The Role and Significance of Government Venture Capital for Early-stage Firms in Creating and Nurturing Next-generation Industries in Japan

－A Study on INCJ's Investment Activities－

Japan Advanced Institute of Science and Technology　Minoru Kobayashi

ABSTRACT

This study conducts an analysis of equity financing's financial support effects. To do so, it examines the investment activities and processes undertaken by INCJ, Ltd., which was established through a corporate split from Innovation Network Corporation of Japan. Through structured interviews with 7 companies, the study elucidates INCJ's role in financial support from an equity financing perspective for each company. The study also investigates whether INCJ has effectively fulfilled its catalyzing function by facilitating collaboration among private funds and corporations and stimulating further investment. A key analytical focus herein is on whether portfolio companies, after beginning transactions with INCJ or after receiving investments, experienced spillover effects in securing additional financial support, especially as debt financing. The study also draws on these findings to provide an interim assessment of the Startup Development Five-year Plan launched in 2022, evaluating its current policy implications.

Key words ：Debt financing, Equity financing, Government venture capital, Startups

1 INTRODUCTION

1.1 Background

In 2022, the Government of Japan, under the framework of its "new capitalism," announced the Startup Development Five-year Plan, promoting startup policies. Against this backdrop, the present study aims to investigate how investments made by the Innovation Network Corporation of Japan (INCJ), a public–private fund established to foster and create next-generation industries, was perceived by its portfolio companies. As noted by Eisenman (2021), sustainable support for startups, especially at the early stage, remains challenging. Aoki (2001) also analyzed how private venture capital firms can demonstrate their strengths through collaboration . In this context, INCJ's impact on its portfolio companies warrants investigation. While government-affiliated financial institutions' positive effects on lending have already been analyzed (e.g., Horiuchi and Sui [1994] and Asai and Ohama [2008]), the impact of public–private funds on one another remains unclear. Through interviews with INCJ's portfolio companies, this study seeks to clarify whether such positive effects existed for INCJ's investments.

1.2 About INCJ

This section gives an overview of the present-day INCJ. The company's establishment and organizational background are as follows:

- Established in September 2018.
- The current INCJ succeeded the business operations of the Innovation Network Corporation of Japan (the former INCJ; Sangyo Kakushin Kikou in Japanese), which was established in July 2009.
- It largely concluded the business operations by March 2025.
- Japan Investment Corporation (JIC) is the sole shareholder (parent company).
- The Government of Japan and 25 private companies[1)] comprise the JIC shareholders.

The Government's contribution amounts to JPY 366.9996724 billion , accounting for 96.45% of the total capital, funded through the Fiscal Investment and Loan Program investment account. The private-sector contribution is JPY 13.5 billion, or 3.55% of the total capital.

1.3 Research Overview

This study conducts a qualitative academic analysis of the financial support effects of equity financing via INCJ investment activities and decision-making processes.
Interviews are planned with 7 portfolio companies to examine INCJ's role and public–private investment funds' function from the perspective of financial support.
The research will assess whether the INCJ, over its 15-year history, has successfully fulfilled its mission of acting as a catalyst ("pump-priming" effect) in collaboration with private funds and private-sector companies.
The study will place particular focus on the additional financial needs that emerged after INCJ transactions or investment decisions began, with special attention given to the spillover effects on debt financing.
The study also will include an evaluation of the Startup Development Plan Five-year Plan that was initiated in 2022.

2 METHODS

Selection of interview survey targets

From the 144 INCJ portfolio companies, 18 were selected as having prospective interviewees, thus ensuring balanced representation across regions and industries.[2)] Notably, among all portfolio companies, the two led by female executives (including founders) were included. From the 18 selected companies, 7 finalized and their executives or founders interviewed .

Interview Framework

Interviews were conducted with the CEOs of seven companies, based on four key interview topics below (Table 1). The interview list shows the dates and times of each interview.
(INTERVIEWS)

Table1 Interview Topics

	Topics	Questions
1	Changes in Fundraising and Cash Flow Before and After INCJ's Investment Decision	- How did your company's financial strategy and fundraising approach change after INCJ's investment decision? - What specific impact did INCJ's investment have on your company's cash flow and financial stability?
2	Current Cash Flow Situation and Use of Venture Capital and Debt Financing	- What is the current state of your company's cash flow management? - How has your company used venture capital and debt financing to complement INCJ investment? - Have you received any additional financial support or credit enhancements after receiving investment from INCJ?
3	Benefits and Challenges of INCJ's Support	- What are the key advantages of receiving financial and strategic support from INCJ? - Have there been any challenges,

		limitations, or areas in which INCJ's support was insufficient? - How does INCJ's involvement compare with that of other financial institutions or investors?
4	Future Challenges for Public–private Funds and Support Policies	- What key issues and challenges should public–private funds address in the future? - How can government-backed investment funds improve their support for startups and growth-stage companies? - What policy measures or structural improvements would make public–private financial initiatives more effective?

3 RESULTS

3.1 Influence

Table 2 shows the aggregated results based on interview responses on whether INCJ (GVC) investments had any influence on other private venture capital (VC) investments or debt financing. Two portfolio companies responded that INCJ's investment had a positive effect, creating opportunities to engage with other private VC firms. However, five responded that INCJ's investment had no impact on other private VC and led to no such opportunities. Regarding the impact on debt financing, only one company responded that INCJ's investment had a positive effect, resulting in opportunities for loan transactions with financial institutions. However, six responded that INCJ's investment did not influence their relationships with financial institutions and resulted in no such opportunities. Notable in these results is that most of these portfolio companies indicated there was no positive effect on their relationships with either private VC or financial institutions. Four (57.1%) of the companies also stated they experienced no impact on either VC relationships or debt financing opportunities[3].

Table2 Effect summary table

	GVC → VC+	GVC → VC -	Number of companies
GVC → Debt+	0	1	1
GVC → Debt -	2	4	6
Total	2	5	7

Notes
1. GVC → VC +: Positive effect from government venture capital funds (GVCs; INCJ) on (private venture capital [VC] firms)
2. GVC → VC −: No positive effect from GVC on VC
3. GVC → Debt +: Positive effect from GVC on debt financing
4. GVC → Debt −: No positive effect from GVC on VC

3.2 Advantages of Support

Three principal benefits of support were identified. First, the knowledge and practical experience gained in corporate governance were substantive, serving as a driving force during the early development stages. Regular convening of board meetings also was regarded as highly beneficial. Finally, the provision of personnel support was greatly appreciated.

3.3 Challenges Identified

Two major challenges were noted. The first concern regarded the considerable time required for the screening and due diligence processes; this, in some cases, led to situations concerning the company's cash flow. The preparation of detailed meeting materials also required substantial effort and posed difficulties. While there was thorough understanding of the company's fundamental aspects , the level of expertise did not extend to advanced technical knowledge or the nuances of industry practices and conventions. There also was a desire for INCJ to have more clearly articulated its vision and philosophy for fostering next-generation industries and demonstrated stronger leadership in shaping new industrial landscapes .

3.4 Issues for Future Consideration

Several future challenges emerged. There remains a recognized need for public–private investment funds with functions similar to those of INCJ. In particular, given the current scarcity of VC capable of responding to later-stage enterprises' needs, public–private funds that can address this stage effectively must be developed. Contributions made in corporate governance development and education were noted as being especially meaningful. However, some respondents expressed that, for personnel support, certain private VC firms have now reached a level where they can provide greater support than that of INCJ. This observation also highlights the positive impact of human resource development resulting from INCJ's activities.

3.5 Additional Observations

The interview findings on startup policies and corporate value collateral rights are summarized below. Table 3 shows the responses confirming the level of expectation and demand for establishing corporate value collateral rights.

Table3 Demand for corporate value collateral rights

Responses	Number of companies
Want introduction	0
It is not necessary	5
Don't know about it	2
Total	7

The interviews sought opinions on current startup policies. In particular, they inquired about establishing corporate value collateral rights, an aspect included in the Startup Development Plan Five-year Plan and whose official implementation was recently decided. Five companies responded that they do not consider this approach necessary, while two responded that they did not know about it.

No company expressed an intent to use this system (Table 3).

4 DISCUSSIONS

Investments made by INCJ, together with VC co-investments at that time , clearly catalyzed VC firms' participation in emerging industrial sectors. However, this study also indicates that the subsequent effects on relationships with other VC firms and financial institutions were not necessarily positive. That finding warrants particular attention, as it differs from the conclusions of prior analyses that suggested public financial institutions' involvement tended to exert a positive influence on transactions with private financial institutions.

Differences between debt financing and equity investment must be duly considered; however, the study results suggest potentially inherent challenges associated with fostering sustained VC engagement. Additionally, certain portfolio companies may be facing delays as an unintended consequence of their transactions with VC firms. The level of awareness among business executives regarding the introduction of corporate value security rights, positioned as one of the current startup policy's most important components, was remarkably low. None of the seven executives interviewed knew the system would soon be implemented. Most were interested after hearing explanation of its content. However, five companies indicated they did not consider such a system to be necessary. Their response may imply they currently have sufficient funding. Nevertheless, the existence of delays could plausibly have influenced their assessment. Moreover, these companies' current financial situations may also be constrained by debt-overhang, leading them to conclude that additional borrowing would be difficult[5)].

The remaining two companies, responding "do not know," apparently viewed the system as a potentially valuable new financing tool and appeared willing to consider it in the future. In this sense, this interview may have helped build awareness and understanding of the system. This finding underscores the need for further proactive outreach and awareness-raising by the Financial Services Agency of Japan, and by relevant financial institutions, to ensure that such policies are more widely understood and effectively used in practice.

5 CONCLUSIONS

The INCJ, through its investments in portfolio companies, indeed has been a catalyst for mobilizing private capital. Its influence on the companies' industries and regions is also apparent. This study conducted interviews to build on this understanding. The study focused specifically on whether the INCJ investments contributed to subsequent increases in transactions with other private VC firms and improved relationships with financial institutions. The results obtained at this interim stage unexpectedly suggested that such effects were not observed. Instead, the benefits of INCJ's involvement evidently have been most pronounced in corporate governance. The interviews confirmed that the added value of INCJ's investments was realized through strengthening governance structures[4)], facilitating talent placement, and related contributions that have been pivotal in the portfolio companies' long-term development.

The Startup Development Five-Year Plan has now reached its midpoint. Policy implementation under this plan seems to be proceeding smoothly. However, awareness of corporate value collateral rights is considerably lower than anticipated, and none of the respondents indicated their intent to use this system. Given that it is considered a key policy measure for supporting startups, stronger efforts to raise awareness and promote understanding of the system are imperative. In conducting these interviews, companies across a diverse range of industries, including those headquartered in regional areas, were intentionally selected to achieve the broadest possible perspective. Nevertheless, this survey represents only a partial view of the overall landscape. Additionally, investments in early-stage venture firms are only one aspect of INCJ's activities.

This study indicates INCJ contributions are evident from the perspective of INCJ portfolio companies. The challenges that arise following INCJ investments warrant further examination. Although INCJ is nearing the end of its operations, the companies' business activities will continue. Therefore, based on these interviews, it is premature to draw definitive conclusions regarding the full scope of INCJ's role. These companies' development and progress must continue to be keenly observed, allowing for a deeper understanding of the significance and lasting impact of INCJ's contributions.

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【Notes】

1)25 corporations: JPY13.5 billion total, JPY 500 million each (Exception: Development Bank of Japan, which contributed JPY 1.5 billion)

・Asahi Kasei Corporation, Canon Inc., Development Bank of Japan Inc., East Japan Railway Company, ENEOS Corporation, Hitachi, Ltd., JGC Holdings Corporation, Marubeni Corporation, Mitsubishi Chemical Holdings Corporation, Mitsubishi Corporation, Mitsubishi Heavy Industries, Ltd., Mizuho Bank, Ltd., MUFG Bank, Ltd., Osaka Gas Co., Ltd., Panasonic Corporation, Sharp Corporation, The Shoko Chukin Bank, Ltd., Sony Group Corporation, Sumitomo Chemical Co., Ltd., Sumitomo Corporation, Sumitomo Electric Industries, Ltd., Sumitomo Mitsui Banking Corporation, Takeda Pharmaceutical Company Limited, Toshiba Corporation, Toyota Motor Corporation

2)The subject companies are portfolio firms of the Venture Growth Investment Group within INCJ. This group mainly focuses on investment activities related to early-stage and venture investments. INCJ also operates another division, the Investment Group, which engages in investment activities centered on themes such as corporate restructuring, cross-border transactions, and growth investments.

3) David J. Storey's research also carefully separates debt financing and equity financing, does not explain their mutual influence (David J. Storey [1994]).

4) D. Whittaker Hugh uses the term "financialized capitalism" to describe Japan's financial system in the government's efforts over the last 15 years (Whittaker [2024]).

5) Refer to following literature for debt overhang, Hart (1995), Constantinides et al. (2003).

This study is being conducted with the approval of the Life Science Committee of the Japan Advanced Institute of Science and Technology. (approval code: Human 06-060).

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【INTERVIEWS】

No.	Company	Industry/area	Position of Interviewee(s)	Date of Visit	Time	Duration (minutes)	Remarks
1	A	Electronic devices	CEO	February 6, 2025	13:00—14:50	110	
2	B	Health, medicine	CEO, Executive Officer	February 12, 2025	14:00 - 15:50	110	
3	C	IT, business services, content, intellectual property	CEO, Department Director	February 13, 2025	13:30 - 15:05	95	
4	D	Materials, chemicals	CEO	March 3, 2025	14:00 - 15:55	115	Accompanied by three other participants
5	E	Materials, chemicals	CEO	March 4, 2025	16:00 - 17:10	70	Accompanied by one other participant
6	F	IT, business services, content, intellectual property	CEO	March 7, 2025	17:00 - 19:05	125	Accompanied by two other participants
7	G	Materials, chemicals	CEO, Audit and Supervisory committee Member, Public Relations and Investor Relations Group Leader	May 20, 2025	10:00 - 11:25	85	

Notes

1.There was an opportunity for one more interview in addition to the seven in this table; however, the additional company was excluded from the analysis as there was insufficient time.

2.Company names are not disclosed here.