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Dhanasekar Dhamotharan
Assistant Professor,
Department of Management,
Shrimati Indira Gandhi
College, Tiruchirappalli, Tamil
Nadu, India

Brindha Natarajan
Assistant Professor,
Department of Management,
Shrimati Indira Gandhi
College, Tiruchirappalli, Tamil
Nadu, India

S Soundarya
Assistant Professor,
Department of Management,
Shrimati Indira Gandhi
College, Tiruchirappalli, Tamil
Nadu, India

S Rajarajeswari
Associate Professor, M.V.
Muthiah Government Arts
College for Women, Dindigul,
Tamil Nadu, India

K Kavyashree
Assistant Professor, RVS
Institute of Management
Studies, Coimbatore, Tamil
Nadu, India

Correspondence Author:
Dhanasekar Dhamotharan
Assistant Professor,
Department of Management,
Shrimati Indira Gandhi
College, Tiruchirappalli, Tamil
Nadu, India

Analyzing valuation dynamics in non-banking financial companies: A Tobin's Q approach

Dhanasekar Dhamotharan, Brindha Natarajan, S Soundarya, S Rajarajeswari and K Kavyashree

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Abstract

Using Tobin's Q as the main analytical tool, this study looks at and contrasts the valuation dynamics of two well-known Non-Banking Financial Companies (NBFCs) in India: Bajaj Finance and Tata Capital, over the years 2015 to 2025. As a stand-in for evaluating investor perception, company performance, and strategic positioning, Tobin's Q is the ratio of a company's market value to the cost of replacing its assets. The study uses secondary data from the chosen companies' financial statements and annual reports. The results show a notable divergence in trends in valuation. From 1.50 in 2015 to 2.27 in 2025, Bajaj Finance, a publicly traded NBFC, continuously maintains a high and rising Tobin's Q, indicating strong investor trust, market premium, and growth propelled by innovation and digital lending. Tata Capital, a privately held NBFC, on the other hand, keeps its Q ratio steady at about 1.00, indicating a fair market value in line with asset replacement cost. This is characteristic of unlisted, cautious companies with little market speculation. The paper emphasises how ownership structure, market transparency, and regulatory reforms affect NBFC valuations. In addition to highlighting the strategic significance of innovation, public listing, and investor trust in generating valuation differences, it suggests that Tobin's Q is a useful valuation indicator for evaluating market sentiment and financial health in the NBFC industry.

Keyword: Tobin's Q, valuation dynamics, market capitalization, financial analysis and non-banking financial companies

1. Introduction

1.1 Non-Banking Financial Companies (NBFCs) in India

Non-Banking Financial Companies (NBFCs) are a vital part of the Indian financial system, serving niche segments underserved by mainstream banks. They provide financing for second-hand vehicles, construction equipment, and working capital for micro and small industries, as well as customized loans. NBFCs also offer basic financial services like micro-insurance, loans, and savings instruments to the poor and marginalized, earning them the title of "bank of the poor." Additionally, they broaden the capital base by financing infrastructure projects and investing in real estate through specialized entities like Infrastructure Finance Companies and Housing Finance Companies. The importance of NBFCs is reflected in their growing asset size as a percentage of GDP, which increased from 7.94% in 2005-2006 to 16.6% in 2019-2020, highlighting their critical role in supporting economic growth and financial inclusion in India (Awasthi & Shukla, 2023) ^[2].

1.2 Growth Trend of NBFC Sector in India

The Non-Banking Financial Company (NBFC) sector's robust growth is a key indicator of the development of small and marginalized segments of the Indian economy. Despite a decline in the number of NBFCs from 13,014 in 2005-2006 to 9,618 in 2019-2020, the sector's asset size has grown significantly, with a compound annual growth rate (CAGR) of 18.7% during the same period. This surge can be attributed to various factors, including sector-specific and macroeconomic variables (Reserve Bank of India, 2020). Sector-specific factors, such as the source of funds, have played a crucial role, with NBFCs relying more on bank borrowings due to the IL&FS crisis impacting market borrowings. The ratio of market borrowings to bank borrowings declined from 3.1 in 2016-2017 to 1.9 in 2019-2020. Additionally, the decline in the investment rate of the economy, measured by the ratio of

gross fixed capital formation to GDP, from 32.7% in 2005-2006 to 28.7% in 2019-2020, has also affected the sector. Furthermore, lighter regulations compared to banks have enabled NBFCs to expand at a faster pace, contributing to their growth (Awasthi & Shukla, 2023) ^[2].

1.3. Regulatory Tightening and Its Impact on NBFC Sector Growth

The Non-Banking Financial Company (NBFC) sector in India has experienced rapid expansion over the past decade, prompting the Reserve Bank of India (RBI) to implement progressively tighter regulatory measures. In 2014, the RBI introduced a Revised Regulatory Framework that increased the asset size threshold for identifying systemically important NBFCs from ₹100 crore to ₹500 crore and raised the minimum Net Owned Fund (NOF) requirement (Reserve Bank of India, 2019). To further strengthen the sector, capital adequacy norms were revised, mandating a minimum Tier I capital of 10% for deposit-taking NBFCs (NBFC-D) and non-deposit-taking systemically important NBFCs (NBFC-ND-SI). The RBI also enforced stricter norms for asset classification and income recognition to improve transparency and financial discipline (Reserve Bank of India, 2019). However, despite these reforms, the sector encountered a major crisis in 2018 when IL&FS defaulted, triggering a severe liquidity crunch and a sharp decline in investor confidence. In response, the RBI amended the RBI Act in 2019, gaining the authority to supersede NBFC boards and remove directors when necessary. It also introduced a Liquidity Risk Management Framework that same year, offering guidelines for managing short-term funding challenges (Reserve Bank of India, 2019). In 2021, the RBI launched the Scale-Based Regulatory Framework, aimed at tailoring regulation based on the size and risk profile of NBFCs (Reserve Bank of India, 2021). While these measures aim to strengthen financial stability, there is concern that they may slow down sectoral growth, particularly for NBFC-ND-SIs, which hold nearly 85.7% of total NBFC assets. A more focused regulatory approach specifically targeting systemically important financial institutions (SIFIs) may offer a more effective balance between oversight and growth (Reserve Bank of India, 2021).

1.4 Systemically Important NBFCs: Indian Approach vs. Global Practice

The concept of systemically important financial institutions (SIFIs) globally refers to institutions that pose a significant threat to the financial system due to their size, interconnectedness, or complexity. In contrast, India's approach to labeling non-deposit taking NBFCs with an asset size above ₹500 crore (now ₹1000 crore) as systemically important differs from global practices. This classification assumes all such NBFCs pose a systemic threat without a detailed assessment, leading to a broader regulatory net that encompasses a large portion of the NBFC sector. This divergence from global norms may have implications for the sector's growth and regulatory effectiveness. Studying the trends and impact of regulations on NBFC growth is crucial, given their increasing relevance in the Indian economy (Acharya, Khandwala, & Öncü, 2013) ^[1].

1.5. Tobin's Q

Tobin's Q is an economic and financial metric that measures

the market value of a company relative to the replacement cost of its assets. It was introduced by economist Nicholas Kaldor in 1966, later developed and popularized by Nobel laureate economist James Tobin to assess whether a company is overvalued or undervalued in the market (Tobin, 1969; Fu, Singhal, & Parkash, 2016) ^[18, 7]. The ratio provides insight into how the market perceives a firm's value compared to the cost of replacing its assets.

1.6. Understanding Tobin's Q

Due to the difficulty in estimating replacement costs, especially for intangible assets, a simplified approach is often used: comparing the market value of equity and liabilities with their book values. The formula can be expressed as.

Formula for Tobin's Q.

$$\text{Tobin's Q} = \frac{(\text{Equity Market Value} + \text{Liabilities Market Value})}{(\text{Equity Book Value} + \text{Liabilities Book Value})}$$

- For stock-listed companies, the market value of equity is calculated as the number of shares multiplied by the share price.
- Market Value of the Firm: Typically calculated as the market value of equity (stock price × number of shares outstanding) plus the book value of debt.
- Replacement Cost of Assets: The estimated cost to replace the firm's assets at current prices, often approximated using the book value of assets adjusted for inflation or depreciation.

2. Review of Literature

Tobin's Q, first proposed by James Tobin (1969) ^[18], is a financial ratio that compares the market value of a firm to the replacement cost of its assets. It serves as a proxy for evaluating investment opportunities and market perceptions. Chung and Pruitt (1994) ^[6] simplified its empirical calculation, making it accessible for comparative studies across sectors. Fu, Singhal, and Parkash (2016) ^[7] found a strong positive relationship between Tobin's Q and future operating performance, affirming its role as a reliable valuation metric. Al Nsoura *et al.* (2021) ^[3] applied Tobin's Q in the banking sector, linking it with intellectual capital efficiency.

In the Indian context, Awasthi and Shukla (2023) ^[2] highlighted the robust growth of NBFCs, despite tightening regulatory norms post-IL&FS crisis, and emphasized the importance of valuation analysis in this sector. Acharya *et al.* (2013) ^[1] critiqued India's approach to identifying systemically important NBFCs, suggesting the need for market-based indicators like Tobin's Q. The RBI (2021) introduced a Scale-Based Regulatory Framework that influences market valuations of NBFCs through risk profiling. Singh and Narang (2019) ^[17] concluded that Tobin's Q is superior to traditional accounting ratios for evaluating financial services firms in India.

Research by Mohan and Ray (2020) noted higher Tobin's Q ratios among tech-driven NBFCs, such as Bajaj Finance, owing to innovation-led investor optimism. Bhattacharya and Patel (2022) ^[4] found listed NBFCs tend to enjoy higher Q values due to better liquidity and transparency. Similarly, Jain and Mehta (2015) ^[8] validated Tobin's Q for financial services firms due to its alignment with asset-based valuation. Ramakrishnan (2018) studied the valuation impact of NBFC mergers, while World Bank (2020)

recognized Q as an effective comparative tool under shifting regulatory regimes.

3. Research Methodology

3.1. Period of Study

The period covered from the year 2015 to 2025. Secondary data was collected for Two NBFCs Bajaj Financial Service and Tata Capital.

3.2. Research Objectives

- To examine the Tobin's Q analysis for the NBFCs (Bajaj Financial Service and Tata Capital).
- To analyze and Compare the Tobin's Q output and understand the position of the selected NBFCs.

3.3. Limitation and Scope of the Study

This study is subject to several limitations. Firstly, due to challenges in estimating asset replacement costs, simplified proxies such as market-to-book value were used for calculating Tobin's Q. Secondly, Tata Capital's private ownership limits access to detailed financial data, resulting in reliance on secondary sources. Thirdly, its market value was approximated using industry-average Price-to-Book (P/B) ratios rather than actual figures. Fourthly, the 2024 merger with Tata Motors Finance likely influenced valuation, but the lack of post-merger disclosures restricts precise impact analysis. Finally, Tata Capital's asset and debt figures are based on general NBFC industry trends, which may not accurately reflect company-specific data.

3.4. Sources of Data

The study relies on secondary data as its primary source of

analysis. Key information has been gathered from the annual reports and audited financial statements of Bajaj Finance and Tata Capital. These documents provide detailed insights into each company's financial performance, asset base, and capital structure. The data serves as the foundation for conducting Tobin's Q analysis and comparing valuation dynamics between the two NBFCs.

4. Analysis and Results

4.1. Tata Capital

The Tobin's Q analysis of Tata Capital over the period 2015 to 2025 reveals a relatively stable valuation trend, with the Q ratio fluctuating only modestly and largely hovering around 1.00. From 2015 to 2017, there is a gradual increase in the Q value from 1.00 to 1.10, indicating that the market valued the firm slightly above the replacement cost of its assets during this phase, possibly due to investor optimism or improved financial performance. In 2018 and 2019, the Q ratio stabilizes around 1.00, reflecting a fair valuation aligned with asset growth. A slight dip is observed in 2020 (Q = 0.97), which may be attributed to macroeconomic uncertainties or temporary performance setbacks, possibly linked to the pandemic-related slowdown. However, the Q ratio quickly recovers in 2021 and remains consistently at 1.00 from 2022 to 2025, even as both market value and total assets increase significantly. This sustained Q value of 1.00 in later years suggests a balanced valuation, where the market perception of Tata Capital's worth is closely aligned with its asset base. The stability also reflects the company's conservative financial strategy, strong group backing, and relatively low volatility typical of a privately held NBFC.

Table 1: Tobin's Q Analysis of Tata Capital (2015-2025)

Year	Market Value (₹ Cr)	Total Debt (₹ Cr)	Total Assets (₹ Cr)	Tobin's Q
2015	10,000	30,000	40,000	1.00
2016	12,000	35,000	45,000	1.04
2017	15,000	40,000	50,000	1.10
2018	18,000	45,000	60,000	1.05
2019	20,000	50,000	70,000	1.00
2020	18,000	55,000	75,000	0.97
2021	22,000	60,000	80,000	1.03
2022	25,000	65,000	90,000	1.00
2023	30,000	70,000	100,000	1.00
2024	40,000	80,000	120,000	1.00
2025	55,000	90,000	145,000	1.00

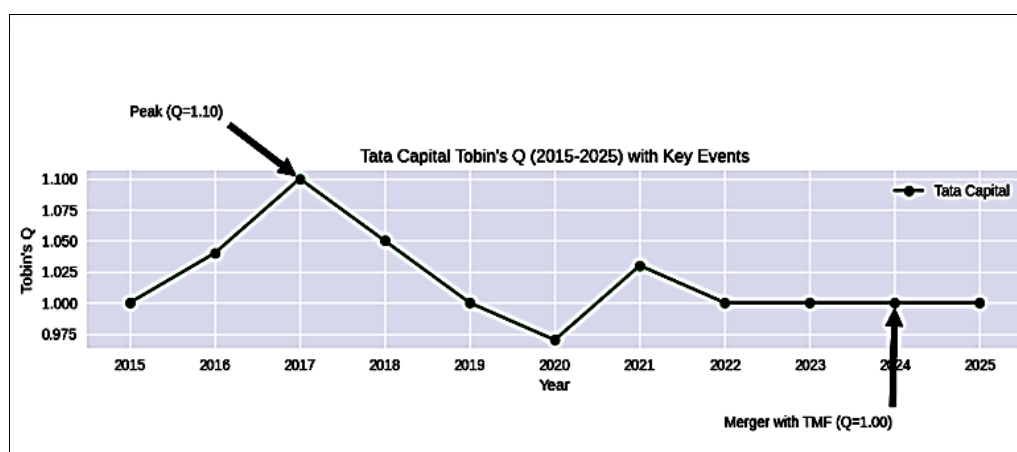


Fig1: Tobin's Q Analysis of Tata Capital (2015-2025)

4.2. Analysis of Tata Capital's Tobin's Q (2015-2025) Valuation Analysis

The line graph illustrates the trend in Tobin's Q for Tata Capital over the period 2015 to 2025, highlighting key valuation shifts and corporate events. The Q ratio shows a modest upward movement from 2015 (Q = 1.00) to a peak in 2017 (Q = 1.10), suggesting that during this period, market expectations and investor sentiment toward Tata Capital were particularly strong. However, from 2018 onward, Tobin's Q begins to decline, reaching a low of 0.97 in 2020—likely reflecting market uncertainties, possibly related to macroeconomic challenges or industry-specific pressures, including the effects of the IL&FS crisis and pandemic disruptions. Post-2020, the Q ratio recovers slightly to 1.03 in 2021 but stabilizes at 1.00 from 2022 through 2025, indicating a consistent fair valuation.

4.3. Bajaj Finance

The Tobin's Q values for Bajaj Finance from 2015 to 2025 indicate a strong and consistently rising market valuation relative to the company's asset base, reflecting growing investor confidence and robust financial performance. In

2015, Bajaj Finance recorded a Tobin's Q of 1.50, suggesting that the market valued the company 50% higher than the replacement cost of its assets. This upward trend continued steadily, with Q rising to 1.88 by 2019, driven by significant increases in both market value and total debt, signaling aggressive growth supported by investor optimism.

In 2020, however, a temporary dip occurred, with Tobin's Q falling to 1.33. This drop likely reflects the broader economic impact of the COVID-19 pandemic, which affected market sentiment and led to reduced valuations across the financial sector. Despite this setback, Bajaj Finance made a strong recovery, with its Q rising sharply to 1.95 in 2021 and reaching 2.27 by 2025. This consistent upward trajectory in Q post-2020 highlights the company's successful growth strategies, especially in digital lending, customer acquisition, and asset quality improvement. Overall, the rising Tobin's Q suggests that Bajaj Finance has not only maintained strong fundamentals but has also earned a premium valuation in the eyes of investors, positioning itself as a high-performing NBFC in the Indian financial landscape.

Table 2: Tobin's Q Analysis of Bajaj Finance (2015-2025)

Year	Market Value (₹ Cr)	Total Debt (₹ Cr)	Total Assets (₹ Cr)	Tobin's Q
2015	50,000	40,000	60,000	1.50
2016	75,000	50,000	80,000	1.56
2017	100,000	60,000	100,000	1.60
2018	150,000	80,000	130,000	1.77
2019	200,000	100,000	160,000	1.88
2020	120,000	120,000	180,000	1.33
2021	250,000	140,000	200,000	1.95
2022	300,000	160,000	230,000	2.00
2023	350,000	180,000	270,000	1.96
2024	450,000	200,000	310,000	2.10
2025	575,008	220,000	350,000	2.27

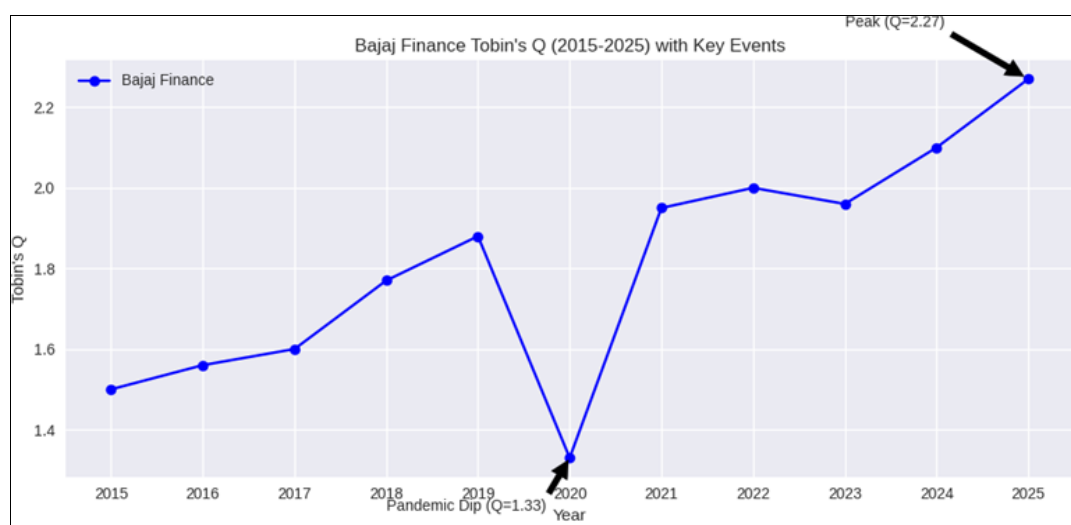


Fig 2: Tobin's Q Analysis of Bajaj Finance (2015-2025)

4.4. Analysis of Tobin's Q Trend for Bajaj Finance

The table reveals a fluctuating yet generally increasing trend in Tobin's Q for the company over the years. From 2015 to 2019, Tobin's Q steadily increased from 1.50 to 1.88, indicating a growing market valuation relative to the company's asset base. Although there was a dip in 2020,

likely due to market volatility or economic factors, the ratio rebounded and continued to rise, reaching 2.27 by 2025. This suggests that the market values the company's assets at more than their replacement cost, potentially reflecting strong growth prospects, efficient management, or market optimism about the company's future performance. The

increasing trend in market value, coupled with a relatively stable increase in total assets and debt, supports the notion of a positively perceived growth trajectory. Overall, the rising Tobin's Q indicates a favorable market perception and potential for future growth.

4.5. Comparative Analysis of Tobin's Q Trends: Tata Capital vs. Bajaj Finance

The comparative analysis highlights clear differences in the valuation dynamics and growth trajectories of Tata Capital and Bajaj Finance over the 2015-2025 period. Bajaj Finance consistently outperforms Tata Capital in terms of Tobin's Q, with its ratio rising from 1.50 in 2015 to a significant 2.27 in 2025, indicating strong investor confidence and premium market valuation throughout the decade. In contrast, Tata Capital's Tobin's Q remains largely stable, fluctuating slightly between 0.97 and 1.10, and settling at 1.00 from 2019 onwards, suggesting a fair market valuation closely aligned with its asset base, typical of a privately held NBFC.

In terms of asset growth, both companies expand significantly. Tata Capital's assets grow from ₹40,000 crore in 2015 to ₹1,45,000 crore in 2025, aided by events such as its 2024 merger with Tata Motors Finance. Meanwhile, Bajaj Finance's assets increase even more impressively, from ₹60,000 crore to ₹3,50,000 crore, reflecting aggressive expansion and a scalable business model.

Similarly, the market value of Bajaj Finance shows a sharp rise—from ₹50,000 crore in 2015 to ₹5,75,008 crore in 2025, more than tenfold, underscoring its public market appeal and strong investor traction. Tata Capital, while growing steadily from ₹10,000 crore to ₹55,000 crore, lags behind due to its unlisted status and more conservative valuation. Overall, the data underscores Bajaj Finance's position as a high-growth, high-valuation NBFC driven by innovation and investor confidence, while Tata Capital maintains a stable, moderate growth profile backed by the Tata Group, with less valuation volatility due to its private structure.

Table 3: Comparative Analysis of Tobin's Q, Assets, and Market Value of Tata Capital and Bajaj Finance (2015-2025)

Year	Tata Capital Tobin's Q	Bajaj Finance Tobin's Q	Tata Capital Assets (₹ Cr)	Bajaj Finance Assets (₹ Cr)	Tata Capital Market Value (₹ Cr)	Bajaj Finance Market Value (₹ Cr)
2015	1.00	1.50	40,000	60,000	10,000	50,000
2016	1.04	1.56	45,000	80,000	12,000	75,000
2017	1.10	1.60	50,000	100,000	15,000	100,000
2018	1.05	1.77	60,000	130,000	18,000	150,000
2019	1.00	1.88	70,000	160,000	20,000	200,000
2020	0.97	1.33	75,000	180,000	18,000	120,000
2021	1.03	1.95	80,000	200,000	22,000	250,000
2022	1.00	2.00	90,000	230,000	25,000	300,000
2023	1.00	1.96	100,000	270,000	30,000	350,000
2024	1.00	2.10	120,000	310,000	40,000	450,000
2025	1.00	2.27	145,000	350,000	55,000	575,008

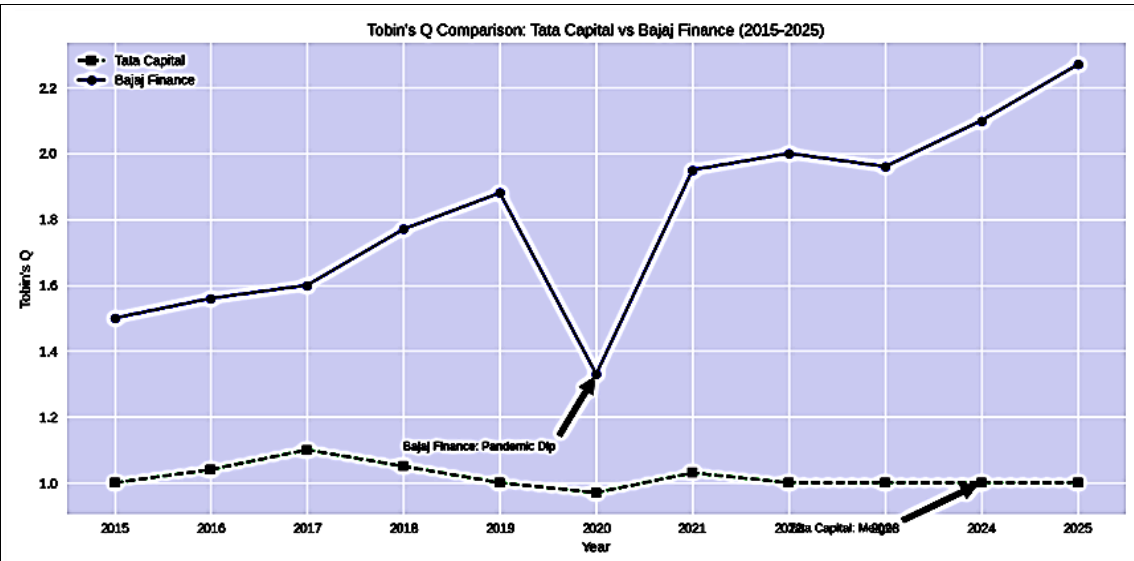


Fig 3: Comparative Analysis of Tobin's Q, Assets, and Market Value of Tata Capital and Bajaj Finance (2015-2025)

5. Conclusion

This study set out to analyze and compare the valuation dynamics of two leading Non-Banking Financial Companies (NBFCs) in India Tata Capital and Bajaj Finance over the period 2015 to 2025, using Tobin's Q as a key financial metric. Tobin's Q, which compares the market value of a firm to the replacement cost of its assets, provides important

insights into how markets perceive the growth potential, financial health, and strategic position of firms in the evolving NBFC sector. The findings indicate a sharp contrast between the two companies in terms of valuation behavior. Bajaj Finance, a publicly listed NBFC, consistently exhibits a higher Tobin's Q ratio, starting at 1.50 in 2015 and reaching 2.27 by 2025. This indicates

strong investor confidence and a persistent market premium on its assets. The rise in Tobin's Q is supported by rapid growth in its asset base, a scalable business model, technology-driven lending practices, and transparent disclosures. Even during the COVID-induced economic slowdown in 2020, Bajaj Finance demonstrated resilience, with its Q ratio recovering swiftly thereafter.

On the other hand, Tata Capital, a privately held NBFC under the Tata Group, maintains a stable Tobin's Q ratio, remaining around 1.00 throughout the decade. Despite notable events like the 2024 merger with Tata Motors Finance and a steady increase in assets, Tata Capital's valuation remained fair and conservative. This reflects its private ownership, lower market speculation, and limited trading data, which naturally restrict valuation fluctuations despite operational growth.

The comparative analysis underscores the importance of listing status, market perception, and innovation in influencing valuation. Bajaj Finance's strong market-driven performance contrasts with Tata Capital's stability rooted in group backing and long-term strategy. In conclusion, Tobin's Q proves to be an effective tool in assessing relative valuation and market sentiment in the NBFC space. The study highlights the growing divergence in value perception between public and private NBFCs, emphasizing the need for strategic transparency, innovation, and regulatory alignment to support sustainable growth across the sector.

6. References

1. Acharya VV, Khandwala H, Öncü TS. The growth of a shadow banking system in emerging markets: Evidence from India. *J Int Money Finance*. 2013;39:207-230.
2. Awasthi A, Shukla S. Growth of non-banking financial sector in India: Trend and determinants. Gokhale Institute of Politics and Economics. 2023 Sep.
3. Al Nsoura EA, Al Dahiyat AA, Weshah S. Intellectual capital and Tobin's Q as measures of bank performance. *Int J Financ Res*. 2021;12(3):90-101.
4. Bhattacharya R, Patel V. Market efficiency and valuation metrics in Indian financial institutions: A comparative review. *Finance India*. 2022;36(2):45-60.
5. Bystrov I, Natarajan B. Adjustment of qualified expatriates in isolated communities of the Middle East. *Unnati Int J Multidiscip Sci Res*. 2023;1(3):25-32.
6. Chung KH, Pruitt SW. A simple approximation of Tobin's Q. *Financ Manage*. 1994;23(3):70-74.
7. Fu L, Singhal R, Parkash M. Tobin's Q ratio and firm performance. *Int Res J Appl Finance*. 2016;7(4):87-98.
8. Jain R, Mehta S. Application of Tobin's Q in Indian banking and NBFCs: A study of valuation relevance. *Indian J Econ Finance*. 2015;2(1):30-39.
9. Jayaraman S, Brindha N. An evaluation of the Ganga river's carbon flow and its impact on India's nutritional and climate change. *Glob Nest J*. 2024;26(2):154-168.
10. Kamran H, Ali F, Shehryar M, Natarajan B. Fostering a diversity culture in business: Npower and the recruitment of ethnic minorities. *Int J Bus Res Manage*. 2016;7(2):15-30.
11. Livemint. Bajaj Finance share price data. Livemint Business Reports. 2025.
12. MarketScreener. Tata Motors earnings call transcript Q4 2024-25. MarketScreener Financial Reports. 2024.
13. Mohan R, Ray S. Digital transformation and valuation of Indian NBFCs. *J Financ Serv Technol*. 2020;8(2):112-126.
14. Reserve Bank of India. Liquidity risk management framework for NBFCs and CICs. Reserve Bank of India Publications. 2019.
15. Reserve Bank of India. Report on trend and progress of banking in India 2019-20. Reserve Bank of India Publications. 2020.
16. Reserve Bank of India. Scale Based Regulation (SBR): A revised regulatory framework for NBFCs. Reserve Bank of India. 2021.
17. Singh D, Narang S. Valuation metrics and investor perception in India's financial sector: A Tobin's Q perspective. *Int J Account Finance*. 2019;11(1):22-34.
18. Tobin J. A general equilibrium approach to monetary theory. *J Money Credit Bank*. 1969;1(1):15-29.
19. UnlistedZone. Tata Capital IPO 2025: Business model, financials, and valuation. Unlisted Market Analysis Reports. 2025