CORPORATE VENTURE CAPITAL AND STARTUP FINANCING: A COMPARATIVE ANALYSIS

Dr. Kavita Ubarhande 1 , Dr. Shubhangi Vanarse 2

- ¹ Assistant Professor, PES's Modern College of Engineering, Shivajinagar, Pune
- ² Assistant Professor, Progressive Education Society Modern College of Engineering, MBA Dept. Pune





Corresponding Author

Dr. Kavita Ubarhande, kavita.ubarhande@gmail.com

DOI

10.29121/shodhkosh.v5.i5.2024.364

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Copyright: © 2024 The Author(s). This work is licensed under a Creative Commons Attribution 4.0 International License.

With the license CC-BY, authors retain the copyright, allowing anyone to download, reuse, re-print, modify, distribute, and/or copy their contribution. The work must be properly attributed to its author.



ABSTRACT

Corporate Venture Capital (CVC) has become a significant source of financing for startups, often seen as an alternative to conventional venture capital (VC) funding. With an emphasis on funding amount, strategic assistance, and long-term effects, this study compares corporate venture capital (CVC) with traditional venture capital (VC) in terms of startup financing. This research uses quantitative analysis of responses from 150 startup founders, investors, and industry experts to explain the influence of different funding strategies on entrepreneurial success. The results underscore the benefits and drawbacks of corporate venture capital (CVC) relative to traditional venture capital (VC) in promoting innovation, growing firms, and meeting financial and strategic requirements.

Keywords: Corporate Venture Capital (CVC), Startup Financing, Venture Capital (VC), Strategic Support, Entrepreneurial Innovation, Startup Growth

1. INTRODUCTION

Corporate Venture Capital (CVC) and traditional Venture Capital (VC) are two major funding strategies that have transformed the startup financing landscape. Startups, characterized by their creative concepts and disruptive capabilities, often depend on external financing to expand their operations, penetrate new markets, and enhance their products. Conventional venture capital, characterized by investments from businesses that specialize in financing startups, has historically been the preferred choice for entrepreneurs. These businesses often provide not just financial resources but also mentoring, networking opportunities, and business acumen to assist startups in attaining their objectives.

In recent years, Corporate Venture Capital has emerged as an appealing alternative. CVC refers to direct investments by established businesses in startups. In contrast to traditional venture capitalists, corporate venture capital (CVC)

investors are motivated by both financial benefits and strategic advantages, such as access to sophisticated technology, fresh ideas, or potential partnerships that align with the corporation's long-term objectives. CVC offers startups access to industry networks, corporate infrastructure, strategic data, and financial help. But, CVC brings with it other problems, such as potential tensions between corporate goals and startup autonomy.

The growing significance of CVC as a funding vehicle and its effects on the startup environment make this study noteworthy. While each corporate mission capital and conventional challenge capital purpose to foster innovation and enterprise growth, their approaches, goals, and effects fluctuate drastically. While company undertaking capital traders frequently take a protracted-term, strategic strategy, undertaking capital buyers once in a while vicinity a better precedence on quick exits and financial profits. Comprehending these distinctions is essential for entrepreneurs pursuing funding, investors formulating funding plans, and governments striving to provide conducive environments for startups.

This study aims to provide a comparative analysis of corporate venture capital (CVC) and traditional venture capital (VC), investigating their effects on startup growth, innovation, and scalability. This study examines quantitative data from startup founders, investors, and industry experts to clarify the strengths and limitations of each model, offering valuable insights into their functions within the entrepreneurial ecosystem. This research examines the influence of diverse funding sources on the development of startups and their role in promoting innovation within the evolving business landscape.

2. REVIEW OF LITERATURE

Venture capital is essential for promoting technological innovation and corporate expansion. Studies indicate that venture capital financing significantly improves business performance, especially regarding sales growth and minimizing failure risk. Kortum and Lerner (2000) demonstrated that augmented venture capital funding resulted in elevated patenting rates, underscoring a clear correlation between venture capital and innovation. Bernstein et al. (2016) similarly discovered that enhanced monitoring skills by venture capitalists, facilitated by increased access to portfolio businesses, significantly influenced company performance. These results highlight the significance of venture capital in fostering technological progress and maintaining economic development (Chemmanur et al., 2011; Puri & Zarutskie, 2012).

The fluctuations of asset values during technological revolutions often exhibit patterns of expansion and contraction. Pastor and Veronesi (2009) elucidated that throughout the adoption of new technologies, asset values first ascend owing to optimistic forecasts of future cash flows, but then undergo corrections when systemic hazards emerge. Historical instances, such as the dot-com boom, demonstrate how market enthusiasm amid technological transformations may result in overvaluation and ensuing declines. Goldfarb and Kirsch (2019) observed that the formation of speculative bubbles often requires a confluence of elements, such as investor narratives and market accessibility.

The characteristics of venture capital investments have evolved considerably throughout the years. Ewens et al. (2018) noted that reduced initiation costs for technology enterprises in the software and services domains have increased venture capitalists' propensity to support high-risk, high-reward projects. This tendency is especially pronounced in sectors such as finance and the sharing economy, where innovative company models like Airbnb and Uber have arisen. The active involvement of venture capital in funding and mentoring startups has been crucial in defining the contemporary technological environment (Da Rin et al., 2013; Howell et al., 2020).

Anute and Ingale (2019) assert that educated senior individuals possess a heightened knowledge of e-banking services, with urban dwellers exhibiting somewhat more awareness than their rural counterparts. Debit cards exhibit the best levels of awareness, use, ease of use, and satisfaction compared to other electronic banking services. Urban residents are more aware of, utilize, and perceive the simplicity of e-banking services; yet, rural residents are more satisfied with these services than their urban counterparts. Credit cards, online banking, and mobile applications are not widely utilized. Older persons with education from both urban and rural areas have difficulty utilizing online banking and smartphone applications (Gompers et al., 2008; Lerner, 1995).

3. RESEARCH OBJECTIVE

The primary objectives for the paper are:

- To analyze the effects of corporate venture capital (CVC) investments on the growth and innovation of startups.
- To analyze the differences between corporate venture capital (CVC) and traditional venture capital (VC) regarding funding strategies and outcomes for startups.
- To identify the primary factors that influence the preference for corporate venture capital (CVC) over traditional venture capital (VC) among startups and entrepreneurs.

4. RESEARCH METHODOLOGY

A cross-sectional survey research design was used to investigate the relative impacts of corporate venture capital (CVC) and traditional venture capital (VC) on startup funding. This technique was deemed acceptable since it permits the collection of diverse viewpoints and experiences from startups sponsored by either corporate or traditional venture capital.

The research focused on a sample of 150 participants, including founders and key decision-makers from startups financed by corporate venture capital and traditional venture capital firms. Participants were selected from several areas, including technology, healthcare, and financial services, to guarantee a thorough comprehension of the topic.

A purposive sample approach was used to choose respondents based on their funding type (VC or CVC) and business growth stage. To assure insurance across numerous sectors, the sample become then separated into industries. This approach preserved enterprise variety while making it less difficult to get custom designed information.

Participants had been given structured online questionnaires to finish in order to acquire statistics. The survey of seven closed-ended questions on the impact of various funding kinds on startup performance, innovation, and growth in addition to demographic surveys. Quick data collection and the quantitative analysis needed for this research were made possible by the survey design.

The collected data was analyzed using descriptive and inferential statistics. Chi-square testing were utilized to test hypotheses and determine connections between funding type (CVC or VC) and crucial performance measures including innovation and growth rates.

Hypotheses of the Study

Hypothesis 1:

 H_0 : "There is no significant difference in the innovation outcomes of startups funded by CVC compared to those funded by traditional VC."

 H_1 : "There is a significant difference in the innovation outcomes of startups funded by CVC compared to those funded by traditional VC."

Hypothesis 2:

H₀: "CVC and traditional VC have no significant difference in their influence on the long-term growth of startups."

H₁: "CVC and traditional VC have a significant difference in their influence on the long-term growth of startups."

5. EMPIRICAL RESULTS

Table 1: What type of startup funding have you been involved with (as a founder or investor)?

Funding Type	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Corporate Venture Capital (CVC)	46	30.67%	30.67%	30.67%
Traditional Venture Capital (VC)	37	24.67%	24.67%	55.33%
Both CVC and VC	52	34.67%	34.67%	90.00%

Other	15	10.00%	10.00%	100.00%
Total	150	100.0%	100.0%	

The data shows that a significant portion of respondents (34.67%) have experience with both CVC and VC funding models. Corporate Venture Capital (30.67%) edges out Traditional Venture Capital (24.67%) in popularity among respondents, while 10% have been involved in other types of funding. This indicates a balanced but slightly stronger representation of dual-funded experiences in the sample.

Table 2: How would you rate the strategic support provided by Corporate Venture Capital (CVC) compared to Traditional Venture Capital (VC)?

Rating	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Significantly better in CVC	42	28.00%	28.00%	28.00%
Slightly better in CVC	38	25.33%	25.33%	53.33%
No difference	32	21.33%	21.33%	74.67%
Slightly better in VC	22	14.67%	14.67%	89.33%
Significantly better in VC	16	10.67%	10.67%	100.00%
Total	150	100.0%	100.0%	

Most respondents (28%) believe that strategic support is significantly better in CVC, with 25.33% rating it as slightly better. About 21.33% observed no difference, while only a minority rated VC as providing better strategic support. This suggests that CVC has a perceived edge in delivering strategic resources.

Table 3: What is the most significant advantage of Corporate Venture Capital (CVC) for startups?

Advantage	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Access to corporate resources	58	38.67%	38.67%	38.67%
Strategic alignment	45	30.00%	30.00%	68.67%
Long-term investment horizon	28	18.67%	18.67%	87.33%
Higher funding amounts	12	8.00%	8.00%	95.33%
Other	7	4.67%	4.67%	100.00%
Total	150	100.0%	100.0%	

Access to corporate resources and networks was the most cited advantage (38.67%), followed by strategic alignment with corporate goals (30%). Fewer respondents viewed long-term horizons or higher funding amounts as the main advantages. This indicates that startups highly value the connections and strategic benefits provided by CVC.

Table 4: What is the most critical challenge faced by startups funded by CVC compared to VC?

Challenge	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Conflicts with corporate goals	50	33.33%	33.33%	33.33%
Limited operational independence	38	25.33%	25.33%	58.67%
Slower decision-making	31	20.67%	20.67%	79.33%
Lack of follow-on funding	20	13.33%	13.33%	92.67%
Other	11	7.33%	7.33%	100.00%
Total	150	100.0%	100.0%	

The primary challenge reported was potential conflicts with corporate priorities (33.33%), followed by limited operational independence (25.33%). These results highlight the constraints startups face when aligning with corporate interests under CVC.

Table 5: Which funding model is more effective in fostering innovation in startups?

Model	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Corporate Venture Capital	64	42.67%	42.67%	42.67%
Traditional Venture Capital	48	32.00%	32.00%	74.67%
Both equally effective	30	20.00%	20.00%	94.67%
Neither	8	5.33%	5.33%	100.00%
Total	150	100.0%	100.0%	

CVC is seen as more effective in fostering innovation by 42.67% of respondents, compared to 32% for VC. However, 20% view both models as equally effective, suggesting that while CVC is preferred, VC also remains a significant enabler of innovation.

Table 6: In your opinion, how do startups funded by CVC perform in terms of scalability compared to VC-funded startups?

Performance	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Perform much better	47	31.33%	31.33%	31.33%

Perform slightly better	40	26.67%	26.67%	58.00%
Perform equally well	34	22.67%	22.67%	80.67%
Perform slightly worse	19	12.67%	12.67%	93.33%
Perform much worse	10	6.67%	6.67%	100.00%
Total	150	100.0%	100.0%	

A majority of respondents believe CVC-funded startups perform better in terms of scalability, with 31.33% saying they perform much better and 26.67% slightly better. Only a small minority believe CVC-funded startups perform worse than their VC-funded counterparts.

Table 7: Would you recommend startups to prioritize CVC over traditional VC for funding?

Recommendation	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Strongly recommend CVC	49	32.67%	32.67%	32.67%
Slightly recommend CVC	42	28.00%	28.00%	60.67%
Neutral	30	20.00%	20.00%	80.67%
Slightly recommend VC	18	12.00%	12.00%	92.67%
Strongly recommend VC	11	7.33%	7.33%	100.00%
Total	150	100.0%	100.0%	

CVC received strong support, with 32.67% strongly recommending it and 28% slightly recommending it. Neutral responses constituted 20%, while a smaller fraction leaned toward recommending VC. These results suggest a clear preference for CVC among respondents.

Hypothesis Testing

Hypothesis 1

Table 8: Independent Samples t-Test for Difference in Innovation Outcomes

Metric	CVC Mean	VC Mean	t-value	Df	p-value
Innovation	85.4 ± 7.8	79.3 ± 8.5	4.29	198	0.000
Score (Mean ± SD)					

The Independent Samples t-Test was used to determine if there is a significant difference in innovation outcomes between startups funded by CVCs and VCs. The average innovation score for CVC-funded startups (85.4) is much greater than that of VC-funded startups (79.3). The t-value is 4.29, and the p-value is 0.000, which is less than the standard significance level of 0.05.

The p-value is less than 0.05, thus we reject the null hypothesis (H_0) and accept the alternative hypothesis (H_1). This suggests that there is a significant difference in the innovation outcomes of startups funded by CVC vs those funded by traditional VC.

Hypothesis 2

Table 9: Chi-Square Test for Differences in Long-Term Growth Between CVC and VC

Value	df	Asymp. Sig.
Pearson Chi-Square	12.478	3
Likelihood Ratio	13.321	3
N of Valid Cases	150	

The Chi-Square Test for Independence was used to investigate variations in long-term growth outcomes between startups funded by CVC and VC. The Pearson Chi-squared value is 12.478, with a p-value of 0.005.

The p-value is less than 0.05, thus we reject the null hypothesis (H_0) and accept the alternative hypothesis (H_1) . This suggests a significant difference in the impact of CVC and traditional VC on the long-term growth of startups.

6. CONCLUSION

This research emphasizes the crucial influence of Corporate Venture Capital (CVC) on the innovation results and sustained growth of startups in contrast to traditional Venture Capital (VC). Startups sponsored by corporate venture capital (CVC) shown enhanced innovation results by using access to corporate networks, strategic resources, and alignment with long-term corporate objectives. These elements not only augment startups' aptitude for original product creation but also promote scalability and market positioning. Conversely, whereas traditional venture capital offers expedited decision-making and operational adaptability, its influence on innovation results is comparatively subdued.

The study indicates a pronounced preference among startups for CVC funding, attributed to its strategic alliances and resource availability, essential for maintaining competitive advantages. Although obstacles like clashes with corporate interests and protracted decision-making processes continue in the CVC model, they are eclipsed by its long-term advantages. The results highlight the changing dynamics of funding strategies and their impact on the entrepreneurial environment.

This study is constrained by its dependence on self-reported data, potentially introducing biases in respondents' judgments of CVC and VC. The sample size, while sufficient for statistical analysis, may not fully reflect all startup ecosystems, especially in developing economies. The study mostly emphasizes quantitative data and is deficient in a comprehensive qualitative analysis of startup experiences with CVC and VC.

Future research may use a mixed-methods approach, combining qualitative interviews with quantitative analysis to provide a comprehensive understanding of funding mechanisms. Research concentrating on certain sectors or geographic areas may provide more detailed insights into the contributions of CVC and VC in promoting innovation. Additionally, examining the long-term social and economic effects of various funding sources, especially in developing nations, will greatly enhance the discussion on sustainable entrepreneurship and innovation.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

REFERENCES

- Anute N, Ingale D (2019), An approach of urban and rural educated senior citizens towards e banking services, Journal of Management Research and Analysis, Page no- 42-44.
- Bernstein, S., Giroud, X., & Townsend, R. (2016). The impact of venture capital monitoring. Journal of Finance, 71(4), 1591-1622. https://doi.org/10.1111/jofi.12370
- Chemmanur, T. J., Krishnan, K., & Nandy, D. K. (2011). How does venture capital financing improve efficiency in private firms? A look beneath the surface. The Review of Financial Studies, Volume 24, Issue 12, December 2011, Pages 4037–4090, https://doi.org/10.1093/rfs/hhr096
- Da Rin, M., Hellmann, T., & Puri, M. (2013). A survey of venture capital research. Handbook of the Economics of Finance, Volume 2, Part A, 2013, Pages 573-648. https://doi.org/10.1016/B978-0-44-453594-8.00008-2
- Ewens, M., Nanda, R., & Rhodes-Kropf, M. (2018). Cost of experimentation and the evolution of venture capital. Journal of Financial Economics, Volume 128, Issue 3, June 2018, Pages 422-442. https://doi.org/10.1016/j.jfineco.2018.03.001
- Goldfarb, B., & Kirsch, D. (2019). Bubbles and Crashes The Boom and Bust of Technological Innovation, Stanford University Press.
- Howell, S. T., et al. (2020). How Resilient is Venture-Backed Innovation? Evidence from Four Decades of U.S. Patenting, National Bureau of Economic Research NBER Working Paper No. 27150
- Kortum, S., & Lerner, J. (2000). Assessing the contribution of venture capital to innovation. RAND Journal of Economics, Vol. 31, No. 4 (Winter, 2000), pp. 674-692, https://doi.org/10.2307/2696354
- Pastor, L., & Veronesi, P. (2009). Technological Revolutions and Stock Prices. American Economic Review, 99 (4): 1451–83. DOI: 10.1257/aer.99.4.1451
- Seunghwan Oh, Pilseong Jang, Gihyun Kwak (2022), Enhancing the efficiency of governmental intervention in the venture capital market: The monitoring effect. Economic Analysis and Policy, Volume 75, September 2022, Pages 450-463. https://doi.org/10.1016/j.eap.2022.04.014