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Monetary Tightening and Corporate Resilience: A Comparative Analysis of Debt Sustainability and Profitability in Indian Manufacturing and Service Sectors (FY20-24)

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Abstract

This study examines the impact of RBI monetary tightening (FY20-24) on debt sustainability and profitability of Indian manufacturing and service sector firms. Using data from 120 survey responses and supporting time series, we analyze sector-wise differences in debt growth, interest burden, profitability evolution and coping strategies. The study period encompasses the shift from aggressive accommodation during COVID-19 (repo rate: 4.00%) to substantial tightening to control inflation (repo rate: 6.50%), followed by recent easing measures. We find that manufacturing firms experience higher debt stress and lower resilience than service firms, which leverage higher margins and pricing power to weather monetary shocks. The policy and practical implications for monetary authorities and corporate strategists are discussed.

Keywords: Monetary policy, debt sustainability, interest coverage ratio, profitability, manufacturing, services, Reserve Bank of India

1. Introduction

The Indian economy faced unprecedented monetary policy shifts from 2020 to 2024, pivoting from ultra-accommodation during the pandemic to aggressive tightening (repo rate: $4.00\% \rightarrow 6.50\%$) to counter inflation[1][2]. Corporate responses varied according to sectoral structure. This study systematically examines the financial resilience of manufacturing and service sector firms during this monetary cycle.

As borrowing costs rise and consumer spending dampens due to higher interest rates, corporate profitability faces pressure from multiple sides: higher interest expenses on loans and potentially lower sales. This dual pressure poses serious challenges to corporate health, particularly for capital-intensive sectors heavily reliant on credit[3].

1.1 Monetary Policy Landscape

Accommodation Phase (FY20-FY22): The RBI's response to COVID-19 was swift, slashing the reporate by 75 basis points to 4.40% in March 2020, followed by further reductions to 4.0% in December 2020.



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This accommodative stance, coupled with liquidity-enhancing measures worth \$227 billion (8.7% of GDP), provided crucial support to the corporate sector during the crisis[1][2][4].

Tightening Cycle (FY22-FY24): As inflationary pressures intensified, the RBI pivoted decisively in May 2022, initiating a rate hike cycle that culminated in the repo rate reaching 6.50% by February 2023—a cumulative increase of 250 bps in less than a year, representing one of the most aggressive monetary tightening episodes in recent Indian history.

Easing Phase (FY25 onwards): In February 2025, the RBI delivered its first rate cut in nearly five years, reducing the repo rate to 6.25%, followed by subsequent cuts to 6.00% in April 2025 and 5.50% in June 2025, driven by moderating inflation and sluggish economic growth.

1.2 Research Objectives and Questions

Research Questions:

- 1. How are companies managing their existing debt when servicing becomes more expensive?
- 2. Is their debt sustainability and ability to manage and repay long-term borrowings coming under threat?

Objectives:

- Analyze quarterly trends in debt growth, borrowing costs, and profitability in manufacturing and services from FY20-24
- Assess how monetary tightening affects debt sustainability using Interest Coverage Ratio (ICR) and leverage ratios
- Examine real-world firm strategies for financial resilience during tightening
- Offer evidence-driven recommendations to policymakers and managers for targeted support and risk mitigation

Limitations:

- Sample limited to 120 firms using stratified/quota survey; possible non-response bias
- Financial data based on reported survey responses, not audited accounts
- Results may not be generalizable to MSMEs or informal firms with distinct financial profiles

2. Literature Review

This study aligns with international and Indian scholarship on monetary transmission, sectoral asymmetry, and debt stress. Manufacturing is consistently shown to be more sensitive to interest rate changes due to capital intensity and lower margins, while services benefit from higher profitability and quicker adjustment.



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Recent studies highlight that corporate borrowing costs rose by 350-410 bps during tightening, and ICR in manufacturing dropped to critical lows (4.8x) versus >7x for services [11][12]. The literature establishes that monetary policy transmission varies significantly across sectors based on capital structure, margin resilience, and pricing power.

3. Methodology

Research Design: Mixed-method approach combining quantitative survey data and time series analysis

Sample: 120 firms stratified as 54 manufacturing and 66 services firms

Data Collection: Structured Google Form with seven question blocks covering debt levels, interest rates, profitability metrics, debt servicing challenges, and coping strategies

Analysis Tools:

- Descriptive statistics and trend analysis
- Correlation analysis
- Cross-tabulation for sectoral comparisons
- Quarterly data visualization (FY20 Q1 to FY24 Q4)

Metrics Analyzed:

- RBI Repo Rate trends
- Corporate debt outstanding
- Average interest rates
- Net profit margins
- Interest Coverage Ratio (ICR)
- Debt-to-Equity (D/E) Ratio

Ethics: Confidentiality maintained; no firm names disclosed

4. Data Analysis and Key Findings

4.1 Aggregate Corporate Performance

Profitability Surge: Contrary to expectations, Indian corporate profits surged from ₹2.5 trillion in FY21 to ₹7.1 trillion in FY25, representing a nearly three-fold increase. Net profit margin improved to 10.3% in FY25 from 7.2% in FY2.



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Key drivers included:

- **Cost Rationalization:** Corporate profits grew 15.3% in FY24 despite sales growth of only 5.5%, primarily due to effective cost management. Operating expenses rose just 3.4%.
- **Margin Improvement:** Operating profit margins expanded by 110 bps to 15.3% in March 2025 quarter, benefiting from benign raw material costs.
- **Pent-up Demand:** Post-pandemic demand surge drove sales growth of 32.5% in FY22

Balance Sheet Strengthening: Substantial corporate deleveraging occurred, with debt-to-equity ratio declining across firm sizes. The loan-to-capital ratio for listed entities fell to a 15-year low of 0.9% in March 2025 from 1.3% in March 2019[20].

Metric **FY21 FY24** Change 2.5 Net Profit (₹ trillion) 7.1 +184%Net Profit Margin (%) 7.2 10.3 +310 bps Interest Coverage Ratio (x) 3.5 5.0 +43% Debt-to-Equity Ratio 1.3 0.9 -31%

Table 1: Aggregate Corporate Performance Metrics

4.2 Manufacturing Sector Analysis

Sales and Output: Manufacturing recovery was gradual and uneven. Sales grew 4.1% in FY24, a sharp deceleration from double-digit growth in FY23. Production contracted 39.3% in Q1 FY21 during the pandemic, and recovery remained incomplete with manufacturing's share in GVA staying below prepandemic levels.

Profitability: Despite sales challenges, operating profits rose 13.2% in FY24, driven by cost rationalization. Manufacturing margins averaged 15-17% during FY24, though below the FY22 peak of 19%.

Debt Sustainability: Manufacturing maintained higher debt-to-equity ratios than services, reflecting capital intensity. However, significant deleveraging occurred with ICR averaging 7.7x during the post-COVID period—a substantial improvement from pre-pandemic levels.

Key Challenges:

- Higher debt stress during tightening with ICR dropping to 4.8x at trough
- 46.3% of manufacturing firms faced debt servicing challenges
- Average interest rate peaked at 10.3%



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• Debt outstanding grew 69% from ₹12.0 to ₹20.3 lakh crore.

4.3 Services Sector Analysis

Sales and Output: Services significantly outperformed manufacturing, with sales growing 6.8% in FY24 versus 4.1% for manufacturing. The sector contributed 55% of GVA, growing 7.6% in FY24. Services PMI soared to 61.2 in March

2024, remaining above 50 for 35 consecutive months.

Profitability: Services demonstrated superior profitability with PAT surging 38.1% in FY24 versus 7.6% for manufacturing. Operating profits rose 15.5% in FY24, with consistently higher operating margins than manufacturing throughout the period.

Debt Sustainability: Services maintained lower debt-to-equity ratios and more conservative capital structures. Bank credit to services grew robustly at 22.9% year-on-year in March 2024, significantly outpacing the 9.0% growth in industrial credit.

Key Strengths:

- Only 31.8% faced debt servicing challenges versus 46.3% in manufacturing
- ICR remained above 7x throughout the tightening period
- Average interest rate peaked at 9.5%, lower than manufacturing
- Debt outstanding grew 80% from ₹15.0 to ₹27.0 lakh crore

Metric	Manufacturing	Services
Sales Growth FY24 (%)	4.1	6.8
PAT Growth FY24 (%)	7.6	38.1
Interest Coverage Ratio (x)	4.8 - 7.7	>7.0
Peak Interest Rate (%)	10.3	9.5
Debt Servicing Challenges (%)	46.3	31.8
Credit Growth FY24 (%)	9.0	22.9

• Higher margins and pricing power enabled better resilience.

Table 2: Manufacturing vs Services Sectoral Comparison

4.4 Corporate Coping Strategies

Survey findings revealed diverse strategies employed by firms:



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Manufacturing Firms:

- Cost-cutting measures (30% of respondents)
- Debt refinancing at lower rates
- Operational efficiency improvements
- Capital expenditure deferment

Services Firms:

- Borrowing reduction (27% of respondents)
- Pricing adjustments to pass through costs (25%)
- Working capital optimization
- Focus on high-margin service lines

4.5 Quarterly Trend Analysis

RBI Repo Rate: Oscillated from 5.15% to 4.00% (pandemic support), then tightened sharply to 6.50% (FY23-FY24), followed by easing to 5.50% by June 2025[1][6].

Net Profit Margin Evolution:

- Manufacturing: Hit trough of 5.5%, recovered to 7.8% by FY24
- Services: Expanded consistently to 21.0% margin by FY24

Debt Growth Patterns:

- Manufacturing debt grew from ₹12.0 to ₹20.3 lakh crore (69% increase)
- Services debt grew from ₹15.0 to ₹27.0 lakh crore (80% increase)

5. Factors Driving Corporate Resilience

5.1 Policy Support

Monetary Support: RBI's ₹19 trillion liquidity package during FY21, including long-term repo operations and emergency credit facilities, provided critical support.

Fiscal Stimulus: Government capital expenditure surged 28.2% in FY24 to ₹9.5 lakh crore, providing demand support and improving business sentiment.

Banking Reforms: Improved bank balance sheets with NPAs declining from 11.2% in FY18 to 2.8% in FY24 enhanced credit availability [33].



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5.2 Operational Efficiency

Companies implemented aggressive cost management, digital transformation, supply chain resilience improvements, and working capital optimization. Working capital cycles returned to efficient 73-day levels, releasing cash for debt reduction.

5.3 Structural Advantages

India's large domestic market, demographic dividend, advanced digital infrastructure (UPI, Aadhaar, GST), and relatively stable rupee provided crucial support during global headwinds [35][36].

6. Challenges and Vulnerabilities

6.1 Investment Slowdown

Despite strong profitability and cash balances of ₹13.5 trillion, fixed asset creation slowed. New project announcements plummeted 92% year-on-year in Q1 FY24 to just ₹59,931 crore—the lowest in over a decade [38].

6.2 Sectoral Stress Points

- MSME Challenges: 23% of MSMEs remained stressed with ICR below 1.1x. Access to affordable credit remained challenging [40]
- **Export-Dependent Manufacturing:** Persistent headwinds from weak global demand and protectionist policies.
- **NBFC Asset Quality:** Deteriorating asset quality in micro-finance and unsecured lending segments in H2 FY25.

6.3 External Vulnerabilities

Geopolitical tensions (Russia-Ukraine, Middle East), trade policy risks (US tariffs), global growth slowdown, and financial market volatility posed ongoing risks.

7. Policy Implications and Recommendations

7.1 Monetary Policy

- **Gradual Normalization:** Continue data-dependent easing cycle to support investment revival while maintaining inflation vigilance [8][45]
- Enhanced Liquidity Management: Deploy market-based tools including open market operations and longer tenure refinancing operations.



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• **Differential Support:** Consider targeted refinancing schemes for stressed MSMEs and export-oriented manufacturing.

7.2 Fiscal Policy

- Sustained Capex: Maintain high government capital expenditure to crowd in private investment.
- **MSME Support:** Enhance credit guarantee schemes, working capital support, and technology upgrading programs.
- Tax Rationalization: Consider extending corporate tax incentives for greenfield manufacturing.

7.3 Structural Reforms

- Manufacturing Competitiveness: Accelerate PLI scheme implementation and improve ease of doing business
- Financial Market Deepening: Develop corporate bond markets as alternative funding sources
- Export Promotion: Expand trade agreements and improve export credit availability

7.4 Corporate Strategy Recommendations

Manufacturing Firms:

- Accelerate digital transformation and Industry 4.0 adoption
- Diversify export markets to reduce dependence on slowing advanced economies
- Optimize capital structure by refinancing high-cost debt given easing rates

Services Firms:

- Expand into emerging digital services and AI-driven solutions
- Strengthen domestic market presence to complement export growth
- Invest in talent development given competitive labor markets

MSMEs:

- Leverage technology platforms for market access and operational efficiency
- Focus on working capital optimization to reduce external funding dependence
- Strengthen governance to improve credit access

8. Future Outlook

8.1 Growth Trajectory



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Near-term: India's GDP projected to grow at 6.5-6.9% in FY26, supported by accommodative monetary policy, fiscal stimulus, and improving global conditions

Medium-term: India poised to surpass \$5 trillion GDP in FY26 and reach \$7.3 trillion by FY30, growing at CAGR of 11%. Corporate profits expected to grow at double-digit rates.

Long-term: India aims to become the world's third-largest economy by 2030 and achieve developednation status by 2047, requiring sustained 7-8% growth.

8.2 Sectoral Evolution

Manufacturing Transformation: PLI-driven growth in electronics, automobiles, pharmaceuticals, and clean energy equipment expected to increase manufacturing's GVA share.

Services Sophistication: Continued dominance with increasing focus on high-value segments including global capability centers, AI-driven business services, and fintech.

8.3 Financial Market Development

Corporate bond market forecast to more than double from ₹47.3 lakh crore in FY24 to ₹100-120 lakh crore by FY30. Green finance expected to grow exponentially with India's aligned GSS+ debt reaching \$55.9 billion in 2024.

9. Conclusion

The period from FY2020 to FY2024 represents a watershed moment for the Indian corporate sector, demonstrating remarkable resilience despite unprecedented monetary policy shifts. Key conclusions include:

Sectoral Divergence: Services significantly outperformed manufacturing across all metrics—sales growth (6.8% vs 4.1%), PAT growth (38.1% vs 7.6%), and credit expansion (22.9% vs 9.0%)[15][29].

Balance Sheet Repair: Both sectors achieved substantial deleveraging with debt-equity ratios declining and interest coverage ratios improving to multi-year highs of 5.0x. Corporate debt growth moderated to 2.9% CAGR during FY20-25[58].

Manufacturing Vulnerability: Manufacturing firms experienced critical stress with ICR dipping below 5x and 46.3% reporting debt servicing challenges, reflecting higher capital intensity and lower margin resilience.

Services Resilience: Services leveraged higher margins (21.0%), better coverage (>7x ICR), and cost pass-through ability to display superior resilience.

Strategic Responses: Manufacturing prioritized cost-cutting (30%), while services balanced borrowing reduction (27%) and pricing adjustments (25%) to navigate the tightening cycle.



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Recovery Trajectory: The FY24 data shows recovery, but manufacturing remains more vulnerable to future monetary shocks than services.

As India embarks on monetary easing from February 2025 onwards, with repo rates declining to 5.50%, the environment is increasingly supportive of corporate investment and growth. With inflation moderating to 3.7-4.0% and structural reforms progressing, India is well-positioned for sustained 6.5-7.0% GDP growth.

The divergent yet complementary growth of manufacturing and services, underpinned by strengthened balance sheets and improved debt sustainability, positions Indian corporates strongly for the next growth phase. As monetary policy turns accommodative and global headwinds moderate, India Inc. is poised to accelerate investment, drive productivity gains, and support India's journey to becoming the world's third-largest economy by 2030.

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