers and subsequently as rising non-performing loans (NPLs) in multiple banking systems (Alber & Dabour, 2021a; 2021b). Follow-up regional analysis by Alber and Amin (2025) extends this finding to Middle Eastern countries, where pre-existing structural rigidities in some banking markets amplified the adverse effects of COVID-19 on profitability and provisioning needs (Alber & Amin, 2025).

Cross-country panel studies corroborate that the pandemic's macroeconomic spillovers — notably GDP contraction, employment loss, and supply-chain disruption — were the dominant transmission channels to banks' income statements. Augeraud-Véron and Boungou (2023) use cross-country bank-level data to show that bank profitability (measured by ROA and ROE) fell materially in 2020–2021 in economies heavily affected by pandemic waves; their econometric tests isolate reduced net interest income and increased provisioning as the main drivers of the decline (Augeraud-Véron & Boungou, 2023). Comparable empirical evidence from developing-country contexts confirms the universal character of these dynamics: Magoma and Mbwambo (2022) document that Tanzanian banks experienced simultaneous liquidity pressure and profit compression, with liquidity ratios tightening as banks deployed cash buffers to honor withdrawals and meet regulatory requirements (Magoma & Mbwambo, 2022). In similar vein, Gazi et al. (2022) find that private commercial banks in Bangladesh recorded statistically significant reductions in profitability metrics during COVID-19, and that operational inefficiencies and concentration in affected sectors (e.g., trade, services) intensified losses (Gazi et al., 2022).

Beyond profitability and asset quality, a growing literature highlights heterogeneity in outcomes across regions and bank types. Xie et al. (2021) examine post-COVID sustainability of banking performance in emerging Asian economies and report that banks with stronger pre-crisis capital buffers and well-diversified loan books sustained better long-run performance trajectories; those with concentrated exposures (e.g., hospitality, small-and-medium enterprises) suffered more persistent setbacks (Xie et al., 2021). This heterogeneity is echoed by cross-sectional analyses that link pre-pandemic soundness indicators to subsequent resilience: Kasavica and Jovic (2015) show that the negative impact of asset-quality deterioration on profitability is magnified where loan-loss provisioning practices are weaker or where governance standards are lower — a pattern amplified under pandemic stress (Kasavica & Jovic, 2015). Sanathanee's panel analysis (2020) further demonstrates that countries with proactive supervisory frameworks were able to contain the depth of profitability deterioration by facilitating temporary reliefs (forbearance) while insisting on forward-looking provisioning practices (Sanathanee, 2020).

Liquidity management and deposit dynamics also featured prominently in the global evidence. Several studies report that while deposit inflows initially rose in some markets (flight-to-safety effects), banks simultaneously faced higher short-term liquidity needs because of moratoria, delayed loan repayments and emergency credit lines. Magoma and Mbwambo (2022) and Gazi et al. (2022) both document that effective liquidity buffers and central-bank liquidity facilities were decisive in preventing immediate solvency stresses. Augeraud-Véron and Boungou (2023) emphasize that the speed and scale of monetary and fiscal responses (liquidity injections, loan guarantee schemes) materially influenced cross-country variance in recovery speed.

The literature also flags how regulatory forbearance and policy interventions produced mixed effects. On the one hand, temporary moratoria and capital relief measures prevented immediate bank failures and smoothed short-term earnings volatility; on the other hand, several authors warn these measures may have deferred the recognition of credit losses, thereby complicating post-pandemic asset quality assessment (Alber & Dabour, 2021b; Xie et al., 2021). Alber and Dabour (2021b) critique blanket forbearance for masking underlying vulnerabilities, while Augeraud-Véron and Boungou (2023) argue that well-targeted interventions, combined with transparent exit strategies, were more effective at limiting long-term systemic risk.

Several contributions focus on regional and thematic variations that add nuance to the “universal stress” narrative. For example, climate- and country-level factors (Ben-Ammar, 2025) and institutional quality metrics (El Hokayem, 2024) are found to condition the severity of the pandemic’s impact on banking stability; banks operating in jurisdictions with high climate-related exposures or weak institutional enforcement displayed greater sensitivity to COVID shocks (Ben-Ammar, 2025; El Hokayem, 2024).

Studies also identify sectoral contagion effects: banks with concentrated exposure to MSMEs, tourism, or export-oriented industries experienced sharper declines in asset performance (Maharaj & Msomi, 2024; Preysi et al., 2021). The role of digital banking and operational agility emerges repeatedly as a moderating factor: institutions that rapidly scaled e-banking and alternative distribution channels curtailed customer attrition and maintained fee-income streams more effectively (Switbert & Baleche, 2022; Xie et al., 2021).

Finally, cross-national comparative works underline methodological lessons and research imperatives. While studies in Bangladesh, Tanzania, the Middle East, and emerging Asia adopt varied econometric approaches (panel regressions, difference-in-differences, event studies), they converge on the conclusion that the pandemic produced measurable, negative effects on core banking performance indicators — albeit with strong heterogeneity driven by pre-existing bank health, regulatory response, exposure composition, and country macro-policy support (Augeraud-Véron & Boungou, 2023; Magoma & Mbwambo, 2022; Gazi et al., 2022; Alber & Amin, 2025; Xie et al., 2021). This body of evidence forms a robust empirical benchmark for assessing the post-COVID trajectory of Indian public sector banks, while underscoring the necessity of longitudinal, bank-level analyses that account for policy interventions, digital adoption, and exposure composition.

Asset Quality, Profitability, And Bank Stability

The relationship between asset quality and profitability constitutes a foundational pillar of banking performance literature, particularly during periods of economic stress. Asset quality, commonly reflected through non-performing loans (NPLs) and provisioning levels, directly influences banks’ income-generating capacity and capital adequacy. Kasavica and Jovic (2015) provide early empirical evidence establishing that deteriorating asset quality significantly erodes bank profitability, as higher NPL ratios increase provisioning expenses and reduce interest income. Their case-based analysis demonstrates that during economic downturns, this negative relationship intensifies, underscoring the vulnerability of profitability to credit risk shocks. This framework became especially relevant during the COVID-19 pandemic, when widespread borrower distress amplified asset quality concerns across banking systems.

Sanathane (2020) reinforces this linkage through a panel data analysis of domestic commercial banks in Sri Lanka, confirming that asset quality deterioration exerts a statistically significant negative impact on profitability indicators such as return on assets (ROA) and return on equity (ROE). The study further highlights that banks with proactive provisioning policies and stronger capital buffers were better positioned to absorb asset quality shocks, thereby maintaining relative financial stability. These findings provide important comparative insights for emerging economies, including India, where public sector banks historically grapple with elevated NPL levels.

Post-COVID literature expands the asset quality–profitability discourse by emphasizing the role of provisioning adequacy and credit risk management frameworks. Xie et al. (2021) examine sustainable banking performance in emerging Asian economies and demonstrate that post-pandemic resilience is strongly contingent upon effective asset quality management and capital strength. Their study finds that banks which recognized credit losses early and strengthened capital positions exhibited more stable profitability trajectories in the post-COVID period, while delayed recognition of asset impairment resulted in prolonged earnings volatility. This evidence suggests that transparency in asset classification and forward-looking provisioning practices are critical determinants of long-term bank stability.

Beyond traditional credit risk factors, recent studies incorporate broader macro-financial risks into the asset quality–profitability nexus. Ben-Ammar (2025) introduces climate-related risk as an emerging determinant of bank stability, arguing that climate vulnerability at the country level exacerbates asset quality deterioration by increasing default risks in climate-sensitive sectors such as agriculture, infrastructure, and energy. The study finds that banks operating in jurisdictions with higher climate exposure experienced greater instability during post-pandemic recovery, highlighting the need to integrate environmental risk considerations into credit assessment and asset quality monitoring frameworks.

Macroeconomic labor-market dynamics further influence asset quality outcomes in the post-pandemic environment. Sarkar and Rakshit (2024) empirically demonstrate that rising unemployment rates adversely affect banking performance by weakening household repayment capacity and increasing retail loan defaults. Their findings suggest that unemployment shocks act as an indirect transmission channel through which economic crises deteriorate asset quality and profitability, particularly in banks with large retail and MSME loan portfolios. This dynamic is especially relevant for public sector banks in India, given their extensive exposure to priority-sector lending.

Collectively, the literature underscores that post-COVID bank stability is no longer driven solely by traditional credit risk metrics but increasingly shaped by multidimensional risk factors encompassing macroeconomic volatility, climate exposure, labor-market conditions, and institutional preparedness. Studies converge on the conclusion that banks with robust asset quality monitoring systems, adequate provisioning buffers, diversified loan portfolios, and strong capital adequacy are better equipped to sustain profitability and stability in the aftermath of systemic shocks. Conversely, delayed recognition of asset impairment and weak risk governance mechanisms amplify financial fragility and prolong recovery.

This evolving body of evidence establishes asset quality as a central determinant of post-COVID financial performance and highlights the necessity of integrating conventional credit risk management with emerging risk dimensions. These insights form a critical foundation for evaluating the post-pandemic financial stability of Indian public sector banks, where asset quality management remains a decisive factor shaping long-term profitability and resilience.

Asset Quality, Profitability, And Bank Stability

Liquidity management emerged as one of the most critical dimensions of banking performance during and after the COVID-19 pandemic, as sudden disruptions in cash flows, loan moratoria, and heightened withdrawal uncertainty tested banks' ability to meet short-term obligations. Effective liquidity planning became essential not only for regulatory compliance but also for sustaining profitability and operational continuity in an environment of heightened uncertainty.

In the Indian context, Attarwala (2025) provides empirical evidence demonstrating a statistically significant relationship between liquidity management and profitability in selected public sector banks. The study shows that banks maintaining optimal liquidity ratios were better positioned to absorb pandemic-induced shocks, as adequate liquid assets enabled them to honor deposit withdrawals, extend emergency credit, and comply with regulatory requirements without resorting to costly external borrowing. Attarwala further argues that excessive liquidity hoarding, while reducing risk, may suppress profitability, thereby highlighting the need for balanced liquidity strategies that support both stability and earnings in the post-COVID environment.

Comparative evidence presented by Gamit and Purani (2023) underscores structural differences in liquidity resilience between public and private sector banks in India. Their study reveals that private sector banks exhibited greater flexibility and responsiveness in liquidity management, supported by diversified funding sources and advanced risk management systems. In contrast, public sector banks displayed

relatively constrained liquidity adaptability due to legacy operational structures and higher exposure to stressed sectors. These findings suggest that institutional efficiency and governance quality significantly influence liquidity outcomes during systemic crises.

International empirical studies reinforce the centrality of liquidity management during the pandemic. Magoma and Mbwambo (2022) examine selected banks in Tanzania and document severe liquidity pressure during COVID-19, arising from delayed loan repayments, increased provisioning, and heightened uncertainty in deposit behavior. The study finds that banks with stronger liquidity buffers and access to central bank support mechanisms demonstrated greater resilience and faster post-crisis stabilization. Similarly, Gazi et al. (2022) analyze private commercial banks in Bangladesh and report a significant decline in liquidity ratios alongside reduced profitability during the pandemic period. Their findings highlight that liquidity stress often preceded profitability deterioration, emphasizing liquidity risk as an early warning indicator of financial distress.

Collectively, these studies demonstrate that liquidity stress during COVID-19 was not confined to a single geography or banking structure but represented a global phenomenon. The literature consistently shows that banks with proactive liquidity risk management frameworks—characterized by diversified funding bases, prudent asset-liability management, and effective contingency planning—were better equipped to sustain operations and support economic recovery. Conversely, institutions with rigid liquidity structures or over-reliance on short-term funding faced prolonged recovery challenges.

In the post-pandemic phase, liquidity management continues to play a decisive role in shaping financial performance and stability. Studies emphasize that regulatory support measures, including liquidity injections and temporary relaxation of liquidity coverage norms, provided short-term relief but also necessitate careful normalization strategies to avoid future vulnerabilities. For public sector banks, strengthening liquidity governance and aligning liquidity strategies with long-term profitability objectives remain essential for ensuring sustainable recovery.

Overall, the reviewed literature establishes liquidity management as a core determinant of post-COVID banking performance, closely interlinked with profitability, risk management, and institutional resilience. These insights provide a critical foundation for evaluating liquidity-performance dynamics in Indian public sector banks and underscore the need for adaptive liquidity frameworks capable of responding to future systemic shocks.

Indian Public Sector Banks And Covid-19 Impact

Indian public sector banks (PSBs) were uniquely exposed to the economic consequences of the COVID-19 pandemic due to their dominant role in credit intermediation, priority sector lending, and public policy implementation. Entering the pandemic, PSBs already faced structural constraints such as elevated non-performing assets (NPAs), moderate capital adequacy, and governance inefficiencies. Consequently, the pandemic acted as both a stress amplifier and a structural test of institutional resilience within the Indian banking system.

Empirical analysis by Panchal (2021) provides one of the earliest systematic assessments of COVID-19's impact on Indian banking. The study reports a sharp contraction in credit growth, declining interest income, and reduced operational efficiency during the pandemic period, with PSBs disproportionately affected relative to private banks. Panchal attributes this differential impact to PSBs' higher exposure to MSMEs, agriculture, and informal-sector borrowers—segments that were severely disrupted by lockdowns and supply-chain breakdowns. The study further highlights that regulatory moratoria, while stabilizing short-term liquidity, temporarily obscured the true extent of asset quality deterioration.

Undi (2021) evaluates the financial performance of selected public sector banks during COVID-19 using conventional financial ratios and finds substantial inter-bank variation in profitability, asset quality, and capital adequacy. The study observes that banks with relatively stronger pre-pandemic balance sheets exhibited faster stabilization in post-COVID periods, whereas banks with legacy NPA burdens continued to experience earnings volatility. These findings underscore the importance of initial financial conditions in shaping post-pandemic recovery trajectories.

Comparative analysis by N and S (2021) further contextualizes PSB performance by examining both public and private sector banks in India. Their results indicate that although profitability declined across the banking system during COVID-19, public sector banks experienced deeper and more prolonged contractions in ROA and ROE. The study attributes this to higher provisioning requirements, slower digital adaptation, and operational rigidities in PSBs, reinforcing the structural disadvantage faced by public banks during systemic crises.

Performance measurement studies provide additional insights into the multidimensional impact of COVID-19 on PSBs. Rao and Kumar (2025), employing CAMEL indicators, demonstrate that capital adequacy and asset quality dimensions deteriorated significantly during the pandemic, while liquidity positions remained relatively stable due to regulatory support. Similarly, Murthy and H (2024) apply a Balanced Scorecard framework to assess PSB performance and find that while financial perspectives weakened during COVID-19, learning, internal process, and customer perspectives showed gradual improvement, indicating adaptive organizational responses.

The role of institutional and regulatory frameworks in supporting PSBs during and after the pandemic is emphasized by Ahluwalia et al. (2025), who assess the Insolvency and Bankruptcy Code (IBC) and its contribution to sustainable bank performance. Their findings suggest that the IBC enhanced recovery mechanisms and improved credit discipline, thereby supporting long-term asset quality improvement in PSBs during the post-COVID phase. This indicates that structural legal reforms complemented short-term regulatory interventions in stabilizing PSB performance.

Several studies situate PSB performance within broader macroeconomic and sectoral dynamics. Sarkar and Rakshit (2024) demonstrate that rising unemployment during COVID-19 adversely affected banking performance by increasing default risk among retail and MSME borrowers. Shashikala (2024) highlights the severe impact of the pandemic on MSMEs in India, a segment heavily financed by PSBs, thereby indirectly aggravating credit risk and profitability pressures in public banks. These findings reinforce the interconnectedness between real-sector distress and banking-sector performance.

Digital transformation and governance factors also influenced PSB outcomes. Joshi and Gelda (2025) examine fraud detection using Benford's Law and emphasize the importance of robust internal controls and data analytics in safeguarding financial integrity during periods of heightened stress. Das (2025) further argues that innovation-driven risk management and technological adoption are critical for enhancing PSB resilience and competitiveness in the post-pandemic environment.

Overall, the literature reveals that the impact of COVID-19 on Indian public sector banks was deep, multifaceted, and uneven. While regulatory support and institutional reforms prevented systemic collapse, PSBs' recovery remains contingent upon sustained improvements in asset quality management, liquidity governance, digital capabilities, and structural efficiency. The reviewed studies collectively suggest that post-COVID performance evaluation of PSBs must move beyond short-term profitability metrics to incorporate sustainability, risk governance, and institutional adaptability.

Several studies have documented the immediate adverse effects of the COVID-19 pandemic on public sector banks, highlighting deterioration in asset quality due to rising non-performing assets (NPAs) and a decline in profitability driven by reduced credit demand. This body of research emphasizes the pandemic-induced stress on banks' balance sheets and earnings, marking a period of heightened financial vulnerability.

Role of Government Support and Regulatory Measures Research has explored how government interventions, including stimulus packages and regulatory forbearance policies, cushioned the banking sector from more severe disruptions. These studies analyze the effectiveness of moratoriums, capital relief measures, and liquidity injections in stabilizing banks and fostering gradual recovery.

Digital Transformation as a Recovery Catalyst The acceleration of digital banking services during the pandemic is identified as a key factor enabling operational continuity and customer engagement. Literature highlights the strategic adoption of technology by public sector banks to mitigate transaction disruptions and improve service delivery, contributing positively to financial performance post-COVID.

Financial Performance Indicators and Variability Across Banks

Empirical analyses focus on key financial metrics such as net interest margin (NIM), return on assets (ROA), and capital adequacy ratio (CAR) to assess recovery trajectories. Studies reveal significant variability among banks, influenced by their pre-pandemic financial health, risk management capabilities, and operational agility.

Macroeconomic Context and Sectoral Challenges

Broader economic disruptions caused by the pandemic, such as GDP contraction and sector-specific slowdowns, are examined for their indirect impact on banking performance. Literature contextualizes bank-level financial outcomes within this macroeconomic environment, underscoring the interplay between external shocks and internal resilience.

Research Gaps: Longitudinal and Comparative Analyses Existing reviews note a paucity of comprehensive longitudinal studies that track financial performance across the full pandemic timeline. Additionally, there is limited sector-specific comparative research distinguishing responses and outcomes among different public sector banks, indicating a need for more granular and differentiated analyses.

Risk Management and Strategic Adaptations Investigations into the risk mitigation strategies adopted during the crisis focus on credit risk management, provisioning policies, and operational adjustments. Literature points to evolving strategic frameworks aimed at enhancing financial stability and preparing for future uncertainties.

Evolving Research Directions and Practical Implications The literature signals a shift from descriptive financial indicator analysis toward integrative studies incorporating strategic, operational, and policy dimensions. This trajectory underscores the importance of data-driven, empirical research to inform policy formulation and banking sector reforms in the post-pandemic recovery phase.

Regulatory Frameworks And Sustainability

Regulatory and institutional frameworks played a decisive stabilizing role during the COVID-19 crisis and continue to shape the sustainability of banking performance in the post-pandemic period. Beyond short-term liquidity support and regulatory forbearance, structural reforms and governance mechanisms have increasingly been recognized as critical determinants of long-term financial resilience, particularly for public sector banks (PSBs).

Ahluwalia et al. (2025) provide comprehensive empirical evidence on the role of the Insolvency and Bankruptcy Code (IBC) in enhancing the sustainable performance of selected public sector banks in India. Their study demonstrates that the IBC strengthened recovery mechanisms by expediting resolution processes, improving credit discipline among borrowers, and enhancing transparency in asset recovery.

By reducing recovery time and uncertainty, the IBC contributed to better asset quality outcomes and more predictable cash flows for PSBs during the post-COVID recovery phase. The authors argue that while pandemic-related moratoria temporarily delayed insolvency proceedings, the underlying institutional framework of the IBC played a crucial role in restoring financial discipline once economic activity resumed, thereby supporting long-term sustainability rather than short-term profit smoothing.

The broader literature emphasizes that institutional quality and risk-taking behavior significantly influence banking stability during systemic shocks. El Hokayem (2024) analyzes banking performance in the MENA region and finds that banks operating in countries with stronger institutional quality—characterized by regulatory effectiveness, rule of law, and governance standards—exhibited lower risk-taking and more stable profitability during and after the pandemic. The study suggests that institutional robustness moderates excessive risk-taking behavior, thereby reducing vulnerability to crisis-induced asset quality deterioration. These findings hold important implications for Indian PSBs, where regulatory credibility and governance reforms remain central to sustaining post-COVID performance.

Corporate governance and disclosure practices further complement regulatory frameworks in promoting sustainability. Ellili and Nobanee (2017) examine the impact of corporate social responsibility (CSR) disclosure on banking performance and find that higher transparency and stakeholder-oriented practices are associated with improved financial performance and reduced risk exposure. In the post-COVID context, enhanced CSR disclosure is argued to strengthen stakeholder trust, support reputational capital, and improve access to funding—factors that indirectly reinforce banking stability and long-term sustainability. For public sector banks, whose mandates extend beyond profit maximization to socio-economic development, CSR-oriented governance assumes particular relevance.

Financial inclusion initiatives represent another institutional channel through which sustainability is achieved. Ditta and Saputra (2020) analyze the relationship between financial inclusion and banking performance in Indonesia and conclude that inclusive banking strategies enhance deposit mobilization, diversify revenue streams, and stabilize funding bases. While inclusion initiatives may initially increase operational costs and credit risk, their long-term effect on financial performance is positive through broader customer reach and risk diversification. In the Indian context, PSBs play a leading role in financial inclusion programs, suggesting that inclusive growth strategies can simultaneously support social objectives and strengthen sustainable banking performance in the post-pandemic period.

Taken together, the reviewed studies highlight that sustainability in banking performance extends beyond conventional financial metrics and is deeply embedded in regulatory quality, institutional governance, and socio-economic engagement. Structural reforms such as the IBC, strong institutional frameworks that constrain excessive risk-taking, transparent CSR practices, and inclusive banking models collectively enhance resilience and long-term stability. In the aftermath of COVID-19, these regulatory and institutional dimensions have become even more critical for public sector banks, as they balance recovery imperatives with broader developmental responsibilities.

This body of literature underscores that sustainable post-COVID banking performance cannot be achieved through short-term regulatory relief alone. Instead, it requires a coherent institutional architecture that aligns financial discipline, governance quality, and socio-economic inclusion—providing a robust foundation for evaluating the sustainability of Indian public sector banks in the post-pandemic era.

Digital Banking, Awareness, And Workforce Factors

Digital transformation emerged as a critical enabler of banking resilience during and after the COVID-19 pandemic, as physical mobility restrictions accelerated the shift toward technology-driven service delivery. The literature consistently demonstrates that digital banking adoption not only ensured operational continuity during lockdowns but also contributed to efficiency gains, cost reduction, and enhanced customer experience in the post-pandemic period.

Al Zubaidi et al. (2025) examine the role of banking awareness in improving banking performance and find that customer awareness of digital financial services significantly enhances transaction efficiency, service utilization, and operational effectiveness. Their study emphasizes that digital adoption yields optimal performance outcomes only when supported by adequate customer education and awareness programs. In the post-COVID context, this insight is particularly relevant, as large segments of customers were compelled to adopt digital channels for the first time, reshaping service delivery models across banking systems.

Complementary evidence is provided by Switbert and Baleche (2022), who analyze e-banking adoption in Tanzania and establish a positive relationship between perceived benefits of e-banking and banking performance. The study highlights that digital platforms reduced transaction costs, improved service speed, and strengthened customer satisfaction, thereby supporting profitability and operational stability during periods of economic stress. These findings reinforce the argument that digital banking capabilities serve as a structural buffer against external shocks.

Beyond customer-facing technologies, internal workforce capabilities play a crucial role in translating digital investments into performance gains. Soewignyo and Soewignyo (2015) demonstrate that workforce factors—including employee skills, training, adaptability, and productivity—significantly influence banking performance. During the COVID-19 period, banks with digitally skilled and adaptable workforces were better able to implement remote operations, manage risk monitoring systems, and sustain service delivery. This underscores that human capital remains a complementary asset to technological advancement.

Innovation-driven risk management further strengthens the digital-performance nexus. Das (2025) argues that innovation in financial technologies and risk management frameworks enables banks to better identify, measure, and mitigate emerging risks in uncertain environments. The integration of advanced analytics, real-time monitoring systems, and technology-driven decision support tools enhances banks' ability to manage credit, liquidity, and operational risks in the post-pandemic landscape. Together, these studies highlight that digital transformation, customer awareness, workforce capability, and innovation-oriented governance collectively shape post-COVID banking performance.

Research Gaps Identified

Despite the breadth of existing literature on COVID-19 and banking performance, several critical research gaps persist. First, most studies adopt short-term analytical horizons, focusing either on the immediate pandemic period or early recovery phases. There is a notable lack of comprehensive longitudinal studies that examine financial performance across the pre-COVID, COVID, and post-COVID periods using consistent indicators. Such analyses are essential to distinguish temporary shock effects from structural performance shifts.

Second, while numerous studies assess banking performance at aggregate or cross-country levels, sector-specific comparative analyses focusing exclusively on Indian public sector banks (PSBs) remain limited. Existing Indian studies often combine public and private banks, obscuring institution-specific vulnerabilities and recovery dynamics unique to PSBs. Given the distinct mandates, governance structures, and policy roles of PSBs, dedicated comparative evaluations are necessary.

Third, sustainability-oriented dimensions—such as climate risk exposure, environmental and social governance (ESG) practices, financial inclusion, and institutional quality—remain under-integrated into traditional financial performance models. Although recent studies highlight the relevance of climate risk, CSR disclosure, and inclusion initiatives, these factors are rarely incorporated systematically alongside conventional financial ratios.

Finally, limited research integrates digital transformation, workforce adaptability, and innovation-driven risk management into post-COVID performance assessment frameworks. Most empirical models continue to emphasize balance-sheet indicators while underestimating the strategic and operational transformations induced by the pandemic. Addressing these gaps would enable a more holistic and policy-relevant understanding of post-COVID banking performance.

Conclusion And Future Research Directions

The reviewed literature unequivocally confirms that the COVID-19 pandemic exerted significant and multifaceted effects on banking sector performance globally and within India. Public sector banks, in particular, experienced compounded stress due to pre-existing asset quality challenges, sectoral exposure, and operational rigidities. While regulatory support measures, liquidity interventions, and institutional reforms played a stabilizing role during the crisis, they primarily addressed short-term solvency and continuity concerns.

The literature highlights that long-term resilience of public sector banks in the post-COVID era depends on a confluence of factors: robust asset quality management, prudent liquidity planning, sustainable regulatory frameworks, digital transformation, workforce capability, and institutional strength. Structural reforms such as the Insolvency and Bankruptcy Code, enhanced governance and disclosure practices, and inclusive banking initiatives have emerged as key pillars supporting sustainable performance.

Future research should adopt longitudinal and comparative frameworks that capture performance dynamics across different phases of the pandemic. Empirical studies focusing exclusively on Indian public sector banks, integrating financial, digital, sustainability, and governance dimensions, are particularly needed. Additionally, incorporating climate risk, technological innovation, and human capital factors into performance models would offer richer insights into banking resilience.

In sum, advancing post-COVID banking research requires a shift from narrowly defined financial ratio analysis toward integrative, multidimensional evaluation frameworks. Such an approach will not only enhance academic understanding but also provide actionable insights for policymakers, regulators, and banking institutions seeking to strengthen the long-term stability and effectiveness of India's public sector banking system.

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