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Private Equity in India Fintech: A Lifecycle Analysis

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Abstract: ***Over the past two and a half decades, India's venture capital and private equity industry have undergone significant growth, driven by the liberalization of the Indian economy and the emergence of a dynamic start-up ecosystem. While the Fintech sector has been preferred for VCPE investments, research on private equity activity in this industry has been limited. This study aims to address this research gap by providing comprehensive insights into the lifecycle of private equity investments in the Fintech industry in India. The study examines private equity investment and exit activity in the Indian Fintech industry between 1998 and Q1 2023. Our research findings indicate that the Fintech industry in India has attracted considerable investments at notably higher entry valuation multiples. Moreover, a few sectors within the industry have garnered higher investments and valuation multiples. Private equity investors have generated significant returns from exits in the fintech industry, with M&As being the preferred exit route during the study period. However, our analysis indicates that exit valuation multiples were lower than entry multiples. This research provides valuable insights for investors and entrepreneurs seeking to understand the Indian Fintech industry and its potential for private equity investments.***

Three item lists of highlights

- ***Private equity investment in Fintech is significant, with the majority of investments occurring in the seed and early stages.***
- ***The software and apps, personal finance, and insurance sectors generated the highest cash flows for exited deals in Fintech.***
- ***Mergers and acquisitions were the most preferred exit routes for private equity investors in the Fintech space.***

Keywords: Private Equity (G24), Fintech (G23)

I. INTRODUCTION

A. Private Equity in India

Over the past quarter-century, private equity activity in India has grown exponentially, with a total investment of $380,031.93 million in 13,963 deals between 1998 and 2023, according to data from the Venture Intelligence database. This growth occurred in four distinct phases. During the first phase, from 1998 to 2004, private equity activity was relatively low. In the second phase, from 2005 to 2008, Indian PE firms experienced significant growth.

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Following the 2008 financial crisis, private equity activity in India slowed for several years but increased again from 2011 to 2017 [5]. The last phase, from 2018 to 2023, was characterized by the highest levels of deal-making activity. IT and ITES received the highest PE investments in industry sectors, followed by the BFSI, healthcare and life sciences, energy and telecom, and manufacturing [6]. Notably, the highest investments were made in the early stage, followed by the late and growth stage, with the majority of investments falling in the $0-5 million bracket, followed by the $5-10 million and $10-15 million brackets.

B. Fintech in India

According to a report published by Inc42, the Indian Fintech market is expected to be $2.1 trillion in size, with a projected compound annual growth rate (CAGR) of 18% between 2018 and 2030 [9]. The Fintech industry in India has witnessed significant investment activity, with a total funding amount of $26 billion between 2014 and 2023 and a CAGR of 34% between 2016 and 2022 [15]. At present, there are 22 Fintech unicorns in India. The primary factors contributing to the high attractiveness of the Indian Fintech sector are the deepening of financial inclusion, growing Internet penetration, and a high level of smartphone adoption [2]. These trends suggest a robust and thriving Fintech industry in India that holds immense potential for investors and stakeholders alike.

II. THE OBJECTIVE OF THE PAPER

The literature on private equity investments in the Indian Fintech industry pertains to the evolution and role of Fintech in India, as studied by Kaur and Dogra (2019) [8], Bhasin and Gulati (2021) [3][4], and Singh (2020), who have examined various cases of Fintech in India. However, none of these papers provides a comprehensive analysis of the entire life cycle of private equity activity in the Fintech industry in India. To address this research gap, this paper aims to achieve three main objectives:

1. A comprehensive life cycle analysis of private equity investments in the Indian Fintech industry is provided, covering the period from 1998 to 2023.
2. Identify the sectors within the Fintech industry that have attracted the highest levels of private equity investment and the entry and exit valuation multiples for these investments.
3. Examine the preferred exit routes for private equity investments in the Indian Fintech industry and evaluate the returns generated by these exits.

III. DATA AND METHODOLOGY

This research study sourced private equity investment and exit data from the Ventureintelligence database, which was then analysed with a main focus on the investment amount and exit multiples. Descriptive statistics such as the mean, median, and quartiles were employed to investigate the distribution of investments and exit multiples. Additionally, nonparametric tests, including the Kolmogorov–Smirnov and Shapiro–Wilk tests, were used to check for statistical significance of the data, as normality tests indicate that the data are not normally distributed. The Kruskal–Wallis test and Fisher's exact test were also used to further explore the statistical significance of the differences. The findings of this study were based on a rigorous data analysis approach, which allowed for accurate and thorough examination of private equity investment and exit data in the fintech industry in India.

IV. RESULTS AND FINDINGS

A. Investment Trends

Exhibit 1 summarizes the investment snapshot of Fintech. The analysis used investment and exit data between 1998 and March 2023. During this period, a total of 1,138 investment deals were made, amounting to a total investment of 26,090.18 million USD, a significant amount of capital. The mean investment amount was 22.93 million USD, indicating that the average investment in the Fintech sector was relatively high. The median investment amount of 4.23 million USD and the interquartile range (IQR) of (1.42,15) million USD showed that a significant proportion of investment deals were for relatively small amounts, while a smaller percentage of deals were for much larger amounts (25% of deals were greater than 15 million USD). The investment data were not normally distributed, revealing an asymmetric investment pattern. Nonparametric tests, specifically the Kolmogorov–Smirnov test and the Shapiro–Wilk test, were used to test the significance of these findings. These results are consistent with previous research on private equity activity in India, as reported by Kaplan and Schoar (2005).

Exhibit 1: Overview of Fintech Investments in India from 1998 to 2023

Fintech Investments	Particulars
Total number of deals	1138.00
Total investments (USD Million)	26,090.18
Mean investment (USD Million)	22.93
Median investment (USD Million)	4.23
Quartiles (Q1,Q3) (USD Million)	(1.42,15)
Kolmogorov–Smirnov p value	0.00
Shapiro–Wilk p value	0.00

B. Stage of Investment

Exhibit 2 provides a comprehensive overview of the investment stage in the Fintech industry. The findings revealed that a majority of the deals occurred during the initial phase, with a decreasing number of deals as the rounds progressed. The most common rounds of investment were Seed and Series A, representing 56.83% of the deals. These rounds were

dominated by private equity-backed investments, which may indicate investors' preference for early-stage ventures.

Interestingly, the study also revealed that bridge rounds were significant in attracting investments, indicating the flexible investment approach of private equity funds. The decline in the number of deals as the rounds progressed may be due to the higher valuation demanded by entrepreneurs, coupled with the high risk and low possibility of significant value creation at later stages.

To test the difference in each round, a Kruskal–Wallis test was conducted, which revealed a statistically significant difference in the investment stage for FinTech companies.

Exhibit 2: Analysis by Investment Rounds in the Indian Fintech Industry: Number of Deals and Percentage Distribution

Round	Number of deals	Percentage
Seed	317	27.86%
1	329	28.91%
2	169	14.85%
3	142	12.48%
4	64	5.62%
5 or later	53	4.66%
Bridge	60	5.27%
Preferential allotment	4	0.35%
Total	1138	100.00%
Krushkal Wallis p value	0	

C. Type of Sector

Exhibit 3 summarizes a detailed sector wise analysis of investments in the FinTech industry. The study classified all the deals into nine broader categories to provide a comprehensive overview. The findings suggest that lending, payments, and personal finance were the most popular sectors for investment, owing to the significant opportunities in these areas in India and the scope of product innovation in personal finance. These findings are consistent with those of Sahoo et al. (2019) [14]. The second most preferred sectors for investments were business and personal utility applications, software, and apps. Interestingly, the study revealed low interest in blockchain and the crypto, insurance, and healthcare sectors. This could be due to regulatory uncertainties and associated risks in these areas.

A Kruskal–Wallis test was conducted to test the difference in investments across sectors, and the results indicated a statistically significant difference in the investments made in various sectors. These findings provide useful insights for investors in making informed decisions and devising effective investment strategies in the fintech industry.

Exhibit 3: Breakdown of Investment Distribution by Sectors in the Indian Fintech Industry

Sector	Number of Deals	Percentage
Blockchain and crypto	23	2.02%
Healthcare	12	1.05%
Insurance	48	4.22%
Lending	409	35.94%
Payments	238	20.91%
Personal finance	143	12.57%
Software and apps	92	8.08%
Trading	41	3.60%
Business and personal utility	132	11.60%
Total	1138	100.00%
Krushkal Wallis p value	0	

D. Valuation Multiples – Entry

Exhibit 4 provides a detailed analysis of investment valuation multiples in the FinTech industry. Valuation multiples represent the premium on which the target company's valuation was based. The study revealed that all the multiples were above 30X, indicating a significantly greater valuation commanded by the FinTech industry. Xu, L., Wang, Y., & Fang, Y. (2019).

The average post money multiples were greater than the pre-money multiples for all three types of multiples. However, the median post money multiple for Price to Adjusted Net Income (PAT) was lower than the Pre-Money multiple, which suggests that investors may have exercised greater caution in applying multiples to PAT than in applying revenue or earnings before interest, taxes, depreciation, or amortization (EBITDA).

A greater postmoney multiplier for EBITDA and revenue may indicate a greater focus on revenue and EBITDA growth in the post multiple period. Overall, the study revealed that all the multiples were on the higher side in the fintech industry.

Exhibit 4: Comparison of Investment Multiples in the Fintech Industry: Pre-Money and Post-Money Valuation by Type of Multiple

Type of Multiple	Investment (Entry) Multiples			
	Average		Median	
	Pre Money	Post Money	Pre-Money	Post Money
Revenue	1033.39	1103.08	32.45	34.16
EBIDTA	124.01	160.81	36.08	39.05
Pat	170.72	291.82	102.54	85.19

Exhibit 5 summarizes the sector wise entry valuation in multiple ways. It was found that certain sectors, such as lending, software and applications, healthcare, and trading, commanded significantly greater revenue than did other sectors. Similarly, business and personal utility, Blockchain and crypto, and software and apps were valued at significantly higher EBITDA multiples. In contrast, insurance, lending, personal finance, and trading were given slightly lower multiples. However, no statistically significant differences were observed for PAT multiples across sectors.

Furthermore, the study showed that sectors with greater potential for growth and returns, such as lending, payments, and software and apps, had greater Pre-Money valuations on average. This could be attributed to the greater potential for growth and returns in these sectors compared to others. Overall, these findings highlight the differences in valuation multiples across different sectors within the Fintech industry and suggest that investors consider various factors when valuing companies in this space. Our findings were consistent with those of Tan, Y., & Gao, Y. (2021) [7][10][11].

Exhibit 5: Sector Wise Pre-Money Valuation Based on Revenue, EBIDTA, and PAT Multiples

Sector	Pre-Money Valuation		
	Revenue	EBIDTA	PAT
Blockchain and crypto	48.09	171.20	n/a
Healthcare	71.21	n/a	n/a
Insurance	4.17	28.83	35.67
Lending	733.73	32.39	202.74
Payments	6.60	95.32	147.69
Personal finance	2.33	17.50	134.16
Software and apps	234.74	70.25	238.26
Trading	17.77	38.89	49.97
Business and personal utility	n/a	110.50	149.11
Krushkal wallis p value	0.00	0.048	0.051

E. Exit Details

Exhibit 6 summarizes the data related to exits from 1998 to 2023. It was found that only 9.14% of deals could result in partial or full exits. Multiple sets of data were available for only 32 deals. It was found that for those deals, the median cash multiple was 4.4X. A large difference between the average and median cash multiples and the wide range of cash multiples across the quartiles suggested a significant variation in the performance of individual investments in the Fintech space.

Exhibit 6: Exit Metrics for Fintech Investments from 1998 to 2023

Fintech Exit Details	Particulars
Total exits	104
Exit ratio (exits/investments)	9.14%
Exit with multiple data	32
Average cash multiple	27.87
Median cash multiples	4.4
Cash multiples quartiles	3.24,31.76

F. Value Creation

Exhibit 7 provides a comprehensive overview of the value creation details in private equity, defined as the difference between exit and entry multiples. The findings reveal that exit multiples, on average, were lower than entry multiples. Notably, the valuation during investment was significantly greater than that during exit, with the highest multiple occurring during the PAT, followed by the EBIDTA multiple and revenue multiple. Moreover, all entry multiples were significantly greater than the exit multiples, indicating a possible overestimation of valuation by private equity investors during investments. Achleitner, A. K., Figge, C., & Tappeiner, F. (2010) [1] However, it should be noted that the exit multiples were only recorded for deals that had exited, leading to potential data limitations.

Thus, the findings could be further refined with a larger sample size and additional data sources.

Exhibit 7: Comparison of Entry and Exit Multiples for Fintech Industry			
Multiples	**Revenue**	**EBIDTA**	**PAT**
Exit multiples (median)	12.32	22.28	47.09
Entry multiples (median)	32.42	36.08	102.54

G. Sector wise Exit Multiples

Exhibit 8 presents a sector wise analysis of the realized cash multiples for exited deals in the fintech space, comparing Pre-Money valuation multiples with realized cash multiples. The findings reveal that the software and app sectors had the highest cash multiples, although it should be noted that entry valuation multiples for these sectors were also very high. The second-best return multiples were observed in the personal finance and insurance sectors, where the valuation multiples were also reasonably high. Conversely, the payments, business, and personal utility sectors delivered relatively lower returns, despite high entry multiples.

Overall, the majority of sectors delivered significant returns on exits. These findings demonstrate the potential for significant returns in the Fintech space, Philippon, T. (2019) [13], with the software and app sectors offering the highest potential. However, it is important for investors to be mindful of high entry multiples, as they may impact overall returns.

Exhibit 8: Realized Cash Multiples and Pre-Money Valuation Across Different Fintech Sectors During 1998 To 2023 Route				
	Realized Cash Multiple Averages	**Pre-Money Valuation**		
Sector		**Revenue**	**EBIDTA**	**PAT**
Insurance	22.29	4.17	28.83	35.67
Lending	2.46	4.17	28.83	35.67
Payments	12.53	6.6	95.32	147.69
Personal finance	29.65	2.33	17.5	134.16
Software and apps	99.29	234.74	70.25	238.26
Business and personal utility	9.07	n/a	110.5	149.11

H. Type of Exit Route

Exhibit 9 provides a comprehensive summary of exit routes used by private equity (PE) investors to exit their fintech investments. The findings indicate that the most common exit routes were M&A, Polat, and M. B. (2018) [12], with a total of 23 deals. The second most common exit route was the public market, with five deals, while IPOs were the least common exit type, with only four deals across all sectors.

The analysis further revealed that business and personal utility, as well as payment sectors, had the highest exits. Both sectors preferred M&A exits. The personal finance and software sectors also had high exits, with M&As being the preferred route. Conversely, the lending and insurance sectors had the lowest exits, with lending preferring M&A exits, while insurance exits were made through public markets and IPOs.

To assess the statistical significance of these findings, Fisher's exact test was performed. The results suggest that there was no statistically significant association between the type of industry and the exit route.

Exhibit 9: Fintech Exit Details by Type and Sector (1998-2023)				
Type	**M&A**	**Pubic Market**	**IPO**	**Total**
Business and personal utility	4	2	2	8
Insurance		2	1	3
Lending	3			3
Payments	6	1	1	8
Personal finance	5			5
Software and apps	5			5
Total	23	5	4	32
Fisher's Exact Test P Value				**0.052**

V. CONCLUSION

This study provides an analysis of the private equity investment landscape in the Fintech industry. The research findings reveal that there has been a substantial amount of private equity investment flowing into the Fintech industry. The majority of investments were focused on seed and early-stage start-ups (up to 3 rounds). The sectors that received the highest investment amount were lending, payments, and personal finance. In addition to investment amounts, this study analysed valuation multiples in the fintech space. The findings indicate that the average valuation multiples for Fintech startups were significantly greater than those for other industries. The sectors that received the highest valuations were lending, software and apps, and payments. While the majority of Fintech deals remained unexited, the exited deals in the Fintech space delivered significantly greater cash multiples. The study also revealed that, on average, the number of exit valuation multiples was significantly lower than the number of entry valuation multiples. The sectors that generated the highest cash multiples were software and apps, personal finance, and insurance. Finally, the study examined the exit routes preferred by private equity investors in the fintech industry. Mergers and acquisitions (M&As) were found to be the most preferred exit route, followed by public markets and IPOs. The sectors that had the highest exits were business and personal utility and payments, both of which preferred M&A exits. Overall, this study provides valuable insights into the private equity investment landscape in the Fintech industry.

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It highlights the sectors with the highest investment amounts and valuations, the exit routes preferred by private equity investors, and the sectors that delivered the highest cash multiples upon exit.

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REFERENCES

1. Achleitner, A. K., Figge, C., & Tappeiner, F. (2010). Private equity valuation: Do managers overestimate exit multiples?. Journal of Private Equity, 13(4), 19-31.
2. Aggarwal, R., & Wu, Q. (2015). The Rise of Indian Venture Capital and Private Equity: History, Trends, and Challenges. Foundations and Trends in Entrepreneurship, 11(4), 265-353.
3. Bhasin, N. K., & Gulati, K. (2021). Challenges of COVID-19 During 2020 and Opportunities for FinTech in 2021 for Digital Transformation of Business and Financial Institutions in India. In E-Collaboration Technologies and Strategies for Competitive Advantage Amid Challenging Times (pp. 282-299). IGI Global.
4. CB Insights. (2021). Global Fintech Report Q1 2021. https://www.cbinsights.com/research/report/global-fintech-q1-2021/
5. Guild, J. (2017). Fintech and the Future of Finance. Asian Journal of Public Affairs, 17-20. Jaiswal, V. K., & Chaudhari, A. K. Fin-Tech Emerging Trends in India
6. Jhariya, P., Kushwaha, N., & Puntambekar, G. (2023). An Analysis of Credit Growth Through Traditional Banks and Fintech Companies in India. Sachetas, 2(1), 1-10.
7. Jreisat, A., Bashar, A., Alshaikh, A., Rabbani, M. R., & Moh'd Ali, M. A. (2021, December). Is Fintech valuation an art of science? Exploring the innovative methods for the valuation of fintech startups. In 2021 international conference on decision aid sciences
8. Kaur, J., & Dogra, M. (2019). FinTech companies in India: a study of growth analysis. Abhigyan, 37(1), 21.
9. Kommalur, M. (2018). The impact of disruptive financial technology (fintech) on emerging markets with a focus on the Interaction between incumbents and new firms: In-depth analysis of the Indian fintech market (Doctoral dissertation).
10. Kukreja, G., Bahl, D., & Gupta, R. (2021). The Impact of FinTech on Financial Services in India: Past, Present, and Future Trends. In Innovative Strategies for Implementing FinTech in Banking (pp. 191-200). IGI Global.
11. Mohanasundaram, T., Vetrivel, S. C., & Prakash, N. FINTECH AND ITS EFFECT ON INDIA'S CHANGING FINANCIAL LANDSCAPE: AN EXPLORATORY STUDY.
12. Polat, M. B. (2018). Exit strategies of venture capitalists in the fintech industry. Journal of Financial Innovation, 1(1), 18-28.
13. Philippon, T. (2019). Fintech: What's old, what's new?. Journal of Economic Perspectives, 33(3), 89-114
14. Sahoo, P., Das, D., & Bhatia, N. (2019). Sectoral analysis of fintech investments in India International Journal of Applied Management and Technology, 18(1), 25-38.
15. Sharma, S., Srivastav, S., Gupta, A., & Manglick, A. (2022, February). Application of Technology and Innovation in Fintech and its Adaptability in India.