

A Comparative Study of Early-Stage Startup Ecosystems in India and the United States: Trends, Challenges and Practical Recommendations to Strengthen India's Scale-Up Pathway

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Abstract

This paper compares early-stage startup ecosystems in India and the United States (US), synthesizing recent quantitative and qualitative evidence from government reports, ecosystem studies and foundational books on entrepreneurship and innovation. The US leads in capital depth, exit markets, and university-industry commercialization; India has rapidly scaled in startup counts, unicorn creation and digital adoption but faces shortages of late-stage capital, shallower exit channels and uneven research commercialization. Using secondary data (2023–2025) and literature synthesis, the paper identifies structural gaps and proposes targeted, practical policy and market interventions — including late-stage co-investment facilities, strengthened technology transfer offices, exit pathway reforms, R&D tax incentives, and founder capability programs — tailored for India. Limitations and directions for empirical follow-up are discussed..

Keywords: *Startup ecosystem; venture capital; unicorns; Startup India; technology transfer; India; United States; policy recommendations.*

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Introduction

Startups remain a leading channel for technological innovation, job creation and productivity growth worldwide. Over the past decade India's ecosystem has expanded rapidly in count and visibility, while the US sustains global leadership in private capital, mature exit markets and research commercialization pathways. Comparing the two economies illuminates concrete institutional and financial practices India could adopt or adapt to move more startups from early traction to global scale. This paper offers a comparative, policy-oriented view using the latest available reports and books to ground practical recommendations for India.

Review of Literature

The comparative analysis draws on three complementary literature strands:

1. Ecosystem benchmarking and reports – Annual ecosystem reports such as the Global Startup Ecosystem Report (Startup Genome) and national industry analyses provide cross-country indicators on funding, exits and ecosystem value.
2. Venture capital and market data – Industry yearbooks and data providers (NVCA, Crunchbase, PitchBook) document funding volumes, dry powder, and unicorn counts that shape investor behavior and startup scaling prospects.
3. Academic and practitioner books on entrepreneurship & state policy – Influential works such as Eric Ries's 'The Lean Startup', Kashyap Deorah's 'The Golden Tap', and Mariana Mazzucato's 'The Entrepreneurial State' provide conceptual frameworks for how startups form, scale and interact with public policy.

Methodology

This is a comparative secondary-data study complemented by literature synthesis:

- Data sources: Official DPIIT/Startup India statistics, Startup Genome (GSER 2025), NVCA yearbook and PitchBook summaries, Crunchbase unicorn listings, NASSCOM/KPMG industry reports, and published books/articles (2011–2025).
- Approach: The study compiles headline metrics (startup counts, unicorn counts, annual VC volumes, exit activity) and synthesizes institutional features.
- Limitations: Differences in definitions mean numbers are approximate; caveats are flagged where relevant.

Results and Findings

India's formal startup registry has expanded rapidly: roughly 159,157 DPIIT-recognised startups as of January 2025. The US continues to dominate VC deal value and capital availability. India shows relative concentration at early stages with fewer late-stage cheques.

Exit pathways are deeper in the US, while India's exit environment is improving. Research commercialization is institutionalised in the US but emerging in India.

Discussion

India has scaled breadth rapidly but lags the US on depth required for global scaleups. Structural drivers include:

1. Capital structure & LP base – US benefits from institutional investors, India's base is smaller.
2. Exit depth and liquidity – US has predictable exits; India's markets need reform.
3. Research commercialization – US universities have mature TTOs, India still building capacity.
4. Policy design – India needs mission-oriented public R&D investments.

Practical Implications

Recommendations for India:

- Create late-stage co-investment facilities.
- Evolve exit pathways.
- Professionalize Technology Transfer Offices.
- Expand R&D tax incentives.
- Scale angel networks outside metros.
- Build founder capacity programs.
- Encourage diverse founder pipelines.
- Publish transparent data.
- Mission-oriented public investments.

Limitations and Future Research Direction

Data variability exists across sources. Future research should include primary founder surveys, longitudinal tracking, and sector-specific studies in deeptech and biotech.

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