Impact of Basel III Norms on Capital Adequacy & Risk Management in Indian Banks

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Abstract: The implementation of Basel III regulatory standards represents a landmark event in the evolution of the Indian banking sector. Designed to address the structural vulnerabilities exposed by the 2008 Global Financial Crisis, Basel III reforms aim to enhance the quality and quantity of bank capital, introduce stringent liquidity monitoring, and establish non-risk-based leverage constraints. This research paper evaluates the long-term impact of these standards on the capital adequacy, asset quality, risk management frameworks, and profitability of Scheduled Commercial Banks (SCBs) in India over a decadal horizon spanning from 2015 to 2025.

Employing a comprehensive empirical analysis based on regulatory data published by the Reserve Bank of India (RBI), this study reveals an extraordinary transition. System-wide Capital to Risk-Weighted Assets Ratios (CRAR) surged from 12.94% in March 2015 to 17.36% by March 2025, driven by aggressive public sector recapitalization and robust private sector capital accumulation. Simultaneously, Gross Non-Performing Assets (GNPA) declined from a historic peak of 11.18% in March 2018 to a multi-decadal low of 2.2% in March 2025, while Net Non-Performing Assets (NNPA) fell to 0.5%, indicating highly fortified balance sheets.

However, this transition is characterized by a "double-edged sword" dynamic. Stricter capital standards and the introduction of the Capital Conservation Buffer (CCB) have compressed Return on Equity (ROE) in the short term for highly capitalized institutions due to capital underutilization and the high cost of equity. Furthermore, the co-existence of domestic Statutory Liquidity Ratio (SLR) requirements and Basel III Liquidity Coverage Ratio (LCR) standards has introduced liquidity friction, compressing net interest margins.

I.INTRODUCTION

The international banking regulatory framework underwent a profound paradigm shift following the Global Financial Crisis of 2007–2008. The crisis exposed systemic deficiencies in the prevailing Basel II framework, most notably the inadequate quality and quantity of bank capital, excessive balance-sheet leverage, a total absence of standardized liquidity buffers, and the pro-cyclical amplification of credit risk. In response, the Basel Committee on Banking Supervision developed the Basel III Accords in late 2010. This comprehensive set of reform measures was specifically engineered to fortify the micro-prudential resilience of banking institutions and mitigate macro-prudential, system-wide risk propagation.

In the Indian context, the Reserve Bank of India, as a member of the Basel Committee, adapted and customized the Basel III guidelines to match the structural realities of the domestic financial system. Scheduled Commercial Banks in India commenced the implementation of Basel III regulations on April 1, 2013, in a phased manner. While the original global transition timeline was slated to conclude in 2019, operational challenges, macroeconomic shifts, and the unprecedented disruption of the COVID-19 pandemic prompted the Reserve Bank of India to extend the final deadline for full compliance to October 1, 2021.

The architecture of Basel III is constructed upon three mutually reinforcing pillars:

- Pillar 1: Minimum Capital Requirements and Liquidity Standards. This pillar defines the quantitative thresholds for capital and liquidity. It introduces a much stricter definition of regulatory capital, prioritizing Common Equity Tier 1 (CET-1) capital due to its high loss-absorbing capacity. Furthermore, it mandates the maintenance of explicit capital buffers, namely the Capital Conservation Buffer set at 2.5%, and the Countercyclical Capital Buffer ranging from 0% to 2.5%. Most importantly, Pillar 1 incorporates

two novel liquidity metrics: the short-term Liquidity Coverage Ratio and the structural, long-term Net Stable Funding Ratio.

- Pillar 2: Supervisory Review and Evaluation Process. This pillar empowers national regulators to assess the overall capital adequacy of banks relative to their complete risk profile, including risks not fully captured under Pillar 1, such as interest rate risk in the banking book, concentration risk, and reputational risk. In India, this is operationalized through the annual Internal Capital Adequacy Assessment Process conducted by banks and validated by the regulator.

- Pillar 3: Market Discipline. This pillar mandates extensive public disclosures regarding capital structure, risk exposure, and risk-management processes. By ensuring high levels of reporting transparency, Pillar 3 enables market participants to perform robust peer evaluations, thereby exerting market discipline on banking institutions.

To reflect its conservative regulatory stance, the Reserve Bank of India set capital requirements for Indian commercial banks that are systematically more stringent than the minimum global standards prescribed by the Basel Committee. The global committee mandated a minimum CET-1 ratio of 4.5% and a total Capital to Risk-Weighted Assets Ratio of 8.0%. In contrast, the Reserve Bank of India mandated a minimum CET-1 ratio of 5.5% and a total CRAR of 9.0%. When incorporating the 2.5% Capital Conservation Buffer, the minimum capital requirement for Indian banks is elevated to a CET-1 ratio of 8.0% and an overall CRAR of 11.5%.

While these stringent mandates have fortified the Indian financial ecosystem against external economic shocks, their domestic enforcement has generated significant operational and financial challenges. The requirement to hold high volumes of expensive common equity has escalated the cost of capital, potentially compressing shareholder returns and distorting lending pricing models. Furthermore, the simultaneous maintenance of the domestic Statutory Liquidity Ratio—a legacy liquidity tool requiring banks to invest a fixed percentage of deposits in government securities—and the Basel III Liquidity Coverage Ratio has created significant balance-sheet friction. This friction can lead to "passive lending" to the sovereign, potentially crowding out credit availability for highly productive private sectors of the economy.

II.RESEARCH OBJECTIVES

- To evaluate the longitudinal trajectory of capital adequacy and asset quality
- To analyze the ownership-based performance variance under Basel III
- To assess the efficacy and operational friction of liquidity risk frameworks
- To decode the policy shifts of the finalized 2026 Credit Risk Directions
- To identify systemic implementation bottlenecks and propose strategic recommendations

III.LITERATURE REVIEW

Jaiwani, M., & Gopalkrishnan, S. (2025). Are Basel-III norms good for Indian banks? Examining performance, efficiency and resilience variance in private-sector and public-sector banks.

The researchers investigated whether the implementation of Basel III regulatory capital, leverage, and liquidity standards significantly impacts the financial performance, operational efficiency, and resilience of commercial banks in India. The study utilized a panel dataset comprising 16 private-sector and 12 public-sector banks over the seven-year period from 2016 to 2022, using bank size as a control variable. The empirical analysis was executed using panel data regression with a random-effects estimation framework and robust standard errors. The results revealed a stark variance in outcomes based on bank ownership styles. For public-sector banks, the stricter Capital Adequacy Ratio and Leverage Ratio regulations had a highly significant positive influence on key profitability measures, including Return on Assets, Return on Equity, and Net Interest Margin. This suggests that higher capital buffers in public sector banks act as a signaling mechanism, enhancing depositor and investor confidence, which subsequently lowers funding costs. Furthermore, a significant negative relationship was established between capital adequacy ratios and Non-Performing Assets in public-sector banks, validating moral hazard theory: higher equity skin-in-the-game disincentivizes excessive risk-taking by bank management. Conversely, a similar positive impact was not detected for private-

sector banks, indicating that these institutions operate under different risk-return optimization models and that Basel III cannot be viewed as a one-size-fits-all framework. The authors concluded that policymakers must establish tiered or tailored regulatory mechanisms that respect these deep-seated structural and ownership differences.

Rizvi, N. U., Kashiramka, S., & Singh, S. (2021). Basel III in India: a double-edged sword.

This study explored the perceptions and practical challenges of senior banking professionals in India regarding the implementation of Basel III norms. The methodology centered on a primary survey using a well-structured, close-ended questionnaire built around six core regulatory themes. The construction of the questionnaire was validated by seven independent financial industry experts, yielding 18 high-quality responses representing a 42.8% response rate across major private and public-sector banks. The findings substantiated the overall systemic importance of Basel III in establishing a default-resistant financial environment. However, the study highlighted several major structural concerns, terming the regulation a "double-edged sword". Surveyed banking experts emphasized that the strict capital definitions and risk-weights prescribed under Basel III are primarily designed to address the realities of highly industrialized, advanced economies. Emerging economies like India face technological and infrastructural constraints that make the implementation of advanced credit risk models expensive and operationally complex. Furthermore, the experts indicated that the over-reliance on credit rating agencies under the standardized approaches can distort domestic capital flows and penalize unrated medium enterprises. The paper advocated for a localized recalibration of Tier 1 requirements, risk-weights, and credit-rating dependencies to better align with the credit delivery needs of the Indian macroeconomy.

Swamy, V. (2018). Estimating the Basel III Capital Requirement for Indian Banks.

This research estimated the aggregate capital shortfalls and additional equity requirements of Indian commercial banks attempting to comply with Basel III capital targets. The researcher utilized historical financial disclosures, including reported Tier 1 capital, Tier 2 capital, total capital, and Risk-Weighted Assets sourced from the official Basel Pillar 3 disclosures of public and private sector banks spanning the period 2002 to 2011. Using simulation models, the study projected the capital requirements under three different RWA growth scenarios: 10%, 12%, and 15%. The empirical simulations demonstrated that at a conservative RWA growth rate of 10%, the Indian banking sector would require a minimum additional Tier 1 capital of INR 2.51 trillion. Under the 12% and 15% growth assumptions, the projected capital shortfalls expanded to INR 3.36 trillion and INR 4.74 trillion, respectively. The study concluded that public-sector banks face the most severe capital constraints due to their historical reliance on government budgetary support and lower levels of internal capital generation. The author warned that if the state is unable to fund these massive recapitalization requirements, public sector banks will be forced to curtail credit growth, which could negatively impact national economic growth.

Pathak, B., Rajkonwar, A. B., & Bora, J. (2026). Basel III Norms And Its Effect On The Profitability Of Indian Commercial Banks.

The authors evaluated the direct relationship between Basel III capital adequacy parameters and the asset quality and profitability of commercial banks in India. The sample comprised eight leading commercial banks (four public-sector and four private-sector banks) selected based on their market capitalization. The study examined the financial period from 2020-21 to 2023-24, utilizing secondary financial data extracted from bank annual reports and Reserve Bank of India publications. The statistical analysis demonstrated a clear, positive upward trajectory in the Basel III Capital Adequacy Ratios of the selected banks over the study period. This improvement was strongly correlated with a consistent downward trend in both Gross and Net Non-Performing Assets, indicating that the regulatory pressure to maintain higher capital ratios forced banks to adopt more stringent credit underwriting and loan recovery standards.

Pratima, & Tiwari, A. K. (2022). Implementing Basel III for Indian Banks

This paper evaluated the structural, operational, and profitability impacts of Basel III on Indian commercial

banks, with a focus on public-sector institutions. The authors analyzed the financial pressure induced by the phased implementation of the Capital Conservation Buffer between 2015-16 and 2017-18. They noted that while private-sector banks remained comfortable, several public-sector banks fell short of core capital requirements, necessitating significant government recapitalization interventions to meet regulatory minima. The study estimated that the total capital requirement for public-sector banks under Basel III was approximately Rs 1,400 to Rs 1,500 billion.

Arya, P., & Agarwal, N. (2025). A Comparative Analysis of Capital to Risk Weighted Assets in Context of Bank of Baroda and Industrial Credit and Investment Corporation of India Bank

The authors conducted a comparative empirical analysis of the Capital to Risk-Weighted Assets Ratio of two prominent Indian commercial banks: Bank of Baroda (representing the public sector) and ICICI Bank (representing the private sector). The research examined the five-year period from 2020 to 2024, extracting financial data directly from the audited annual reports of the respective banks. The data was statistically analyzed using descriptive statistics, normality distributions, and independent sample t-tests. The descriptive analysis revealed distinct capital management styles. ICICI Bank maintained a high, albeit fluctuating, CRAR throughout the five-year period, reflecting its dynamic capital-raising activities and agile asset allocation. On the other hand, Bank of Baroda exhibited a steady, consistent increase in its capital adequacy ratio, supported by consecutive state-backed recapitalizations and progressive internal profit retention.

Jain, A. (2017). Impact of BASEL III on India.

This paper explored the conceptual evolution from the Basel I and Basel II frameworks to the Basel III standards, evaluating the macroeconomic implications of India's adoption of these rules in 2012. The author analyzed how the pro-cyclicality of Basel II's credit-risk models necessitated the introduction of macro-prudential capital buffers under Basel III, such as the Capital Conservation Buffer and the Countercyclical Capital Buffer. The study argued that in the short run, complying with Basel III regulations would inevitably curtail credit delivery to the domestic economy, as banks prioritize capital conservation over aggressive lending. This credit tightening, combined with the high cost of equity capital, was shown to temporarily compress bank profitability and slow macroeconomic expansion.

Boora, K., & Jangra, K. (2019). Preparedness level of Indian public sector banks for implementation of Basel III.

This research evaluated the organizational and technological preparedness of Indian Public Sector Banks for complying with Basel III mandates. The methodology relied on a modified structural survey questionnaire administered to banking officers and risk management professionals, testing seven distinct operational hypotheses regarding implementation readiness. The empirical results demonstrated that Indian public-sector banks are highly committed to integrating Basel III rules into their daily operations. The surveyed professionals expressed strong confidence in their internal risk-governance frameworks, credit appraisal standards, and supervisory disclosures under Pillar 3. However, the study identified significant bottlenecks, most notably a severe shortage of skilled risk specialists, inadequate data architecture to support advanced internal-ratings-based approaches, and difficulties in generating organic common equity. The authors advised that the government and banking boards must prioritize technical training and invest heavily in integrated risk-reporting IT infrastructure to transition from basic standardized approaches to advanced risk-measurement systems.

Nedorezova, E., & Maraval, C. (2019). The Basel III Liquidity Requirements and Banks' Stock Returns (Doctoral dissertation, Department of Business Administration, Diva Portal)

The researchers investigated the financial market implications of the Basel III liquidity standards, focusing on the relationship between these rules and banks' equity performance. The study executed a quantitative panel regression analysis using key bank balance-sheet variables, including the Liquidity Coverage Ratio, Net Stable Funding Ratio, deposit-to-assets ratio, and Return on Assets, tracking equity market valuations from 2011 to 2018. The empirical results confirmed that the implementation of strict liquidity requirements exerts a significant influence on bank equity returns, though this effect is mediated by

the bank's initial funding structure. Banks that maintained high structural liquidity (higher deposit-to-assets ratios) experienced a compression in their stock returns during the initial phase of Basel III enforcement, as holding high volumes of low-yielding liquid assets reduced their short-term profitability. However, the study highlighted that once the market fully integrated the lower default risk of these highly liquid institutions, the equity risk premium demanded by investors decreased.

Sharma, P., & Anand, R. (2022). Basel III and Financial Stability: Evidence from the Indian Banking Sector.

This paper examined the relationship between regulatory capital adequacy and systemic banking stability in India. The authors analyzed balance-sheet data of leading private and public-sector commercial banks, exploring how regulatory capital constraints influence bank credit expansion and systemic risk-taking behaviors. The study demonstrated that while stricter regulatory guidelines—such as higher minimum CET-1 and Tier 1 ratios—effectively shield the banking system from systemic default risks, they do not automatically lead to higher operational efficiency. The researchers identified an inverse relationship between capital adequacy and Return on Equity, where banks that held capital buffers well above the regulatory minimum (such as HDFC Bank maintaining a CRAR above 18%) experienced a gradual compression in return efficiency. This compression occurs because equity is an expensive source of funding, and holding excess capital without productive, high-yielding lending avenues dilutes shareholder returns. The authors concluded that banks must balance regulatory compliance with strategic asset-liability management, ensuring that capital expansions are matched with efficient asset allocation and diversified fee-based income streams.

IV.RESEARCH METHODOLOGY

To evaluate the systemic impact of Basel III guidelines on Scheduled Commercial Banks in India, this study establishes a quantitative, analytical research design that traces macro-prudential and micro-prudential banking indicators over a decadal timeline from March 2015 to March 2025.

The quantitative model is built upon secondary financial data extracted from the Reserve Bank of India's statutory annual publication, Report on Trend and Progress of Banking in India, alongside quarterly Financial Stability Reports and audited bank disclosures. The sample consists of the aggregate population of Scheduled Commercial Banks in India, further segmented into Public Sector Banks and Private Sector Banks to analyze ownership-based performance variance.

To measure capital adequacy, this framework utilizes the Capital to Risk-Weighted Assets Ratio, representing the total capital buffer, and the Common Equity Tier 1 ratio, representing high-quality core equity. The formulas are specified as follows:

$$\text{CRAR} = \frac{\text{Tier 1 Capital} + \text{Tier 2 Capital}}{\text{Risk-Weighted Assets (RWA)}} \times 100$$

$$\text{CET-1 Ratio} = \frac{\text{Common Equity Tier 1 Capital}}{\text{Risk-Weighted Assets (RWA)}} \times 100$$

GNPA RATIO= Total Gross NPA Loans/ Total Gross Advances*100

NNPA RATIO = Gross NPA – Accumulated Provisions/ Total Gross Advances – Accumulated Provisions*100

Bank efficiency and profitability are evaluated using the Return on Assets and Return on Equity:

$$\text{ROA} = \frac{\text{Net Income}}{\text{Average Total Assets}} \times 100$$

$$\text{ROE} = \frac{\text{Net Income}}{\text{Average Total Shareholders' Equity}} \times 100$$

The analytical strategy tracks these metrics through the asset quality crisis of 2015–2018, the state-backed recapitalization phase, the COVID-19 regulatory relief period, and the subsequent recovery leading to historic profitability in March 2025.

V.DATA ANALYSIS

Decadal Capital Adequacy and Liquidity Trends in Scheduled Commercial Banks (2015–2025)

The table below traces the longitudinal evolution of regulatory capital and liquidity buffers in Scheduled Commercial Banks in India over the decadal Basel III implementation horizon.

Fiscal Year Ended (March)	Capital to Risk-Weighted Assets Ratio (CRAR) (%)	Common Equity Tier 1 (CET-1) Ratio (%)	LCR Regulatory Minimum Requirement (%)	Actual Average LCR Maintained by SCBs (%)
2015	12.94%	9.98%	60.00%	118.50%
2016	13.20%	10.15%	70.00%	122.40%
2017	13.60%	10.45%	80.00%	125.10%
2018	12.87%	9.75%	90.00%	121.30%
2019	14.30%	11.20%	100.00%	128.60%
2020	14.70%	11.75%	80.00% (COVID Relief)	135.40%
2021	16.30%	12.85%	100.00%	142.10%
2022	16.80%	13.40%	100.00%	138.50%
2023	17.10%	13.90%	100.00%	131.20%
2024	16.80%	13.80%	100.00%	127.80%
2025	17.36%	14.81%	100.00%	129.40%

The table below illustrates the relationship between credit risk (measured by Gross and Net NPAs) and bank profitability (measured by ROA and ROE) over the same decadal period.

Fiscal Year Ended (March)	Gross NPA (GNPA) Ratio (%)	Net NPA (NNPA) Ratio (%)	Return on Assets (ROA) (%)	Return on Equity (ROE) (%)
2015	4.30%	2.20%	0.81%	10.40%
2016	7.50%	4.60%	0.40%	5.30%
2017	9.60%	5.30%	0.35%	4.20%
2018	11.18% (Peak NPA)	5.94% (Peak Net NPA)	-0.22% (System Loss)	-2.74% (System Loss)
2019	9.10%	3.70%	0.10%	1.10%
2020	8.21%	3.03%	0.20%	2.30%
2021	7.30%	2.40%	0.70%	7.80%
2022	5.90%	1.70%	0.90%	10.10%
2023	3.90%	0.95%	1.10%	12.30%
2024	2.70%	0.60%	1.30%	13.50%
2025	2.20% (Multi-decadal low)	0.50% (Multi-decadal low)	1.37% (Historic High)	14.09% (Historic High)

This table contrasts the structural, operational, and capital adequacy performance between Public Sector Banks and Private Sector Banks as of March 2025.

Financial Performance Metric	Public Sector Banks (PSBs)	Private Sector Banks	Banking Sector Aggregate
Capital to Risk-Weighted Assets Ratio (CRAR)	16.40%	18.20%	17.36%
Common Equity Tier 1 (CET-1) Ratio	13.10%	15.90%	14.81%
Gross Non-Performing Assets (GNPA) Ratio	2.58% (Down from 9.11% in 2021)	1.75%	2.20%
Net Non-Performing Assets (NNPA) Ratio	0.52% (Down from 1.24% in 2023)	0.38%	0.50%
Return on Assets (ROA)	1.22%	1.55%	1.37%
Return on Equity (ROE)	13.20%	14.80%	14.09%
Contribution to Banking System Net Profit	Rs 1.78 lakh crore (FY25)	Rs 2.23 lakh crore (FY25)	Rs 4.01 lakh crore (FY25)

This table outlines the structural changes in risk-weight assignments under the Reserve Bank of India's newly issued Credit Risk Standardised Approach Directions of April 2026, effective April 1, 2027.

Exposure Classification Segment	Legacy Standardized Approach Framework	Finalized April 2026 Directions (Effective April 1, 2027)	Main Strategic Objective
Sovereign Exposures	0% risk-weight for domestic government debt	0% risk-weight maintained; greater granularity in treating government guarantees	Minimizes state-related credit distortions.
Interbank Exposures (Domestic)	Dependent on individual bank regulatory capital ratios	Harmonized into a single rating-based scale with sovereign floors	Promotes standardization in interbank lending.
Medium Corporate (BBB Rated)	100.00% risk-weight	75.00% risk-weight	Lowers capital cost; incentivizes mid-tier credit expansion.
Large Unrated Corporate Exposures	100% risk-weight up to Rs 200 crore; penal risk-weights thereafter	Threshold for penal risk-weights increased to Rs 500 crore	Prevents capital penalization of growing unrated corporate entities.

VI.FINDINGS

The quantitative data in Table 1 demonstrates an extraordinary rise in regulatory capital buffers over the decadal implementation horizon. The system-wide Capital to Risk-Weighted Assets Ratio of Scheduled Commercial Banks increased from 12.94% in March 2015 to 17.36% by March 2025. Similarly, Common Equity Tier 1 capital, which represents the highest-quality, loss-absorbing common equity, expanded from 9.98% to 14.81% during the same period. This capital fortification has occurred across both public and private sector banks, as evidenced by Bank of Baroda and ICICI Bank demonstrating statistical convergence in their long-term capital adequacy profiles.

This growth in capital is the result of several overlapping structural factors:

1. Sustained Government Recapitalization: Following the Asset Quality Review initiated by the Reserve Bank of India in 2015, public-sector banks faced severe capital constraints due to the transparent recognition of bad loans. In response, the Government of India injected approximately Rs 1.4 to Rs 1.5 trillion in capital. This capital injection allowed these institutions to absorb credit losses while rebuilding their regulatory capital bases.
2. Robust Credit Risk Governance and Underwriting Standards: The regulatory pressure to maintain higher capital ratios forced banks to adopt more conservative credit appraisal and collateral management systems. As a result, credit growth has balanced risk control with profitability, preventing the loose credit origination patterns that characterized the pre-2015 era.
3. Decline in Solvency Risk: The consistent decline in the system-wide Debt-to-Equity Ratio indicates a reduced reliance on volatile wholesale debt, strengthening the long-term solvency of commercial banks.

The Asset Quality Turnaround and Credit Resolution Efficacy

As illustrated in Table 2, the asset quality of Scheduled Commercial Banks has improved significantly. The

Gross Non-Performing Assets ratio, which peaked at a multi-decadal high of 11.18% in March 2018, fell to 2.2% by March 2025. Net Non-Performing Assets, which reflect credit risk exposure after provisioning, declined from a peak of 5.94% in March 2018 to 0.5% in March 2025.

This significant turnaround was driven by several key factors:

1. Stricter Provisioning and Asset Classification: The Reserve Bank of India's enforcement of standard credit classification guidelines (including the 90-day overdue rule for non-performing asset classification) forced banks to recognize credit defaults early.

2. Introduction of Special Mention Accounts (SMA): The creation of early-warning classifications (SMA-0, SMA-1, SMA-2) allowed banks to identify incipient stress in credit accounts before they became non-performing. This proactive monitoring facilitated early resolution and credit restructuring.

3. Active Recovery and Write-Off Mechanisms: The implementation of the Insolvency and Bankruptcy Code in 2016 provided banks with a more efficient, legally binding platform for corporate resolution. This, combined with write-offs and asset sales to Asset Reconstruction Companies, helped clear historical bad loans from bank balance sheets.

4. Strengthened Provision Coverage Ratios (PCR): Banks utilized their operational profits during economic expansions to build substantial provisioning buffers, driving net NPAs down to historic lows.

The Profitability Turnaround and Its Long-Term Sustainability

The quantitative trends in Table 2 show a direct relationship between asset quality improvement and bank profitability. In the initial phase of Basel III implementation, Scheduled Commercial Banks recorded severe net losses, with the system-wide Return on Assets falling to -0.22% and the Return on Equity dropping to -2.74% in FY 2017-18. These losses were primarily driven by massive credit provisioning charges, which absorbed operating profits.

However, once the balance-sheet cleanup was completed, the reduction in provisioning requirements allowed commercial banks to improve their earnings performance. By March 2025, system-wide ROA climbed to a historic high of 1.37%, while ROE surged to 14.09%. Public Sector Banks also experienced a significant recovery, with aggregate net profits rising from Rs 1.05 lakh crore in FY 2022-23 to Rs 1.78 lakh crore in FY 2024-25. This performance demonstrates that compliance with strict Basel III guidelines, although costly in the short run, ultimately supports sustainable, long-term bank earnings by establishing healthier loan portfolios.

The ROE Compression and Capital Efficiency Trade-Off

Despite the system-wide recovery in profitability, the empirical findings reveal a clear operational challenge, often termed the capital efficiency trade-off. Under Basel III, equity is the most expensive source of funding due to the high risk premium demanded by equity investors. Consequently, maintaining capital ratios far above the regulatory minima can compress Return on Equity by diluting earnings per share.

This trade-off is clearly observed in the capital structure of several highly capitalized private banks. For example, HDFC Bank consistently maintained a high Capital Adequacy Ratio (above 18%) and substantial capital buffers (ranging from 7.01% to 7.84% above the regulatory minimum) over the 2021–2025 period. However, during this same period, its Return on Equity declined from 20.31% in 2021 to 14.25% in 2025. This decline demonstrates that holding excess capital can dilute shareholder returns if the capital is not fully utilized through high-yielding credit portfolios.

This negative relationship between capital adequacy and return efficiency highlights the need for bank management to shift from simple capital accumulation to active, dynamic capital allocation.

Liquidity Standard Friction: The Co-Existence of SLR and LCR

A key domestic implementation challenge under Basel III is the friction between global liquidity standards and pre-existing Indian regulatory tools. The Liquidity Coverage Ratio requires banks to hold an adequate stock of unencumbered High-Quality Liquid Assets to

survive an acute, 30-day liquidity stress scenario. HQLAs are divided into Level 1 assets (such as cash, excess cash reserve ratio balances, and government securities, which attract 0% haircuts) and Level 2 assets (such as high-quality corporate bonds, which face 15% to 50% haircuts).

In the Indian financial system, commercial banks are also subject to the statutory Statutory Liquidity Ratio, which mandates investing a fixed percentage of Net Demand and Time Liabilities in government securities. To alleviate the double-counting burden, the Reserve Bank of India allowed banks to include government securities held within the mandatory SLR requirement as eligible HQLAs, utilizing specific windows such as the Marginal Standing Facility and the Facility to Avail Liquidity for Liquidity Coverage Ratio.

Despite these operational adjustments, the banking sector has continuously raised concerns that the simultaneous maintenance of LCR and SLR requirements traps a high volume of assets in government securities. This high concentration of liquid assets can lead to "passive lending" to the government, compressing net interest margins and reducing the availability of credit for private investments.

VII.CONCLUSION

The implementation of Basel III regulatory standards has fundamentally strengthened the Indian banking sector. Through conservative adaptation by the Reserve Bank of India, the system has transitioned from the high-risk, NPA-heavy environment of 2018 into a resilient, well-capitalized, and highly profitable banking ecosystem by 2025. This transition has been driven by capital injections into public sector banks, improved credit underwriting standards, the legal resolution framework of the Insolvency and Bankruptcy Code, and the accumulation of loss-absorbing CET-1 capital buffers.

However, this transition has also highlighted several key structural challenges. The high cost of equity capital has diluted Return on Equity for highly capitalized institutions. Concurrently, maintaining both LCR and SLR requirements has restricted asset yields by forcing substantial holdings of government securities. Finally, the transition to the finalized 2026 credit risk standardized directions (effective April 2027) introduces significant data, IT system, and capital allocation challenges.

To address these challenges and support sustainable growth, the following strategic policy recommendations are proposed:

1. Tiered and Ownership-Sensitive Regulatory Standards

The empirical findings demonstrate a clear variance in the impact of regulatory capital on public and private sector banks. Stricter capital standards have significantly boosted profitability and reduced credit risk in public-sector banks by enhancing market confidence. However, private-sector banks operate under different risk-return optimization models, and a single regulatory approach may not fully reflect their specific risk profiles. The Reserve Bank of India should consider adopting tiered or ownership-sensitive capital requirements that account for these structural differences, avoiding a rigid, one-size-fits-all framework.

2. Strategic Capital Steering and Risk-Adjusted Asset Pricing

To mitigate the dilution of Return on Equity caused by high capital requirements, commercial bank boards must move away from simple capital accumulation. Banks should implement dynamic capital steering frameworks that integrate the revised 2026 standardized directions into active loan pricing. By embedding capital consumption metrics directly into credit pricing models, banks can ensure that lending rates accurately reflect risk-adjusted returns. Portfolios should be dynamically adjusted, shifting focus toward high-yielding retail, MSME, and low-LTV mortgage assets that carry lower risk-weights under the new regulations.

3. Integrated SLR and LCR Liquidity Alignment

To reduce balance-sheet friction and support credit delivery, the Reserve Bank of India should work toward further aligning domestic SLR requirements with Basel III LCR standards. As the quality of the government bond market remains high, the regulator could progressively increase the FALLCR and MSF limits allowed for LCR calculation. This integration would help free up trapped liquidity, reduce the pressure on asset yields, and allow commercial banks

to expand credit to productive private sectors of the economy.

4. Technological Fortification and Digital Operational Risk Management

As the Indian banking system embraces rapid digitization and digital lending models, operational risk profiles have shifted significantly. While the volume of reported bank frauds has declined, the overall value involved in these frauds surged to Rs 34,771 crore in FY 2024-25, highlighting the rising impact of sophisticated cyber-attacks and digital lending fraud. Banks must invest heavily in advanced risk mitigation technologies, such as Artificial Intelligence and Machine Learning models, to monitor transactions in real time, identify algorithmic biases, and secure digital onboarding channels. Furthermore, IT systems must be upgraded to support the data requirements of the newly issued 2026 credit risk standardized guidelines.

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