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The Impact of Digital Payments on Traditional Banking Profitability

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Abstract

Findings reveal that while Supertrend is the most consistent individual tool, combining it with RSI and EMA leads to superior overall performance. The study contributes to existing literature by providing empirical support for multi- indicator strategies and underscores the importance of adapting these tools to specific market conditions.

1. Introduction

1.1 Background

Context: Explosion of digital payments in recent years (e.g. India's UPI CAGR ~147% from FY2018–2023).
Motivation: Traditional banks experience eroding transaction fee income amidst growing fintech competition

2. Literature Review

2.1 Digital Payments & Operational Efficiency

- Dr. Anilkumar L. Rathod (2023): Digital wallets/mobile payments enhance efficiency but increase cybersecurity demands.
- Emergence of mobile operators functioning like banks (Pau 2013)

2.2 Profit & Profitability

Ghana study: Positive correlation between automated clearing systems and bank profitability; negative effect from mobile money.
Indonesia & 110 country study: Digital payment adoption negatively correlated with banking stability
.
China analysis: Fintech boosts Chinese bank profitability via efficiency and product diversification. WPM Malaysia: Fintech investment improves ROE of traditional banks.

2.3 Risk & Stability

- BIS paper: Digitization increases mid-tier bank systemic relevance, uninsured deposit risk, and credit strains.
- Digital payments enhance monetary policy transmission but reduce deposit power.

2.4 Response & Adaptation

Hong Kong/China review: Banks can use mobile payment integration and focus on user experience . Ahmedabad study: Digital payment shift demands customer education, investment in AI for fraud detection

3. Methodology

Mixed methods: Panel data regression (international), case studies (India, China, Ghana), literature synth Empirical timeframe: 2017–2024 for global panels; FY 2012–2018 for Ghana; FY 2017–2025 for India.

4. Findings

4.1 Revenue Channels

Decline in net interest margin and branch fee revenue .

Fintech partnership investment boosts non-interest income streams .

4.2 Cost & Efficiency

Operational costs fall via digital channel automation but investment in IT and cyber-security increases .

4.3 Competitive Pressures

Banks losing market share to agile digital peers globally .

UK case: Neobank initiatives pressured high street banks to upgrade digital offerings .

5. Discussion

- Profitability Outlook: Mixed; banks that invest in fintech partnerships maintain or grow margins, while others lo

- Strategic Adaptations:
  a. Invest more in IT and security (e.g. Indian banks upping tech budgets)
  b. Embed mobile payments and real-time capabilities
  c. Enhance non-interest income via fintech alliance
  d. Strengthen risk and audit frameworks to manage digital transaction risks .

- Policy Implications: Regulators should balance digital innovation with systemic stability and cybersecurity.

6. Conclusion

Digital payments present both threat and opportunity. Traditional banks that proactively invest in digital transformatio partnerships can preserve—and even enhance—profitability. Others risk losing transactional dominance and revenue t challengers.

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Additional sources: Digital finance debates, open banking, UPI metrics