Investment Patterns in Emerging Fintech Sectors: Trend Analysis Using Venture Capital and Private Equity Databases

K. SATHISH[1], Dr. C. KATHIRAVAN[2]

[1] Research Scholar, Department of Business Administration, Annamalai University, Chidambaram, Tamilnadu.
[2]Associate Professor, Department of Business Administration, Annamalai University, Deputation to Govt. Arts & Science College, Sivakasi
*Corresponding author mail id: kathirc@gmail.com

Abstract:
Financial technology receives investment through three main factors consisting of technological innovation and regulatory reforms which develop new financial markets and increased digital service usage demand. Mutual to their investment strategies is how entrepreneurs and private equity investors seek economic benefits with market conditions that present difficulties. The fast-evolving financial technology market gains investor support from rising customer demand for necessary financial services and changing market conditions. Financial technology costs represent a main driver that mainly results from quick technological improvements transforming financial procedures. Digital banking and payment systems have become so popular that they have become significant targets of investor interest. Market regulation along with increased consumer demand for smooth financial interactions between people and institutions define how investments develop within this industry sector. The dynamic growth of financial technology receives momentum from these vital elements which also draw large amounts of capital investments. The present work explores the Indian venture capital investments through equity-based trends analysis. The analysis established investor growth projections from technological sectors throughout 2023- 24 and 2024-25 based on equity investment.

Key words: Financial technology, Management, Venture Capital, Investments, Equity

1. Introduction

Blockchain technology-powered digital payment schemes and AI-driven financial services development receive the most funding from investors as their primary investment destination. Privately funded equity firms and venture capitalists select these investment areas because they support banking restructuring while reducing operational costs [1]. The financial inclusion of market communities that have needed proper services attracts investors to fintech solutions [2].Artificial intelligence-driven fintech solutions keep the market strongly interested because they address both superior customer satisfaction and operational optimization goals [3]. Today's organizations require business collaboration platforms to connect with traditional financial institutions for meeting their operational needs. Fintech innovations improve financial service management by increasing user access for people who lacked banking access to receive banking services and make investments. Traditional financial institutions implement new technologies after creating a competitive sector and through this process their products benefit consumers [5]. The combination of fintech solutions drives enhanced economic development through disruptive commercial approaches and financial service workforce that establishes job market opportunities. Through its progress fintech creates advanced protective measures which promote market transparency and hence boosts customer confidence thus forcing conventional finance institutions to advance their operations.

2. Literature Review

Financial technology platforms under the name of fintech introduced rapid alterations that now threaten conventional financial services businesses to produce extensive economic developments across various fields. A comprehensive assessment of fintech market expansion and its business ramifications for traditional financial services appears in this part.

Haslanger, P et al [6] A survey of the literature in both domains is provided in this critique. Bibliometric analysis was utilized to provide a thorough summary of the disciplines' geographical focus, methodological choices, major topics, and future research goals using a huge corpus from the Web of Science. Dominic, J.; Joseph [7] This research examines the interplay between several VC and PE investment parameters in the context of India's developing economy, including holding durations, return multiples, fund kinds, and exit methods. We use data beginning in January 2004 and ending in March 2021, and we find that return is negatively correlated with holding duration. Hammer et al. [8] Therefore, this study deepens our understanding of the crucial relationship between investment holding time and subsequent returns, a topic of paramount relevance in the field of entrepreneurial strategy management. Harris et al. [9] Private equity has so become a popular investment option. However, some long-standing approaches to private equity value creation have encountered new obstacles recently. Ljungqvist et al. [10] stress that private equity firms' access to cheap funding can boost competition, making possible exits more appealing. Beyond basic criteria like operational performance, Gompers et al. [11] discover that the amount of activity in the M&A and IPO markets significantly impacts the choice of exit. Private equity firms are thus better equipped to sell their interests when the price is right because of these characteristics. The authors Giot et al. [12] build a connection between private equity firms' experience and holding periods. Their findings point to the fact that inexperienced businesses may have to wait longer to invest since they are unable to deploy funds as efficiently. Problems with deal sourcing and value creation during the holding term could befall less experienced organizations. In addition, private equity firms' types and areas of expertise might impact the duration of holding periods. According to Arcot et al. [13], long-term investment goals are given more weight by certain private equity firms, particularly those associated with financial institutions such as pension funds and banks.

According to Peterman and Lai [14], a strategic sale could be the best choice if an initial public offering (IPO) is not feasible, particularly in times of financial crisis when investors are not very confident. Even in tough economic times, a judicious sale may nevertheless yield more money than going public. Pindur [15] In conclusion, initial public offerings (IPOs) have long been the go-to for private equity firms looking to get out of the market, but strategic sales have been growing in popularity as an alternative, especially in cases where an IPO isn't possible or when the focus is on long-term strategy and quick divestiture rather than immediate profits. According to Kaplan and Schoar [16], secondary buyouts accounted for a fifth of all withdrawals between 1970 and 2007. Financial buyouts accounted for 43% of exits, as pointed out by Jenkinson and Sousa [17], highlighting the growing popularity of secondary buyouts. Secondary buyouts have been the go-to method of exiting throughout Europe. According to Dominic and Gopalaswamy [18], the analysis highlighted that if the exit did not occur in the first few years, there was a nearly 70% chance that it would not occur soon, meaning that the investment was becoming liquid.

3. Methodology:

The global PE and VC deal values surged during 2024 as they showed their first positive movement after 2021. The total deal value experienced a year-over-year growth of 24.7% reaching $639.02 billion while large-scale deals at or above $5 billion made substantial contributions to this development. A decline occurred in the number of deals to 12,672 while the total number of transactions maintained 13,547 thus showing preference for high-value investments in 2024.

Investor Growth in Technological Sectors (Equity Basis)

Investor growth patterns in technological sectors will be evaluated through equity market activity in 2023-24 and future projections indicate shifting trends for 2024-25. **Indian Technology Sector Performance**

The Indian technology industry established itself as a worldwide innovation center that brings global recognition.

During FY25 the domestic technology market is expected to cross $60 billion while expansion will occur at 7.0% annually to reach
$58.2 billion. The industry added 126,000 workers during the time, for a total of 5.80 million, or a 2.2% annual growth rate. Emerging business-to-business segment markets in Asia-Pacific, the telecommunications and healthcare industries, retail businesses, and the US market are the primary revenue generators in the IT services industry.

Anticipated Trends for 2024-25:

- Continued AI Dominance: AI equity investments will deepen their dominance of VC and PE investments in 2025 thus strengthening their purchasing force
- Further IPO Recovery: The upcoming IPO market boom will create additional financial liquidity for technology equity investments.
- Strategic Tech Investments: Investors plan to allocate funds to technological assets that enable extended innovation and market stability.
- Integration of AI in Investment Processes: AI tools will expand their usage toward sourcing deals and conducting due diligence and portfolio management activities in technology equity investments.

Equity Investment Growth in Technological Sectors (Estimated Trends):

This table presents qualitative projections for equity investment expansion throughout main technological fields which will extend the trends we have seen in 2023-24 through 2024-25. The data presented in this table features market-dependent figures which also rely on available data sources.

Table: qualitative overview of the anticipated growth in equity investments

Technological Sector	Investment Growth (2023-24)	Anticipated Investment Growth (2024-25)	Key Drivers
Artificial Intelligence (AI)	Very High	Extremely High	Breakthroughs in AI, expanding applications across industries, demand for AI infrastructure.
Healthcare Technology	High	High	Aging population, demand for personalized medicine, digital health solutions, AI in drug discovery and diagnostics.
Green Tech & Clean Energy	Increasing	High	Climate change concerns, government incentives, ESG investing, development of sustainable energy solutions.
Cybersecurity	High	High	Rising cyber threats, increasing digitalization, need for robust data protection.
Cloud Computing	Steady Growth	Steady Growth	Continued digital transformation, demand for scalable and flexible IT infrastructure.

Robotics & Automation	Increasing	High	Need for automation in manufacturing and logistics, advancements in robotics technologies.
Quantum Computing	Moderate	Increasing	Long-term potential to revolutionize computing, advancements in quantum hardware and software.
5G & Digital Infrastructure	Moderate	Increasing	Ongoing deployment of 5G, demand for high-speed connectivity, infrastructure needs for AI and IoT.
Fintech	Steady	Steady	Continued adoption of digital financial services, innovation in payment systems and lending.
Biotechnology	Moderate	Increasing	Advances in gene editing, drug development, and biopharmaceuticals.
Space Technology	Increasing	Increasing	Growth in commercial space ventures, satellite communications, and space exploration.

Results and discussions:

The technological sector within India shows continual growth throughout fiscal years 2023-24 (FY24) and 2024-25 (FY25) according to forecasted data for FY26. This document provides detailed statistical information about growth shown by specific segments in their performance metrics.

Overall Industry Growth:

Fiscal Year	Revenue (USD Billion)	Growth Rate (%)
FY23	244.6	-
FY24	253.9	3.8
FY25	282.6	5.1
FY26 (Proj.)	300.0+	~6.1

Table: Segment-Wise Performance in FY24 and FY25

Segment	FY24 Revenue (USD Billion)	FY24 Growth Rate (%)	FY25 Revenue (USD Billion)	FY25 Growth Rate (%)
IT Services	131.4	3.8	137.1	4.3
Business Process Management	52.1	3.3	54.6	4.7
Engineering R&D	51.9	48	55.6	7.0
Domestic	54.4	5.9	58.2	7.0
Revenue				
Export Revenue	214.8	3.3	224.4	4.6

Engineering R&D (ER&D): The segment stands as a major growth force responsible for generating 48% of the total export revenue expansion in FY24. The ER&D sector expects growth to $55.6 billion during FY25 pending a 7% increase.

Global Capability Centers (GCCs): During 2023 India welcomed 53 new GCCs as the nation established itself as a major center for these facilities on the world stage.

Artificial Intelligence (AI): The pace of AI technology adoption speeds up rapidly through the application of generative AI. The number of AI-related activities surged to 2.7 times its calendar year 2023 levels above what it was during the prior year. The upcoming two years will see more than 650,000 employees receive training in generative AI skills because organizations have fully committed to workforce upskilling.

Domestic vs. Export Revenues: In FY25 the domestic market revenue should grow by 7% up to $58.2 billion while export revenue growth will reach 4.6% to $224.4 billion.

Table: Key Metrics of the Indian Technology Sector (FY23 to FY25)

Metric	FY23	FY24	FY25 (Projected)
Total Revenue (USD Billion)	245.0	268.9	282.6
Revenue Growth (%)	8.4%	9.8%	5.1%
Software Exports (USD Billion)	-	-	224.4
Net Employment Addition (Thousands)	290	90	126
Total Workforce (Millions)	5.4	5.49	5.8
Venture Capital Funding (USD Billion)	9.8	13.7	-
Number of VC Deals	880	1,270	-
Number of IPOs	-	91	-
IPO Capital Raised (INR Trillion)	-	1.6	-

Venture Capital Investments: The Indian technological sector received $13.7 billion through venture capital

investments during FY24 which demonstrated a 40% improvement from $9.8 billion in FY23 data. The number of VC deals also rose by approximately 45%, from 880 in FY23 to 1,270 in FY24. The funding surge occurred because of excellent domestic market performance and rising investments in public markets.

Initial Public Offerings (IPOs): The amount of ₹1.6 trillion that 91 large enterprises were able to raise via initial public offerings (IPOs) in FY24 was a record. Three prominent IT companies—Groww Pine Labs, Lenskart, and others—were planning to launch initial public offerings (IPOs) with a combined $1 billion+ in funding. It is the high level of investor optimism about the future of technology that is propelling this market trend..

Private Equity Buyouts: The amount of private equity buyouts in India experienced a 39% increase during fiscal year 24 to reach $16.8 billion. Private equity transactions during FY24 mainly targeted the financial services sector along with IT making up the most appealing investment areas as real estate and healthcare lost their initial significance.

Conclusion:

The technological sector has shown vigorous development throughout 2023-24 and 2024-25 with AI advancements and digital transformation and solid financial results as its base. The market challenges of this sector remain strong because fundamental characteristics combined with ongoing innovations support long-term positive growth. The venture capital and private equity markets restored their strength in 2024 following a time of market adjustments. The current investment landscape shows clear evolution through anticipations of Public offerings and private capital deals recovering along with deep interest in AI technologies. The investment environment will expand into 2025 because competition will strengthen while strategic deal acquisition becomes vital and exit strategies will take a more prominent position. The identification of promising investment opportunities by investors and firms depends heavily on their access to complete venture capital and private equity database information as they operate within dynamic market conditions.

Emerging Trends and Future Scope

Statistical research indicates artificial intelligence functions as the main driving force within modern technological market growth. Research proves artificial intelligence will revolutionize multiple business industries because companies are exploring new opportunities regarding AI-related infrastructure and cybersecurity and artificial intelligence agent technologies. Through investments in software and IT services the Indian IT sector should expand by 11.2% until 2025 while reaching an estimated value of $160 billion.

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