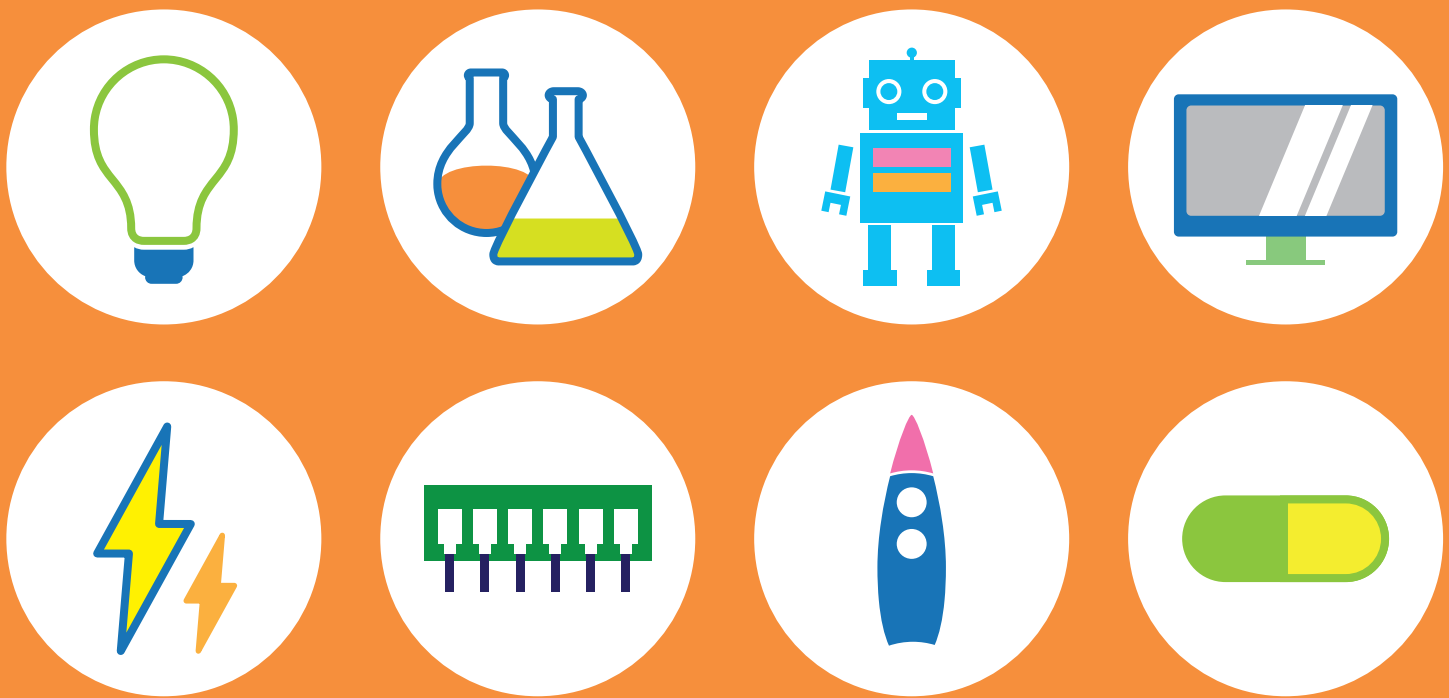
VEC
Venture Enterprise Center

VEC YEARBOOK 2016

Annual Report on Japanese Startup Businesses

Venture Enterprise Center, Japan



VEC YEARBOOK 2016

Annual Report on Japanese Startup Businesses

March 2017

Venture Enterprise Center, Japan

Foreword

It is my pleasure to publish the “VEC YEARBOOK 2016 -Annual Report on Japanese Startup Businesses-” in cooperation with our collaborators. We are proud to author the only report that provides comprehensive coverage of Japan’s venture capital and startup businesses, which is often quoted in academic literature and by the media.

Annual venture capital investments in FY 2015 totaled ¥130.2 billion, up 11.2% from ¥117.1 billion in FY 2014. Broken down into overseas and domestic investments, the former category was more or less flat year on year, whereas the latter category rose 19.9% year on year, marking steady growth. New venture capital funds launched in FY 2015 totaled ¥193.2 billion, a substantial increase from FY 2014.

While all the personnel involved are committed to continually improving the usefulness of the VEC YEARBOOK each year, this year’s yearbook includes four main changes.

1. Investment trends of venture capital firms are analyzed by category, such as independent, bank-affiliated, securities company- and life or non-life insurer-affiliated, non-financial services company-affiliated, and university-affiliated entities.

2. The analyses of fund performance, previously featured only in the data section, are discussed in the main section of the Yearbook, because we consider it is necessary to improve the accuracy of our performance analyses to allow them to strongly demonstrate their appeal to institutional investors.

3. The regional revitalization initiative is highlighted in a column.

4. As for matching large companies and startup companies, this Yearbook features not only event-based matching activities, but also online platform-based activities.

In Japan’s venture capital ecosystem, seeds are likely to become increasingly important. On the question of what should be done to grow the number of high-quality seeds, I would cite labor market flexibility and educational reforms.

I think we must create a society in which switching employers is considered to be a commonplace practice through efforts to raise the flexibility of the nation’s labor market, currently marked by low job mobility or so-called “Membership System” by large companies. Doing so will likely give rise to greater opportunities for highly skilled professionals of leading enterprises to take on the challenge of starting a new business in a spin-off.

On the education front, we must reform the country’s educational system into one that helps students explore ways of resolving challenges, a departure from the memorizing skills-centric system that may be likened to a jigsaw puzzle game in which the player must discover the one and the only correct puzzle piece for a given slot. Students should find challenges first on their own, and then consider what schemes and products are required to resolve those challenges. Students’ summer-holiday free research

assignments, although ostensibly designed originally to serve as an opportunity for such training, have completely lost substance. The nation's educational system must transition from one in which students learn passively to one that trains them to acquire knowledge proactively. Such endeavors are expected to be assisted by teachers, who thus must undergo a significant level of training. If robots and artificial intelligence (AI) become part of daily life, a totally different skill set would be required of professionals, suggesting that government curriculum guidelines for junior and senior high schools must be overhauled in anticipation of such a scenario becoming reality. In August 2016, a program was launched in Wakayama in which a high school teacher invited from Silicon Valley provided entrepreneurship education to local Japanese and foreign high school students. Participating in this program, I strongly felt this involved a "Learning Approach Revolution" and "a Teaching Approach Revolution." In this respect, I would very much like to see many educational experts participate in the program from next year.

I offer my deepest gratitude to those who participated in our surveys and interviews. We will continue improving our data collection so that we can provide even more useful and relevant information. Thank you for your continued support.

Venture Enterprise Center, Japan

President Ryuji Ichikawa

I. Analysis: Retrospect and Prospect of Startup Businesses in 2016

VEC YEARBOOK 2016
Table of contents
- Analysis -

- Data -

Chapter I. Japanese Venture Capital Investment Trends

Venture Enterprise Center, Japan (VEC) conducted an annual questionnaire survey on venture capital investment trends, targeting 163 venture capital firms and related organizations incorporated in Japan, and received responses from 121 entities. Moreover, from late April to late May 2016, VEC interviewed major venture capital firms. The following paragraphs analyze investment trends, based on the findings of the questionnaire survey and interviews.

Annual Survey on Venture Capital Investment Trends in 2016	
Survey collection period	June 3 - August 10, 2016
Period covered by the survey	Investments made in startup companies mainly during FY 2015 * For some survey items, data for calendar years 2015 and FY 2014 were also obtained.
Number of firms surveyed	163 firms
Number of firms responded	121 firms * See “II. Data: page II-136 List of VC firms responded to the survey”
Response rate	74.2%

Treatment of fractions

All fractions are rounded off to the first decimal place, in principle.

For some graphs, however, all fractions are rounded off to the nearest whole number for readability.

This treatment of fractions results in some breakdown totals differing from aggregate totals.

1. Venture Capital Investment Trends in FY 2015

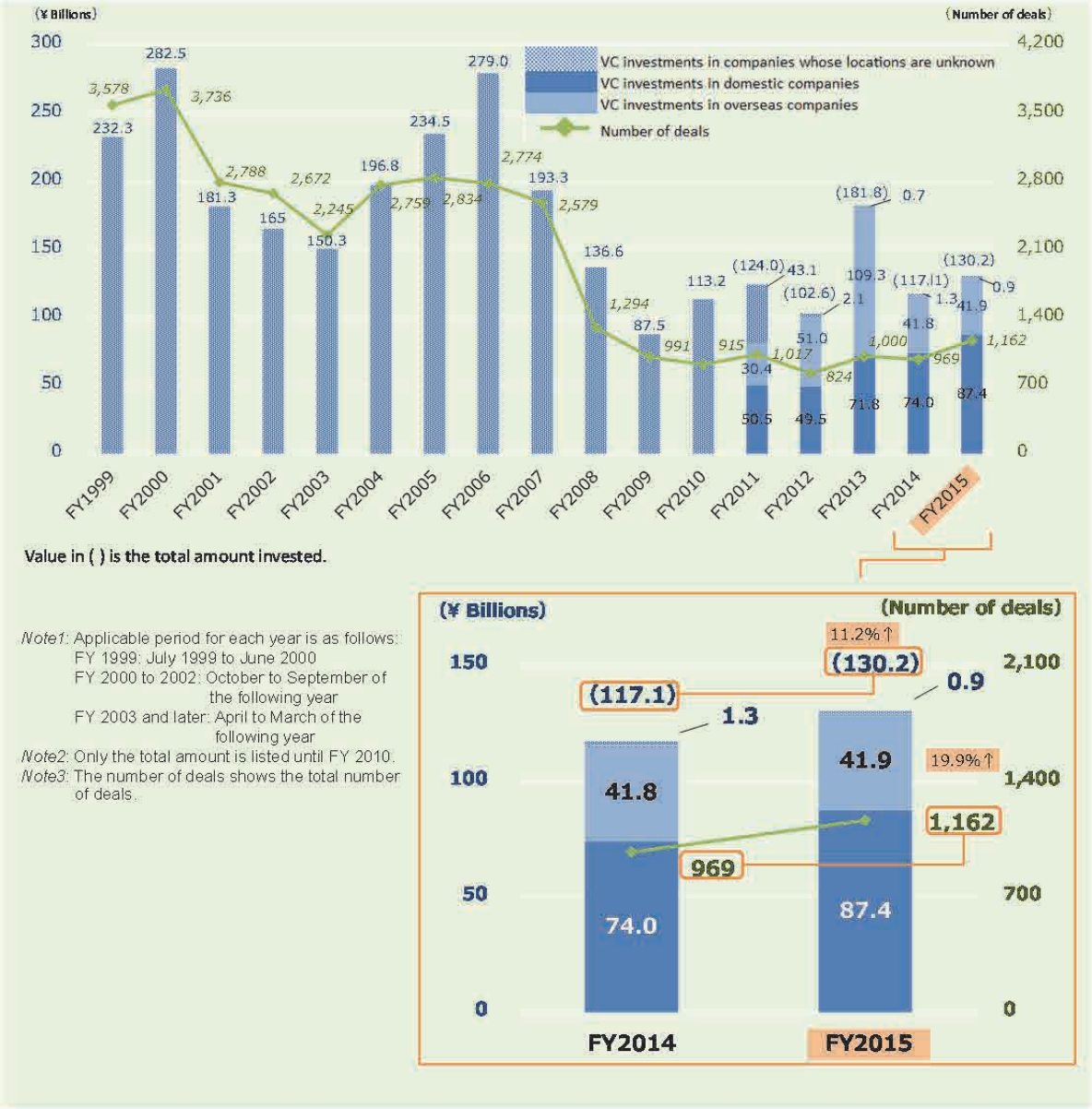
(1) Overview

1) Annual Japanese venture capital investments: 1,162 deals worth ¥130.2 billion

In FY 2015 (from April 2015 to March 2016), total investments in startup companies by venture capital firms and other organizations in Japan stood at ¥130.2 billion, up 11.2% year on year, involving 1,162 deals, up 19.9% year on year (Figure 1-1).

These investments bottomed out in FY 2009, the fiscal year following that marked by Lehman Brother's bankruptcy, and then showed a recovery trend from FY 2010, but failed to reach the peak levels posted from FY 2000 to FY 2007 (approximately ¥280.0 billion).

Figure 1-1 Trend of Investments by Japanese VC firms



(Source: Survey on Venture Capital Investment Trends, VEC)

2) Domestic investments of ¥87.4 billion vs. overseas investments of ¥41.9 billion

Analyzing domestic and overseas investments ("Domestic-Overseas Comparison"), venture capital investments in Japan in FY 2015 stood at ¥87.4 billion, up 18.1% from ¥74.0 billion in FY 2014 (Figure 1-2). Meanwhile, venture capital investments overseas in FY 2015 amounted to ¥41.9 billion, which was more or less flat compared to ¥41.8 billion in FY 2014. Aggressive overseas investments were made only by a small number of leading venture capital firms, so investment value fluctuations by some of them appear to have greatly affected the total level of investments.

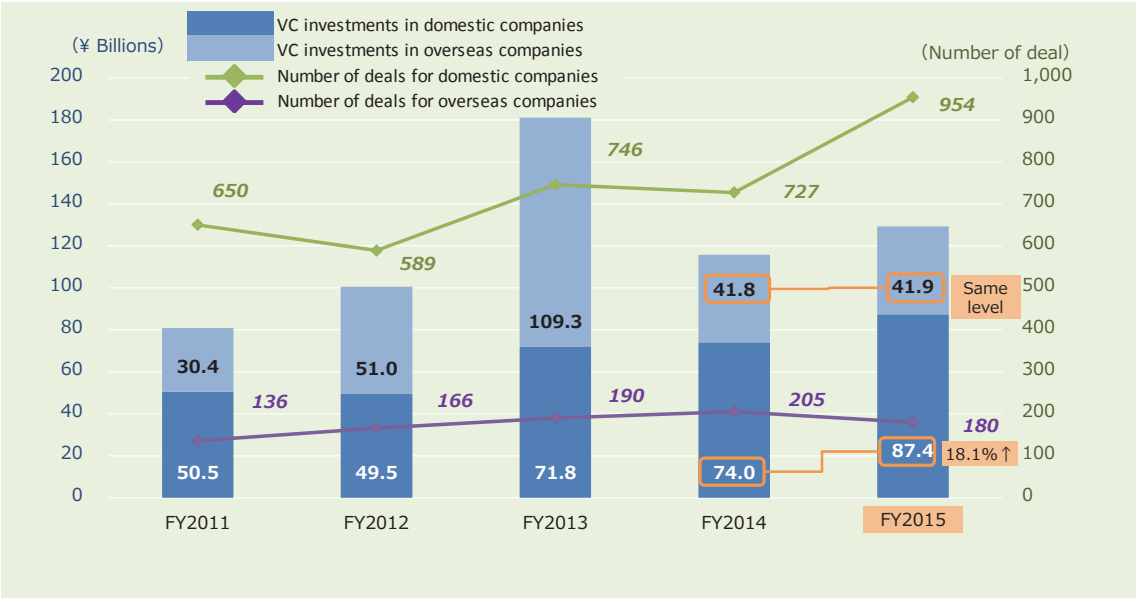
3) Domestic investments remained strong as in FY 2014

Since FY 2013, venture capital investments in Japan have been growing strongly and consistently (Figure 1-2).

Valuations (enterprise valuations) had been surging in the eyes of many venture capitalists, who attributed the phenomenon to: 1) a concentration of investments in certain attractive startup companies; and, 2) increasing investments in startup companies by non-financial services enterprises. Surging valuations have caused many venture capitalists to become highly selective in choosing investment targets with some experts even predicting that down rounds could occur in certain deals, starting from around the end of 2015 (a phenomenon in which the valuation of a company during a financing round falls below that of the previous financing round).

Figure 1-2

Trend of Investments in Domestic and Overseas Companies and Number of Deals



(Source: Survey on Venture Capital Investment Trends, VEC)

4) Venture capital investment per deal in Japan down from FY 2014

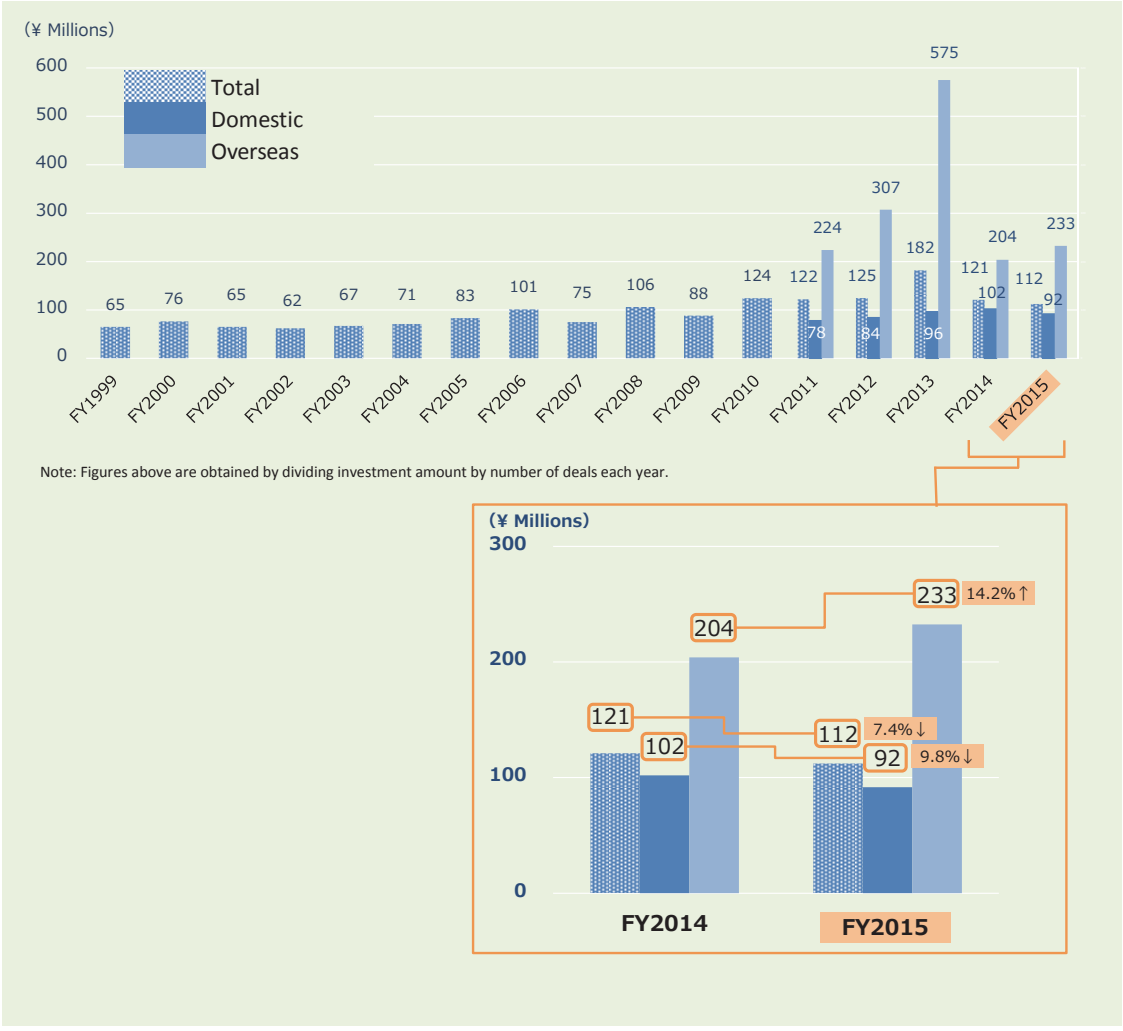
Venture capital investment per deal in FY 2015 on an overall basis stood at ¥112 million, down 7.4% from ¥121 million in FY 2014 (Figure 1-3).

A domestic-overseas comparison shows domestic investments at ¥92 million per deal, down 9.8% from ¥102 million for FY 2014, and overseas investments of ¥233 million per deal, up 14.2% from ¥204 million in FY 2014.

When interviewed, major venture capitalists typically said per-deal investment had been rising year on year—feedback that is at odds with the trends shown by the survey's findings. This is probably because some of the corproates who did not respond to our survey made large per deal investments in startup.

In this survey, per-deal investment for each fiscal year is the simple average investment determined by dividing the year's total venture capital investments, as informed by venture capital firms and other organizations, by the total number of venture capital investment deals for the period.

Figure 1-3 Investment per Deal（Average）



（Source: Survey on Venture Capital Investment Trends, VEC）

(2) Investment Trends by Industry

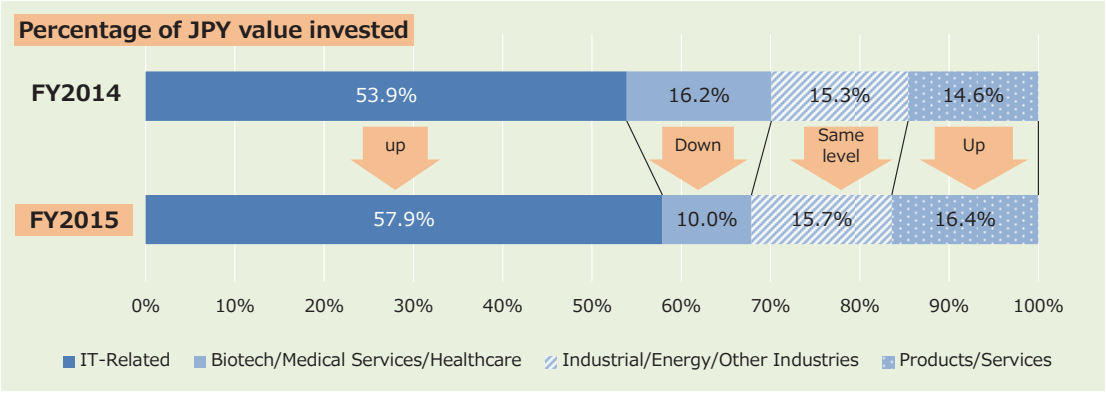
1) IT-related companies accounted for a majority of investments as in FY 2014

Looking at the breakdown of FY 2015 investment target industries by value, venture capital investments in IT-related Industries (mainly PC, mobile, and communications sectors) accounted for a little less than 60% of total investments (Figure1-4). Venture capital investments in the Biotech/Medical Services/Healthcare Industries in FY 2015 decreased to 10.0% of the total, down from 16.2% in FY 2014.

As for the breakdown of FY 2015 investment target industries by deal count, percentage shares are more or less identical to value-based shares (Figure 1-5). Compared to FY 2014 figures, the percentage share of the Biotech/Medical Services/Healthcare Industries declined to 11.5% of the total, down from 15.6% in the previous year, and Industrial/Energy/Other Industries to 13.1% of the total, down from 14.7% in the previous year. In contrast, the percentage share of the Products/Services Industries in FY 2015 rose to 19.1%, up from 14.4% in FY 2014.

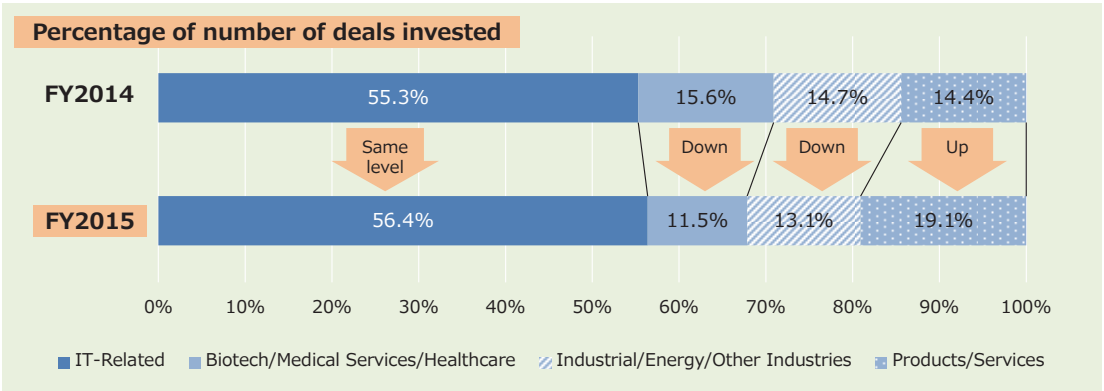
Note : In this survey, services and industries that use IT are included in IT-Related for both the investment amount and the number of deals. As a result, attention is required due to the fact that certain service businesses are included in IT-Related, not in Products/Services.

Figure1-4 Investment Distribution by Industry（Percentage of JPY value invested）



（Source: Survey on Venture Capital Investment Trends, VEC）

Figure 1-5 Investment Distribution by Industry（Percentage of number of deals invested）



（Source: Survey on Venture Capital Investment Trends, VEC）

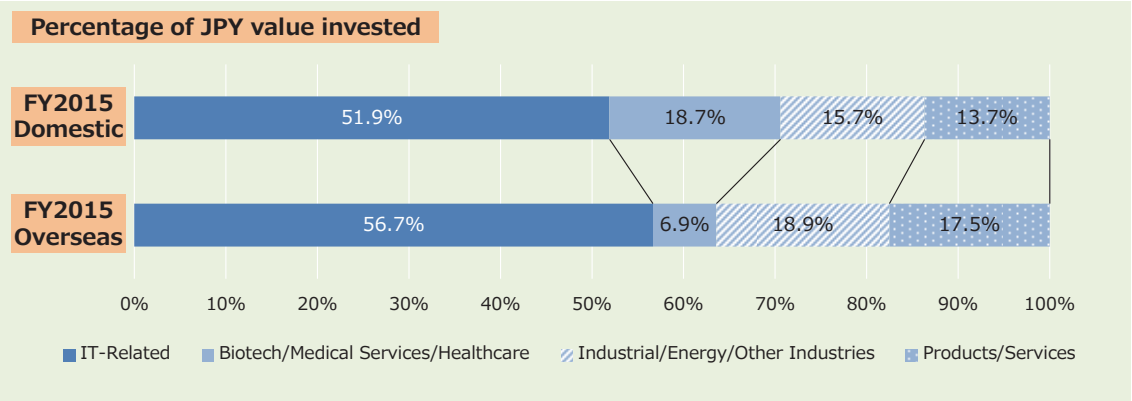
2) Among domestic investments, the Biotech/Medical Services/Healthcare Industries trailed only IT-related Industries

Looking at the breakdown of FY 2015 investment target industries by value, divided into domestic and overseas investments, IT-related Industries accounted for a little over half of total venture capital investments both for domestic and overseas categories. Of total venture capital investments, Biotech/Medical Services/Healthcare Industries accounted for 18.7% of the domestic category, but only 6.9% of the overseas category (Figure 1-6).

By absolute amount, domestic investments of venture capital in Biotech/Medical Services/Healthcare Industries in FY 2015 stood at ¥13.94 billion (Figure 1-7).

Figure 1-6 Investment Distribution by Industry

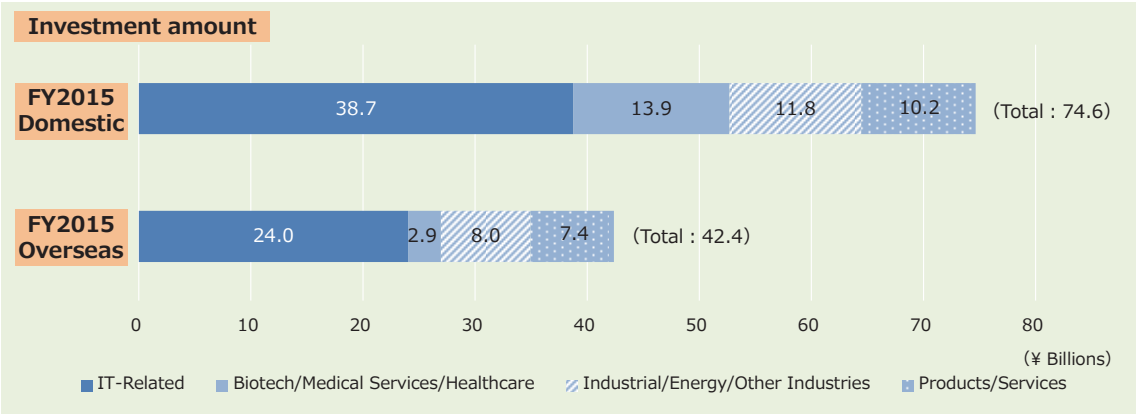
(Domestic and Overseas comparison: Percentage of JPY value invested)



(Source: Survey on Venture Capital Investment Trends in 2016, VEC)

Figure 1-7 Investment Distribution by Industry

(Domestic and Overseas comparison: Investment amount in JPY)



(Source: Survey on Venture Capital Investment Trends in 2016, VEC)

A domestic-overseas comparison of per-deal investments shows that average overseas investment deal value of all categories ranged from two to four times that of domestic categories, with the exception of Biotech/Medical Services/Healthcare Industries, showing that many overseas investments were large (Figure 1-8).

Figure 1-8 Average Investment amount per deal by Industry
(Domestic and Overseas comparison)

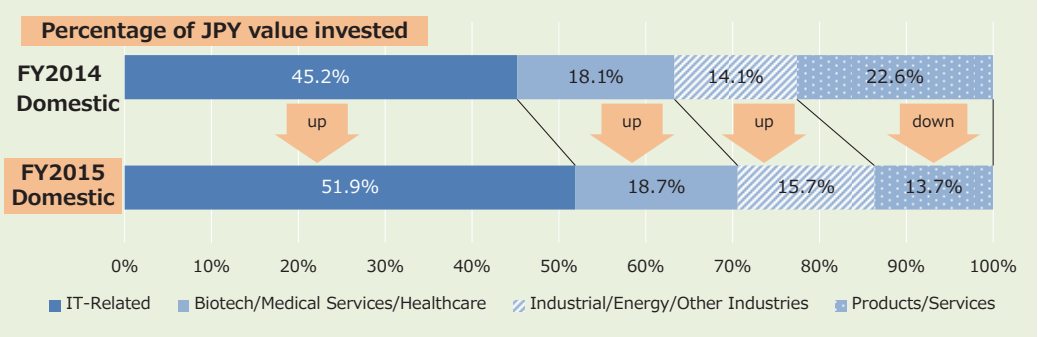
FY2015	A: Domestic (¥ millions)	B: Overseas (¥ millions)	Ratio (B/A)
IT-Related	87.5	210.7	2.4
Biotech/Medical Services/Healthcare	123.4	133.6	1.1
Industrial/Energy/Other Industries	95.5	421.5	4.4
Products/Services	60.8	232.0	3.8
Total	88.1	226.7	2.6

(Source: Survey on Venture Capital Investment Trends in 2016, VEC)

Reference: Domestic Investments by Industry (FY 2014 and FY 2015 Comparison)

Although VEC's previous surveys did not cover industry-by-industry investments and deal counts for the domestic and overseas categories separately, we obtained data on a category-by-category basis, starting from the latest survey in 2016 (targeting FY 2015). Figure 1-9 presents a breakdown of domestic investments by industry. For FY 2014 annual data, we used the sum of quarterly investments found in quarterly Surveys on Venture Capital Investment Trends (from the second quarter of 2014 to the first quarter of 2015). Compared to FY 2014, FY 2015 saw only Products/Services Industries fall as a percentage share with higher proportions posted by IT-related Industries, as well as Biotech/Medical Services/Healthcare Industries and Industrial/Energy/Other Industries, which ostensibly points to venture capitalists' growing interest in high-technology segments.

Figure 1-9 Investment Distribution by Industry
(Domestic: Percentage of JPY value invested)



(FY2014：Based on Quarterly Survey on Venture Capital Investment Trends
FY2015： Survey on Venture Capital Investment Trends in 2016, VEC)

Results of interview-based survey

We conducted an interview-based survey of venture capital firms and other organizations on trends of industry-by-industry investments by venture capital, which yielded the following insights.

- Many venture capitalists interviewed thought that, although investments in IT-related Industries would remain an area of focus, investments in smartphone-related companies had more or less run their course because this market segment, including applications, was experiencing tough competition due to low barriers to entry and market saturation.
- Many of those interviewed took the view that startup companies found it challenging to enter the game-related segment, in particular, in the face of rising development costs and an intensifying oligopoly of leading players.
- Among IT-related Industries, segments such as FinTech, the IoT, AI, and robotics attracted growing interest from investors, according to many of the venture capitalists. Some of them, however, pointed out that certain deals in the above segments lacked technological innovativeness.
- In recent developments, a relatively large number of those interviewed cited increasing venture capital investments in research and development-based startup companies associated mainly with universities and other organizations, adding that pronounced moves were shown specifically by investments in high-technology startup companies involved in biotechnology, life science, AI, robotics, and the IoT.
  Some experts said major companies that had contributed capital to a fund as a limited partner (LP) or launched a corporate venture capital (CVC) fund by themselves were beginning to take a disproportionate interest in high-technology companies with promising technologies.

Although it is difficult to make the claim on the back of the latest investment trend survey, which indicates that investments in high-technology startup companies have been rising notably, regulatory easing through revisions to the Pharmaceutical Affairs Act (which came into force in November 2014) have revitalized activities in the medical service segment, suggesting that new moves have been taking place.

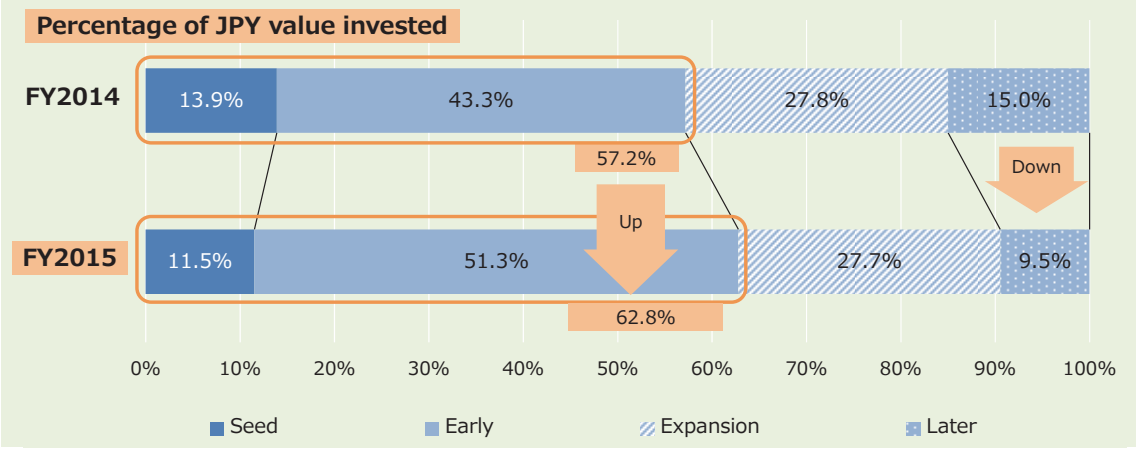
(3) Investment Trends by Stage

1) Investments in Seed and Early Stage target companies rose in value and deal count

Looking at the stages of investment target companies in FY 2015 by value ratio, Early Stage target companies stood at 51.3% of the total, up from 43.3% in FY 2014. On the other hand, Later Stage target companies in FY 2015 accounted for 9.5% of the total, down from 15.0% in FY 2014 (Figure 1-10). As a result, the combined total of Seed and Early Stage target companies in FY 2015 represented 62.8% of the total, an increase of 5.6 percentage points from 57.2% in FY 2014.

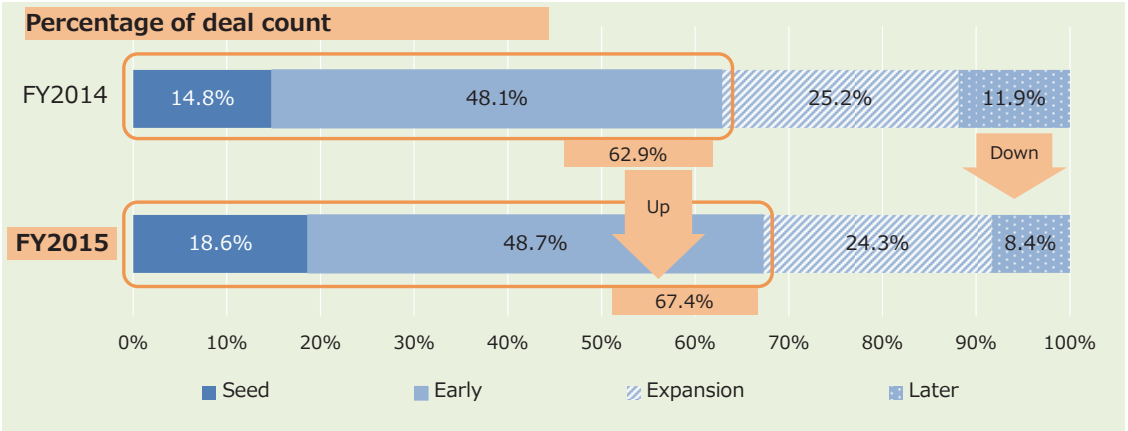
Viewed by deal counts in FY 2015, the combined total of Seed and Early Stage target companies stood at 67.4% of the total, in excess of two thirds of the total, compared to 62.9% in FY 2014 (Figure 1-11). Meanwhile, Later Stage target companies in FY 2015 accounted for 8.3% of the total, down from 11.9% in FY 2014. This was probably the result of a growing number of venture capitalists having shifted to Seed and Early Stage target companies with low valuations, while avoiding high valuation investments.

Figure 1-10 Investment Distribution by Stage（Percentage of JPY value invested）



（Source: Survey on Venture Capital Investment Trends , VEC）

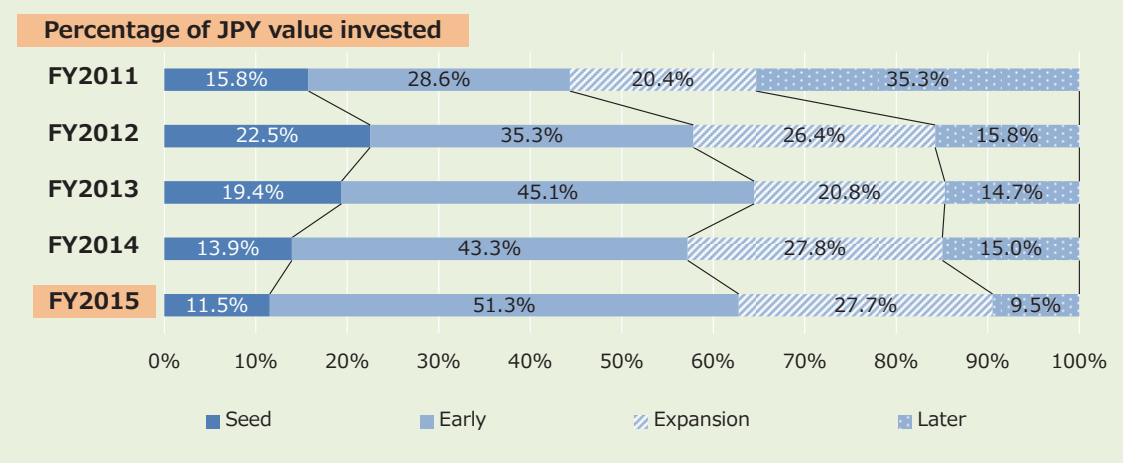
Figure 1-11 Investment Distribution by Stage（Percentage of deal count）



（Source: Survey on Venture Capital Investment Trends , VEC）

Looking at investment target companies' stage-by-stage developments for the most recent five-year period, there was a general trend of a shift to Seed and Early Stage target companies (Figure 1-12 and Figure 1-13).

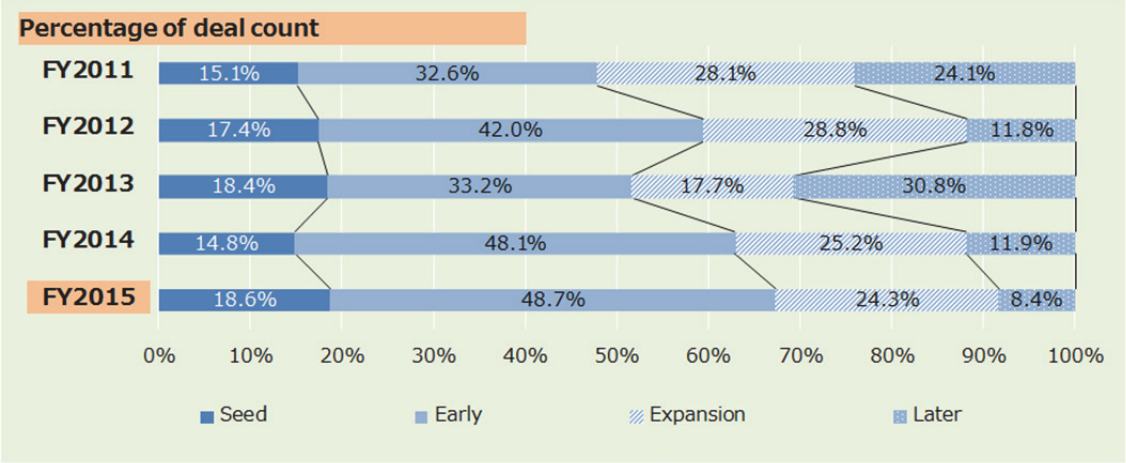
Figure 1-12 Investment Trends by Stage in 2011-2015（Percentage of JPY value invested）



(Source: Survey on Venture Capital Investment Trends , VEC)

Figure 1-13

Investment Trends by Stage in 2011-2015（Percentage of deal count）



(Source: Survey on Venture Capital Investment Trends , VEC)

Average per-deal investment in FY 2015 for individual stages declined compared to FY 2014（Figure 1-14）.

Figure 1-14　Trend of Average Investment Amount per Deal by Stage

（Unit：¥ Millions）

	FY2013	FY2014	FY2015
Seed	102.0	114.4	53.2
Early	132.0	108.2	92.4
Expansion	114.4	131.8	99.6
Later	46.4	150.4	97.4

（Source: Survey on Venture Capital Investment Trends , VEC）

Reference: Definition of Stage

VEC's definitions of stages are shown in Figure 1-15. Certain venture capital firms, however, use their own standards to judge their stage, and in some cases no standard is specified or the stage assessment standard is different from VEC's definitions.

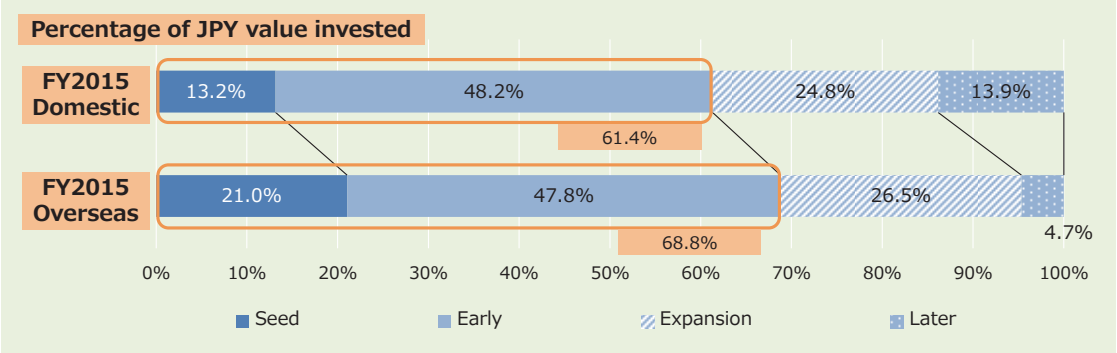
Figure 1-15 Definition of Stage in VEC's survey

Stage	Definition
Seed	Companies undergoing research and product development but has yet to establish a commercial business operation.
Early	Companies with product development, and the early stage of marketing, manufacturing and sales promotion.
Expansion	Companies that have started production and shipment with its inventory and/or sales growing in size.
Later	Companies that have a continuous cash flow and are nearing the stage for IPO.

2) Investments in Seed and Early Stage target companies stood out in both domestic and overseas deals

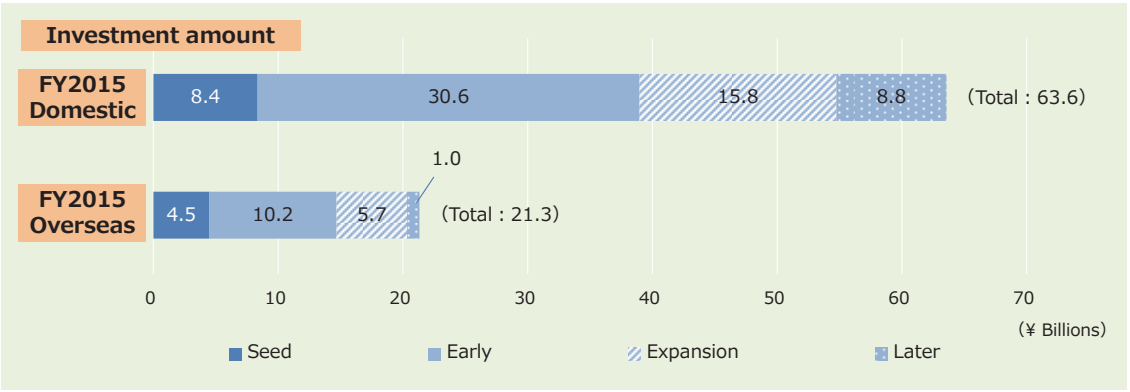
Comparing the stages of domestic and overseas investment target companies in FY 2015 on a value ratio basis, the combined total of Seed and Early Stage target companies accounted for over 60% in both domestic and overseas deals (Figure 1-16). A domestic-overseas comparison shows that Seed Stage target companies notably represented a mere 13.2% of total domestic investments, but 21.0% of total overseas investments. In contrast, Later Stage target companies accounted for 13.9% of total domestic investments, but an extremely-low 4.7% of total overseas investments. On an absolute investment value basis, Later Stage target companies in overseas deals amounted to a mere ¥1.0 billion (Figure 1-17).

Figure 1-16 Investment Distribution by Stage
(Domestic and Overseas Comparison: Percentage of JPY value invested)



(Source: Survey on Venture Capital Investment Trends in 2016, VEC)

Figure 1-17 Investment Distribution by Stage
(Domestic and Overseas Comparison: Investment amount)



(Source: Survey on Venture Capital Investment Trends in 2016, VEC)

The average per-deal investment value for Seed Stage target companies was more than four times greater in overseas deals compared to domestic deals. On the other hand, for other stages, the average per-deal investment value for overseas deals was only a little less than two times greater than that for domestic deals. (Figure 1-18).

Figure 1-18　Average Investment Amount per Deal by Stage (Domestic and Overseas Comparison)

FY2015	A: Domestic (¥ millions)	B: Overseas (¥ millions)	Ratio (B/A)
Seed	58.9	249.3	4.2
Early	90.8	156.7	1.7
Expansion	92.3	176.8	1.9
Later	120.8	142.8	1.2
Total	93.3	236.9	2.5

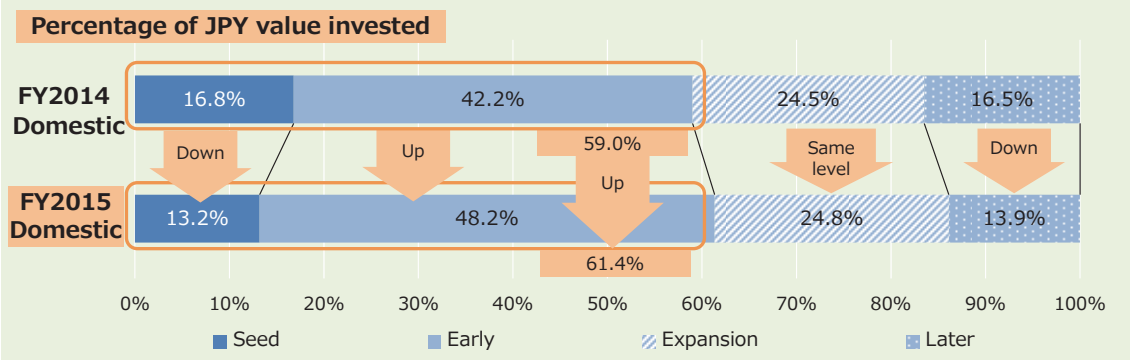
(Source: Survey on Venture Capital Investment Trends in 2016, VEC)

Reference: Domestic Investments by Stage（FY 2014 and FY 2015 Comparison）

Although VEC's previous surveys did not cover stage-by-stage deal counts and investments for domestic and overseas categories separately, we obtained data on a category-by-category basis, starting from a survey done in 2016 (targeting FY 2015). When making the FY 2014-FY2015 comparison, we deemed, as annual data for FY 2014, a set of values determined by adding together investments found by the quarterly Surveys on Venture Capital Investment Trends (the second quarter of 2014 through the first quarter of 2015), thus examining stage-by-stage value shares in domestic investments (Figure 1-19).

Compared to FY 2014, FY 2015 saw Seed Stage target companies fall and Early Stage target companies rise. The combined total of these two categories in FY 2015 increased to 61.4%, up from 59.0% for FY 2014.

Figure 1-19 Investment Distribution by Stage
(Domestic: Percentage of JPY value invested)



（FY2014：Based on Quarterly Surveys on Venture Capital Investment Trends
FY2015：Survey on Venture Capital Investment Trends in 2016, VEC）

Results of interview-based survey

On the trend of stage-by-stage investments by venture capital, we conducted an interview-based survey of venture capital firms and other organizations, which yielded the following views.

- Most of the venture capitalists said investments in Early Stage startup companies had been growing. Some added that venture capital firms had been competing fiercely for deals in Seed and Early Stage startup companies.

- Many of those interviewed attributed this to the fact that, unless they invested early, venture capitalists were unable to earn a profit because startup companies had been becoming increasingly polarized, resulting in a surge in the valuations of much sought-after companies.

- Some of the venture capitalists said that, due to a fund manager's need to achieve results within a 10 year-period, they also considered investing in Expansion and Later Stage startup companies to a certain extent so that they can exit early.

- Two to three venture capitalists pointed out that follow-on investments were growing due to a rising number of Seed and Early Stage startup companies.

FY 2015 data testify to the fact that investments in Seed and Early Stage startup companies had been growing as stated by the venture capitalists. However, we were unable to ascertain from the data that increased investments in Seed and Early Stage caused follow-on investments to grow.

(4) Investment Trends by Region

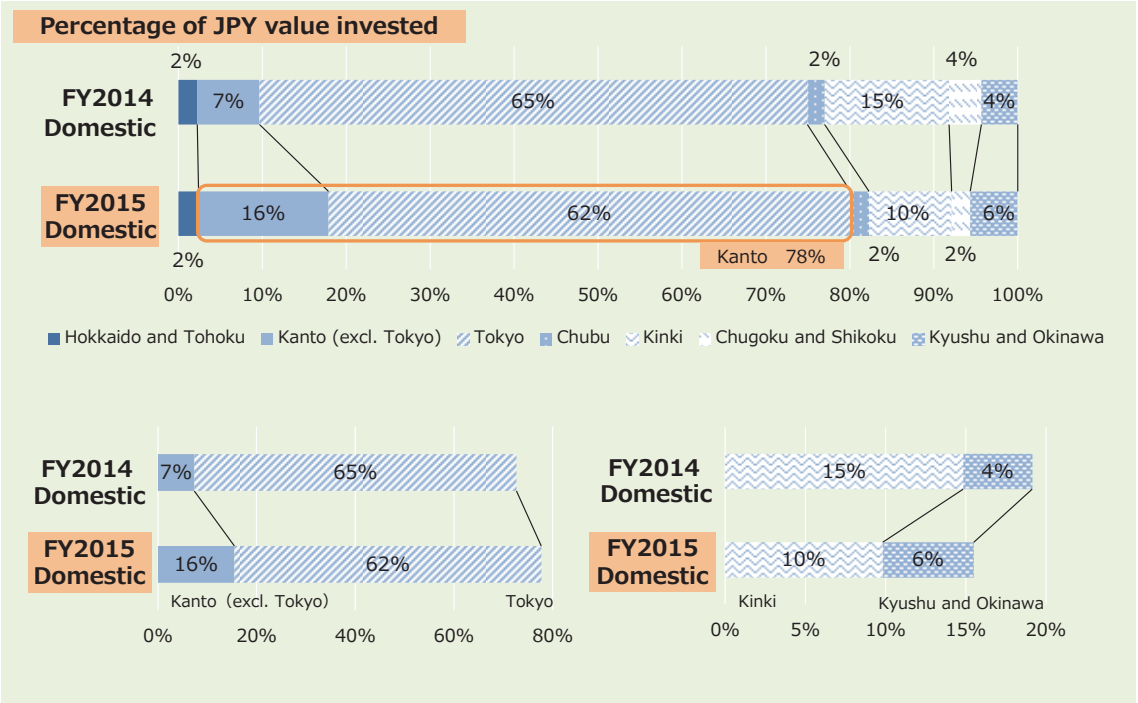
1) The Kanto area accounted for approximately 80% of all domestic investments

The last several years have seen the Regional Revitalization initiative pursued in different parts of the country. Figure 1-20 illustrates investments by area.

In FY 2015, the Kanto area (Tokyo and other parts of the Kanto area) accounted for 78% of all domestic investments, with Tokyo's share representing 62% of the total.

Compared to FY 2014, the share of the Kanto area investments excluding Tokyo in FY 2015 climbed notably to 16%, up from 7% from in the previous year. In contrast, Tokyo's share declined slightly to 62%, down from 65%. As for non-Kanto areas, the Kinki area's share fell to 10%, down from 15%, while the Kyushu Okinawa area's share rose marginally to 6%, up from 4%.

Figure 1-20 Investment Distribution by Region
(Domestic: Percentage of JPY value invested)



(Source: Survey on Venture Capital Investment Trends, VEC)

2) Overseas investments comprised those in various industries mainly in Asia

To ascertain the trend of Japanese venture capital firms' overseas investments in more detail, we added overseas investment destination areas and industries to the items of the Survey on Venture Capital Investment Trends, starting this time (FY 2015 data) (Figure 1-21).

This survey found that Japanese venture capitalists' investments in China consisted mainly of those in IT-related Industries and their investments in India were composed chiefly of those in the Financial Services/Real Estate/Corporate Services Industries. Their investments in other parts of Asia (South Korea, Taiwan, Hong Kong, Southeast Asia, Israel, and the Middle East, among others) included all industries besides the Medical Equipment/Healthcare Industries. Although unable to ascertain information on a country-by-country basis, we assume South Korea, Taiwan, and Israel account for a significant portion of investments.

Japanese venture capitalists' investments in Europe were all in IT-related Industries. Their investments in North America consisted widely of all possible industries, in addition to IT-related Industries representing a little less than 60% of the total.

Figure 1-21 Investment Amount by Region and Industry

(Unit：¥ Billions)

FY2015	Domestic	Overseas					
		China	India	Other Asian regions	Europe	North America	Other regions
Telecommunications/Networking and Equipment	1.7	0.0	0.0	0.2	0.0	0.5	0.0
Computers and Peripherals/IT services	28.9	2.1	0.7	11.9	1.1	5.3	0.02
Software	3.8	0.0	0.0	0.1	0.01	1.3	0.3
Semi-conductors/ Electrical Machinery & Equipment	4.3	0.3	0.0	0.1	0.0	0.01	0.0
Biotechnology/Medicine	7.8	0.0	0.0	2.1	0.0	0.7	0.0
Medical Device and Equipment/ Healthcare-related	6.1	0.0	0.0	0.0	0.0	0.2	0.0
Industrial/Energy/Other	11.7	0.0	0.0	6.6	0.0	1.4	0.0
Media/Entertainment/Retailing/ Consumer Goods	7.3	0.0	0.0	1.7	0.0	0.4	0.0
Finance/Real Estate/Business Services	2.9	0.0	2.1	0.5	0.0	2.7	0.0
Total	74.7	2.4	2.8	23.3	1.1	12.4	0.4
Number of VC firms responded	110	109	109	109	109	109	109

(Source: Survey on Venture Capital Investment Trends in 2016, VEC)

(5) Domestic investment trends by venture capital contributor category

We grouped venture capital firms according to capital contributor category* before individually examining investment behavior differences and characteristics of the groups. Our analyses here solely target domestic investments. That is because overseas investments are made mainly by a small number of leading venture capital firms, causing some individual firms' moves to affect the overall trend disproportionately. Figure 1-22 shows the numbers of respondent venture capital firms in FY 2014 and FY 2015.

The description of investment trends by industry and stage covers respondent venture capital firms.

Figure 1-22 Number of VC firms responded to the survey by VC contributor category

	FY2014		FY2015	
	Number of VC firms responded to investment amount	Number of VC firms responded to number of deals	Number of VC firms responded to investment amount	Number of VC firms responded to number of deals
Independent	39	39	39	39
Bank-affiliated	31	31	31	31
Securities and Life or Non-life Insurer-affiliated	11	11	10	10
Non-financial services company-affiliated	15	15	21	23
Central or municipal government-affiliated	4	5	6	6
University-affiliated	1	1	5	5
Other	4	4	7	7
Total	105	106	119	121

(Source: Survey on Venture Capital Investment Trends in 2016, VEC)

*Note:

Grouping venture capital firms according to originator category

1. Grouping according to venture capital contributor category

In the VEC survey, each of the surveyed firms declared its industry to be one chosen from among the following nine categories.

Independent	Bank-affiliated	Securities company-affiliated
Life or non-life insurer-affiliated	Non-financial services company-affiliated	Central or municipal government-affiliated
University-affiliated	Individual person※	Other

* In surveys conducted in 2015 and 2016, no venture capitalist declared itself to be an individual person.

2. Grouping based on self-declaration

Some companies among non-financial services company-affiliated, securities company-affiliated, and life or non-life insurer-affiliated venture capital firms make business decisions independently, although they have obtained capital contributions from parent companies. Independent venture capital companies include some firms whose principal business activities are financial services. The "Other" category contains some firms that are almost equivalent to an independent venture capital company. However, the grouping was based on self-declaration.

3. Grouping of securities company- and life or non-life insurer-affiliated firms

Securities company- and life or non-life insurer-affiliated firms, categories comprising a relatively small number of entities, were integrated into one group titled "Securities and Life or Non-life Insurer-affiliated Firms."

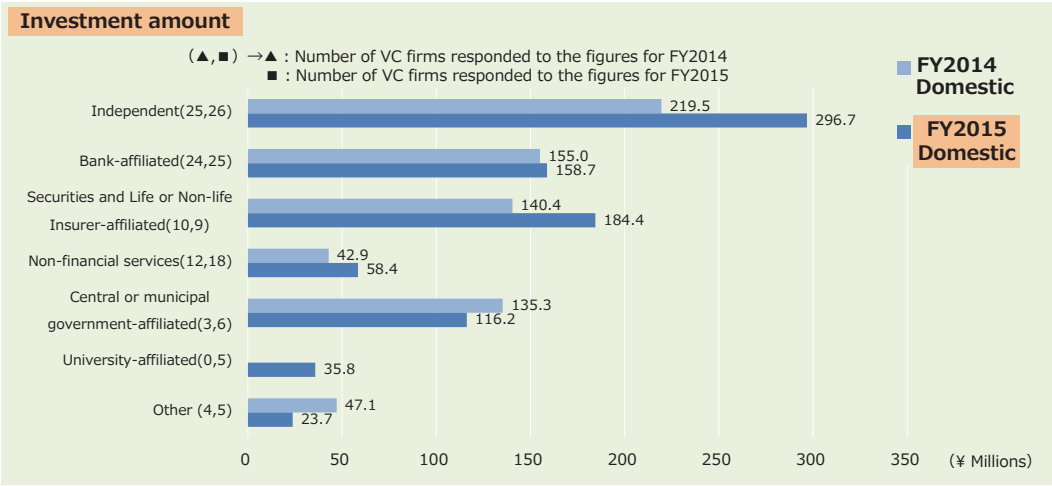
1) For domestic investment in FY 2015, the top three venture capital investor groups by value were independent firms, securities and life or non-life insurer-affiliated firms, and bank-affiliated firms, and the top three by deal count were bank-affiliated, independent firms, and securities and life or non-life insurer-affiliated firms

Looking at investments in FY 2015, independent venture capital firms ranked at the top at ¥29.7 billion and securities and life or non-life insurer-affiliated venture capital firms ranked second at ¥18.4 billion. Bank-affiliated venture capital firms, which ranked at the top by deal count, ranked third at ¥15.9 billion (Figure 1-23). These three groups together accounted for approximately 70% of total domestic venture capital investments (Figure 1-24). Only central or municipal government-affiliated venture capital firms and "Other" category firms showed a reduction in investments compared to FY 2014. The reduction by the former group was affected by reduced investments by Innovation Network Corporation of Japan (INCJ) (Figure 1-23).

FY 2015 was characterized by a number of university-affiliated venture capital firms established through Public-Private Innovation programs (project contributing capital to national universities) launched operations.* These university-affiliated venture capital firms, including private university-related firms, began to engage in investment activities on a full-scale basis with investments expected to grow further during FY 2016. Non-financial services company-affiliated venture capital firms also continued to pursue investment activities aggressively, and the momentum is unlikely to weaken in the near-term.

*Note:
Although one university-affiliated venture capital firm was among the respondents in FY 2014, it was included in the "Other" category to prevent the firm's investment value from being disclosed.

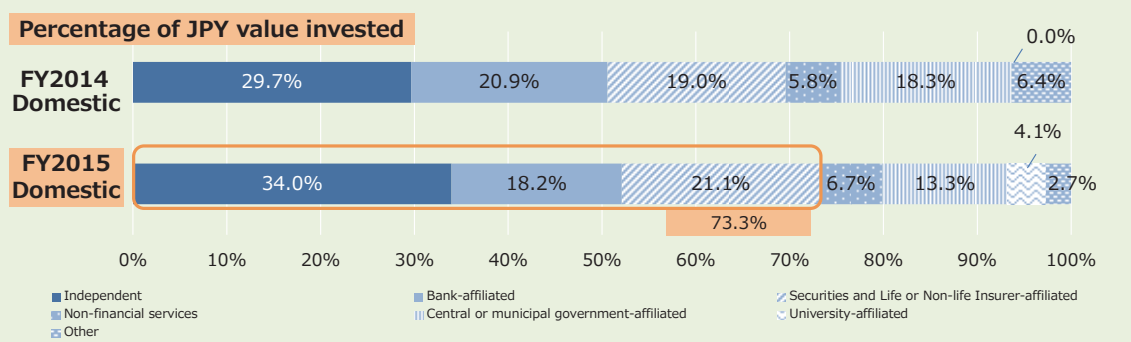
Figure 1-23 Investment amount by VC contributor category (Domestic)



(Source: Survey on Venture Capital Investment Trends, VEC)

Figure 1-24 Investment Distribution by VC contributor category

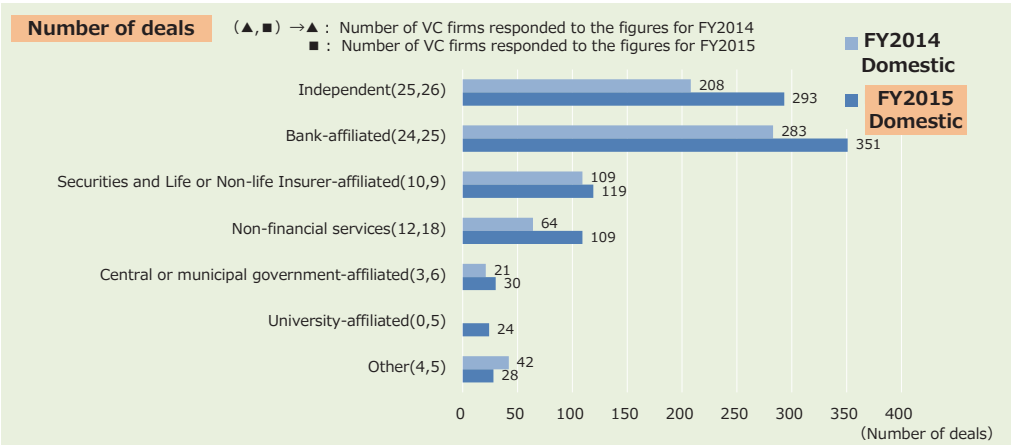
(Domestic: Percentage of JPY value invested)



(Source: Survey on Venture Capital Investment Trends, VEC)

In terms of the number of investment deals for FY 2015, bank-affiliated venture capital firms (mega bank-, regional bank-, and shinkin bank-affiliated firms) came in top with 351 deals, trailed by independent venture capital firms with 293 deals (Figure 1-25). These two groups together accounted for a little less than 70% of the total (Figure 1-26). The number of investment deals in FY 2015 grew compared to FY 2014 for all venture capital contributor groups excluding the "Other" category (Figure 1-25).

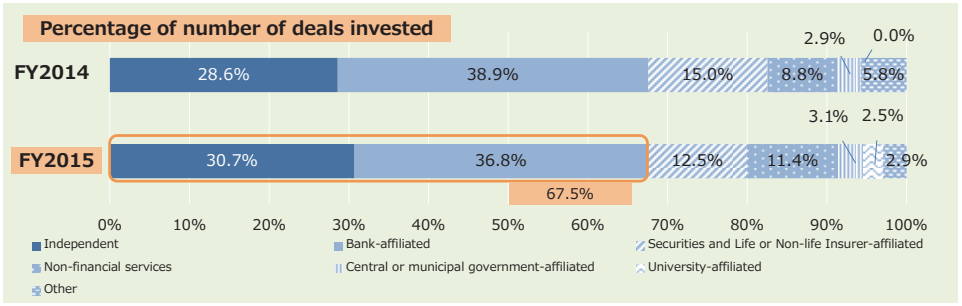
Figure 1-25 Number of Deals by VC contributor category (Domestic)



(Source: Survey on Venture Capital Investment Trends, VEC)

Figure 1-26 Investment Distribution by VC contributor category

(Domestic: Percentage of number of deals invested)



(Source: Survey on Venture Capital Investment Trends, VEC)

2) Average per-deal domestic investment varied greatly from one group to another

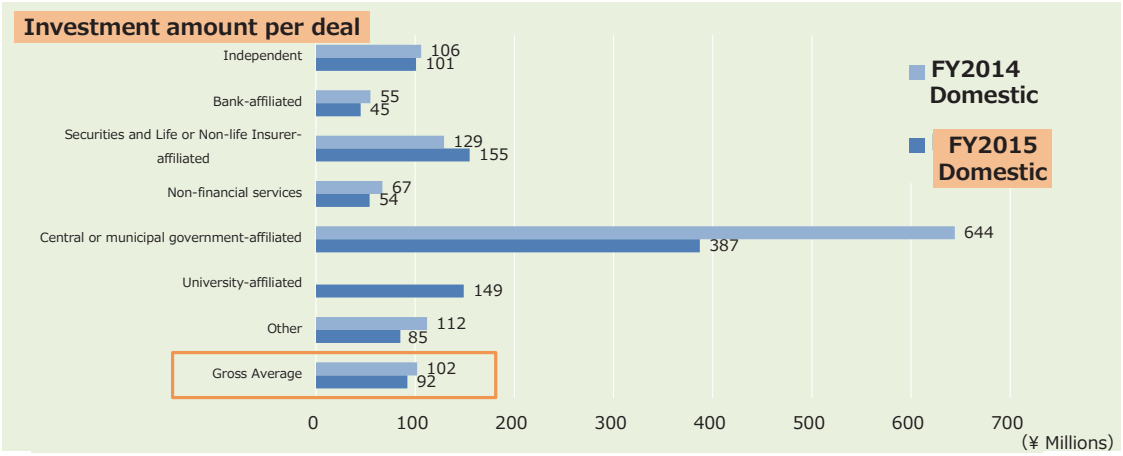
Average per-deal domestic investment in FY 2015 amounted to ¥92 million, down 9.8% from ¥102 million in FY 2014. Examined by venture capital contributor category, the average per-deal value varied widely from one group to another (Figure 1-27).

Average per-deal investment in FY 2015 grew year on year only at securities and life or non-life insurer-affiliated venture capital firms and university-affiliated venture capital firms.* A year-on-year decline was experienced by all other groups, among which central or municipal government-affiliated venture capital firms seemed to be affected by reduced investments from INCJ.

During FY 2015, amid low interest rates, mega banks, regional banks, and shinkin banks, which were the parent companies of bank-affiliated venture capital firms, worked hard to acquire new customers (borrowers). Bank-affiliated venture capital firms, for their part, sought to grow the number of deals in collaboration with individual parent companies.

Average per-deal domestic investment by securities and life or non-life insurer-affiliated venture capital firms in FY 2015 stood at a high of ¥155 million, up year on year, because they presumably made investment deals of over a certain level, while engaging in fewer deals. This group ranked second in this respect, trailing only central or municipal government-affiliated venture capital firms, which posted ¥387 million for average per-deal domestic investment.

Figure 1-27 Average Investment Amount per Deal by VC contributor category (Domestic)



(Source: Survey on Venture Capital Investment Trends, VEC)

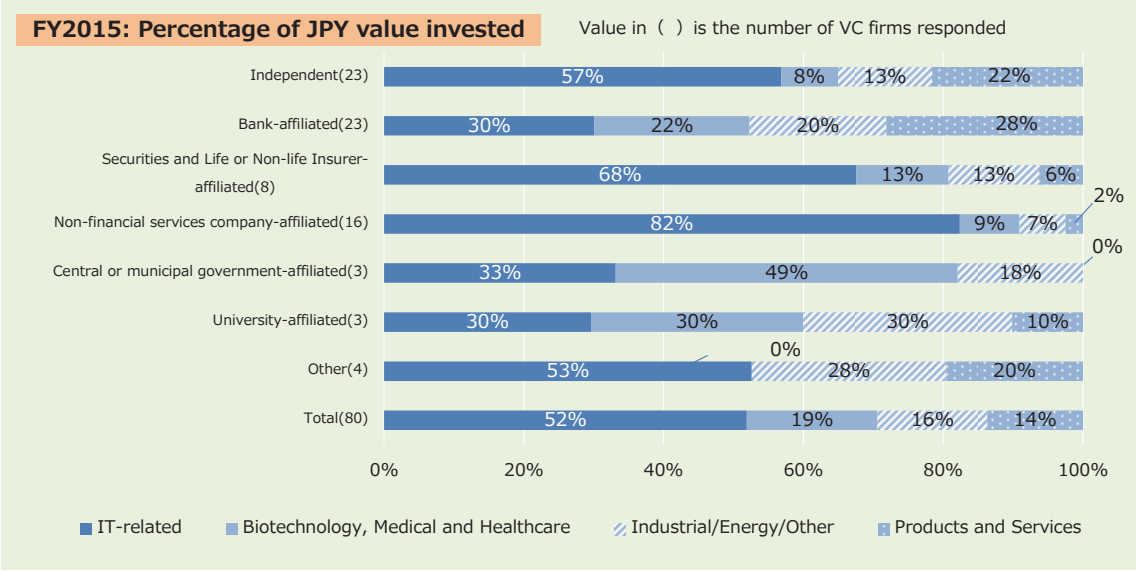
* Note:
Average per-deal investment for the university-affiliated category increased, although Figure 1 – 27 does not show it because the only one university-affiliated venture capital firm in FY 2014 was included in the "Other" category.

3) Domestic investment targets by venture capital contributor category: Bank-affiliated venture capital firms invested in a wide range of industries

The following characteristics can be identified by examining domestic investment target industries in FY 2015 by venture capital contributor category both on a value share basis (Figure 1-28) and a deal count share basis (Figure 1-29).

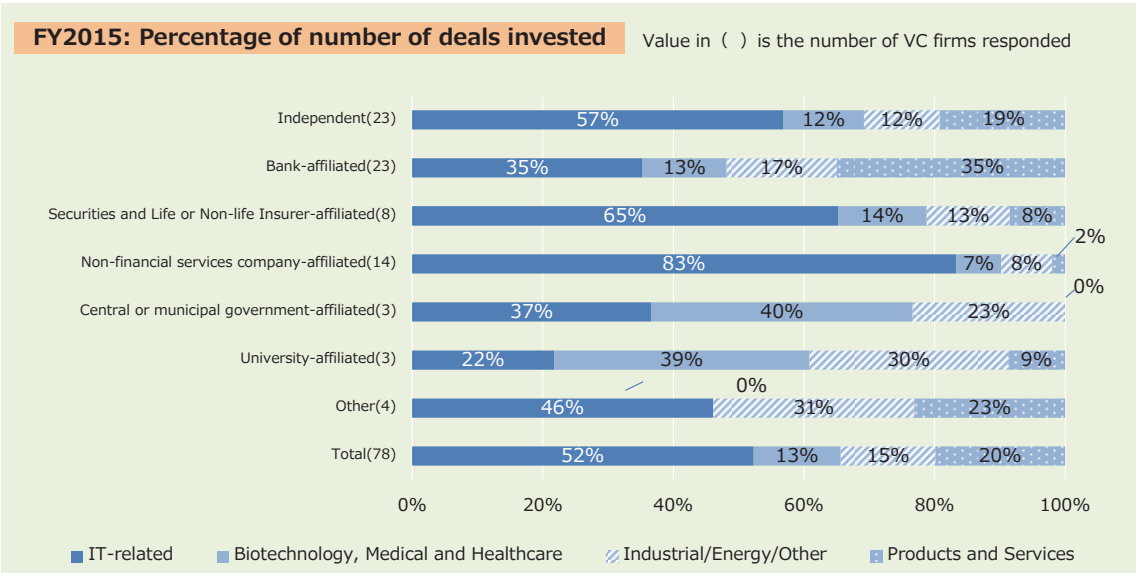
- Independent venture capital firms' investments in IT-related industries accounted for over 50% of their entire domestic investments in terms of value and deal count shares. Meanwhile, some of these firms focused on high-technology startup companies, while others were dedicated to the Biotech/Medical Services/Healthcare industries, showing that the situation varied from one firm to another.
- Bank-affiliated venture capital firms' investment target industries in Japan were spread across different industries, especially in terms of value share because each parent company had dealings with customers in a wide range of sectors. While IT-related industries were low for value share, Products/Services industries accounted for a high proportion compared to other venture capital firm categories.
- Regarding securities and life or non-life insurer-affiliated venture capital firms, IT-related industries represented a high proportion of their total domestic investments. However, some of these firms were skewed toward the Biotech/Medical Services/Healthcare industries, while some others were found to show a high proportion of investments for the Industrial/Energy/Other industries.
- At non-financial services company-affiliated venture capital firms, IT-related industries accounted for an extremely high proportion of their total domestic investments, both for value and deal count shares, which was probably due partly to the fact that their parent companies in the IT sector or an IT-related sector in many cases.
- Central or municipal government-affiliated and university-affiliated venture capital firms showed high proportions of investments in the Biotech/Medical Services/Healthcare Industries and the Industrial/Energy/Other Industries, thus differing markedly from other venture-capital firm categories. The number of samples available, however, was small.

Figure 1-28 Industry Distribution by VC contributor category (Domestic: Percentage of JPY value invested)



(Source: Survey on Venture Capital Investment Trends in 2016, VEC)

Figure 1-29 Industry Distribution by VC contributor category (Domestic: Number of deals invested)



(Source: Survey on Venture Capital Investment Trends in 2016, VEC)

4) Seed and Early Stage accounted for over 50% of domestic investments (in value share) by all venture capital firm categories excluding bank-affiliated firms

The following characteristics can be identified by examining, by venture capital contributor category, the stages of domestic investment target companies in FY 2015 on a value share basis (Figure 1-30) and a deal count share basis (Figure 1-31).

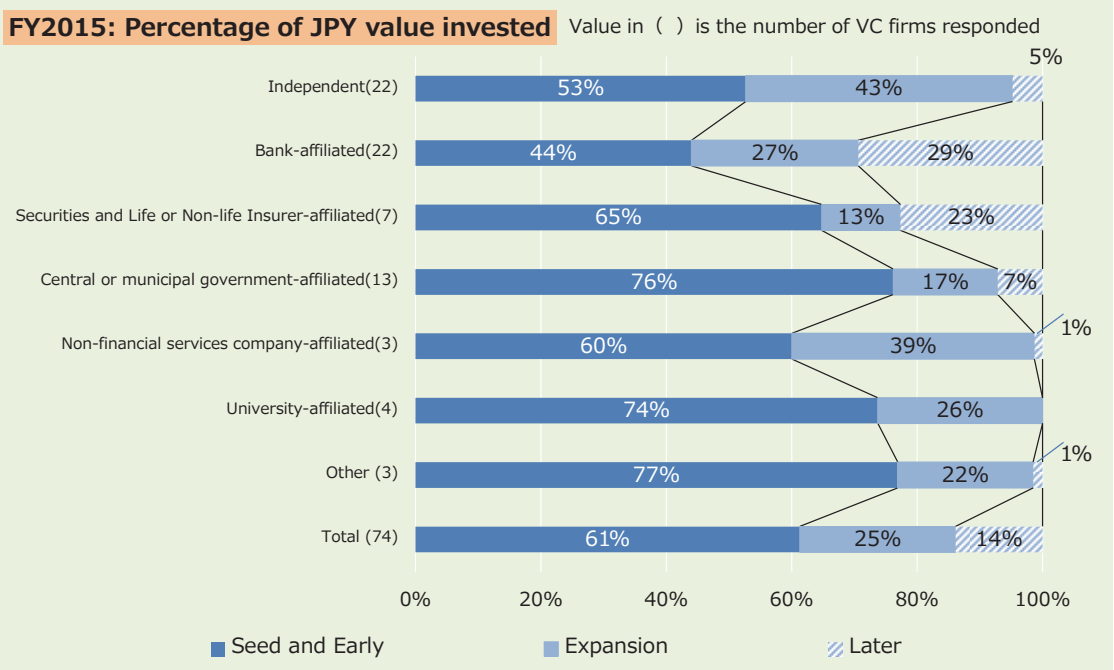
Value share

●The combined total value share of Seed Stage and Early Stage investment target companies (Figure 1 – 30) was high at over 70% for the "Other" category (77%), central or municipal government-affiliated venture capital firms (76%), and university-affiliated venture capital firms (74%).

●This share, however, was lowest for bank-affiliated venture capital firms at below 50% (44%), trailing independent venture capital firms (53%) and non-financial services venture capital firms (60%), two categories at above 50% and up to 60%.

●Some independent venture capital firms, however, were dedicated to Seed Stage and Early Stage target companies.

Figure 1-30 Stage Distribution by VC contributor category
(Domestic: Percentage of JPY value invested)



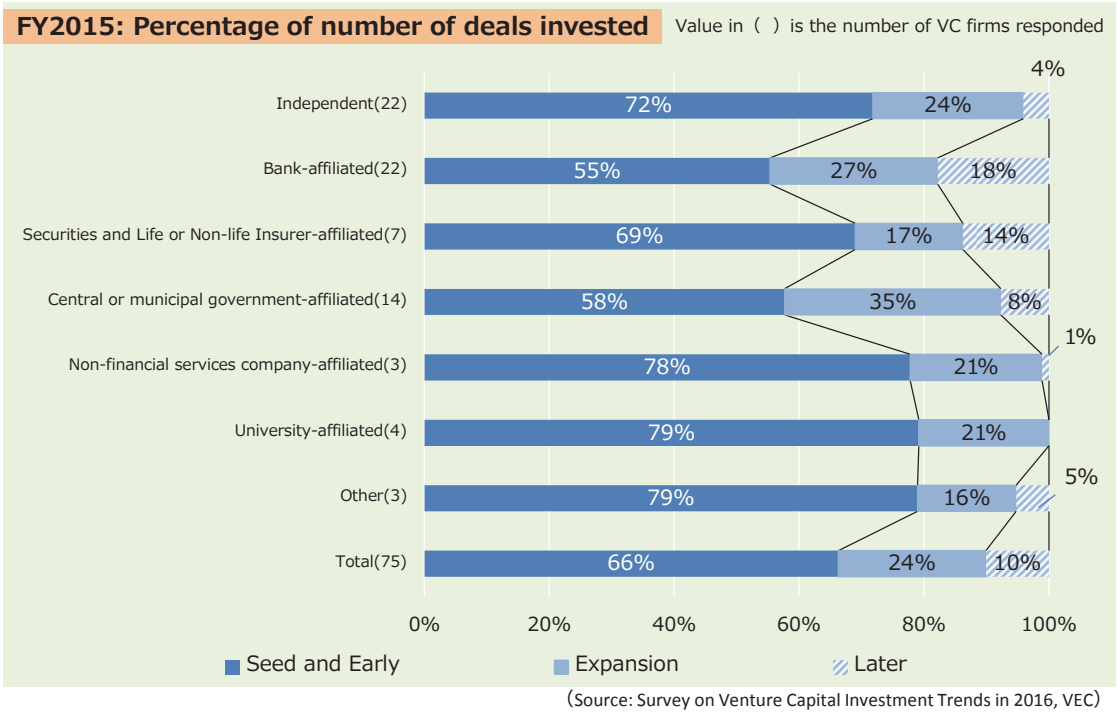
(Source: Survey on Venture Capital Investment Trends in 2016, VEC)

Deal count share

●The combined total deal count share of Seed Stage and Early Stage investment target companies was over 50% for all venture capital firm categories, standing at over 70% for university-affiliated, non-financial services company-affiliated, independent, and “Other” category venture capital firms, in particular (Figure 1-31).

●This share, however, was below 60% for bank-affiliated and central or municipal government-affiliated venture capital firms. This share for those central/municipal government-affiliated firms differed markedly from their value share of Seed Stage and Early Stage investment target companies (over 70%), a phenomenon that was probably affected by INCJ, a continued investor in Seed Stage and Early Stage target companies.

Figure 1-31 Stage Distribution by VC contributor category
(Domestic: Percentage of number of deals invested)



(Source: Survey on Venture Capital Investment Trends in 2016, VEC)

Value and deal count shares

● The value and deal count shares of Later Stage investment target companies were high for bank-affiliated and securities and life or non-life insurer-affiliated venture capital firms (Figure 1-30 and Figure 1-31).

2. New Venture Capital Funds Launched

Total value of venture capital funds launched rose sharply in FY 2015, posting a post-Lehman bankruptcy peak

In FY 2015,51 venture capital funds launched with a total fund value of ¥193.2 billion (Figure 1-32), which marked a sharp rise compared to FY 2014 and marked a peak since the Lehman bankruptcy. . Those fund launches grew significantly both in launch count and total fund value, matching perceived conditions in the market.

In addition, venture capital funds were launched by the parent companies of non-financial services firms, which would send the launch count and total fund value even higher.

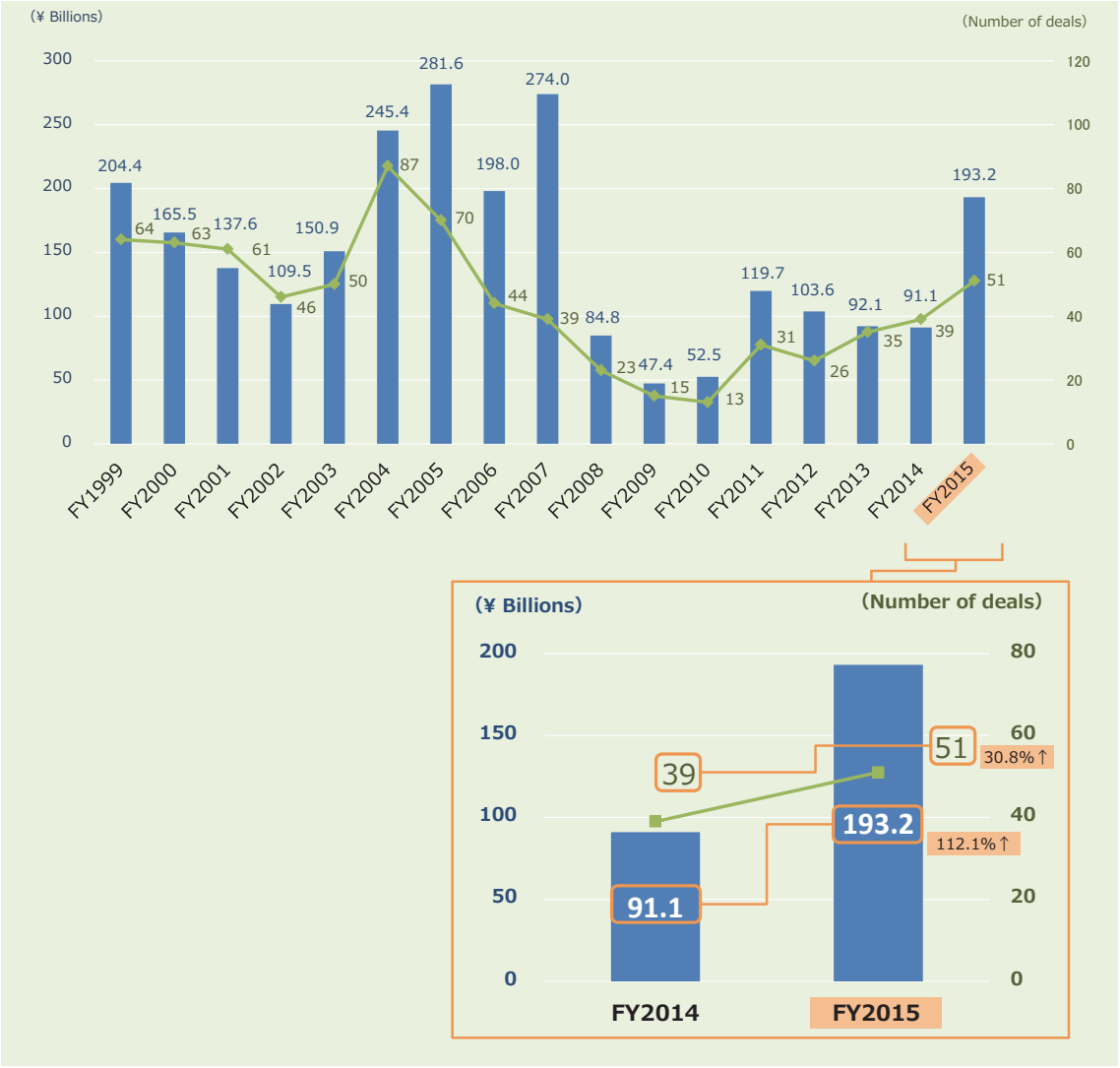
FY 2015 was marked by a growing diversity of funds using a new format* incepted among many funds launched such as university-affiliated venture capital funds. Attracting attention was the news that, for the first time in about eight years, some corporate pension funds contributed capital to a fund launched by a leading venture capital firm.

*Note:

For example, each fund of TechAccel Ventures, LLC established by Ricoh Co., Ltd., OMRON Corporation and SMBC Venture Capital is intended for investments in technology startup companies, based on a format in which multiple non-financial services firms manage the fund jointly.

In another example, Universal Materials Incubator Co., Ltd., established in October 2015 with a capital contribution of at least 90% from INCJ, launched a fund in January 2016, aiming to make concentrated investments in startup companies at Early Stage to early Expansion Stage, while specializing in the areas of materials and chemicals.

Figure 1-32 Number of New Funds and Total Fund Value



(Source: Survey on Venture Capital Investment Trends, VEC)

3. Status of Investment Exits

(1) Status of Exits for FY 2015

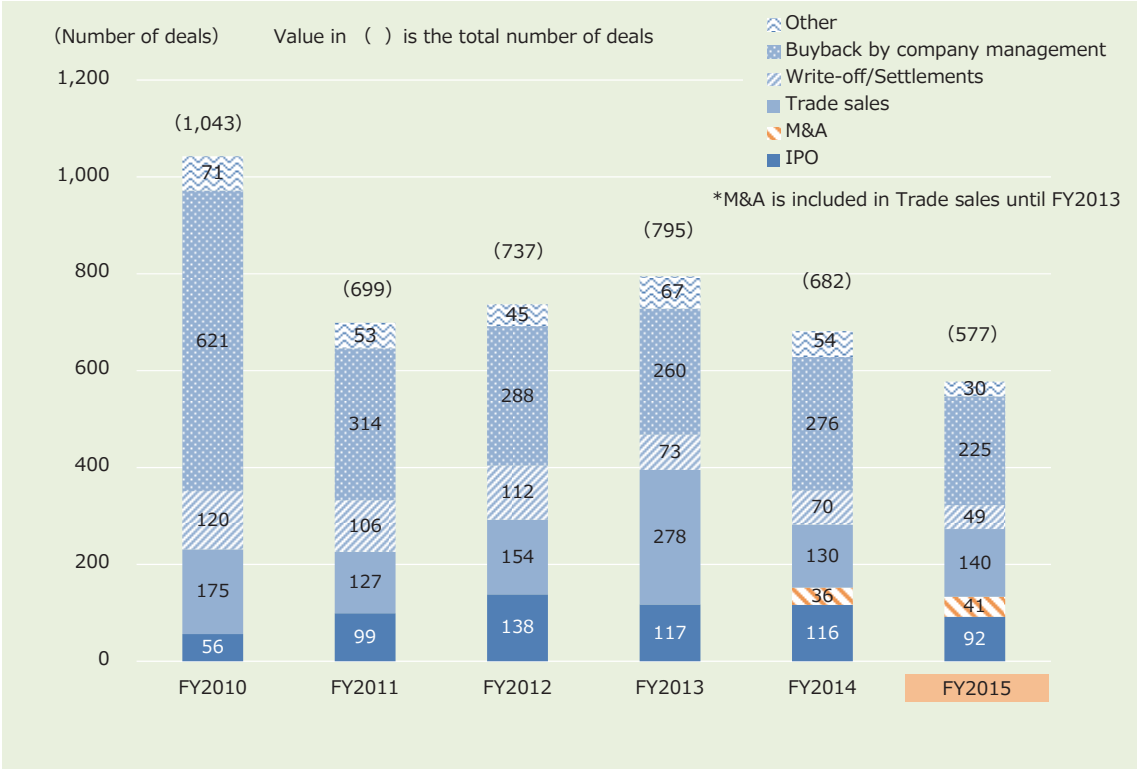
The number of merger and acquisition deals increased slightly in FY 2015, despite the wider use of class shares

The status of investment exits in FY 2015 did not show a notable change from FY 2014 (Figure 1-33 and Figure 1-34). Starting with FY 2014 data, the number of merger and acquisition deals at investment exit* was added to the survey items (a data point included in sales data up to FY 2013 data). Merger and acquisition deals in FY 2015 totaled 41, only a slight rise from 36 in FY 2014.

Many venture capitalists predicted that the number of merger and acquisition deals would remain on an uptrend in the coming years. However, views on the pace of progress differed widely from one venture capitalist to another.

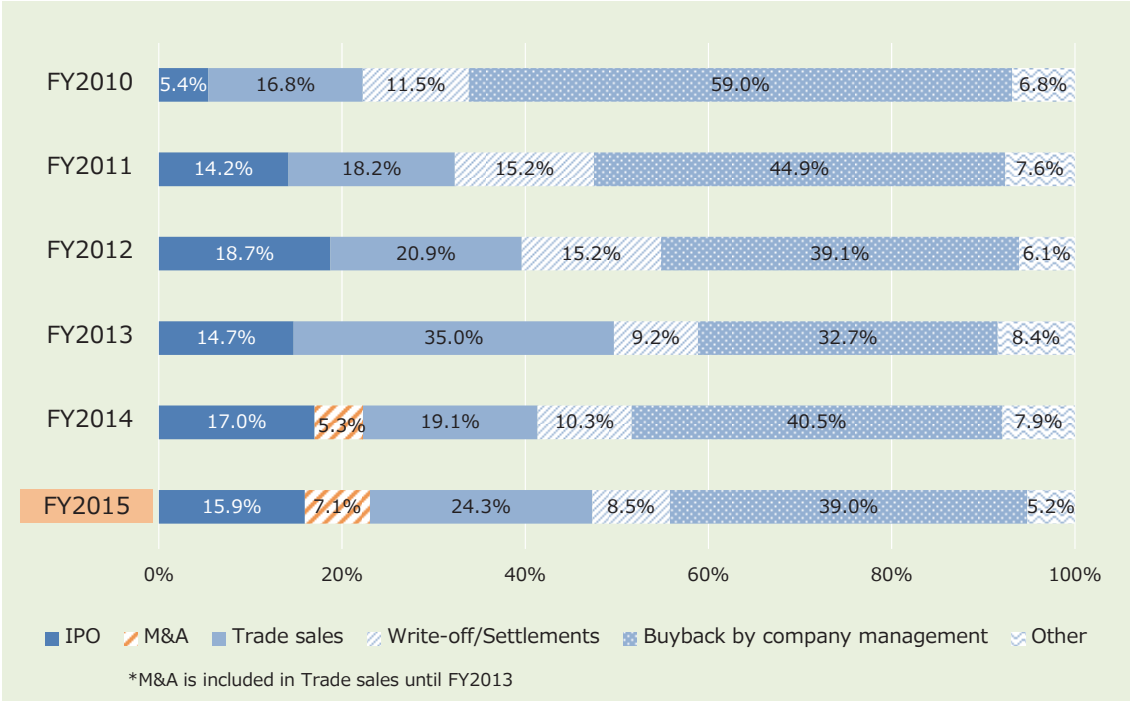
Note*	M&A	:	Sales that involve the transfer of management rights
	Trade Sales	:	Sales to secondary funds, etc.

Figure 1-33 Number of Exits by Type



(Source: Survey on Venture Capital Investment Trends, VEC)

Figure 1-34 Percentage of Number of Exits by Type



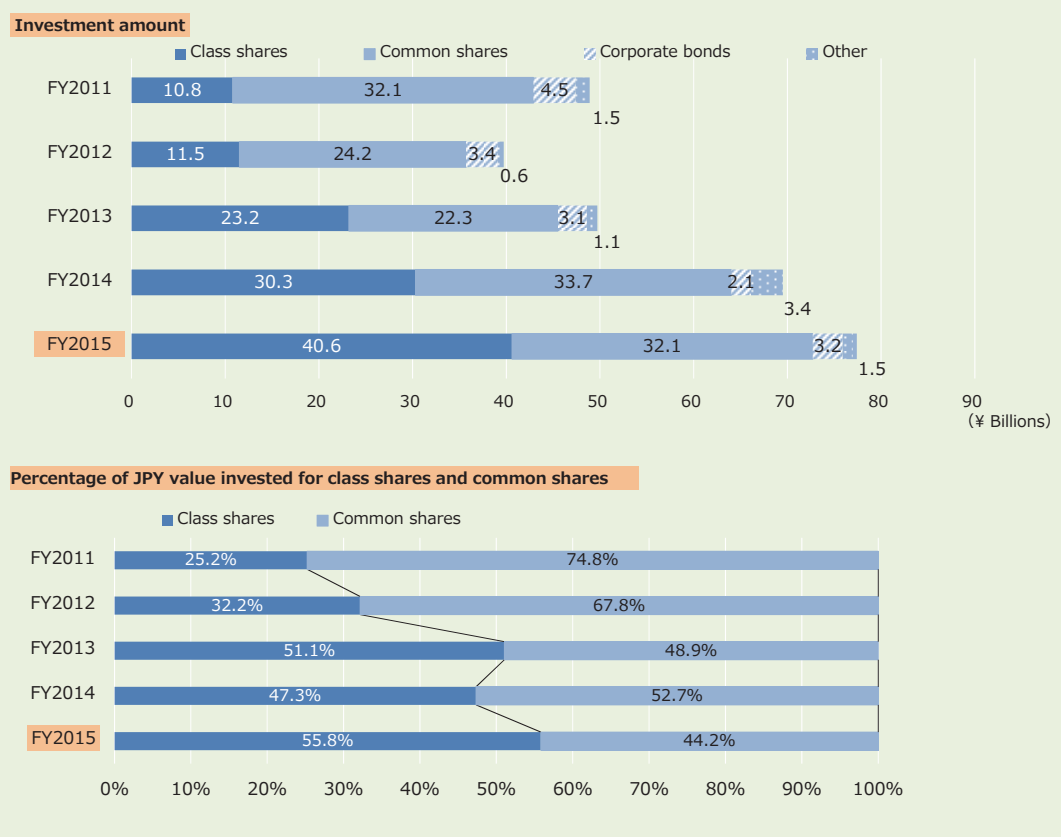
(Source: Survey on Venture Capital Investment Trends, VEC)

Using class shares also enabled profit generation through mergers and acquisitions

Class shares, which are being used more widely year after year, are said to be a major trend nowadays. This survey asked venture capitalists to disclose the values of their annual investments broken down into four categories, namely, common shares, class shares, corporate bonds, and other investments, and on a parent-based investment basis and a partnership-based investment basis. Figure 1-35 shows the results (values) of partnership-based investments, which accounts for approximately 80% of total annual investments, in four categories, as well as the value percentages of common shares and class shares. This chart shows that the use of class shares has been expanding steadily, exceeding the 50% mark in FY 2015. This trend also holds true on a deal count basis.

There is a type of class share (share with preferred acquisition right) designed to deliver an effect that is identical to the distribution of preferred residual assets at the time of dissolution on the occasion of a merger and acquisition deal, a function made possible by including a deemed liquidation clause in the investment agreement. It appears that shares with preferred acquisition rights are increasingly used for investments, allowing venture capitalists to earn a profit not only through an IPO deal but also a merger and acquisition transaction. In fact, some venture capitalists seem to welcome merger and acquisition deals, through which they are able to lock in profits early.

Figure 1-35 Annual investment values by investment category and value percentages for class shares and common shares (partnership-based investment)



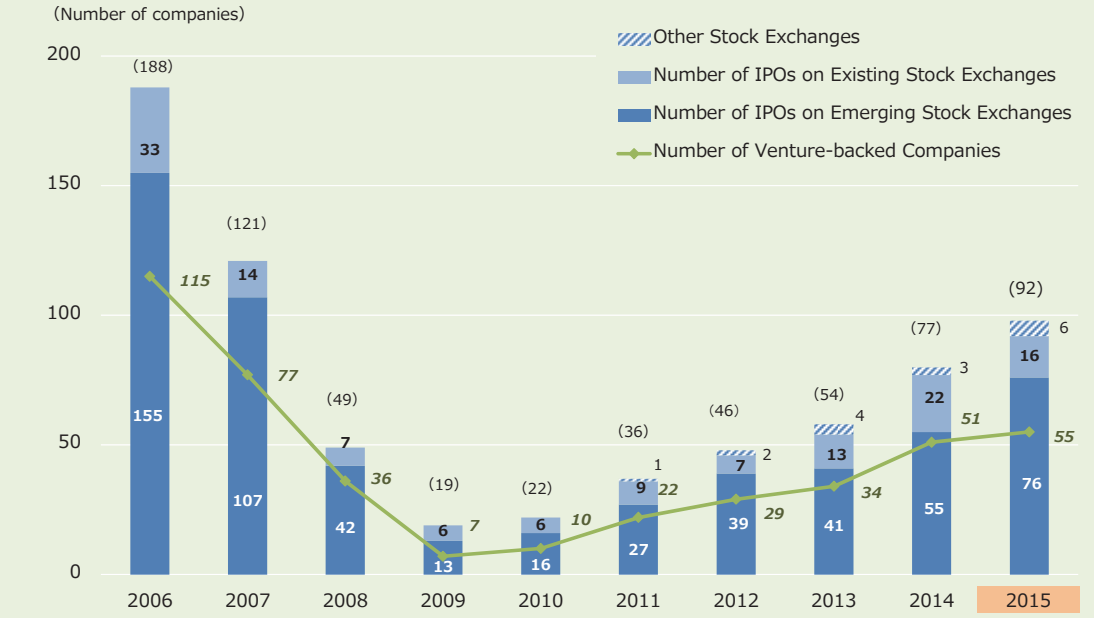
(Source: Survey on Venture Capital Investment Trends, VEC)

(2) IPO Trends

In calendar year 2015, 92 companies carried out IPOs in Japan, an increase of 15 compared to 77 for 2014 (Figure 1-36 and, for details, Figure 1-38). During the January-to-June 2016 period, 40 companies conducted IPOs (Figure 1-39).

Looking at the historical number in the country of IPO-implementing companies during the past 10 year-period, 2009 saw the number fall sharply in response to the Lehman Brothers' bankruptcy in the autumn of 2008 (19). From 2010, however, the number of IPO-implementing companies recovered gradually, exceeding the 50 mark in 2013 for the first time in six years, before rising steadily since then.

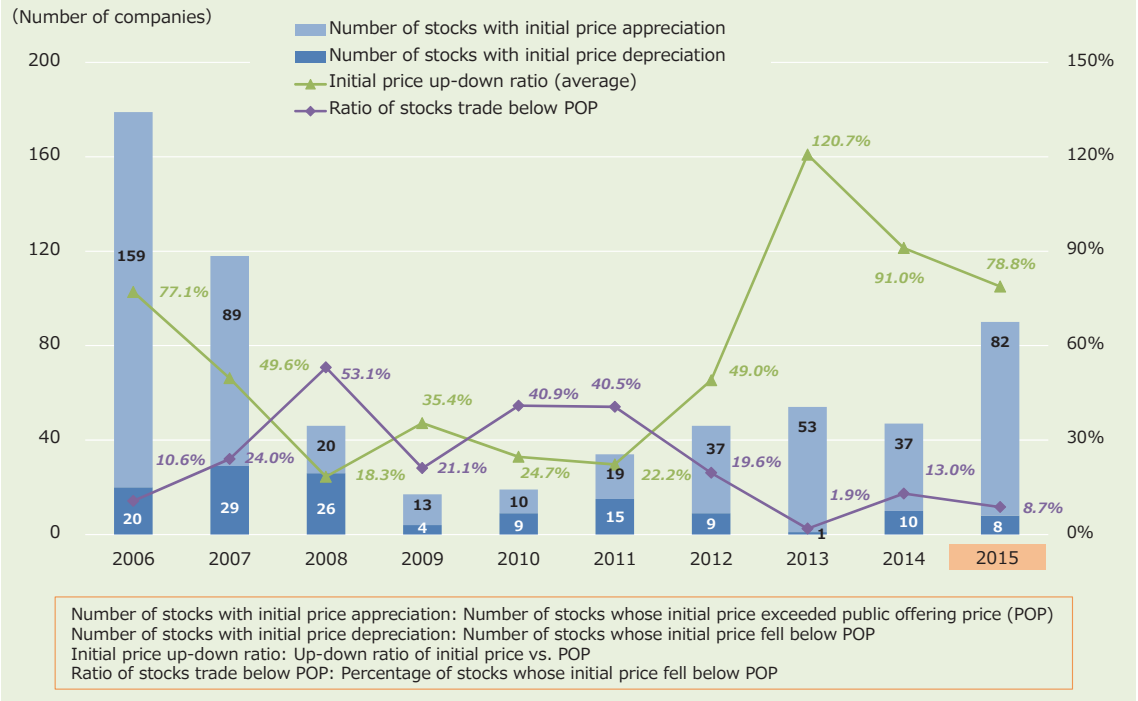
Figure 1-36 Number of IPOs in Japan



・Value in ( ) is the total number of IPO companies on both emerging and existing stock exchanges
・2011 value excludes Seven Bank
・Other stock exchanges: Tokyo AIM Exchange (established in June 2009) and Tokyo PRO Market (established in July 2012)
・Number of Venture-backed companies identified from listed companies on emerging stock exchanges

(Source: TRADER'S WEB, TOKYO PRO MARKET, prepared by VEC)

Figure 1-37 Initial Price Appreciation and Depreciation, Stocks Traded Below POP, and Initial Price Up-down Ratio Average



Number of stocks with initial price appreciation: Number of stocks whose initial price exceeded public offering price (POP)
Number of stocks with initial price depreciation: Number of stocks whose initial price fell below POP
Initial price up-down ratio: Up-down ratio of initial price vs. POP
Ratio of stocks trade below POP: Percentage of stocks whose initial price fell below POP

(Source: TRADER'S WEB, prepared by VEC)

Figure 1-38 Summary of IPOs in 2015

Listing Date 2015		Market	Stock Name	Industry	Public Offering Price	Initial Price	Initial Price Up-Down Ratio	2015 Dec-End Up-Down Ratio vs. Initial Price
1	2/12	Mothers	KeePer Giken	Service	2,120	3,160	49%	-51%
2	2/18	Mothers	FirstLogic, Inc.	Service	1,770	2,700	53%	-6%
3	2/18	Mothers	FIRST BROTHERS Co., Ltd.	Real Estate	2040	2,090	2%	-28%
4	2/19	Mothers	ALBERT Inc.	Information/Telecommunications	2800	6040	116%	-81%
5	2/20	TSE 2	HOKURYO CO., LTD.	Fisheries/Agriculture and Forestry	460	501	9%	74%
6	2/23	Mothers	Silicon Studio Corp.	Information/Telecommunications	4900	9,900	102%	-71%
7	3/17	JASDAQ	MKSystem Corporation	Information/Telecommunications	3,500	15,120	332%	-88%
8	3/17	Mothers	Collabos Corporation	Information/Telecommunications	3620	8,600	138%	-40%
9	3/19	Mothers	Showcase-TV Inc.	Information/Telecommunications	1,800	5,290	194%	-85%
10	3/19	Mothers	General Oyster, Inc.	Retail	1800	2010	12%	28%
11	3/19	JASDAQ	SLD Entertainment, Inc.	Retail	1,650	1,903	15%	0%
12	3/24	Mothers	IID, Inc.	Service	1,400	2,050	46%	-49%
13	3/24	Mothers	RS Technologies	Metalware	2,750	2,100	-24%	2%
14	3/24	Mothers	First-corporation Inc.	Construction	1,600	2,000	25%	-50%
15	3/25	Mothers	Aiming	Information/Telecommunications	920	1,032	12%	-21%
16	3/25	Mothers	HOUSEDO Co., Ltd.	Real Estate	3600	5300	47%	-79%
17	3/25	JASDAQ	SHINDEN HIGHTEX CORPORATION	Wholesale	2,740	3,075	12%	-36%
18	3/26	Mothers	PLATZ Co., Ltd.	Other Product	3260	5,550	70%	-52%
19	3/26	Mothers	Japan Animal Referral Medical Center	Service	1,130	1,630	44%	-4%
20	3/26	Mothers	Mobile Factory, Inc.	Information/Telecommunications	1410	2,812	99%	-35%
21	3/27	Mothers	sMedio Inc.	Information/Telecommunications	2,520	4,000	59%	-58%
22	4/8	Mothers	SanBio Co., Ltd.	Pharmaceutical	2000	1710	-15%	-39%
23	4/17	Mothers	Kaihan co., ltd.	Retail	1,020	1,800	76%	-16%
24	4/20	Mothers	Hamee Corp.	Retail	2,530	4,230	67%	-88%
25	4/21	TSE 2	CRE, Inc.	Real Estate	3,620	3,355	-7%	-32%
26	4/22	Mothers	Nippon Ski Resort Development, Co., Ltd.	Service	3,570	3,925	10%	-45%
27	4/24	Mothers	Rentracks Co., Ltd.	Service	1750	2,680	53%	-70%
28	4/24	JASDAQ	SANKI SERVICE CORPORATION	Service	1540	2112	37%	-75%
29	4/28	Mothers	Gunosy Inc.	Service	1,520	1,520	0%	-56%
30	4/28	Mothers	Linkbal Inc.	Service	2400	3,070	28%	-64%
31	4/28	Mothers	JIGSAW, Inc.	Information/Telecommunications	2,390	8,040	236%	-18%
32	4/30	Mothers	DesignOne Japan, Inc.	Service	2750	4,150	51%	-68%
33	4/30	Mothers	TerraSky Co., Ltd.	Information/Telecommunications	1,700	7,650	350%	1%
34	6/16	JASDAQ	Smartvalue Co., Ltd.	Information/Telecommunications	1580	7030	345%	-77%
35	6/16	Mothers	HEALOS K.K.	Pharmaceutical	1,200	1,470	23%	-24%
36	6/17	Mothers	MarketEnterprise Co., Ltd.	Retail	1,500	4,005	167%	-74%
37	6/18	JASDAQ	Digital Information Technologies Corporation	Information/Telecommunications	1,300	4,500	246%	-36%
38	6/24	Mothers	Nakamura Choukou Co., Ltd.	Machinery	1,700	1,901	12%	138%
39	6/24	Ambitious	ECONOS Corp.	Retail	600	1,320	120%	-64%
40	6/25	TSE 1	Menicon Co., Ltd.	Precision Equipment	1700	2950	74%	25%
41	6/25	TSE 2	FUJI DIE Co., Ltd.	Machinery	530	800	51%	-29%
42	6/25	Mothers	Fundely Co., Ltd.	Retail	765	1,546	102%	-42%
43	6/29	JASDAQ	Nagaoka CO., LTD.	Machinery	1,600	2,250	41%	-47%
44	7/7	Mothers	Fujisan Magazine Service Co., Ltd.	Retail	2650	6,000	126%	-33%
45	7/8	JASDAQ	CRESTEC Inc.	Other Product	960	1,751	82%	-44%
46	7/10	JASDAQ	HIRAYAMA Co., Ltd.	Precision Equipment	2130	2758	29%	-46%
47	7/16	Mothers	iRIDGE, Inc.	Information/Telecommunications	1,200	6,350	429%	-20%
48	7/29	TSE 1	Dexerials Corporation	Chemical	1,600	1,550	-3%	-16%
49	7/30	Mothers	ITOKURO, INC.	Service	1,930	2,010	4%	15%
50	8/4	Mothers	PCI Holdings, INC.	Information/Telecommunications	2,530	6,820	170%	-50%
51	8/5	Q-Board	SK-HOME Property Co,. Ltd.	Construction	800	910	14%	-13%
52	8/11	Mothers	Palma inc.	Real Estate	1350	2302	71%	-57%
53	8/26	Mothers	C.E.Management Integrated Laboratory Co., Ltd.	Service	1,250	1,220	-2%	-44%
54	8/28	Mothers	Metaps Inc.	Service	3300	3,040	-8%	-3%
55	8/28	TSE 2	Lacto Japan Co., Ltd.	Wholesale	1,400	1,400	0%	7%
56	8/31	Mothers	Aqualine Ltd.	Service	1250	1,521	22%	-30%
57	9/2	Mothers	TOKYO BASE CO., LTD.	Retail	2,870	3,440	20%	-87%
58	9/2	Mothers	BESTERRA CO., LTD.	Construction	2500	3125	25%	14%
59	9/8	TSE 2	JESCO HOLDINGS, INC.	Construction	540	569	5%	-17%
60	9/14	Mothers	PIXTA Inc.	Retail	1,870	2,521	35%	-14%
61	9/15	Mothers	IBC CO., LTD.	Information/Telecommunications	2,920	10,250	251%	-88%
62	9/17	Mothers	Branjista Inc.	Service	450	647	44%	132%
63	10/15	Mothers	AppBank	Service	1200	1,750	46%	20%
64	10/22	Mothers	Green Peptide Co., Ltd.	Pharmaceutical	450	414	-8%	-36%
65	10/23	Mothers	GMO Media Inc.	Service	2,740	5,510	101%	-38%
66	10/27	Mothers	Partner Agent. Inc.	Service	1260	4,000	217%	-52%
67	10/28	Mothers	BALNIBARBI Co., Ltd.	Retail	2,500	5,750	130%	-67%
68	11/4	TSE 1	JAPAN POST HOLDINGS Co., Ltd.	Service	1400	1,631	17%	14%
69	11/4	TSE 1	JAPAN POST INSURANCE Co., Ltd.	Insurance	2,200	2,929	33%	6%
70	11/4	TSE 1	JAPAN POST BANK Co., Ltd.	Bank	1450	1680	16%	4%
71	11/19	Mothers	Rozetta Corp.	Service	695	3,705	433%	-79%
72	11/19	Mothers	Anshin Guarantor Service Co., Ltd.	Other Financial Services	1,460	5,730	293%	-84%
73	11/20	TSE 1	BELLSYSTEM24 Holdings, Inc.	Service	1,555	1,478	-5%	-21%
74	11/27	Mothers	NEOJAPAN Inc.	Information/Telecommunications	2,900	14,550	402%	-80%
75	12/3	Mothers	investors cloud co., ltd.	Construction	1870	3,615	93%	-36%
76	12/4	Mothers	Kamakura Shinsho, Ltd.	Service	1000	2806	181%	-21%
77	12/9	Mothers	RAKUS Co., Ltd.	Information/Telecommunications	1,080	3,550	229%	-48%
78	12/11	TSE 2	R&D COMPUTER CO., LTD.	Information/Telecommunications	1760	3,580	103%	-80%
79	12/15	Mothers	Double Standard Inc.	Information/Telecommunications	2,190	5,010	129%	-15%
80	12/16	TSE 1	Tsubaki Nakashima Co., Ltd.	Machinery	1550	1,620	5%	6%
81	12/17	Mothers	OpenDoor Inc.	Information/Telecommunications	3,820	4,710	23%	-44%
82	12/17	JASDAQ	MIZUHO MEDY Co., Ltd.	Pharmaceutical	1100	2822	157%	-35%
83	12/18	TSE 1	FURYU Corporation	Machinery	3,200	3,220	1%	-17%
84	12/18	Mothers	Ahkun Co., Ltd.	Information/Telecommunications	1,360	4,925	262%	-16%
85	12/18	Centrex	ArtGreen Co., Ltd.	Wholesale	420	614	46%	-18%
86	12/21	Mothers	Mynet Inc.	Information/Telecommunications	1,680	2,005	19%	5%
87	12/21	Mothers	Vision Inc.	Information/Telecommunications	2000	2,213	11%	-11%
88	12/22	Mothers	So-net Media Networks Corporation	Service	2300	5500	139%	-26%
89	12/22	JASDAQ	PROPERTY AGENT Inc.	Real Estate	1,400	3,010	115%	-33%
90	12/24	Mothers	SOCIALWIRE CO., LTD.	Information/Telecommunications	1600	2,511	57%	-18%
91	12/24	TSE 2	KEIAI STAR REAL ESTATE	Real Estate	1,200	1,282	7%	-3%
92	12/25	TSE 2	ICHIKURA CO., LTD.	Service	1,210	1,236	2%	-7%
93	1/27	TOKYO PRO MARKET	Simplex Financial Holdings Co., Ltd.	Securities				
94	3/23	TOKYO PRO MARKET	TSON Co., Ltd.	Real Estate				
95	8/18	TOKYO PRO MARKET	SUZUKI SOLAR TECHNO	Construction				
96	9/11	TOKYO PRO MARKET	Dentas Co., Ltd.	Service				
97	10/15	TOKYO PRO MARKET	WBF RESORT OKINAWA	Service				
98	11/25	TOKYO PRO MARKET	TRIUMPH Co.	Information/Telecommunications				

(Source: TRADER' S WEB, TOKYO PRO MARKET, Prepared by VEC)

Figure 1-39 Summary of IPO in 2016 (as of end-June)

	Listing Date 2016	Market	Stock Name	Industry	Public Offering Price	Initial Price	Initial Price Up-Down Ratio	2016 June-End Up-Down Ratio vs. Initial Price
1	2/24	Mothers	Hatena Co., Ltd.	Information/Telecommunications	800	3,025	278%	-32%
2	3/2	Mothers	VALUE GOLF	Information/Telecommunications	1,280	3,215	151%	-50%
3	3/3	TSE 2	Nakamoto Packs Co., Ltd.	Other Product	1470	1,480	1%	21%
4	3/4	Mothers	Yoshimura Food Holdings K.K.	Food	880	1320	50%	-23%
5	3/9	Mothers	BRASS Co., Ltd.	Service	4,370	4,650	6%	-51%
6	3/11	Mothers	Fit, Inc.	Construction	1890	1,741	-8%	-54%
7	3/14	Mothers	LITALICO Inc.	Service	1,000	1,880	88%	-26%
8	3/15	JASDAQ	Fuji Soft Service Bureau Incorporated	Service	890	1,010	13%	-39%
9	3/15	TSE 1	UMC Electronics Co., Ltd.	Electric Equipment	3,000	2,480	-17%	-11%
10	3/15	TSE 1	First Bank of Toyama	Bank	470	500	6%	-7%
11	3/16	JASDAQ	Shoei Yakuhin Co., Ltd.	Wholesale	1,350	2,001	48%	-12%
12	3/17	Mothers	Akatsuki Inc.	Information/Telecommunications	1,930	1,775	-8%	99%
13	3/18	JASDAQ	Agratio urban design Inc.	Real Estate	1,730	3,505	103%	-20%
14	3/18	Mothers	Global Group Corp.	Mothers	2,000	3,200	60%	-17%
15	3/18	Mothers	PhoenixBio Co., Ltd.	Service	2400	2,350	-2%	1%
16	3/18	TSE 2	Iwaki (stock name: Iwaki Co., Ltd.)	Machinery	2000	2050	3%	-17%
17	3/18	JASDAQ	Hirose Tsusho K.K.	Securities Futures	830	830	0%	-23%
18	3/18	Mothers	Aidma Marketing Communication Corporation	Information/Telecommunications	1440	1,230	-15%	-16%
19	3/22	JASDAQ	CHIeru Co., Ltd	Information/Telecommunications	810	2,151	166%	67%
20	3/24	JASDAQ	WILLPLUS Holdings Corporation	Retail	1880	1,729	-8%	-21%
21	3/24	Mothers	BENEFIT JAPAN Co., Ltd.	Information/Telecommunications	1,980	3,310	67%	-35%
22	3/31	Mothers	PR TIMES Inc.	Information/Telecommunications	1340	2130	59%	-30%
23	3/31	Mothers	Evolable Asia Corp.	Service	1,800	2,670	48%	-25%
24	4/5	Mothers	HyAS&Co. Inc	Service	950	2,750	189%	-55%
25	4/8	NSE 2	Maruhachi Holdings Co., Ltd.	Fiber Product	680	757	11%	3%
26	4/15	Mothers	Edia Co., Ltd.	Information/Telecommunications	1,630	3,165	94%	-15%
27	4/19	Mothers	Globalway, Inc.	Information/Telecommunications	2,960	14,000	373%	-13%
28	4/21	TSE 2	JAPAN MEAT CO., LTD.	Retail	1010	1,040	3%	23%
29	6/15	Mothers	Atrae, Inc.	Service	5,400	12,720	136%	-39%
30	6/15	Mothers	HOPE, INC.	Service	1400	3220	130%	-33%
31	6/16	Mothers	Nousouken Corporation	Wholesale	1,050	1,870	78%	239%
32	6/17	JASDAQ	Yamami Company	Food	1,690	1,751	4%	-14%
33	6/21	Mothers	AWS Holdings, Inc.	Information/Telecommunications	2,490	8,350	235%	-7%
34	6/21	Mothers	Strike Co., Ltd.	Service	3,440	7,770	126%	-20%
35	6/22	Mothers	J-LEASE Co., LTD.	Other Financial Services	3,100	4,170	35%	-19%
36	6/23	Mothers	Virtualex Consulting, Inc.	Service	1,090	1,235	13%	-7%
37	6/27	Mothers	CAREER CO., LTD.	Service	1,950	3,870	98%	38%
38	6/28	Mothers	VEGA-CORPORATION	Retail	1,600	2,000	25%	9%
39	6/29	TSE 1	KOMEDA Holdings Co., Ltd.	Wholesale	1,960	1,867	-5%	6%
40	6/29	TSE 1	Solasto Corporation	Service	1,300	1,222	-6%	-4%
41	6/17	TOKYO PRO MARKET	Ci Medical Co., Ltd.	Wholesale				
42	6/23	TOKYO PRO MARKET	computermind	Information/Telecommunications				

(Source: TRADER'S WEB, TOKYO PRO MARKET, Prepared by VEC)

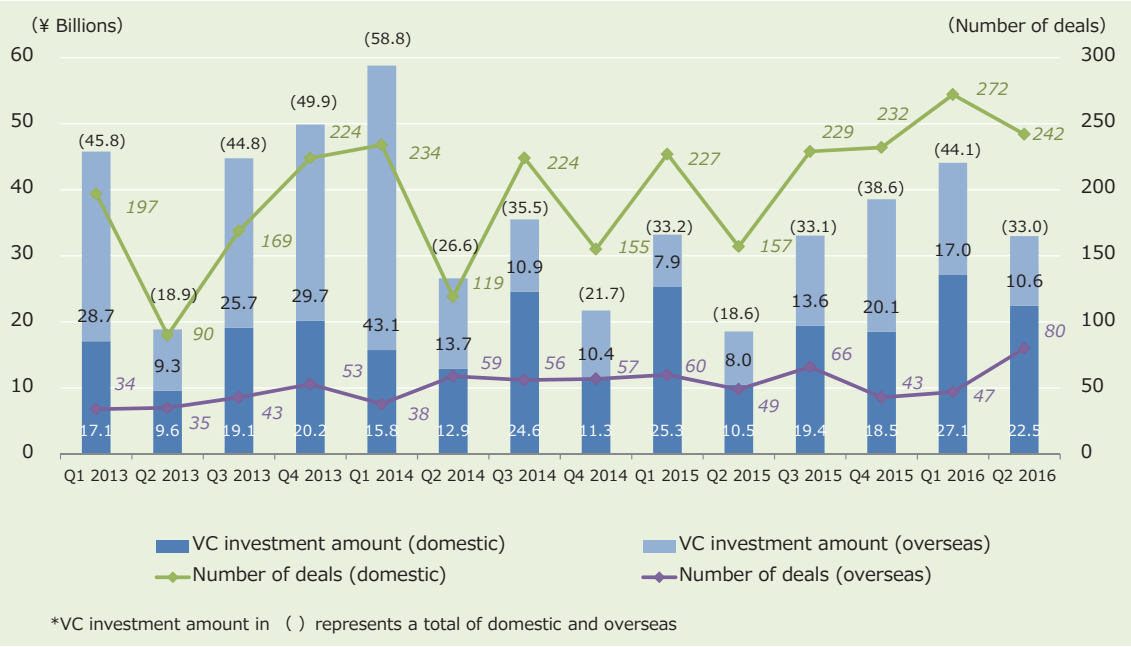
4. Quarterly venture capital investments

Separate from the annual survey, since 2012 VEC has been conducting a quarterly survey on venture capital investment trends, while continuing to release its findings. Figure 1 – 40 shows investments (flows) by venture capital firms and other organizations up to the second quarter of 2016.

Note
Total investments found by each quarterly survey differ slightly from those identified through each annual survey because:
1) Some companies respond to a quarterly survey, but fail to do so in the annual survey, and some other companies respond only to the annual survey;
2) There are instances of quarterly survey numbers being revised in the annual survey.

Quarterly venture capital investments in Japan remained strong in FY 2016 (Figure 1-40). Investments in the second quarter of 2016 (April to June) fell approximately ¥4.6 billion from the first quarter (January to March), which was probably a phenomenon that was bound to occur after a spike peculiar to the fiscal year-end. More noteworthy is the fact that there was an increase of approximately ¥12.0 billion compared to the same period of the previous year (second quarter of 2015 from April to June). This large gain was mainly attributable to the fact that investments by leading venture capital firms were strong during the period, and that venture capital firms established in Public-Private Innovation programs (projects involving capital contributions to national universities) launched investment operations. The number of investment deals stood at 242 for the second quarter of 2016, up 85 year on year, pointing to solid performance.

Figure 1-40 Trend of Investments by Japanese VC firms（Based on quarterly report）



（Source: Quarterly Surveys on Venture Capital Investment Trends, VEC）

5. Analysis of Survey on Venture Capital Fund Status

Coinciding with the Survey on Venture Capital Investment Trends, VEC conducts the annual Survey on Venture Capital Fund Status ("Fund Status Survey"), which is intended to ask venture capital firms managing startup investment funds, among entities targeted by the former survey, about the characteristics of individual funds, as well as their investment values. This fund status survey allows VEC to discover the numbers and sizes of startup company investment funds in Japan, as well as their investment performance.

To date, VEC has accumulated data on 684 funds that commenced investment operations during the period from 1982 to 2016. The survey findings are used by each venture capital firm to compare the performance of the funds it manages with that of rival firm funds, among other purposes.

The survey findings are shown in the Data Section of each year's VEC YEARBOOK. The following paragraphs analyze the survey done in 2016. For detailed survey findings, the reader should refer to "Data Section: Chapter II Survey on Venture Capital Fund Status" item page II–41.

(1) Outline of Fund Status Survey

The fund status survey, conducted annually concurrently with the Survey on Venture Capital Investment Trends, compiles data on the characteristics of individual funds and the status of their cash flows, including their concentrated investment stages, based on feedback from venture capitalists. In the survey conducted in 2016, 87 respondents among 121 venture capital firms that responded to the Survey on Venture Capital Investment Trends provided data on 350 funds. These data are combined with data on 334 liquidated funds obtained through our surveys done up to 2015 before being analyzed, the results of which are shown in the "Data Section: Chapter II Survey on Venture Capital Fund Status" presented starting from item page II–41.

Number of Funds Targeted in Survey on Venture Capital Fund Status	
Funds existing + liquidated in 2016	350
Funds liquidated before 2016	334
Total	684

The survey findings are compiled on a category basis, focusing on fund categories and, separately, on a performance basis, focusing on performance status.

In the category-based data compilation process, we analyze the number of funds by stages, industries, and areas for concentrated investing, and count total investment values and average capital contribution values on a category-by-category basis. In addition, we show the capital contributor percentage breakdown by industry for each launch year.

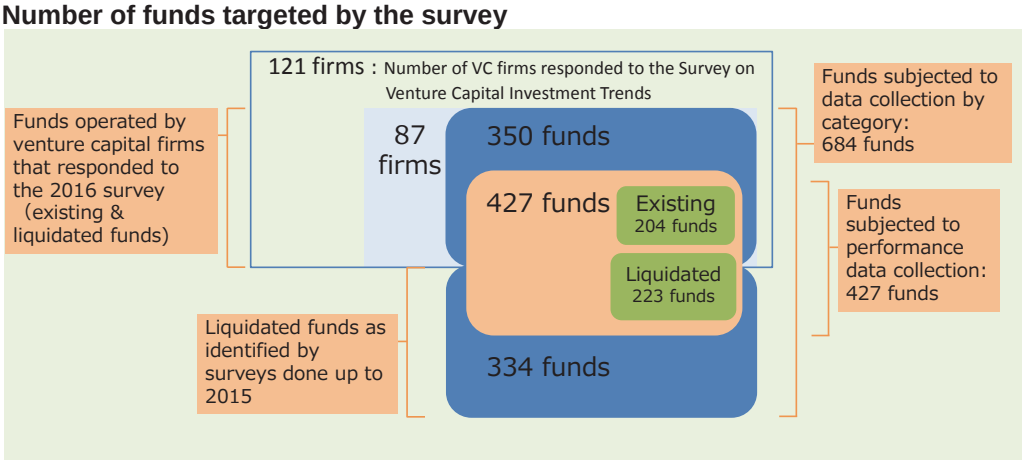
Collection by Category	
Statistical data focusing on fund type	
Number of Funds	By vintage year, fund type, focused stage, focused industry, focused region, fund size
total investment values	By vintage year
average capital contribution values	By vintage year, fund type, focused stage, focused industry, focused region
capital contributor percentage breakdown by industry	—

In the performance-based data compilation process, we highlight fund investment performance, namely performance statistics, on the basis of cash flows informed by respondents. We analyze the state of fund investment from various perspectives using indices mainly comprising internal rate of return (IRR), distribution to paid-in (D/PI), and total value to paid-in (TV/PI). For descriptions of these indices and applicable calculation methods, refer to the sections from page II–42 onward.

Performance data Collection	
Statistical data focusing on management status	
IRR Distribution	All、by management period, fund type, focued stage, focused industry, focused region
Performance by vintage year	Cash flow、IRR、D/PI、TV/PI
Total Cash Flows	Cumulative total for each year in which the cash flow occurred

The performance-based data compilation does not necessarily cover all the funds, because some of them did not disclose cash flows data to VEC. At the time of the 2016 survey, 427 of all funds totaling 684 were targeted by the compilation.

Number of funds targeted by the survey



(2) Observations from the fund status survey

1) Performance varied noticeably

Figure 1-41 shows the distribution of IRRs for 427 funds covered by VEC's performance data compilation. Funds with an IRR ranging from minus 10% to plus 10% total 247, representing over 50% of the total, while multiple funds show an IRR of less than minus 60% or one over plus 60%. The standard deviation of the funds covered, standing at 24.7% (refer to the IRR standard deviation for individual launch years as shown in Item II of the Data Section, Page II-64), varies notably.

Of the above-mentioned 427 funds, 107 represent the top 25% in IRR, and their IRRs range from 1.30% to 304.26%.

Figure 1-41 Distribution of IRR

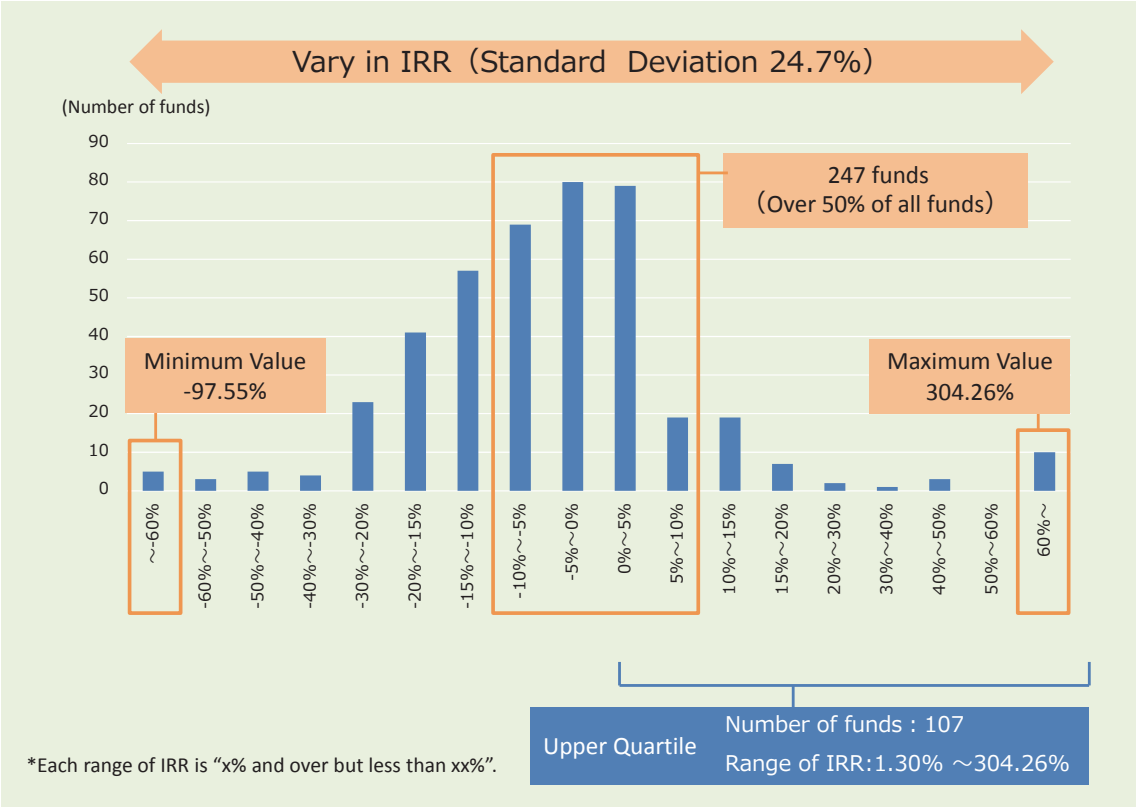
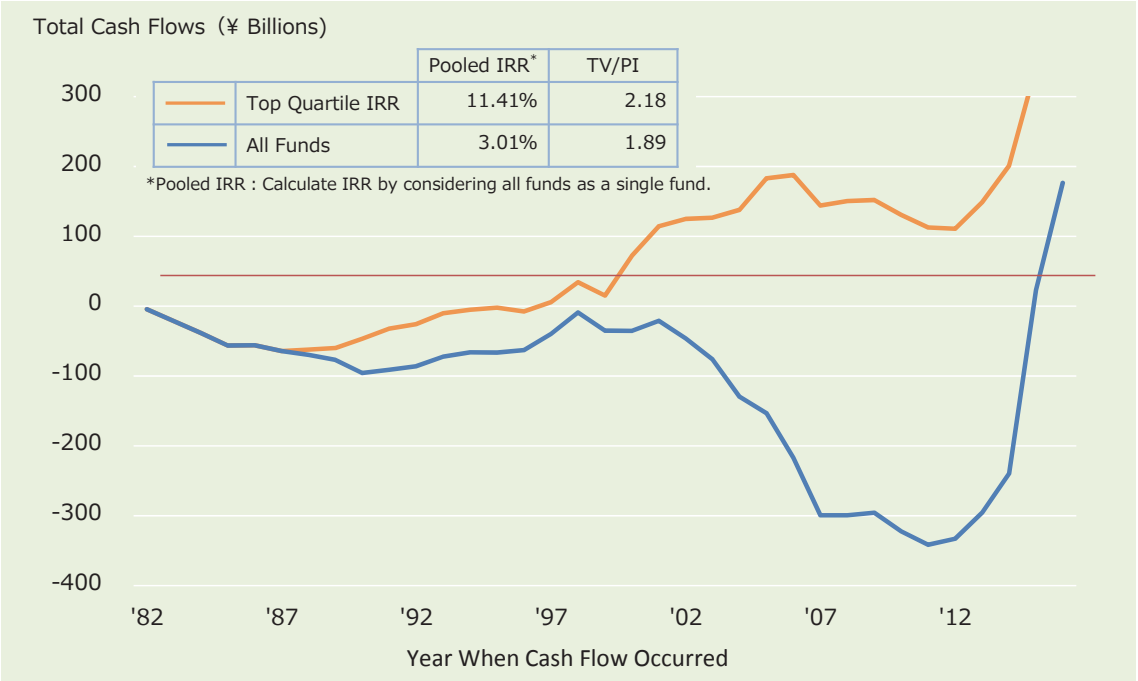


Figure 1-42 shows historical total cash flows determined by aggregating the cash flows of all the 427 funds and, separately, 107 funds are ranked within the top 25% in IRR for the individual occurrence years (Total capital contributions [minus] + Total distributions [plus] + Residual valuation [plus]). (For details of the historical cash flows of all the funds, refer to Item II of the Data Section, from Page II-62 to Page II-63).

The IRR of above-mentioned top 25% funds turned positive in 1997 before consistently remaining in positive territory (i.e. retaining the state of TV/PI being over 1 [TV/PI > 1]). On the other hand, on an entire funds basis, the figure did not exceed the zero mark even once during the years to 2014, and it has actually fallen sharply since 2002, in particular.

The two fund groups' total cash flows both rose markedly from 2014, affected mainly by the residual valuations of existing funds. Total cash flows usually tend to be high for the one to two years up to the year containing the market valuation date. This is because the residual valuation as of the latest valuation time point is deemed to be a positive cash flow before being aggregated. Although potentially becoming the source of a future distribution, the residual valuation does not represent any distribution as of the valuation date. In other words, sharply higher total cash flows in the past one to two years do not necessarily mean a performance improvement for the same period, a fact that needs to be noted.

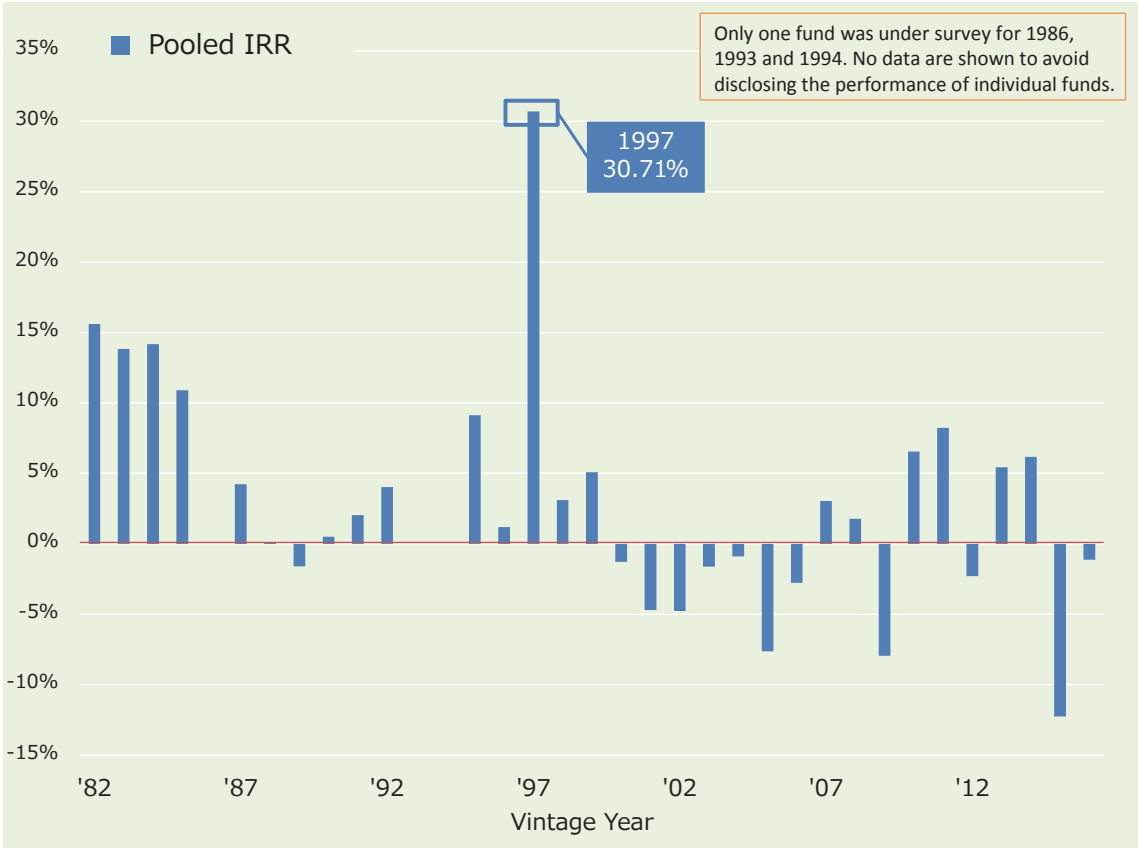
Figure 1-42 Total Cash Flow of Funds with Upper Quartile IRR



2) Variances according to year of fund launch

The performance of funds varied greatly according to year of fund launch. Figure 1-43 shows the historical IRRs of total cash flows calculated by aggregating the cash flows for each fund launch year before individually deeming each IRR to be one of a given fund (total cash flows IRR). Although the 30% mark was exceeded by the IRR of funds launched in 1997, funds launched in 2000 to 2006 show an IRR of below 0%. The performance of funds seems to be affected by various factors prior to and after the launch year and the existing period. However, we are unable to discover any clear correlation with the trend shown in Figure 1-43.

Figure 1-43 Pooled IRR by Vintage Year

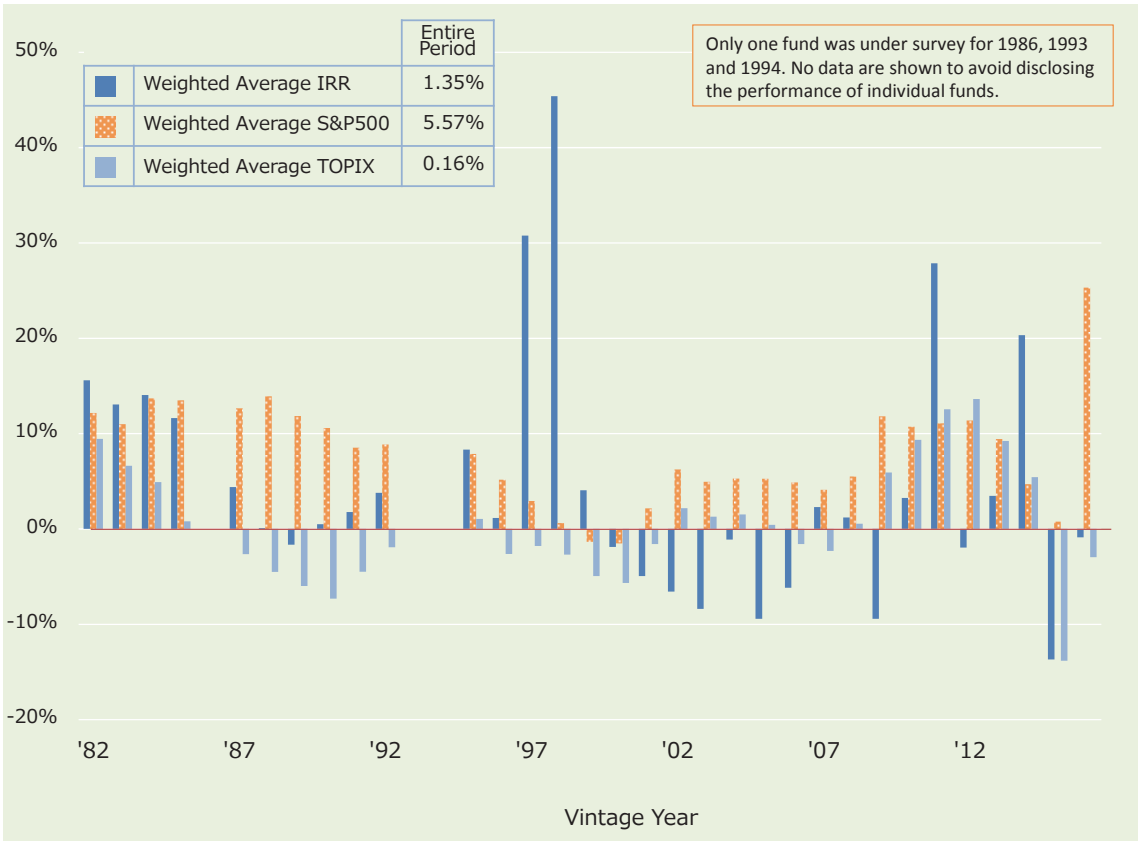


3) Comparison with investments in listed shares

Figure 1-44 shows performance comparisons among venture capital investment funds, index-linked funds tracking the Tokyo Stock Price Index (TOPIX), and index-linked funds tracking Standard & Poor's 500 Stock Index (S&P 500). The IRR of each venture capital investment fund is calculated for each fund launch year by taking a weighted average based on a fund's size. As for the performance posted by each stock price index-linked fund by investing contributed capital equal in value to the one of each venture capital investment fund and for the same period, the chart plots performance as that of weighted-average TOPIX and weighted-average S&P500.

Examined on an entire period basis, the performance of the weighted-average IRR of venture capital funds (1.35%) was higher than the weighted-average TOPIX (0.16%) and lower than the weighted-average S&P500 (5.57%).

Figure 1-44 Performance Comparison of VC Funds and Stock price index-linked funds



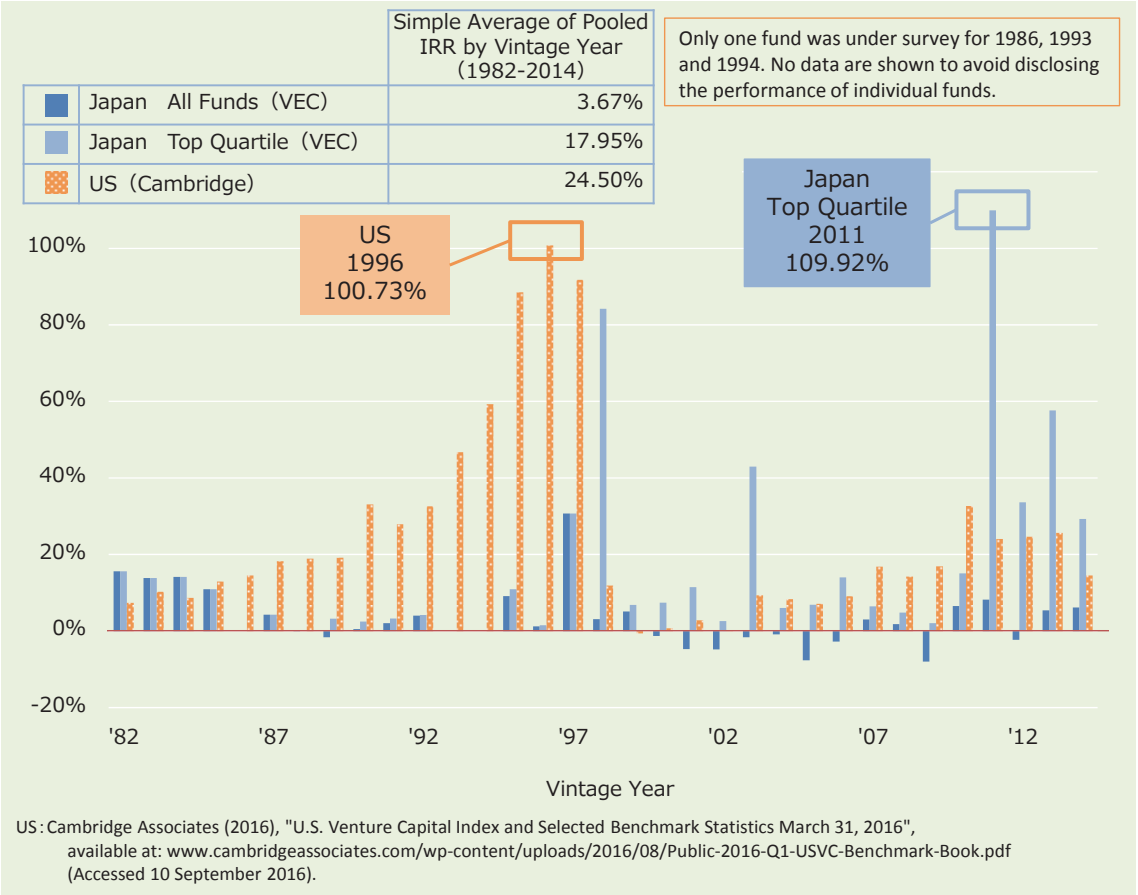
4) Comparison with the U.S.

Lastly, the following compares the performance of venture capital funds in Japan and the U.S. In the U.S., the National Venture Capital Association (NVCA) works with the research house Cambridge Associates to analyze the performance of venture capital investment funds before releasing the results. The number of funds surveyed from 1982 to 2014 totaled 1,603.

Figure 1-45 compares the performance of Japanese venture capital funds (pooled IRR for each fund launch year) with that of U.S. peers.

When aggregated by launch year, all 427 Japanese venture capital funds surveyed by VEC had inferior performance to their U.S. peers, with the exception of the funds launched in the 1982-to-1984 period and funds launched in 1999. However, we find many years in which Japanese venture capital funds had superior performance to their U.S. peers, a fact discovered by calculating the pooled IRRs for each fund launch year of 107 Japanese funds ranked within the top 25% of all funds by IRR. The highest IRR among these top 25% Japanese funds was 109.92% (2011), exceeding that of U.S. peers at 100.73% (1996).

Figure 1-45 Pooled IRR by Vintage Year（Japan and US Comparison）



US：Cambridge Associates (2016), "U.S. Venture Capital Index and Selected Benchmark Statistics March 31, 2016", available at: www.cambridgeassociates.com/wp-content/uploads/2016/08/Public-2016-Q1-USVC-Benchmark-Book.pdf (Accessed 10 September 2016).

Chapter II. Collaboration between startup companies and large enterprises

Large enterprises have been becoming increasingly interested in open innovation with specific actions being taken in many instances.

In the VEC YEARBOOK 2015 published in December 2015, we discuss the overview and noteworthy points of corporate venture capital (CVC), a means with which to promote open innovation at large enterprises.

From February to October 2016, we visited about 50 entities comprising venture capital firms, CVC firms, and non-financial services companies to interview them on how large enterprises sought to collaborate with startup companies, as well as on those enterprises' specific activities in CVC.

Based on the interview results, the following pages present key points on how large enterprises should collaborate with startup companies.

The types of startup company we assume here consist of those companies in which the venture capitalist aims conduct an IPO, such as 1) a company boasting superb technological expertise in cutting-edge fields; 2) a company aiming to grow globally; and, 3) a company taking on the challenge of creating a big new market segment using a totally new business model.

As discussed in Figure 3-6 of "Chapter III Japanese Startup Business Survey" (see Page I-67), not all startup companies aim for an IPO deal.

There are many startup companies working to revitalize regional local communities and resolve social challenges faced by local citizens. Both efforts are similar in that the professionals involved tackle the challenges of invigorating Japanese industries and society, and play a crucial role.

1. Collaboration between startup companies and large enterprises: How to collaborate

(1) Emerging large enterprises and conventional large enterprises: Big differences in approaches to startup companies

On collaborations between large enterprises and startup companies, experts say there are big differences between a conventional large enterprise and an emerging large enterprise founded as a startup company before growing fast to become a large enterprise (typically an IT-related company).

Emerging large enterprises appear to interact with startup companies with a sense of companionship, considering them to be partners with which to cooperate to bring about innovation. It is probably due to such a corporate culture that there have been a number of deals in which an emerging large enterprise enters into a collaboration with, or acquires, a startup company. For example, DeNA Co., Ltd. acquired iemo Co., Ltd. [Note 1] and peroli, Inc. [Note 2] in October 2014, before setting up a joint venturecalled Robot Tax, Inc., with ZMP Inc. [Note 3] in May 2015 with the objective of creating a robot-based taxi service business using autonomous driving technology.

Note 1) iemo Co., Ltd.: A curation platform operator dedicated to housing and interiors
Note 2) peroli, Inc.: A curation platform operator dedicated to female fashion
Note 3) ZMP Inc.: A developer/distributor of robots and platform for developing autonomous driving technologies

In contrast, conventional large enterprises are bound to play down startup companies, typically considering them to be a category of sub-contractor. Although increasingly investing in startup companies, conventional large enterprises are still found to rarely collaborate with, or acquire, a startup company.

The following paragraphs discuss a collaboration between such a conventional large enterprise as described above and a startup company.

(2) Significant change experienced by conventional large enterprises: Startup companies are considered to be a useful option for generating innovation

A change has been experienced by conventional large enterprises (“Large Enterprises”) as well, albeit to a different degree.

Their top managers have come to realize the importance of open innovation due to a rising sense of crisis that it is difficult to maintain the status quo, not to mention generate growth, without working on new technologies, materials, and business models.

Amid this situation, these managers’ views of startup companies are beginning to change, seeing collaboration with them as a useful option for generating innovation.

As shown on the following page, the Ministry of Economy, Trade and Industry expressed expectations on startup companies concerning its preferences for promoting future collaborations in a report titled “Fiscal 2015 Industrial Technology Survey Project (Survey on Desirable Support for Japanese Companies’ R&D Activities and Technology Validation and Evaluation Study)” [Note]. This fact represents the most

significant change.

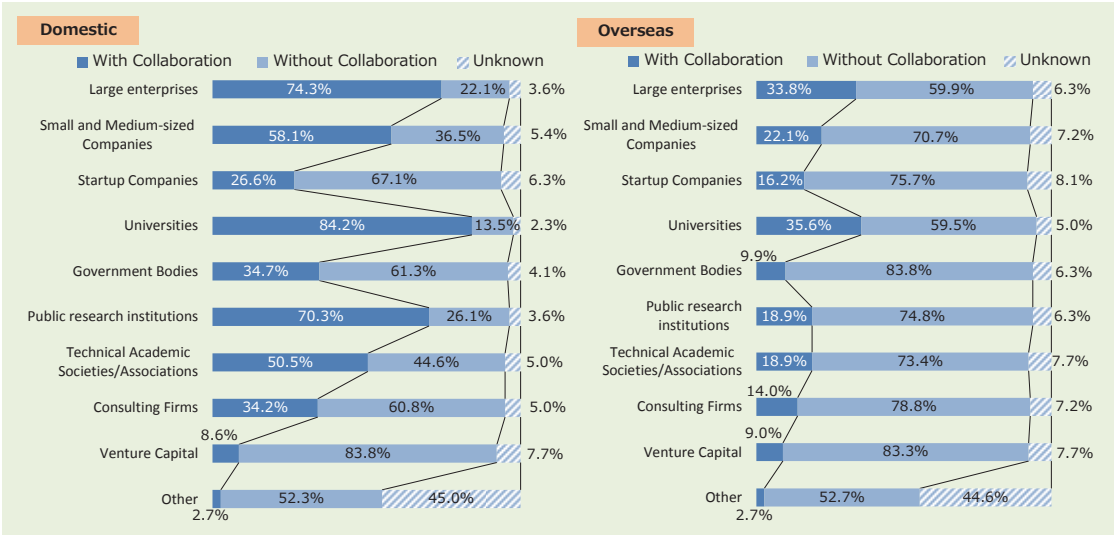
This is probably attributable to the following factors:

1) The application of new technologies, such as the IoT and AI, has been expanding rapidly in scope, so even large enterprises cannot sufficiently develop new businesses with in-house technologies alone;
2) Disruptive technologies have been created by startup companies;
3) Former startup companies such as Google, Facebook, and Amazon have been actively acquiring startups in Japan and abroad, expanding their business areas at a fast pace;
4) Experts have a sense of crisis, in that it is difficult to tell if, after 10 years, large enterprises will even remain as they currently are, as evidenced by the experiences of some Japanese electrical manufacturers.

Note: There was one survey by the Ministry of Economy, Trade and Industry on collaboration between large enterprises and external organizations titled “Fiscal 2015 Industrial Technology Survey Project (Survey on Desirable Support for Japanese Companies’ R&D Activities and Technology Validation and Evaluation Study)” (survey targets: top 1,001 large enterprises in research and development expenses for the previous fiscal year/number of respondents: 222).

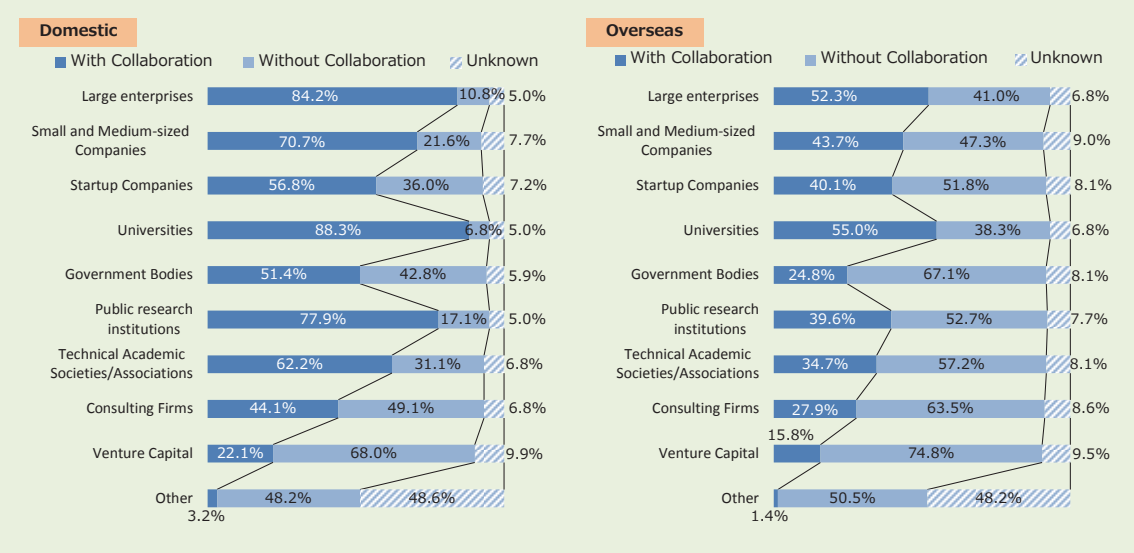
This survey examined large enterprises’ collaborations for FY 2014 (Figure 2-1) and their intentions for future collaborations (Figure 2-2) by breaking down collaboration partners into domestic and overseas. Looking at domestic collaboration deals in FY 2014, universities were the top collaboration partner category (84.2%), trailed by large enterprises (74.3%) and public research institutions (70.3%), with startup companies standing at a mere 26.6%. On the other hand, looking at large enterprises’ intentions for future collaborations in Japan, startup companies came in at 56.8%, significantly over double the percentage of actual collaborations, although the top three rankings were unchanged with universities at 88.3%, large enterprises at 84.2%, and public research institutions at 77.9%.

Figure 2-1 Large enterprises’ collaborations with external organizations (FY 2014)



Source: Ministry of Economy, Trade and Industry, Fiscal 2015 Industrial Technology Survey Project

Figure 2-2　Large enterprises' intentions for collaborations with external organizations



Source: Ministry of Economy, Trade and Industry, Fiscal 2015 Industrial Technology Survey Project

(3) How to search for a partner startup company

We often hear from both large enterprises and startup companies that they want to participate in events at which they can meet and identify potential collaboration partners.

A significant role is played by an intermediary that serves as a bridge between a large enterprise and a startup company.

To date, intermediaries designed to link large enterprises with startup companies have consisted of venture capital firms, financial services companies, universities (industry-academia collaboration), central or municipal governments, their affiliated organizations, audit firms, and lawyer's offices, among others. In recent years, however, companies specializing in intermediation services have been delivering results.

Recently, different companies have come to use different inventive methods to search for preferred partners.

1) Self-hosted matching event targeting interested startup companies

Large-scale events have been playing a role in providing startup companies with opportunities to give presentations and of exposing them to not only participating large enterprises but also other attendees and the broad general public. Examples include events titled "New Business Creation Support Conference & Connect!" and "TOKYO Innovation Leaders Summit." At such large-scale events, intermediation activities for large enterprises and startup companies are performed.

Recently, intermediation activities focusing on some theme in a more specific manner between large enterprises and startup companies are performed.

For instance, an event titled Global Open Innovation “From the Port of Toyosu” organized by NTT DATA, a company that continues to perform activities, uses a framework in which the organization invites startup companies related to its operations before having interested departments work towards commercialization.

Other events of this type include megabank-targeted contests focusing on the theme of FinTech, Hackathon [Note] hosted by large enterprises, and Ideathon [Note] hosted by large enterprises.

Some enterprises have begun to hold events targeting overseas startup companies. For example, Murata Manufacturing Co., Ltd. has organized hackathons on two occasions in Israel in collaboration with Samurai Incubate Inc.

Note: The term “Hackathon” is a word coined by combining the words hack and marathon. The term “Ideathon” is a word coined by combining the words idea and marathon. At both types of event, participants composed mainly of external specialists in various fields within a short period develop services and systems and construct a business model under a specific theme.

2) Intermediation taking the form of online-based platform and human networks

Newcomer intermediation service providers include, notably, an entity that builds a new business model and is a startup company itself. Among providers of manufacturing-related matching services are Linkers Corporation, [Note 1] Leave a Nest Co., Ltd., [Note 2] and A Inc. [Note 3] The targets of these three firms’ services also include large enterprises and startup companies. Each of these service providers use online-based platforms to expand the number of candidates and the scope of intermediation services. At the same time, Linkers Corporation and Leave a Nest Co., Ltd. also use offline human networks of the existing organizations.

Note 1) Linkers Corporation: Founded in April 2012, https://linkers.net/

- Provides manufacturer matching service Linkers
- Coordinators (over 1,700) propose products (companies) meeting the requestor’s wishes. Each coordinator, serving an industrial support agency of municipal governments across Japan, is a professional who is well-versed in practical work and products.

Note 2) Leave a Nest Co., Ltd.: Founded in June 2002, https://lne.st/

- All of the staff totaling over 50 hold a master’s or doctor’s degree
- It is equipped with broad platforms for scientific technologies, including TECH PLANTER, a seed acceleration program based on tie-ups with large enterprises, and the L-RAD platform for researchers and large enterprises

Note 3) A Inc.: Founded in April 2012, https://www.wemake.jp/

- Runs Wemake*, a manufacturing crowd platform

  *Open Innovation Platform on which a manufacturer creates a new product concept and a new business plan jointly with members (approximately 10,000) within a short period
- Creates new products through the process of the manufacturer officer in charge and members having discussions with each other on an equal footing

(4) Specific changes at large enterprises

At some large enterprises, there have been serious moves to promote collaborations with startup companies. The following highlights specific instances.

1) Sharp increase in capital contributions by large enterprises, including parent companies

On the funds front, there have been growing instances in which a large enterprise invests in a startup company in Japan or abroad through a venture capital firm established as a subsidiary. Recently, there have been notable instances in which the parent company of an venture capital firm invested directly in a startup company.

Figure 2-3 shows some instances of large enterprises (manufacturers) investing in startup companies inside or outside Japan from FY 2015. Large enterprises' capital contributions typically take the form of strategic investments, suggesting that they prioritize facilitating innovation over securing near-term financial returns.

Figure 2-3 Instances of startup company investments by large enterprises (manufacturers)

Investments in Domestic Startup companies

Large Companies · CVC	Portfolio companies	Industry	Remarks	Time of Investment
Murata Manufacturing Co., Ltd.	CLIP	Development of card-based device CLIP		April, 2015
GOLDWIN INC.	Spiber	Development of a new-generation bio material (spider threat)	Invested ¥3.0 billion, Keio University-originated startup company	October, 2015
Nisshinbo Holdings Inc. Daiwa House Industry Co., Ltd. New Japan Radio Co., Ltd.	UNIVERSAL SOUND DESIGN	Design, development, and sales of hearing-aid devices		October, 2015
Brother Industries, Ltd.	FLOSFIA	Semiconductor	Kyoto University-originated startup company	October, 2015
Toyota Motor Corporation	Preferred Networks	AI	Invested ¥1.0 billion, University of Tokyo-originated startup company	December, 2015
SPARX Group Co., Ltd. MIRAI SOSEI Fund (Toyota Motor Corporation)	Three-dimensional media SORACOM	Three-dimensional robot vision system IoT	Ritsumeikan University-originated startup company	May, 2016 July, 2016
Hitachi, Ltd.	Enechange	Electricity comparison website		February, 2016
CEMEDINE Co., Ltd.	AgIC	Printed electronics	University of Tokyo-originated startup company	February, 2016
Toray Engineering Co., Ltd.	Riverfield Inc.	Endoscope holder robot	Tokyo Institute of Technology-originated startup company	March, 2016
Omron Ventures Co., Ltd.	Asterisk Inc. Life Robotics Inc.	Mobile POS system Robot		March, 2016

Investments in Overseas Startup companies

Large Companies · CVC	Portfolio companies	Industry	Remarks	Time of Investment
Nintendo Co., Ltd.	Niantic, Inc.	Development of Pokemon Go		October, 2015
Yamaha Motor Co., Ltd.	Veniam	Provision of Wi-Fi communication service for mobile devices Sales of communication hardware		February, 2016
TDK Corporation SCREEN Holdings Co., Ltd.	Zeptor Corporation	Lithium ion battery	Japanese Founder CEO	September, 2016 September, 2016

Source: Official corporate websites of the companies, various press reports, and data prepared by VEC

The fact that the corporate venture capital investment has been gaining momentum is a desirable change in the past few years for stimulating the startup eco-system in Japan. However, some experts advise that the large companies tend to get caught by a trap without knowing the right practices involving corporate venturing.

Points to keep in mind when undertaking CVC investment

Masakazu Masujima

Partner, Mori Hamada & Matsumoto

Corporate venturing traps

Most of the corporate venturing attempts go bad because of "common traps"

- For conventional companies, a disruptive investment idea is reasonably voted down under existing reporting line
  - A disruptive proposal is typically rejected by another business unit who says:
    - ✓ "We are for other technology that is now being developed"
    - ✓ "We can do it ourselves if we wish to"
    - ✓ "There's a credit risk if you deal with startups"
    - ✓ "No robust internal control with startups…" "There is a security risk…"
- No further action after investment
  - Business unit won't collaborate with startups
  - Anticipointment because of sloppy diligence review
- Lack of expertise on startup investment terms
  - Lack of knowledge in valuation of startups lead to overvaluation
  - Lack of knowledge in market terms of startup investments
  - Misunderstand capital contributor can control startups (forget that investment is in exchange for access to innovation of an equal value)

How to avoid common traps?

"Structure follows strategy"

- Setting up a reporting line different from existing one
  - Corporate venturing must be led directly by a C-position officer responsible for company's long term strategy
    - ✓ Should be headed by the CEO, CFO, or CSO
  - No intermediary between senior management and persons in charge of corporate venturing
    - ✓ Direct communication with senior management leads to quick decision-making
- Need tech-savvy internal staff member with knowledge of "who a key person is to facilitate collaboration" within the company
  - Capable of pre-negotiating with internal key person to seek for future cooperation
  - To create a "Shopping List" that specifies technologies needed
- Need venture capitalist type staff member having access to startup community
  - A traditional company attempting to deal with startups without knowledge of startup eco-system screws up startups
  - Difficult to find a good entrepreneur without any access to startup community
  - Startup investment is totally different from M&As and strategic investment with companies with stable revenue.

If company's existing structure does not allow itself to create a business unit with above feature, then it must form corporate venture arm as a subsidiary

How to avoid common traps

Discuss in-depth strategy and structure investment management process consistent with strategy

- There's no strategy in investing failing startups
  - "Strategic Investment" cannot be an excuse for doing sloppy investment
- Sustainability of corporate venture arm is important
  - Making profits is important for corporate venture arm to survive
  - Corporate venture arm should have a strategy to survive internal "scrap and build" restructuring under the assumption of "making no profit for the coming several years"
  - Pursue cost effective operation
    - ✓ Borrow internal human resources for free
    - ✓ Minimize the number of staff members
    - ✓ Use equity incentives
- Avoid making up ad hoc investment strategy for randomly incoming deal opportunity
  - Create a "Shopping List" in advance by checking technologies in stock beforehand and identifying startups who have technologies in need
  - Consider framework of possible collaboration with a business unit and a startup in advance of investment
  - Obtain commitment from the business unit to collaboration with startup and monitor the progress after investment

Mr. Masakazu Masujima provided the following comment on corporate venturing by conventional large enterprises.

"Startups can survive only within the startup eco-system. A large enterprise may join the ecosystem by either: 1) becoming a limited partner (LP) of an independent venture capital; 2) becoming a strategic investor in one of the financing rounds of startups; or, 3) becoming an acquirer of a startup and provide an exit to its investors. Whichever the case may be, the large enterprise must understand that any single transaction with a startup does not just mean one time transaction with a specific startup, but does mean one of the repeated games with startup ecosystem as a whole. In fact, there exists well-developed networks within the startup space and the community shares not only which entrepreneur is trying to disrupt which area, the strategies of each startup, and technology portfolios, but also which investor is worth dealing with and which investor is a suck. Suppose a large enterprise who invests in a startup engages in any one of the acts to: 1) claim, on account of having contributed capital, ownership of an intellectual property created by the startup; 2) demand that the startup to agree on an exclusivity by taking advantage of its investor position; and, 3) hinder the growth of the startup by leveraging the financial resources of the enterprise. Then, its bad reputation gets shared within the entrepreneur networks. A financial gain could be made from the ongoing project by such bad acts. However, once a bad reputation is created, subsequent investments become very difficult to make, which will cut off the enterprise's access to innovation."

"Business collaboration with a startup should be considered a positive-sum at all times. One must consider the profit to be gained by a large enterprise allowing the startup's business to grow by tens of times or hundreds of times by cooperating for its growth as possible as it can. The benefits earned from such collaboration will be far greater than the benefits earned by depriving the startup of its knowledge or other proprietary assets in the near-term or imposing unreasonable obligations on it which restricts startup's potential. Unless this fact is constantly borne in mind when interacting with startups, the conventional large enterprise will find it difficult to reap the fruits of collaboration."

2) Changing awareness of a large enterprise's HR section: Even sending employees on loan to startup companies

Large enterprises' human resource (HR) management policies have also been undergoing changes, which represent, in our view, an extremely important phenomenon for further promoting collaboration between large enterprises and startup companies, and creating a new startup company out of a large enterprise. The following highlights specific instances.

Large enterprises' practice of loaning employees to startup companies and receiving employees on loan from them

With the aim of revitalizing its business development activities, Morinaga & Co., Ltd. (Morinaga) is pursuing joint creation of new businesses by having its employees interact directly with startup companies using a corporate accelerator program [Note] provided by 01Booster Inc., a business creation accelerator. Moreover, as part of the program, Morinaga employs the Startup Company Stay Study scheme provided by01Booster, in which employees are loaned to startup companies. So far, Morinaga has loaned one employee each to two startup companies, and one of the employees is now engaged in startup company operations in Uganda for a project scheduled to last one year, according to the company. Employees sent on loan to a startup company can learn about the thinking and decision-making procedures of the organization's personnel (management and employees) on a first-hand basis. Such on-loan employees can also experience the company's business administration itself from a broad perspective because each startup company staff member is required to play multiple roles. After being reinstated at their original large enterprises, employees should be able to fully leverage the valuable experience gained during collaborations with startup companies.

In a different move from that of Morinaga, KDDI Corporation loans employees to startup companies to assist them in dealing with staff shortages, and receives professionals on loan from startup companies to boost business synergies. Moreover, one unnamed large enterprise also loaned an employee to a startup company on a trial basis, starting from the spring of 2016.

Some venture capital firms have begun to build a new framework for proactively receiving employees on loan from large enterprises to startup companies, based on the view that securing human resources is crucial for generating accelerated growth, in addition to financial support.

Such personnel-based exchanges between a large enterprise and a startup company enable employees to mutually sense differences between both entities in ways of thinking and behavioral patterns during individual stages of performing duties, thereby achieving a better mutual understanding of the process. This scenario, if realized, would help remove factors that tend to hinder efforts to collaborate on innovation. If a large enterprise's employees, in particular, understand a startup company's corporate culture and business execution procedures, which are totally different from those of a large enterprise, that would be of great significance for pursuing collaboration with startup companies.

Note: Corporate accelerator program

Refers to a program in which a large enterprise is a sponsor among types of program run by accelerators that assist startup companies mainly at the seed stage (for recent developments, see the column below)

Global Accelerator Network (an international association of accelerators) participated in by accelerators from 125 cities in six continents has criteria for accelerator programs including the above-mentioned program, and the following requirements (excerpt) apply.

- Is an assistance program lasting three to six months
- Is a mentor-driven program (mentor leadership-based program)
- Involves contributions of capital and business resources
- Is an initiative friendly to a startup company
- Makes office equipment available to a startup company
- The program operator itself is an entrepreneur that has started a new business

Corporate Accelerator Program:

Large enterprises work with startup companies to create new businesses together

A growing number of large enterprises have been implementing a corporate accelerator program in which the implementer assists a startup company, working with it to create a new business. This type of program is said to allow a new business contributing to the enterprise to be created by itself more efficiently than by acquiring a startup company or by investing in one. Behind the acceleration of this trend are assistance service companies having a wealth of experience.

A sense of fervor filled LIXIL Group Corporation's conference room during a meeting held on the top floor of the Kasumigaseki Building at Kasumigaseki, Tokyo in early August 2016. This meeting was attended by almost 100 professionals composed of top managers from startup companiesand entrepreneurs seeking to achieve growth by collaborating with the group. LIXIL Group, a leading building materials supplier, tasked the startup companies with delivering housing-related innovations.

Previously, information technology enterprises dominated the list of providers of assistance to startup companies. The last several years, however, have seen such assistance provided by entities in an increasingly wide scope of sectors. One company supporting this trend is 01Booster Inc. (01Booster), which has so far been involved in operating corporate accelerator programs in diverse sectors with companies such as Morinaga & Co., Ltd., Gakken Holdings Co., Ltd., and Kirin Brewery Company, Limited.

Attention to detail and care characterize 01Booster, as evidenced by the fact that it starts with employee training at the large recipient enterprise that is designed to change its perception of startup companies. Numerous results have been achieved by 01Booster, such as investments in startup companies by large enterprises and loaning employees to startup companies and business partnerships.

Creww Inc. delivers accelerator programs featuring a relatively light touch by heavily using the Internet for communication between large enterprises and startup companies. To date, this vendor has implemented accelerator programs for 70 companies. About 231 programs, including those under consultation, are scheduled to be adopted by large enterprises, stated the company (as of September 19, 2016).

Flexible handling of professionals being spun off

Among large enterprises turning an in-house technology into an independent business, a step referred to as carve-out or spin-off, there have been a number of instances that are considered to have been effective for creating a startup company out of a large enterprise. Some experts are now seeking flexibility to handle the treatment of employees of spin-offs.

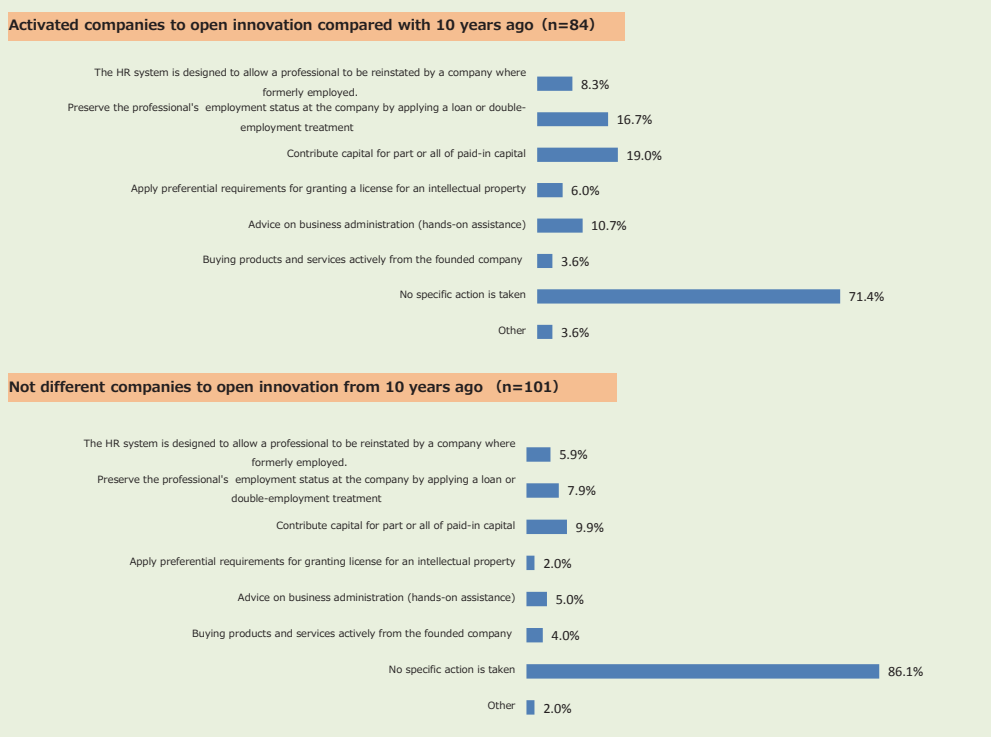
To date, employees intending to become independent through a spin-off deal were typically subject to a rule requiring them to resign from the company, in principle. Nevertheless, among large enterprises promoting open innovation, an increasing number seems to have allowed an on-loan status to be granted to employees (Figure 2-4).

For instance, Fujitsu Limited [Note], a firm that introduced a spin-off scheme in 1994, revised it in 2015 to allow former employees involved with a spin-off to be reinstated at the company within the extent stipulated by its regulations, based on the realization that human resources with experience of starting a new business externally are important. This scheme aimed to stimulate junior employees to take on challenges, according to those involved.

Note) Fujitsu's spin-off scheme: Although called the Internal Venture System within the company, it is actually a spin-off scheme, under which 26 companies have been established so far with 16 still operating, one of which, PAPYLESS Co., Ltd., became an exchange-listed company.

The latest interviews show that management is considering various points, such as how to treat employees wishing to be part of a spin-off, whether to grant on-loan status, and whether a leave of absence is among potential options.

Figure 2-4 Specific assistance for spin-off employee and organization



Source: NEDO, *Open Innovation White Paper* (issued in July 2016)

Changing awareness of HR sections of large enterprises

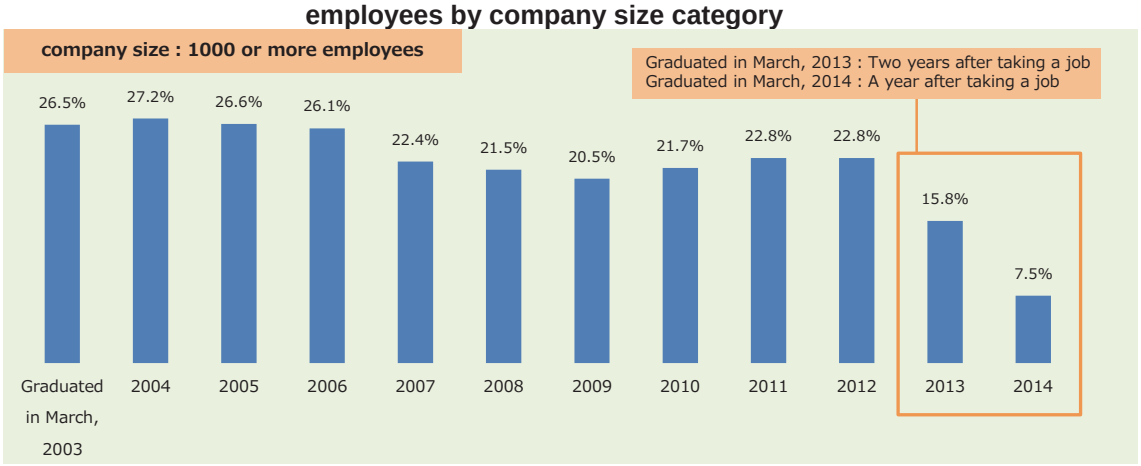
As shown by the examples discussed earlier, loaning employees to a startup company is equivalent to sending them to a startup company stay study program, which is akin to a study abroad program. Awareness of executives in HR sections of large enterprises seems to be gradually changing, making them think that on-loan status duties, representing valuable experience for an employee, is useful for encouraging innovation at the employer company.

If solicitation is done openly within the enterprise, employees wishing to be sent on loan to a startup company could leave the enterprise to officially join the startup entity in the future. Some enterprises, however, even welcome this prospect in a broad-minded decision, based on the belief that such a scenario, if realized, will be useful for retaining close relations with the startup company.

For reference, the Ministry of Health, Labour and Welfare states that an average of a little over 20% of new university graduate employees at Japanese large companies switch employers within three years (Figure 2-5). Of university students who graduated from universities in March 2014, approximately 130,000 entered companies each employing at least 1,000 persons. If 20% of those new graduate employees were to switch employers within three years, the total would be 26,000. While the reasons for switching employers could vary widely, many workers are said to leave a large enterprise because they are not allowed to be assigned to preferred duties or are denied opportunities to perform research and development under their preferred themes.

It is desirable to provide those employees with new opportunities to tackle challenges by loaning them, given their wishes, to collaborating startup companies that aim to commercialize leading-edge technologies. Startup companies find that acquiring the necessary human resources is one of their top operational challenges (see [Figure 3-12, Figure 3-13 and Figure 3-14 in Chapter III “Japanese Startup Business Survey] Pages I-72 and I-73). In this respect, receiving employees on loan from a large enterprise is likely to help secure needed human resources, which makes us think that individual startup companies are well-advised to actively communicate human resource needs to partner large enterprises.

Figure 2-5 Rate of resignations three years after graduation for new university graduate employees by company size category



Source: Ministry of Health, Labour and Welfare, *List of Materials on Resignations by New Graduate Workers*

Conclusion: What should be done to increase startup company leaders and stimulate innovation?

In Japan, there is a significant shortage of startup companies—one of the major engines for creating innovation—and the professionals who lead those companies.

Recently, even Japan seems to have been beginning to see an increase in new university graduates joining startup companies immediately after graduation or joining large enterprises before switching to a startup company employer. On the other hand, many high-quality students in the U.S. are said to start new businesses or join startup companies just after graduating from undergraduate or graduate courses.

In present-day Japan, many students actually seek to join large enterprises in search of stability.

What should be done to sharply increase the number of startup company leaders?

As discussed in the Introduction section of the 2016 VEC YEARBOOK, in order to grow the seeds of entrepreneurship, the following two steps are essential.

1) Improve labor market flexibility and provide increased opportunities for employees of large enterprises to take on the challenge of starting a new business

2) Transform the country's education system into one that is problem-solving-centric[Note]

(Note: An attempt in this direction has already started (see the column titled "Learning Approach Revolution" on the next page)

In fact, it would take a fairly long time before a growing number Japanese become entrepreneurs through the positive effects of improved labor market flexibility and reforms of its education system.

Meantime, what can be done?

The answer is to encourage large enterprises to loan employees to startup companies, as discussed in this chapter, thereby developing an environment in which a large enterprise and a startup company can collaborate properly with each other. The hiring of former startup company executives and enployees, which is already practiced by some entities, should help develop an environment for collaboration between large enterprises and startup companies.

Generally, if a startup company is acquired, an employee or a team previously loaned to the startup company would find many opportunities to perform well in new business development activities by fully leveraging their experiences. Moreover, if such professionals serve a startup company in the future after leaving a large enterprise, their previous on-loan startup company experience should also help them greatly.

Whatever the case, it would be highly desirable for startup companies and the Japanese business community to see the number of prospective business management professionals equipped with extensive risk-taking experiences grow sharply in the country.

Learning Approach Revolution

Venture Enterprise Center, Japan

President Ryuji Ichikawa

"Learning Approaches Reform" was as an alternative title I also considered for this column. What is happening now should be likened to a revolution in the light of Japan's conventional senior high school education. This apparently represents a "Teaching Approach Revolution" as well, so I would very much like to see educators join the event's class inspection sessions from 2017.

This is based on a vivid impression I had when attending the Global Technology Entrepreneur 2016 (GTE2016) event organized by Kapion Educations Organization on August 2 to 4, 2016 in Wakayama.

The first reason I use the word "Revolution" to describe the situation is the outstanding quality as a teacher of Mr. Juston Glass, a Silicon Valley senior high school teacher (originally a Certified Public Accountant). During the session, students continued to be overwhelmed by a flurry of fast-spoken English words. I asked two female students from a senior high school in the State of Kansas, located more or less in the central part of the U.S., about the session. They said the teacher's English was too fast and tough even for them, albeit being Americans, adding that they were worried if Japanese students could follow the presentation. Local Japanese students probably found partial translation into Japanese by Japanese graduate school students with foreign living experience who attended as support staff helpful. As for Mr. Glass's quality as a teacher, I found him to have an excellent ability to identify each of the 22 students present (17 Japanese, two Americans, two Pakistanis and one Vietnamese). On the morning of Day Two, after having these students cover their name plates, the teacher recited their first names from memory, with about 80 percent accuracy, although the names were mostly foreign. In addition, when handing out course completion certificates on the final day, Mr. Glass elaborated on each student's personal traits and things each had worked hard on. More than anything, he showed a passion for teaching.

The second reason is a procedure in which students are encouraged to think about things in depth. On Day One, students sitting close by were asked to form teams of four to five persons before devising business plans on a team-by-team basis. This was followed by a series of lectures and team discussions. During the discussions, the teacher gave appropriate advice to each team. In fact, on Day One a student proposed tackling the issue of nuclear waste treatment. In response, rather than telling the student to abandon the idea due to the difficulty involved, the teacher provided advice on what must be considered, and left the matter for the team to discuss. As a

result, the team continued discussing the issue until midnight before switching to a different plan. Although the individual teams were composed of students who previously did not know each other, the team members instantly became friendly during the two-day program, engaging in heated discussions with their eyes showing a sense of seriousness. When a team leader student saw his idea rejected, nearly putting the team in a state of disintegration, the teacher advised that the leader must work as a "servant leader," taking the initiative to address issues. Concerning each activity considered by the students, issues and points required to be addressed were pointed out one after another by the teacher. This was probably attributable to the fact that his senior high school was situated in Silicon Valley, and engulfed by information on startup companies, and that his students comprised many children of second- and third-generation Indian-American entrepreneurs.

The third reason is the frequent use of games, which are not smartphone games but games involving physical movements of students. The most interesting was a supply chain management game, in which each student at the end of the classroom was supposed to throw a candy into a bucket placed diagonally at another end of the room, winning five points, if successful. The throwers, however, were required to kneel on the floor, making it unavoidable to place middlemen at midpoints, and points were deducted on a one-point-per-middleman basis. Different teams were supposed to compete against each other for the highest team score. Students strategically considered how many middlemen to place and where, working on the task seriously. Each time a candy hit the target, their roars of joy were heard. Although not knowing why this kind of game was required to be played at the time, each student would probably discover its meaning later when looking back on the experience, due to body-based memory. Asked if games of this type were original, the teacher said some of them were original while some others were based on ideas received from colleagues.

The fourth reason is the fact that the process of conducting the lively and enjoyable program actually covered knowledge that is essential for starting a new business, such as SWOT analysis, Lean Startup Business Model Canvas, and balance sheets. The teacher's presentation on financial statements undeniably gave the impression of not being understood well enough by the Japanese students as they had never seen them before and the briefing took place in the final part of the session amid tight time constraints. So, I thought this subject should be explained from next time even by opting to spend more days on the program.

In addition, I was much impressed by the teacher's skill to create a good atmosphere through, for example, arranging for pop music to be aired during team discussions.

I pointed out that Japan had National Curriculum Guidelines in place, making it difficult for

teachers to provide lessons at their discretion. In response, Mr. Glass answered that state schools and private schools differed from each other in this respect, adding that his school was private, giving more discretion to each teacher.

According to media reports, some experts in Japan are seeking to revise the National Curriculum Guidelines, aiming to introduce an active learning method for class sessions. It is my strong wish that experts involved will participate in the GTE class session inspection program from 2017. It is a rare program that allows attendees to experience Silicon Valley education in Japan on a first-hand basis, without having to visit the U.S. Each teacher would be able to put active learning into practice only after undergoing extensive training.

Lastly, to opine on the shape of education in the future, citizens would be required to have a skillset that is totally different from the one currently needed as robots and artificial intelligence (AI) become increasingly prevalent in people's living environments. In this respect, I am gravely concerned that citizens could end up potentially experiencing an unfortunate mismatch in the future unless our education system is first transformed into one that is well-prepared to address the situation. We will no longer need an education program in which a student memorizes information before coming up with the one correct answer to a given question. By only knowing in advance how to retrieve information, each student will be easily able to verify that information when interested in doing so. More important will be training designed to help each person discover challenges in the living environment and intensely debate within a team a potential solution to each challenge, while devising a business plan. The skill to make that happen is something that deserves to be mastered by a person as a human being. In my opinion, moving in this direction will enable a startup company culture to take hold in Japan, serving to generate economic growth and create jobs.

Tackling the challenge of FinTech

Venture Enterprise Center, Japan

President Ryuji Ichikawa

Presented jointly by the Financial Services Agency (FSA) and Nikkei Inc., the FinSum Symposium (FinTech Summit Symposium) was an event where international financial experts could meet. This symposium's innovativeness was observed in that the FSA, a regulatory body, took the initiative to advocate activities to address new technologies and systems such as blockchain.

At the outset of the event, Taro Aso, Deputy Prime Minister, Minister of Finance, Minister of State for Financial Services Minister stated that the FSA must transform itself from a "Financial Sanction Agency" into a "Financial Development Agency," outlined the need to promote FinTech, and drew the audience's attention to the need for experts to provide explanations in order to avoid causing a sense of mistrust among the general public.

What surprised me was the proactive approach to FinTech shown not only by regulators in the U.K. and Luxembourg, countries dubbed as advanced nations in FinTech, but also those in Asian countries such as Indonesia and Singapore. Their feedback was that, needing to address the situation harmoniously, regulators must collaborate with other government agencies, thus working on changing awareness by organizing relevant forums. It was also pointed out that Singapore, being small, was the most suitable test bed for FinTech. Some experts highlighted the "Financial Inclusion" advantage of blockchain technology, saying it allowed previous non-bank account holders (the poor and refugees in Asian and African countries) to engage in financial transactions effortlessly using a smartphone. Some stated that exchanges of value, conventionally transacted through the medium of money, would likely end up being replaced by "Digital-Digital" exchanges, something reminiscent of barter.

Not all experts were found to espouse FinTech and blockchain, which were viewed with caution by some. Some question the ability of distributed ledger system even though bitocoin-related services have already been commercialized. In June 2016, a DAO incident occurred with a hacker cashing out a significant amount of money by taking advantage of a code fragility of the victim, pointing to the need for research into ensuring security and privacy protection. It was also argued that the current state of blockchain technology was comparable to that of the Internet at its dawn in the 1990s, when it had yet to enable exchanges of video, and that the world needed a more mature and stable platform. Realizing this will require industry standardization, such as in the form of International Standards Organization (ISO) Standards, which however will take three to four

years, according to some experts. As for the fact that this subject attracted much public attention, despite the lack of major FinTech players like those found in Silicon Valley, some said this pointed to concerns over existing banks, claiming that Japan had gone so far as to invest in maintaining old systems replaced at the time of the last global financial crisis, and had yet to make the kinds of investment carried out in the U.S. to prepare for change.

The latest symposium was participated in by three Japanese megabanks, along with leading banks and insurers. These participants individually briefed on their proactive FinTech activities. What struck me as novel was an opinion that, for existing banking businesses, it was actually important for banks to be data-rich rather than cash-rich, and that they should use customer information as big data, something not practiced to date partly due to regulation. As for insurance, a sector in which the term "InsureTech" has been coined, details of an accident occurring in the age of the IoT can be correctly reported to the insurer thanks to a sensor function without a need for a telephone call. Compared to banks, insurance companies are generally slower to take action, according to an expert. Enterprises seeking collaboration with startup companies must do so with a sense of urgency, something that affects manufacturing companies as well.

The symposium gave a sense of reality to the dream scenario that, through FinTech, experts will pioneer a new age of finance in Japan, one that is based on user protection, fraud prevention, and system stability under appropriate regulations, something that is to be achieved in the light of constructive public-private-sector dialogues with the FSA leading the way.

Chapter III. Japanese Startup Business Survey

1. Outline of 2016 Survey

Following on from the 2015 survey, VEC conducted the online Survey on the Startup Business Environment (2016), targeting startup companies established within the previous 10 years, instead of those within the previous five years, a scope that had been applied to the 2015 and earlier annual surveys. The following table provides an overview of the survey.

Summary of the survey	
Target companies	Startup companies established within the previous ten years
Survey collection period	June 8th – July 7th, 2016
Survey method	Web surveys
Number of companies surveyed	3,273
Number of companies responded	404
Response rate	12.3%
Valid number of companies responded	399*
Valid response rate	12.2%

* Excludes the startup companies established before 2006

The following table shows the number of responding startup companies that received funds from venture capital (VC) firms after they were established and those that did not.

Number of Responding Companies receiving/without VC investments

	Number of companies responded
Receiving VC investments	141
Without VC investments	258
Total	399

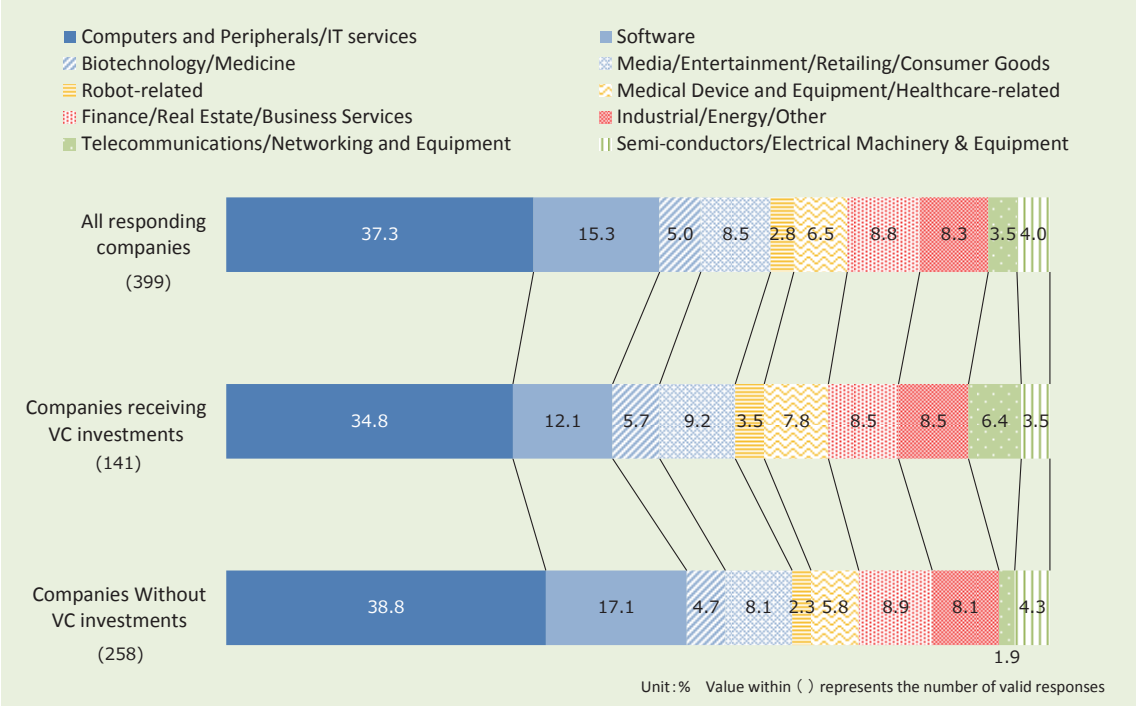
Please note that there is a large gap between the number of companies included in “Received VC investments” and those included “Without VC investments.” Each figure lists the number of valid responses to the corresponding survey.

2. Profiles of Responding Startup Companies

(1) Industries

The industry breakdown of respondent startup companies shows that, regardless of whether or not invested in by venture capital, the Computers and Peripherals/IT Services Industries accounted for the largest proportion of total respondents, or approximately 40%, trailed by the Software Industry. These two industry groups represented about half of the total. Startup companies in the Telecommunications/Networking and Equipment Industry showed a slight difference. Such companies accounted for 6.4% of total respondents "receiving venture capital," and represented 1.9% of total respondents "not receiving venture capital." However, other industries' percentages in these two respondent categories were more or less consistent.

Figure 3-1 Industry Distribution of Responding Companies



(2) Stage

The stages of startup company in VEC's survey are defined as follows.

Stage	Definition
Seed	Companies undergoing research and product development but has yet to establish a commercial business operation.
Early	Companies with product development, and the early stage of marketing, manufacturing and sales promotion.
Expansion	Companies that have started production and shipment with its inventory and/or sales growing in size.
Later	Companies that have a continuous cash flow and are nearing the stage for IPO.

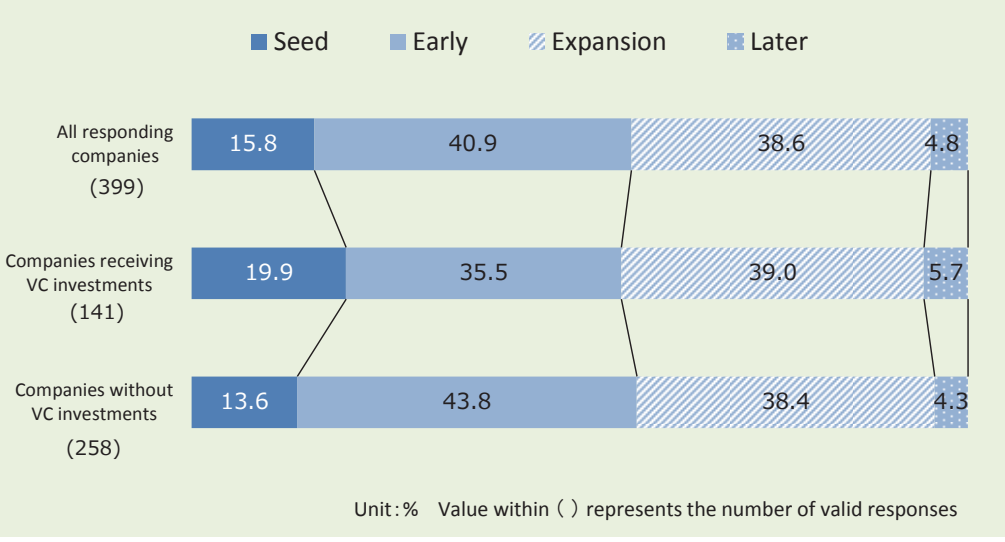
Looking at the overall stage distribution of respondent startup companies, not much difference was shown by the two respondent categories, namely, those "receiving venture capital" and those "not receiving venture capital," although an 8.3 percentage point variance was observed for Early Stage companies. Early Stage and Expansion Stage startup companies each accounted for about 40% of the total in both categories, with Seed Stage startup companies representing around 20% of the total and Later Stage ones about 5% of the total. Stage breakdown displayed comparable trends to our past survey data.

This year's survey, targeting startup companies established within the previous 10 years, covered a wider range than that of the 2015 survey (startup companies established within the previous five years). This change of scope resulted in the proportion of Later Stage startup companies to be higher that in the 2015 survey (1.5% overall), although it is still not high. One survey* claimed that it takes an average of 20 years from founding to share listing, which suggests that not many startup companies grow to the Later Stage, the phase just prior to an IPO, within 10 years after founding.

* PricewaterhouseCoopers Aarata LLC, 2014 IPO Companies: Business Descriptions and Founding to Listing Periods

(http://www.pwc.com/jp/ja/assurance/research-insights/accounting-case-study/com-001.html)

Figure 3-2 Stage Distribution of Responding Companies

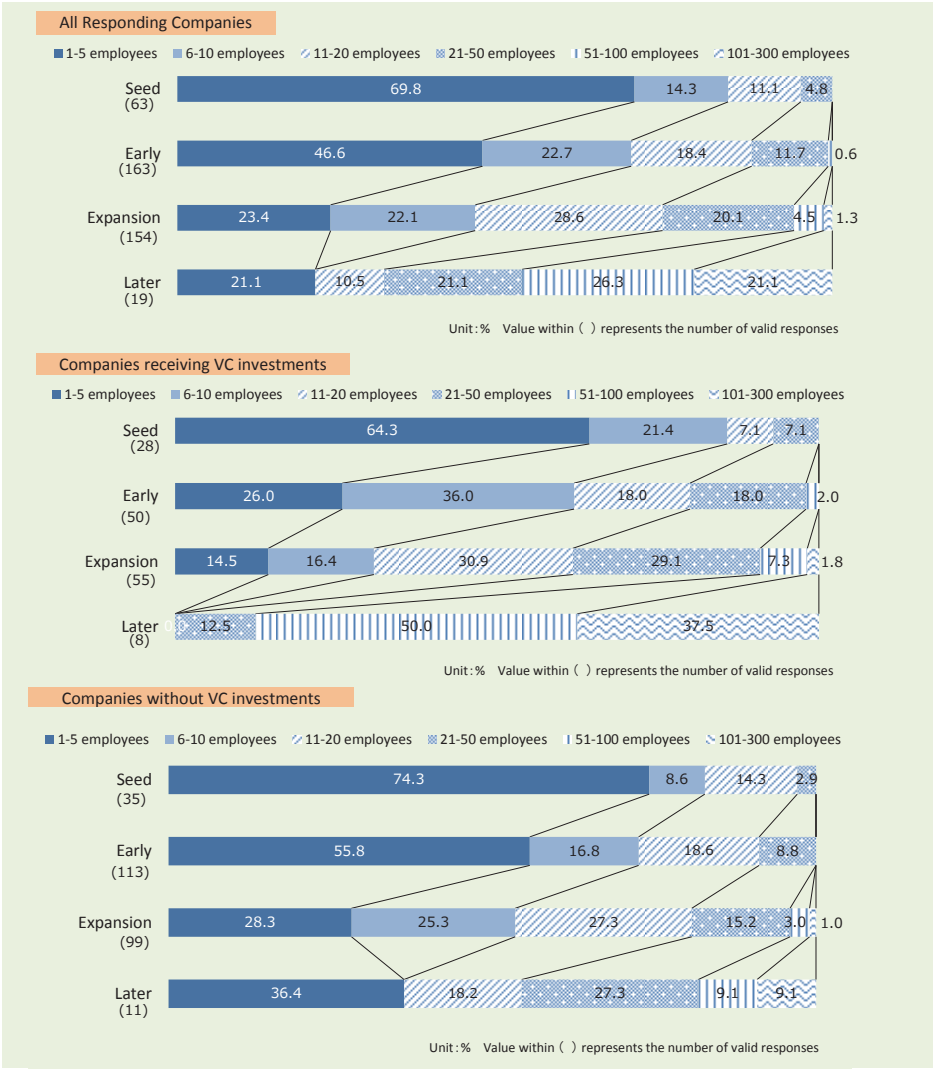


(3) Stage and the Number of Employees

Looking at the number of employees (directors and employees, including non-regular employees such as temporary and part-time employees) of startup companies at different stages, about 70% of Seed Stage startup companies were found to be staffed by one to five persons, whether or not it received venture capital. The later the stage, the greater the number of employees tended to be, and some Expansion Stage and Later Stage companies were staffed by 101 to 300 employees.

Startup companies receiving venture capital tended to be larger than those that had not received venture capital, with all Later Stage VC funded companies having more than 5 people. However, 61.8% of Expansion Stage startup companies receiving venture capital were organizations staffed by up to 20 employees, showing them to be predominantly small enterprises in terms of the number of employees. Moreover, although the samples were limited in number, 36.4% of Later Stage startup companies that have not received venture capital were entities staffed by up to five employees, which was in a stark contrast in size to peers receiving VC funding.

Figure 3-3 Number of Employees Distribution of Responding Companies by Stage



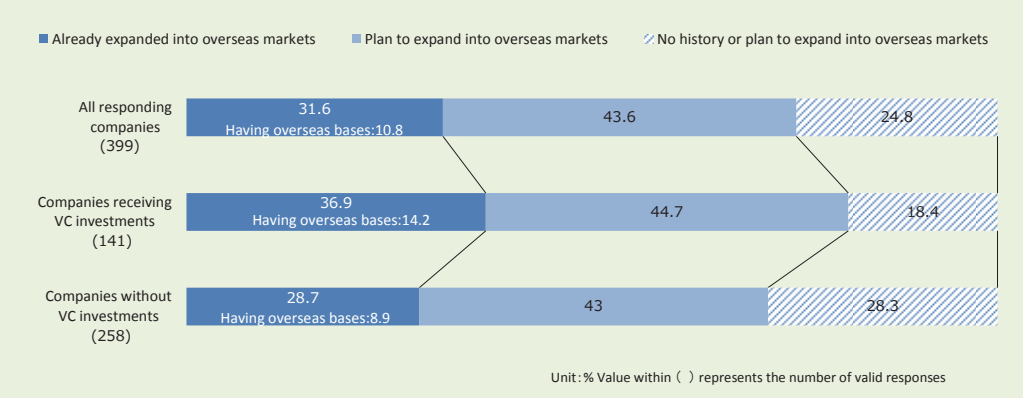
3. Status of Business Development

(1) Overseas Business Development

The survey finds 31.6% of all respondent startup companies had already expanded into overseas markets (sales and procurement), with 10.8% of those companies having overseas bases.

The ratio of startup companies already dealing with overseas markets was somewhat higher among those receiving venture capital than among startup companies not receiving venture capital. Regarding startup companies that had overseas bases, the ratio of those receiving venture capitalwas about 1.6 times the ratio of thosenot receiving venture capital. Nearly 30% of startup companies that have not received venture capital answered that they had neither begun to deal with overseas markets nor planned to do so.

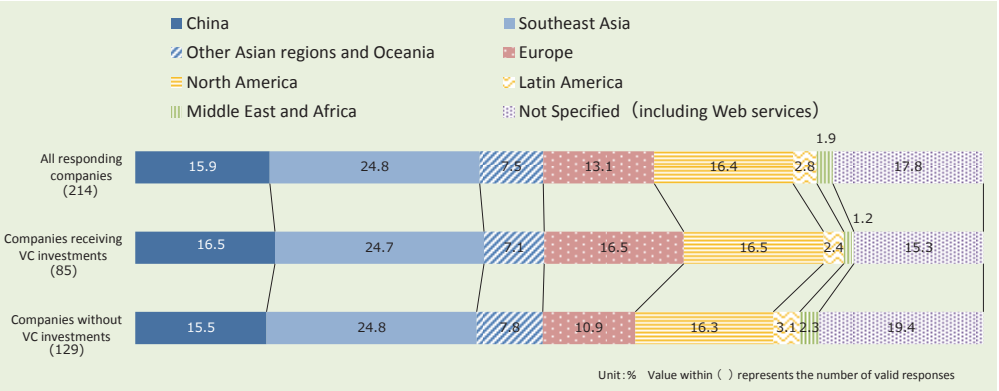
Figure 3-4 Status of Overseas Business Development



Asia had the most activity for Japanese startup companies among both those receiving venture capital and those not receivingventure capital." This overall proportion of Asia, including China, Southeast Asia, and "Other" Asia, was equivalent to approximately 50% of the total. In particular, Southeast Asia represented one fourth of the total overseas areas addressed by Japanese startup companies. In recent years, Asia including China has attracted much attention as an investment market by venture capitals, so Japanese startup companies are likely begin to address Asia as a whole even more in the coming years.

The ratio of startup companies already dealing with European markets was somewhat higher among those receiving venture capital than among startup companies not receiving venture capital.

Figure 3-5 Existing Overseas Business by Region



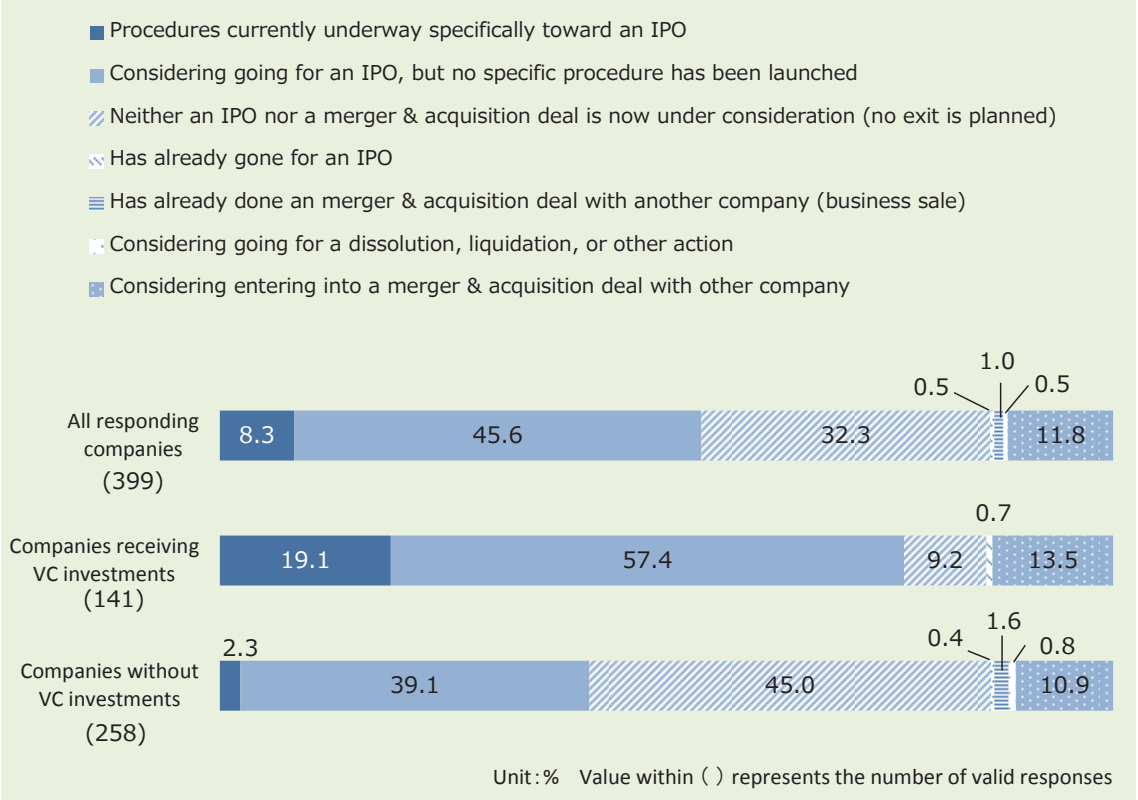
(2) Future Business Plans

60% of total the startup company respondents wish to conduct an initial public offering (IPO) of shares or are already engaging in specific procedures toward an IPO. In contrast, only about 10% of respondent startup companies considered conducting a merger and acquisition deal. Compared to Europe and the U.S., the number of merger and acquisition deals in Japan has been much smaller. This survey's findings reveal that in Japan,mergers and acquisitions is a much lower priority than conducting IPOs.

As for future business planning, 76.5%, approaching 80%, of startup companies receiving venture capital wished to move on to conduct an IPO. Approximately 20% of them had begun to engage in specific procedures, suggesting an IPO deal was on the horizon for many startup companies that have received capital contributions from venture capital.

On the other hand, less than half of startup companies that have not received venture capital wished to move on to conduct an IPO deal. Over 40% of startup companies in this category contemplated neither an IPO nor a merger and acquisition deal as a potential option, which was in stark contrast to startup companies receiving venture capital.

Figure 3-6 Future Business Plans



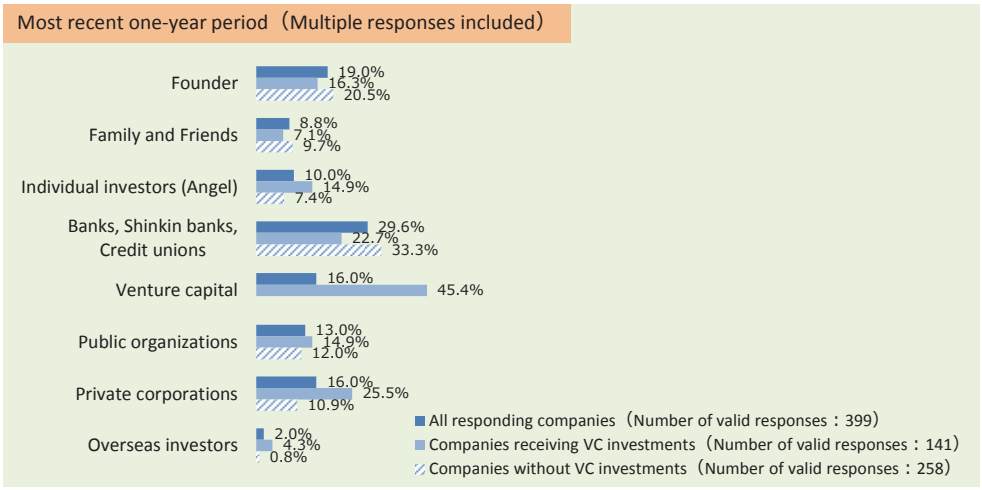
4. Status of Fundraising

(1) Status of Fundraising during the Most Recent One-year Period

Looking at sources of the funds raised for all responding companies in the previous one year by deal count, the “Banks, shinkin banks, and credit unions” category came in at 29.6%, the highest of all sources. This category was trailed by the “Founder” category at 19.0%.

As for startup companies that had received capital contributions from venture capital after founding and up to the present time, venture capital accounted for 45.4% of all deals done in the previous one year.

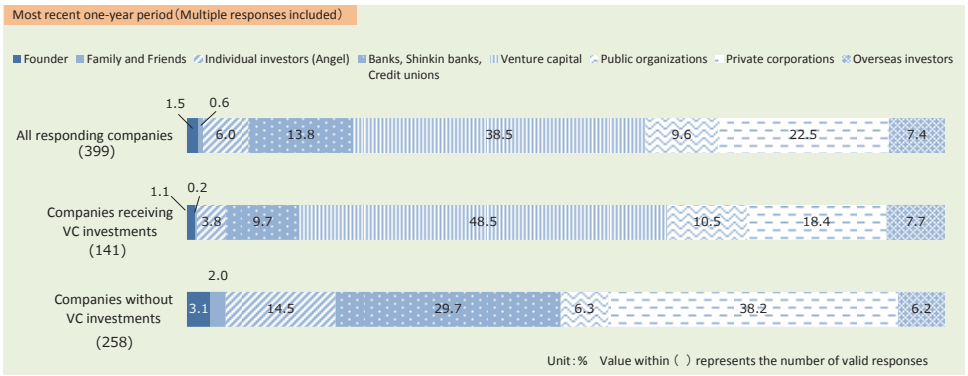
Figure 3-7 Sources of Total Funds Raised during the Most Recent One-year Period (By percentage of number of fundraisings)



Looking amount of funds raised in the most recent one-year period by source, the “Venture capital” category came in top at 38.5% of the total for all responding companies, trailed by the “Private corporations” category, which came in second with 22.5% of the total. These two sources of funds together represents about 60% of the total.

As for startup companies receiving venture capital,” the “Venture capital” category came in highest at 48.5% of the total. On the other hand, looking at startup companies that have not received venture capital, both “Banks, shinkin banks, and credit unions” category and “Private corporations” category provided comparatively high levels of funding, each accounting for 30% to 40% of the total.

Figure 3-8 Sources of Total Funds Raised during the Most Recent One-year Period (By percentage of amount of funds raised)

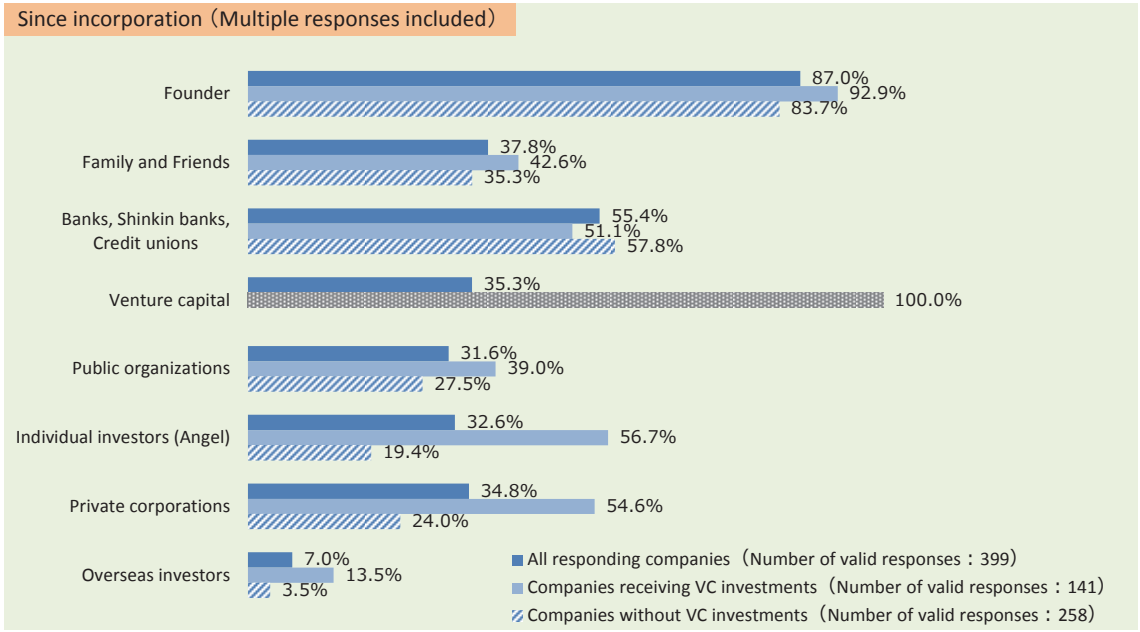


(2) Status of Fundraising Since Incorporation

Looking at the deal count ratio of sources of funds raised from incorporation until now, the “Founder” category provided funding activities to most startup companies, both among those receiving venture capital and by those not receiving venture capital. The “Banks, shinkin banks, and credit unions” category came in second at over 50%.

The percentage of respondants receiving funding from individual investors (angels) and private corporations for startups that have received venture capital were both higher by about 20 percentage points than those of companies that have not received venture capital. The percentage of fundraising from overseas investors was 13.5% for startup companies receiving venture capital funding versus 3.5% for those not receiving venture capital, showing a significant difference, although involving only a small number of instances.

Figure 3-9 Sources of Total Funds Raised since Incorporation
(By percentage of number of fundraisings)

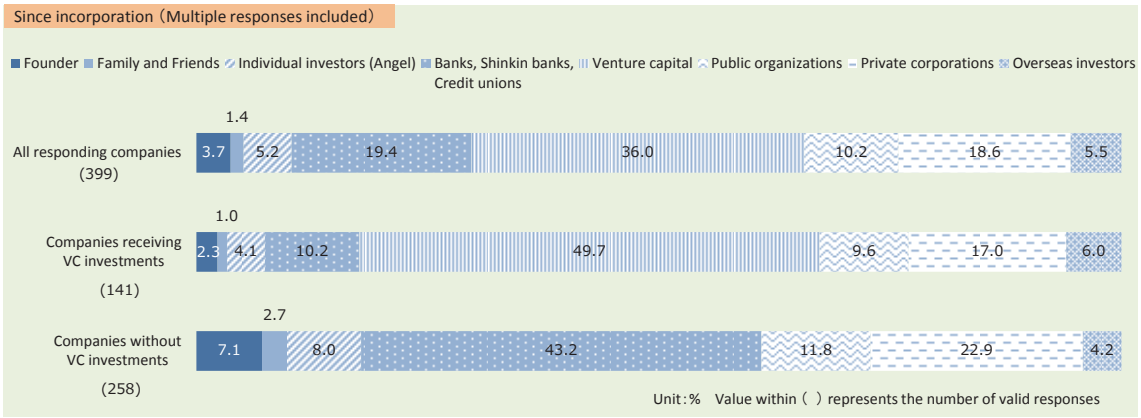


Looking at the sources of the funds raised by value share for all respondants, the “Venture capital” category came in top, followed by the “Private corporations” category and the “Banks, shinkin banks, and credit unions” category. The “Founder” category, accounted for a massive 87.0% in deal count share, but only represented less than 5% by the amount of funds raised showing that individual deals were extremely low in value.

Comparing startup companies receiving venture capital and those that have not received venture capital, the former group showed the “Venture capital” category accounts for about 50% of funds raised.

As for startup companies not receiving venture capital, the “Banks, shinkin banks, and credit unions” category came in top at 43.2%, trailed by the “Private corporations” category at 22.9%. Although accounting for a small amount of the funds raised overall, the shares of the “Founder” category and that of the “Family member, relative, or friend” category were each about twice that of startup companies receiving venture capital.

Figure 3-10 Sources of Total Funds Raised since Incorporation
（By percentage of amount of funds raised）



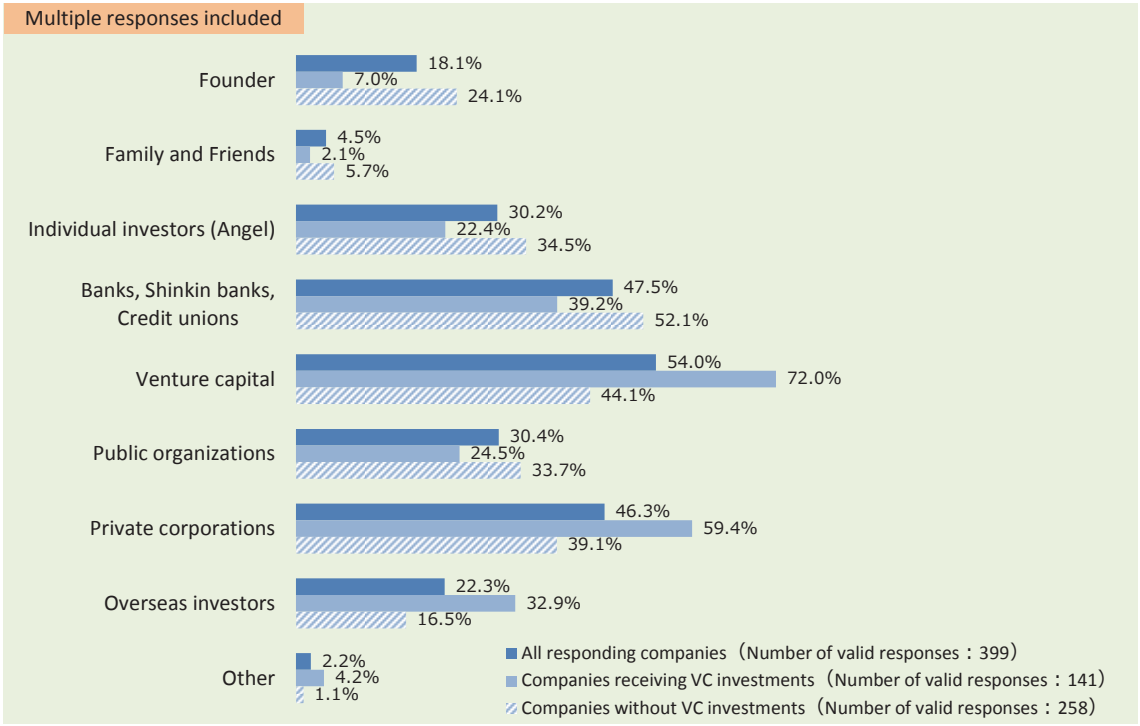
(3) Forecasted Sources of Future Funds

As for forecasted sources of future funding, “Venture capital,” “Banks, shinkin banks, and credit unions” and “Private corporations” categories were the highest sources, each noted by about 50% of all respondents.

In the case of startup companies receiving venture capital, the “Venture capital” category came in top at 72.0%, trailed by the “Private corporations” category at 59.4%. Their expectations of the “Private corporations” presumably reflected the fact that investments by non-financial companies (investments by corporate venture capital) have become increasingly aggressive in startup company investments in recent years.

Looking at startup companies that have not received venture capital, most expected funding from “Banks, shinkin banks, and credit unions”. Their expectations receiving funding from the “Founder” category was over three times that of startup companies receiving venture capital.

Figure 3-11 Forecasted Sources of Future Funds



5. Needs of Startup Companies

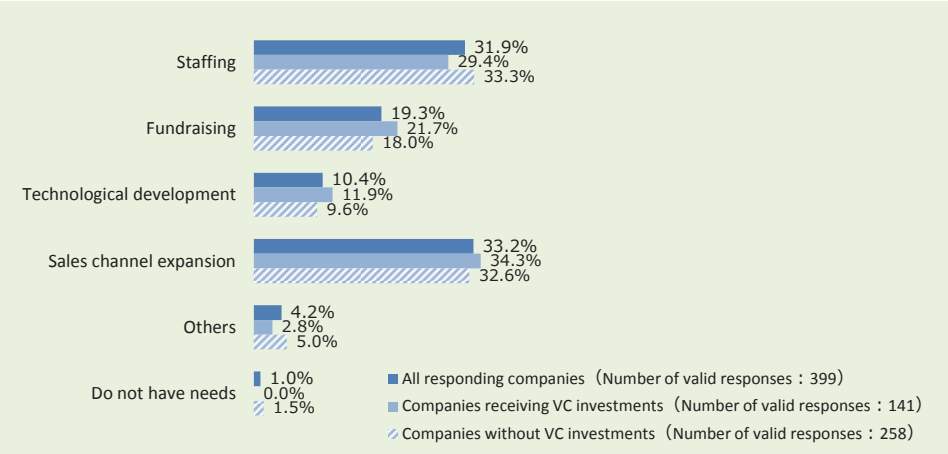
(1) Present Management Needs

The survey asked startup companies about their greatest need among current or future business needs.[Note] The needs cited by companies receiving venture capital did not differ much from the needs pointed out by companies that have not received venture capital. The “Employee recruitment” and “Sales channel expansion” categories were each high at about 30%.

Note: In the 2015 and earlier surveys, multiple answers had been allowed.

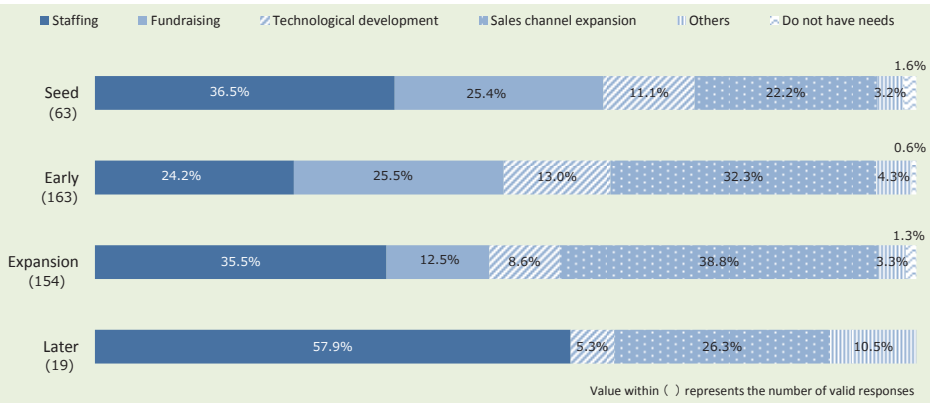
The needs shown for individual items by startup receiving venture capital were stronger than those that have not received venture capital with the exception of the “Other business need” and “Have no business need” categories. Solely for the “Staffing” category, the needs of startup companies not receiving venture capital were somewhat higher than that of those receiving venture capital.

Figure 3-12 Current or future business needs



Examined on a stage-by-stage basis, Seed and Early Stage startup companies showed stronger needs for the “Fundraising” category compared to Expansion and Later Stage companies. The later the stage was, the greater the need was for “Sales channel expansion” and “Staffing” categories with Later Stage startup companies showing the strongest needs for staffing.

Figure 3-13 Management Needs by Stage

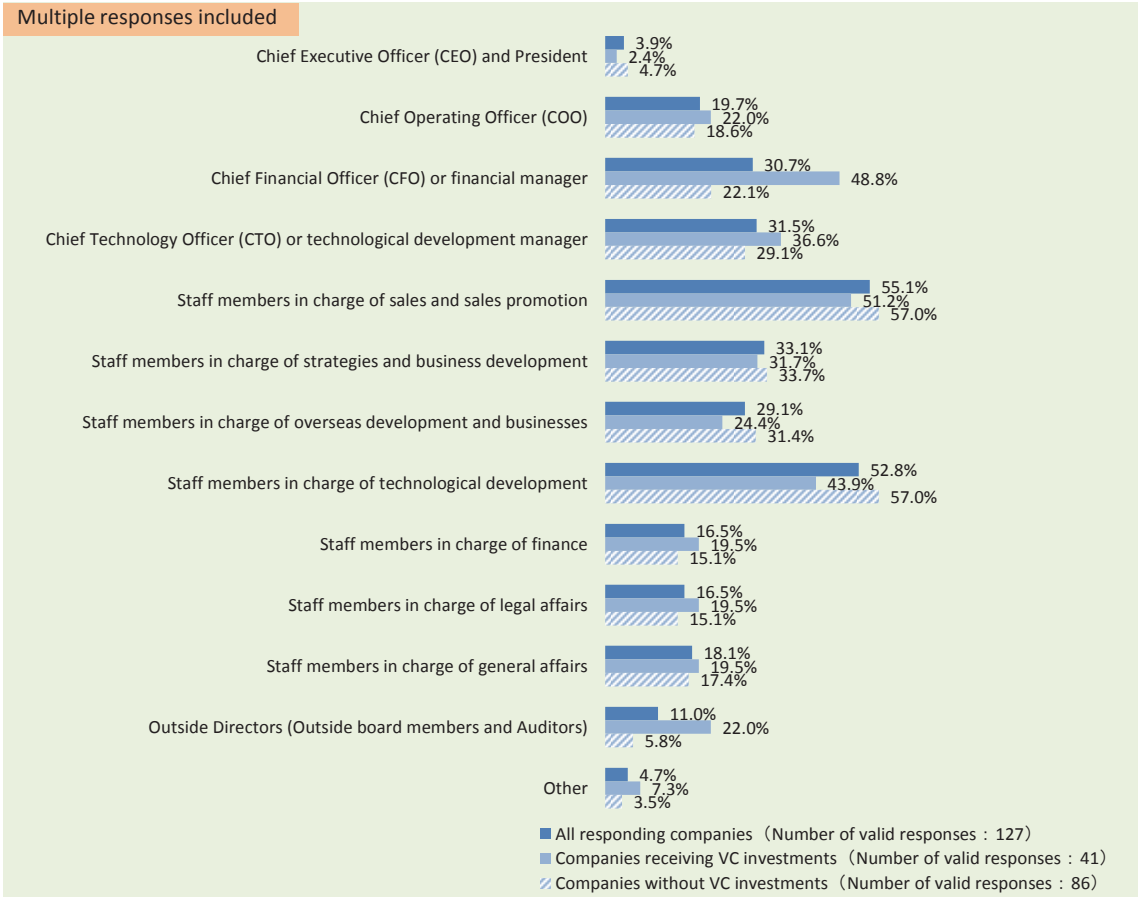


(2) Staffing Needs

When considering needs for all survey respondents “Sales and sales promotion officers” came in top among types of employee most required to be recruited, trailed by the “Technology development officers” . Both categories were cited as necessary by over half of respondent companies answering that they had human resource needs.

The percentage share of startup companies receiving venture capital that needed managers such as chief operating officer (COO), chief financial officer (CFO), and chief technology officer (CTO) was higher compared to startup companies not receiving venture capital. In particular, the former group’s need for hiring CFOs was extremely high at 48.8% of the total, which was more than twice that of peers not receiving venture capital. Although accounting for only a low percentage share, the needs of startup companies receiving venture capital for the “Outside directors (outside board members and auditors)” category was about four times that of peers not receiving venture capital, pointing to a big difference between these groups. A high proportion of startup companies receiving venture capital wished to move on to conduct an IPO deal (see Figure 3-6), hinting that, to bolster their organizational structures, they needed to a greater extent professionals that can support their corporate governance.

Figure 3-14 Staffing Needs



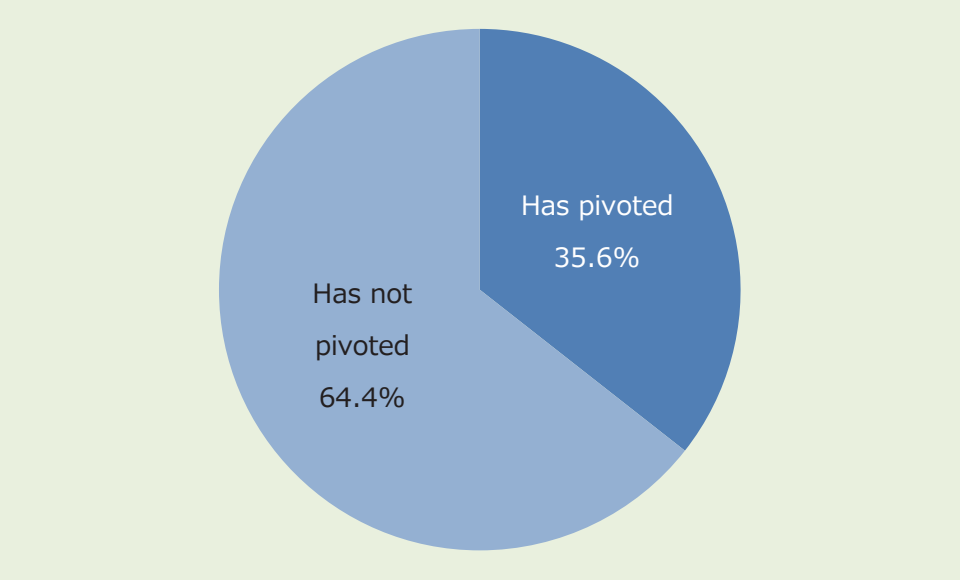
6. Other tendencies

The following outlines characteristic tendencies observed through the questionnaire survey.

(1) Whether or not any pivots had been taken

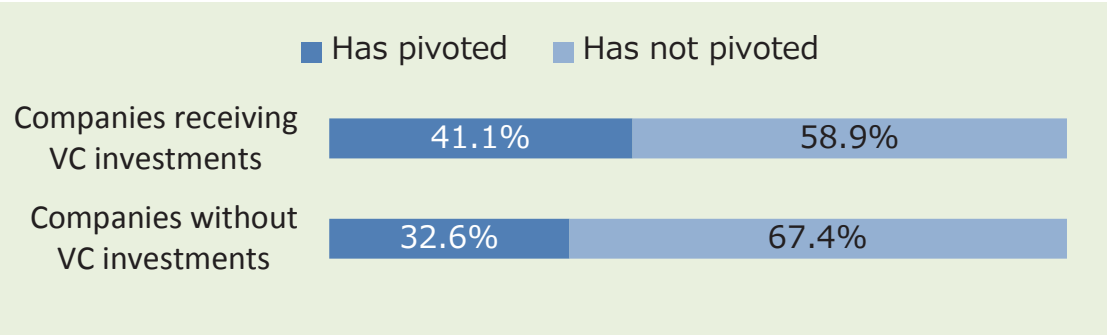
More than 30% of the respondent startup companies answered in the affirmative to a question on whether any pivots had been taken with respect to their flagship business line (a complete shift in strategy for existing businesses and products), showing that many of these companies had taken such action.

Figure 3-15 Whether or not any pivots had been taken



Startup companies who received VC investments are more likely to pivot. One likely reason for this phenomenon is that these startup companies had potentially pivoted for the purpose of obtaining a capital contribution from venture capital.

Figure 3-16 Whether or not any pivots had been taken by companies receiving venture capital and those that have not received venture capital

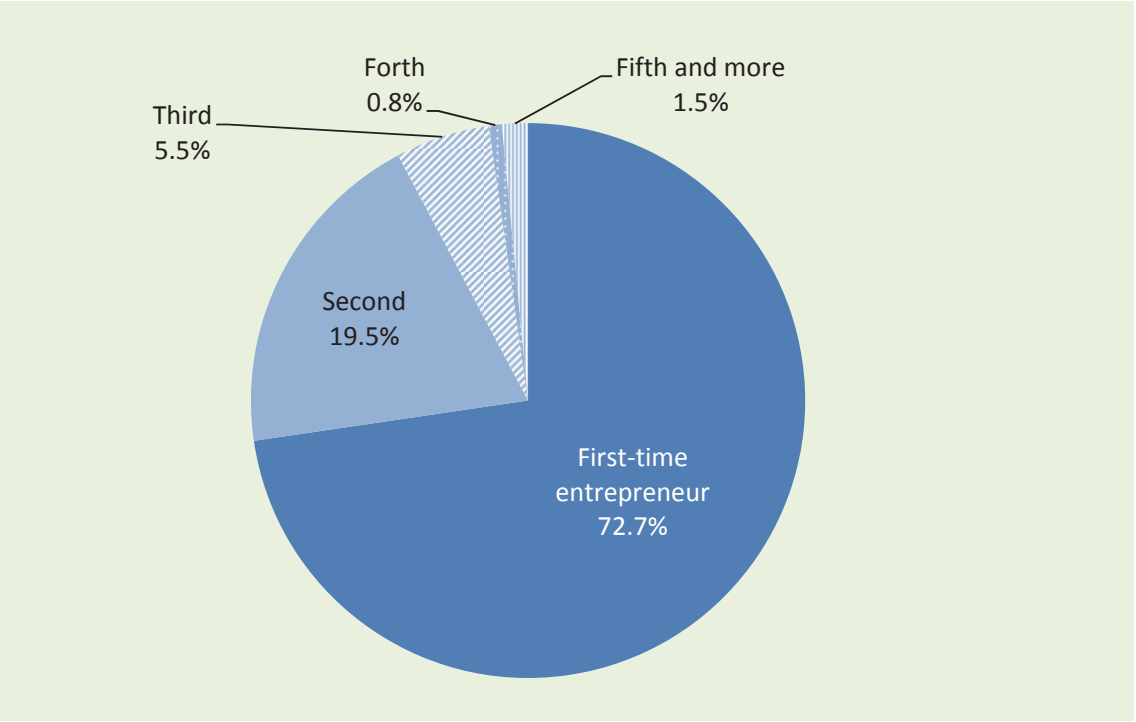


(2) How many startup companies the founder had established

Almost 30% of respondents said the founder had established at least two startup companies, including the most recent one. The data excludes any special-purpose companies such as an asset management

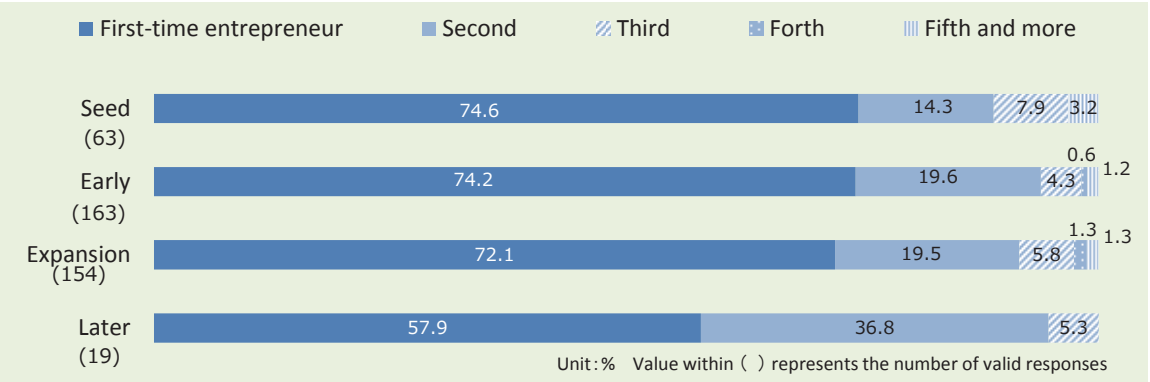
company.

Figure 3-17　The number of startup companies established by the founder



Data compiled across different stages showed that a higher proportion of Later Stage startup company founders had established at least two startup companies, including the most recent one, while founders of Seed Stage through Expansion Stage startup companies exhibited lower proportions. This suggests that a founder having previously started a new business is better placed to grow the next startup company into a Later Stage one.

Figure 3-18　The number of startup companies established by the founder by Stage



7. Requests to the Government and Other Institutions on Policies for Creating and Growing Startup Companies

The survey asked startup companies to provide, in an open text format, their wishes and requests for policies of the government and other institutions. Of the 399 companies that responded to the survey, 89 companies responded to this particular request (22.3% of respondants). The findings are broken down into the following nine items, details of which are discussed in the following paragraphs on an item-by-item basis.

Requests	Number of Companies responded	Percentage
Subsidy and aid system	24	27.0%
Overall support system	14	15.7%
Fundraising	9	10.1%
Developing entrepreneurship environment	8	9.0%
Regions	6	6.7%
Staffing	5	5.6%
Matching with large private-sector enterprises	5	5.6%
Overseas engagement	3	3.4%
Others	15	16.9%
Total	89	100%

(1) Subsidy and aid system

The subsidy and aid system was the top request by among items covered in the open feedback section of the questionnaire. The respondents cited many procedural issues such as: 1) the existing systems of central and municipal governments involve too many processes; 2) the system was found not to be user-friendly in terms of application methods and review periods; and, 3) matters such as documents to be submitted and subsequent reporting are extremely laborious for a lean staffed startup company. Multiple respondents expressed the hope that the scope of subsidy and aid would be improved, saying that: 1) the purposes of use of subsidies are limited in scope; 2) only companies in limited industries can use the system; and, 3) it is difficult to obtain approval for an application by a novel business or a business in a unique industry.

(2) Overall support system

The respondents commented on the “Overall support system” that trailed only the “Subsidy and aid system” among the top requests. Among the comments were: 1) the national subsidy and aid system overly adheres to the framework of conventional industrial sectors. The focus should be on growing companies striving to meet customer needs for new business sectors; and, 2) government policies are

satisfactory, but procedures such as document creation are highly troublesome. Many remarks were made on the fact that, amid ongoing digitization, the support framework did not suit the current situation.

(3) Fundraising

Concerning fundraising, respondents commented on burdens imposed on an entrepreneur seeking to obtain a loan. Among these opinions were: 1) many loan schemes require guarantees and collaterals such as land and building; 2) policymakers must overhaul the requirement of having a loan guaranteer when obtaining a loan; and, 3) risk-taking is impeded by a structure in which the representative director serves as a loan guarantor for obtaining financing from a private financial institution. In addition, some respondents expressed the hope that central and municipal government policies would include those providing entrepreneurs with an opportunity to acquire improved skills in preparing written business plans, coupled with an environment for giving feedback on ideas.

(4) Developing entrepreneurship environment

Referring to the entrepreneurship environment, many comments were concerning the easing the risks of starting a new business. Among these comments were: 1) it is desirable to build a society able to mitigate personal risk for the entrepreneur; 2) even after shutting down a business, the entrepreneur must be allowed to promptly start up another business; otherwise, professionals having gained experience would be lost when a business is shutdown; and, 3) a freer market should be established, based on future-oriented regulatory easing and a structure enabling fair decision-making for that easing. Moreover, respondents expressed specific hopes for business launch preparation support in the form of upgrading entrepreneurship assistance facilities and providing office and equipment at launch.

(5) Regions

Regional startup companies expressed the hope that experts would flexibly handle initiatives unique to individual communities. One feedback was that municipal government projects lacked flexibility, whereas those under direct control of the central government (agency) had a very solid framework. The feedback provider also said that municipal office officials in charge tended to focus mostly on whether a document had been completed flawlessly, adding that it was essential to enable coordination that brings success to each project with due respect to the purpose of the research and development and to build flexible schemes. Moreover, multiple respondents pointed out that regions varied widely in terms of the level of support provided. They stated, for instance, that there was a disparity in the level of support provided in individual prefectures and that prefecture-level subsidies for startup companies differed vastly from one location to another, with some startup professionals often finding peers in other prefectures given preferential treatment.

(6) Staffing

Referring to staffing, many respondents cited serious staff shortages. Among the comments were the following statements: 1) the government wants to consider measures to help startup companies recruit staff given that young human resources tend to be hired predominantly by large enterprises; and, 2) the government must work hard on education and stimulating human resource creation. Some expressed hopes for near-term support to compensate for staff shortages, saying support for back-office functions

should be provided to recently established startup companies.

(7) Matching with large private-sector enterprises

On the question of matching with mainly large private-sector enterprises, many pointed out the existence of barriers to collaboration with large enterprises. Among the comments were: 1) individual large enterprises want to internally set up a dedicated unit or department under a name such as “Open Innovation Department,” seeking to develop negotiations with a startup company on a “Level Playing Field” with the department serving as a contact point; 2) when opening a transaction account with a large enterprise, an entrepreneur is often obliged to provide a loan guarantor, making it difficult to do business; and, 3) large enterprises must create a culture that treats a startup company as a partner.

(8) Overseas engagement

As for overseas engagement, hopes expressed were: 1) it is desirable to have a scheme for central and municipal governments to actively provide information on overseas engagement and place non-Japanese human resources; 2) advice on overseas engagement should be provided at an affordable charge, and there is a need for professionals equipped with overseas engagement experience at a large enterprise. Some pointed out the existence of language barriers, saying that the country’s English education must be reformed urgently to ensure more capable companies continue to be established in Japan, adding that the nation lacked the language skills to show its primary products to be superior in quality to those of other countries and regions.

(9) Others

In addition to those featured above, various comments were provided, including that government agencies and municipal governments should adopt services from startup companies in earnest. Some expressed expectations for venture capital investment, saying that the eco-system appeared to be very important, first and foremost, in order for a startup company to come into being and that venture capitalists wanted to make investments aggressively given that the relationships between a country’s total investments in startup companies and the number of successful startup companies seemed to be identical in nature to the so-called “Chicken and Egg Relationship.”

Recently, the central government and many related institutions have been actively providing a variety of support to startup companies. For instance, various bodies, such as government-affiliated financial institutions and municipal governments, now provide diverse subsidies and loans. Some startup companies, however, have raised the issue of support schemes not being user-friendly. It is not certain whether relevant information is disseminated widely to startup companies to a sufficient degree and whether it is easy to use. At least some aspects of the schemes are said to be problematic. It is thus hoped that, in addition to delivering direct financial support, the above-mentioned bodies will improve their services in the form of consolidating consultation contact points into a single one, simplifying application forms, and providing office space and equipment at business launch.

The respondents also expressed many wishes on fundraising. This survey found fundraising to be at the top of the near-term operational wish-list of Seed Stage startup companies, in particular. Some startup companies have recently come to use crowd-funding services to solicit capital contributions widely from personal investors. In April 2016, Saitama Resona Bank established a scheme called the Saitama Resona Incubation Fund, for directly investing in a company at the founding or secondary founding stage (not necessarily a startup company) (the first-ever scheme of its kind by a Japanese bank). This fund, applying an investment upper limit of ¥10 million per company, made its inaugural investment in September 2016. It is hoped that such efforts to diversify means of fundraising will progress further.

Startup companies are perceived typically as fast-growing enterprises aiming for a share listing. Recently, so-called “Born Global Startup Companies” have begun to come into being. Such companies pursue the policy of rapidly becoming internationalized starting from the early days after founding, while intending to address the global market from the start without being limited to the Japanese market. On the other hand, however, some startup companies necessarily aim for neither a share listing nor fast growth. In fact, this survey found about one third of all responding startup companies answered that neither IPO nor merger and acquisition was under consideration. Such startup companies appear to include many that strive to invigorate regional economies and resolve local community challenges (see the column by Mr. Keiji Imajo, Chairman of FVC Co., Ltd. on the following page). It is hoped those startup companies will be successful as engines of the Regional Revitalization initiative.

VEC will continue to conduct this survey in the future in an effort to understand the business environment and needs of startup companies. We will also release information to all parties interested in improving the business environment in which startups operate.

Current status of Regional Revitalization funds and their challenges

Keiji Imajo, Chairman
Future Venture Capital Co., Ltd.

Track record of FVC's Regional Revitalization fund endeavors

Future Venture Capital Co., Ltd. (FVC) is an independent venture capital firm established in 1998 in Kyoto, Japan under the founding philosophy of assisting management in translating their dreams into reality, and was listed in 2001 on the then-NASDAQ Japan (now JASDAQ). FVC has continued to support companies with superb technologies and innovative business models and their management as a local community-friendly and hands-on venture capital firm with the focus on Early Stage startup companies.

Being among the few non-Tokyo-headquartered independent venture capital firms, since its founding, FVC has been engaged in activities to support startup companies in Tokyo and the country's other regions. In 2001, FVC launched a fund jointly with the Ishikawa Prefectural Government before establishing and managing in the early 2000s, over 10 venture capital funds in different regions with the cooperation of municipal governments, regional financial institutions, and the Organization for Small & Medium Enterprises and Regional Innovation, JAPAN.

Although that period saw venture capital firms other than FVC also launch many regional funds (including so-called "Municipality Funds"), they were funds aimed at enabling a much higher number of regional companies move on to conduct an IPO, something not yet achieved amid a plunge in the number of the nation's IPOs, affected by the Livedoor incident and Lehman Brothers' bankruptcy, which occurred later.

Given this situation, FVC has continued to deliver corporate venture capital (CVC) functions and new business development consulting services to leading enterprises, and to launch so-called "Regional Revitalization" funds as an initiative to contribute to local communities by leveraging valuable experience gained through the above endeavors.

FVC's Regional Revitalization funds

FVC Regional Revitalization funds are funds that support efforts to invigorate regional economies by helping resolve regional challenges.

Regional Revitalization funds managed by FVC have so far consisted mainly of Founding Assistance Funds that support startup stage companies. These funds contribute to revitalizing regional economies by invigorating local communities and creating jobs, something to be achieved by providing equity (capital) to recently established regional startup companies before facilitating their business creation and development activities.

Funds are still far from achieving their goal of enabling a much higher number of regional

companies move on to conduct an IPO, activities worked on across the country. In recent years, however, some entities have begun to consider and implement measures to raise the business founding rate amid a growing desire to revitalize regional economies on the back of government policy support. *Shinkin* banks and credit unions in particular have wanted to see new types of scheme developed because their loan schemes alone were unable to fully meet customer needs, although their potential customer base included recently established companies and prospective managers thinking about starting up a new business.

In response, FVC developed a scheme in which to invest in companies that aim necessarily for neither a share listing nor fast growth. FVC starts and manages funds based on this scheme in collaboration with regional financial institutions, thus supporting a wide range of entrepreneurs and business operators.

The table below lists businesses founding support funds launched and managed in the last few years by FVC, a list that probably is longer than any rival firm's list of this kind in Japan (as surveyed by FVC).

Main Regional Revitalization (Business Founding Support) funds managed by FVC

Fund name ("Investment Limited Partnership" name is omitted)	Established	Limited partners	Total Fund Value
Morioka Kigyo Fund	8/20/2012	Morioka Shinkin Bank, Morioka City Government, Takizawa City Government, Yahaba-cho Government, Shiwa-cho Government	¥100 million
Osaka Sogyo Fund	9/10/2014	Osaka Shinkin Bank	¥300 million
Akita Sogyo Support Fund	10/1/2015	Akita Shinkin Bank, Akita City Government, Oga City Government, Katagami City Government, Gojomemachi Government, Hachirogatamachi Government, Ikawamachi Government, Ogatamura Government	¥100 million
Iwakinokuni Chiiki Shinko Fund (joint GP with Iwashin RITA Partners)	10/15/2015	Iwaki Shinkumi, Ltd., Shinkumi Federation Bank	¥300 million
Kanshin Mirai Fund (joint GP with Kanshin Service)	12/1/2015	Daiichi Kangyo Shinkumi, Ltd., Shinkumi Federation Bank	¥300 million
Kyoto-shi Startup Shien Fund	4/28/2016	Kyoto Chuo Shinkin Bank, Kyoto Shinkin Bank, Kyoto Research Park	¥260 million
Fukushima Yumeno Kakehashi Fund	6/1/2016	Fukushima Shinkin Bank	¥200 million

Characteristics of FVC's Regional Revitalization (business funding support) funds

FVC's strength is its network connecting municipal governments, regional financial institutions, local enterprises/entrepreneurs, and large enterprises -- a network built through its regional engagement pursued to date. One of FVC's characteristics is its extensive list of investments in not

only Internet-related companies based chiefly in the Tokyo Metropolitan Area, but also enterprises pursuing manufacturing and service businesses that are heavily involved in local economies and traditional crafts.

Business Founding Support Funds established in recent years are also designed to support startup companies by discovering promising startup companies and providing them with business assistance. In addition, the support includes financing coupled with loans, in close collaboration with *shinkin* banks and credit unions, among other regional financial institutions, and municipal governments, as well as The Shinkumi Federation Bank and Japan Finance Corporation. Each fund's investments, albeit not very large in value, boost the recipient company's capital, allowing financial institutions to provide loans to the company more easily, a process that supplies it with cash that is sufficient for the founder to start up a business.

To raise the likelihood of recovering investments after investing in a company not necessarily aiming for an IPO, FVC also builds a framework for monitoring a company's operations in collaboration with individual institutions. Moreover, FVC, by actively using class shares, allows the company management or a third party including a business partner to buy equity or the company itself to buy equity as treasury stock according to its operating results so that FVC has other exit options apart from IPO or M&A. FVC prevents ownership dilution, which could occur due to investing in the company soon after its founding by adjusting voting rights.

Future engagement

In the coming years, equity investment through the fund is likely to become more important for business funding support activities in regional areas, but it alone will not suffice. A company in the early days after its founding has shortages not only of cash but also of all possible items, such as staffing, assets, information, and networks, a set of shortages for which backup help must be provided by the supporter. Paradoxically, the fact that the amount of money involved is small makes it extremely difficult to use the fund's operating expenses to cover costs, so it is important to build a platform on which to provide support efficiently. We think this point would be rectified if relevant regional financial institutions not only merely serve as capital contributors for the fund, but also involve themselves in the investment operation. Doing so would enable them to accumulate knowhow such as in making company assessments, monitoring, and providing business support, which would step up local communities' business founding support functions, in our view.

FVC plans to work on various challenges for local communities more widely than before by providing the Regional Revitalization Portfolio Package; in addition to 1) the Business Founding Support Fund delivered to date as a fund to raise the startup rate 2) the Business Handover Fund, aimed at reining in the business termination rate, and 3) the Creating Share Value (CSV) Fund, which is intended to help create businesses designed to resolve local community challenges.Moreover, by building overseas networks and upgrading business startup support

service menus, FVC wishes to deliver detailed hands-on help to the businesses invested in by the above-mentioned funds and related business models, thereby contributing to efforts to perpetuate each business, raise its value, and rejuvenate local economies.

The gradual accumulation of professionals has started to accelerate the growth of Japanese startups

Masahiro Kotosaka, Associate Professor
Faculty of Policy Management, Keio University

What has changed in the last two decades?

VEC YEARBOOK 2016 points to venture capital investments growing sustainably in Japan. Looking at the level of increasing investment and fund values, it appears to me that Japan's startup investments are reaching a new stage.

From late 2015 to early 2016, some investors said this situation was probably a bubble, expressing worries that a sharp downswing would occur soon. However, the nation's venture capital investments will continue to be buoyant, at least in the near-term, from the perspective of capital injection.

Underlying this situation are not just temporary economic fluctuations and the government's short-term economic policies. The source of this change is the fact that Japan's startup community, or often referred as "eco-system", which was born in conjunction with the Internet, has finally begun to secure a certain scale and function.

I have surveyed Japanese startup companies over the past three years. I interviewed over 100 diverse market participants such as startup company top managers, venture capitalists, headhunters, certified public accountants, lawyers, certified tax accountants, and patent attorneys. Through these interviews, I found that the accumulation of specialized management talent is essential for the founding and growth of startup companies.

This represents a change that is not easy to identify, unlike numbers such as venture capital investment, fund values or market capitalization of the Mothers Section of the Tokyo Stock Exchange. However, this talent accumulation factor has brought about, in particular, the distinct change in the business entrepreneurship environment discussed below.

Specialized management talent intermediating in financing

Venture capital investment has become increasingly diversified. In the past, there was an extended period in which only several leading venture capital firms dominated the industry, and those firms saying no to a given investment proposal meant the startup company was denied a growth opportunity. Currently, however, various investors are supporting the growth of startup companies, while playing different roles individually according to growth stages.

For the startup stage, more and more business founding supporters suchas accelerators are

emerging. Government-led startup support services have also been improving. Even at a pre-startup stage, specialized advisors assist a prospective entrepreneur. Moreover, independent venture capital firms boldly invest in seed-stage promising businesses at their own risk. Bank or securities company-affiliated venture capital firms invest in startup companies that have continued to grow to a certain degree, helping them further expand their customer list and prepare for market entry. In addition, there have been a rising number of instances of a corporate venture capital firm introducing customers and intermediating in business acquisition deals. A variety of funding sources, having different expertise, have come to support, in collaboration, the growth of startup companies at different growth stages.

Among experts, some well-known investors and leading venture capital firms are coming closer to playing the role of a catalyst for investment. Information that a given investor or a venture capital firm has invested has continued to function in the investor community to date as a "Currency of Confidence." This type of information has been becoming more and more influential, and highly-skilled investors and business professionals who assess business seeds are expanding the opportunities of high-quality business seeds at an accelerated pace.

Importance of serial employees

Coinciding with the expansion of investors, the pool of business managers has been steadily growing in size and quality. Especially important is the existence of serial employees, whose existence is low-key, masked by serial entrepreneurs starting up businesses one after another, but who cooperate with and support serial entrepreneurs close by or behind the scenes.

A serial employee, albeit not a founder, is equipped with a wealth of working experience at startup companies and has typically experienced what is called an "Exit," namely, an IPO or sale of business. Being well-versed in situations faced by a startup company and ways to deal with them, such a serial employee is a medium who transfers valuable knowhow from a mature startup company to a rising startup company.

Professionals who launch a business from scratch to develop it into a small-size business, professionals who structure the business into a medium-size business, and professionals who organize the business into a large-size business—those diverse professionals experience a number of successes and failures, while flowing in the startup company eco-system as a valuable talent pool. Highly skilled entrepreneurs have become able to efficiently tap into a pool of those management talent to secure a necessary function, instead of managing business on their own.

Talent inflows from large enterprises are considered still limited. While the absolute number is limited in the first place, skills and experience gained at a large enterprise are not very useful at a startup company. However, an increasing number of such professionals have started participating in the eco-system by way of seasoned startup on the course to becoming a large enterprise.

New graduate employees hired in large numbers by seasoned startup companies, after several years, end up becoming valuable labor resources for emerging startup. Moreover, a shift to a

society that is tolerant of diverse ways of working is creating a pool of highly skilled engineers and designers, who remain freelance workers, while reporting to multiple startup companies on a several-days-a-week part-time basis.

In the past, founders were lonely. It was extremely difficult to hire employees, allowing only a limited number of startup companies to succeed. However, the pool of talent supporting the founder and helping accelerate business growth continue to be accumulated, albeit gradually, in the IT startup community, in particular.

Official and unofficial communities supporting human interactions

In the second half of the 1990s when Shibuya, Tokyo was dubbed the "Bit Valley" of Japan, a community that was more exclusive and smaller than now was giving shape to communication among startup companies. Although this community evidently remains exclusive even now in some respects, entrepreneurs in 2016 are allowed to take part in human interactions via communities that are wider and more open.

Experts have created many conferences for startup entrepreneurs, holding a variety of large events such as B-Dash, IVS, Tech in Asia, Slash Asia, ICC, and G1 Ventures, some of which are open to people outside of an exclusive community. Smaller scale events include lectures held at co-working spaces in different locations and event programs at universities, providing countless opportunities for entrepreneurs to encounter people.

Entrepreneurs and prospective entrepreneurs who have become acquainted with each other through such events and gatherings move on to subsequently hold small study meetings, examine business plans together, while continuing to exchange information. Such information exchanges take place through a closed SNS-based community. There are some communities that analyze the articles of incorporation of companies that have successfully exited and some that exchange non-public information on cases of company valuations.

The above-mentioned human relations contribute greatly to considering investment agreements and dealing with litigation, starting from the stage just after founding. One's strong relationships with friends and colleagues are intertwined in increasingly complex ways. Currently, even collaborations based on one's weaker relationships with friends' friends and colleagues' subordinates continue to function highly effectively.

Industry expansion is altering the shapes of communities

The startup company communities that initially grew, driven mainly by entrepreneurs involved in PC-based internet services, are now gradually expanding into other areas. This move stems from the fact that information and telecom technologies are increasingly applied to new sectors such as agriculture and fishery, and that new startup company segments are expanding to include biotechnology, robotics, and artificial intelligence.

Internet-centric companies have been becoming more and more influential. At the same time,

information and telecom technologies have become essential in many business areas as described above, meaning players that are more diverse than ever before have become involved in startup businesses.

In a move referred to as open innovation, large enterprises have begun to attach importance to collaborating with startup companies. Operational knowhow has been accumulated increasingly more extensively. Experts have witnessed a gradual emergence of businesses that raise funds on a large scale during the period just after founding before initiating overseas engagement.

Japan's startup company communities are now on the way to taking solid form after having overcome many challenges and periods of stagnation. Such change, if continued smoothly, is likely to generate a big wave that invigorates the Japan's entire economy.

・Supplementary note 1: Part of the author's personal survey and research activities representing the foundation for writing this manuscript was subsidized with JSPS science research expenses (15K17131) and The European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 645763. The author is most grateful for the assistance.

・Supplementary note 2: This manuscript was composed based on "THE EVOLUTION OF THE ICT STARTUP ECO-SYSTEM IN JAPAN: FROM CORPORATE LOGIC TO VENTURE LOGIC?", an academic essay written by the author jointly with Professor Mari Sako, Oxford University.

Start-up companies and regulatory easing

Venture Enterprise Center, Japan
President Ryuji Ichikawa

When a startup company tries to spread goods or services in a way that goes beyond conventional assumptions in the real world, existing regulations may potentially stand in the way.

Among recent reports on such issues are those on the regulation of the Aviation Act on flying drones and the Radio Wave Act, as well as the Inns and Hotel Business Act on homestay services.

In January 2016, the Tsukuba City Government organized a forum on robot special zones, covering themes on the special zone-based easing of regulations on transportation aid robots such as Segway and Winglet. As pointed out by the city's Governor, it was important for special zones-based regulatory easing to be explained at this forum by relevant officers of regulatory authorities, such as the National Police Agency in charge of the Road and Traffic Act and the Ministry of Land, Transport and Tourism in charge of the Road Transportation Vehicle Act, instead of startup-promoting agencies such as the Ministry of Education, Culture, Sports, Science and Technology and the Ministry of Economy, Trade and Industry.

In the 19th century, the U.K. had in place interesting regulations called the Red Flag Acts. Then in the early days of steam cars, regulators seemed to struggle to decide how to handle the new types of vehicle positioned to replace horse-drawn carriages. For safety purposes, an act of 1865 limited the speed of steam cars to 6.4 kilometers an hour in suburban areas and 3.2 kilometers an hour in urban areas, while making it mandatory for each vehicle to follow a security officer carrying a red flag. Such strict regulations resulted in the U.K. car industry lagging behind its German and French rivals, according to experts. Although subsequently the U.K. began to gradually ease regulations, it was too late.

The Tsukuba City Government is said to have achieved results over four years using a special zone under regulatory easing. The municipality obtained designation in 2011 for the Tsukuba Mobility Robot Experiment Special Zone under the structural reform special zone initiative. Through repeating corroborative experiments and obtaining the understanding of regulators, officials eased regulations on special zones across the country in 2015.

The regulatory easing was carried out gradually in several stages. In the initial stage, each experiment spot was required to be specified as a pavement at least three meters in width with a color cone placed, and a security officer riding a bicycle was obliged to monitor the spot. The bicycle-riding security officer is said to follow a vehicle intentionally slowly, something reminiscent of security officers under the Red Flag Acts of the U.K.

In time, the color cone gradually became not mandatory, and the vehicle rider was allowed to pass through a pedestrian crossing without getting off the equipment and riders of Segways and similar means were authorized to serve as their own security officers. Moreover, regulators abolished the requirement on

road width.

Regulators gradually eased relevant regulations, while essentially seeing if the new mobility robot would be accepted by general pedestrians and the motorized community without a sense of discomfort as a safe type of equipment.

Singapore, due partly to its strong regulations on buying a private car, was quick to see this type of mobility robot used for commuting, and regulators are said to, belatedly, be introducing regulations on its movements on public roads. The Japanese regulators' approach, being characteristic of the nation, took the form of making decisions on regulatory easing, while performing corroborative experiments using the special zones scheme. However, Japanese startup companies intending to deploy new hardware or services may take comfort in the fact that the regulators understood well the signif icance of new types of vehicle and that regulatory easing was successfully carried out across the country within four years by employing the effective means of the special zones scheme.

Admittedly, not every citizen has yet to be authorized to ride types of vehicle such as Segway on a public road. Only municipality operators are now allowed to conduct corroborative experiments approved by regional transportation authorities. So, future progress will be predicated on the fact that Tsukuba's experiment did not experience any accidents such as those involving injury, and further regulatory easing would hinge on the results of corroborative experiments to be implemented across the country from now.

II. Data: Survey on Venture Capital Investment Trends in 2016

VEC YEARBOOK 2016
Table of contents
- Data -

CHAPTER II

Survey on Venture Capital Fund Status ····· II -41

CHAPTER I
Survey on Venture Capital Investment Trends

About Survey on Venture Capital Investment Trends in 2016

Survey on Venture Capital Investment Trends in 2016 was conducted as follows:

Survey collection period	June 3 - August 10, 2016	
Period covered by the survey		
	Two fiscal years before	**Previous fiscal year**
	FY 2014 April,2014 - March, 2015	FY 2015 April,2015 - March, 2016
Number of companies surveyed	163	
Number of companies responded	121 *See"II. Data: page II-136 List of VC firms responded to the survey"	
Response rate	74.2%	

The VEC YEARBOOK 2016 omits presenting the findings of the survey on turnaround and buyout investments, despite presenting them until 2015, because VEC mainly surveys target venture capital without exhaustively surveying all turnaround and buyout investments in Japan.

How to read the charts in this report (points to note)

The charts contained in this report were created based on the results of our survey, which was conducted to find out trends in venture capital investment activities. The following are some points to note in reading the charts.

- "Principal" indicates a principal investing, i.e. investments by a venture capital firm's own account. "Partnerships" or "Funds" indicate investments through funds.
- Investment includes purchases of stocks and bonds (including bonds with share option) as well as investment in a fund managed by a third party.
- Unless otherwise stated, "N" below the tables indicates the number of VC firms whose responses are incorporated in the charts.
- The year-on-year percentage of change is calculated based on answers from VC firms that provided data for both the previous and latest business years.
- When a denominator is 0 and the value cannot be calculated, "NA" is given.
- In the results of the survey, VC firms that did not provide a response were counted as zero.
- The total may not correspond to the sum of breakdown owing to rounding and non-response.
- The "Internet of Things (IoT)" in the industry classification overlaps with other industry categories.

Classifications for the Analysis

Investment Focus by Stage

In stage analysis, deals are classified into four stages according to the maturity of the portfolio companies, and three investment strategies. The classifications and its definitions are as follows.

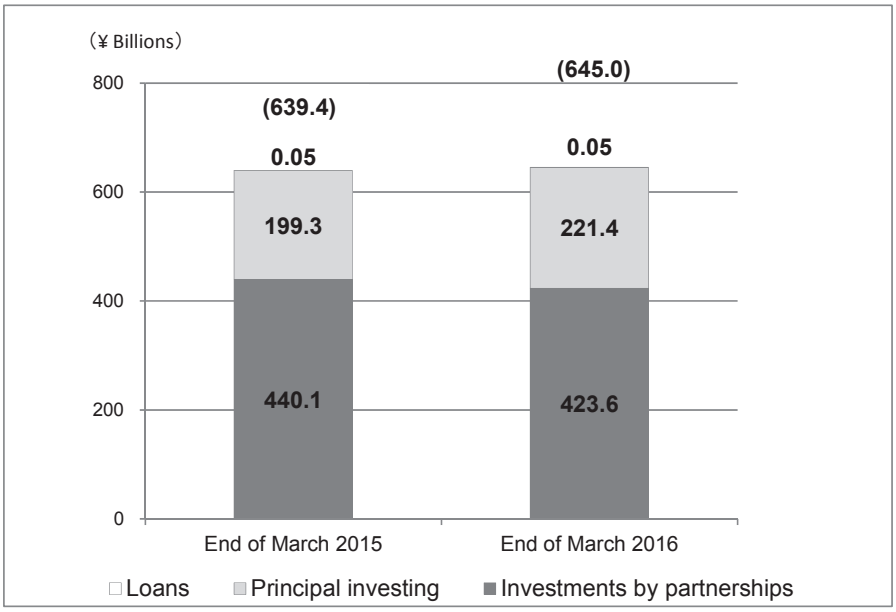
1	Seed	Companies undergoing research and product development but has yet to establish a commercial business operation.
2	Early	Companies with product development, and the early stage of marketing, manufacturing and sales promotion.
3	Expansion	Companies that have started production and shipment with its inventory and/or sales growing in size.
4	Later	Companies that have a continuous cash flow and are nearing the stage for IPO.
5	Balanced	Investment strategy of investing with no particular concentration on either of deals including seed stage, early stage, expansion stage and /or later stage.
6	Buyout	Investment strategy of making leveraged buyout.
7	Recap/ Turnaround	Investment strategy of providing financing at a time of operational or financial difficulty with the intention of improving the company's performance.
8	Not Specified	

1. Investment/loan Balance

(1) Status of investment/loan balance

Chart 1-1 illustrates the change in the venture capital investment/loan balance over the two most recent fiscal years. The breakdown of investments/loans for the most recent fiscal year is shown in Chart 1-2, and the breakdown of investments/loans in terms of the number of deals is given in Chart 1-3. The amount of investments (investments and/or loans) and the number of deals are calculated by simply adding up the figures given in survey answers.

Chart 1-1: Trend of VC investment/loan balance



Note 1: Numbers in parentheses indicate the total amount of investments/loans.
Note 2: Numbers for End of March 2015 are based solely on the latest survey.

Chart 1-2: Investment/loan balance (as of the end of March 2016)

(Yen millions)

	Principal		Partnerships		Total	
		y/y % change		y/y % change		y/y % change
Investments	221,372	11.1%	423,555	-3.4%	644,927	1.1%
Loans	51	-3.8%	0	-	51	-3.8%
Total	221,423	-2.4%	423,555	-3.4%	644,978	-3.1%
N: Number of VC firms responded	N=71	N=70	N=90	N=90	N=96	N=96

Note 1: Numbers above are calculated by simply adding up the figures in answers.
Note 2: Numbers above refer to VC firms that provided investment/loan amount.
Note 3: y/y % change is based on answers from VC firms that provided figures for both 2015 and 2016 (as of the end of March).

Chart 1-3: Number of deals for investment/loan balance (as of the end of March 2016)

(Number of deals)

	Principal	y/y % change	Partnerships	y/y % change	Total	y/y % change
Investments	1,022	-7.4%	3,164	0.6%	4,186	-1.5%
Loans	1	0.0%	0	-	1	0.0%
Total	1,023	-7.4%	3,164	0.6%	4,187	-1.5%
N: Number of VC firms responded	N=71	N=70	N=93	N=93	N=99	N=99

Note 1: Numbers above are calculated by simply adding up the figures in answers.
Note 2: Numbers above refer to VC firms that provided the number of deals.
Note 3: y/y % change is based on answers from VC firms that provided figures for both 2015 and 2016 (as of the end of March).

(2) Investment/loan balance per deal

Chart 1-4 and 1-5 "Investment/loan balance per deal" refers to VC firms that provided both the amount of investment/loan balance and the number of deals. Per-deal figure is calculated by dividing the total amount of balance by the total number of deals.

Chart 1-4: Investment/loan balance per deal (as of the end of March 2016)

(Yen millions)

	End of March 2015		End of March 2016		y/y % change	
	Principal	Partnerships	Principal	Partnerships	Principal	Partnerships
Number of deals	1,103	3,175	1,013	3,153		
Investment balance	198,506	439,416	220,656	423,555		
Investment balance per deal	180.0	138.4	217.8	134.3	21.1%	-4.1%
Number of loans outstanding	1	0	1	0		
Balance of loans outstanding	53	0	51	0		
Balance per loan	53	-	51	-	-3.8%	-
Total number of deals/loans	1,104	3,175	1,014	3,153		
Total balance	226,136	439,416	220,707	423,555		
Total balance per deal/loan	204.8	138.4	217.7	134.3	6.4%	-4.1%
N: Number of VC firms responded	N=71	N=94	N=70	N=90	N=69	N=89

Note 1: Numbers above refer to VC firms that provided both the number of deals and the amount of investments/loans.
Note 2: y/y % change is based on answers from VC firms that provided the number of deals and investment/loan amount for both 2015 and 2016 (as of the end of March).

Chart 1-5: Investment/loan balance per deal (Principal and Partnerships, as of the end of March 2016)

(Yen millions)

	End of March 2015	End of March 2016	y/y % change
Number of deals	4,281	4,166	
Investment balance	638,687	644,927	
Investment balance per deal	149.2	154.8	2.8%
Number of loans outstanding	1	1	
Balance of loans outstanding	53	51	
Balance per loan	53	51	-3.8%
Total number of deals/loans	4,282	4,167	
Total balance	666,317	644,978	
Total balance per deal/loan	155.6	154.8	-1.4%
N: Number of VC firms responded	N=99	N=96	N=95

Note 1: Numbers above refer to VC firms that provided the number of deals and the amount of investments/loans.
Note 2: y/y % change is based on answers from VC firms that provided the number of deals and investment/loan amount for both 2015 and 2016 (as of the end of March).

(3) Distribution of VC firms by investment/loan balance

The following chart shows the distribution of investment/loan balance for "Principal and Partnerships". Chart 1-6 shows the number of VC firms, the amount of investment/loan balance and the composition ratio for each range of balance. Chart 1-7 compares the share of the top ten VC firms and firms ranking 11th to the 20th to the rest of the VC firms in terms of the investment/loan balance.

Chart 1-6: Distribution of investment/loan balance (as of the end of March 2016)

Balance range (Yen billions)	Number of VC firms	Total balance (Yen billions)	Percentage
1 or less	46	20.4	3.2%
over 1 - 5	24	50.7	7.9%
over 5- 10	8	56.6	8.8%
over 10 - 50	8	98.1	15.2%
over 50 - 100	0	0.0	0.0%
over 100	3	419.2	65.0%
Total	89	645.0	100.0%
N: Number of VC firms responded			N=89

Chart 1-7: Investment/loan balance: Top 10 and the rest of VC firms comparison

	Total balance (Yen billions)	Percentage
Top 10	507.3	78.6%
Top 11th to 20th	71.5	11.1%
Top 21th and below	66.2	10.3%
N: Number of VC firms responded		N=89

(4) Distribution of investment/loan balance by region

Charts 1-8 to 1-10 illustrate investment/loan balance for "Principal and Partnerships" by region according to the location of the deals.

Chart 1-8: Investment/loan balance by region
(Principal and Partnerships, as of the end of March 2016)

	Number of deals	Percentage	Amount (Yen millions)	Percentage
Domestic total	3,123	84.9%	284,473	59.4%
Hokkaido	30	0.9%	1,152	0.3%
Tohoku	81	2.4%	5,121	1.3%
Kanto (excl. Tokyo)	281	8.3%	20,834	5.1%
Tokyo	1,488	43.8%	129,780	32.0%
Chubu	138	4.1%	8,602	2.1%
Kinki	458	13.5%	27,270	6.7%
Chugoku	157	4.6%	5,616	1.4%
Shikoku	30	0.9%	2,047	0.5%
Kyushu and Okinawa	179	5.3%	11,165	2.8%
Overseas total	555	15.1%	194,069	40.6%
China	100	2.9%	39,657	9.8%
Southeast Asia	54	1.6%	9,906	2.4%
Other Asia-Pacific region	203	6.0%	52,041	12.8%
Europe	12	0.4%	831	0.2%
North America	170	5.0%	87,658	21.6%
Other Regions	15	0.4%	3,974	1.0%
Total	3,927	100.0%	490,186	100.0%
N: Number of VC firms responded	N=94		N=92	

Note 1: Numbers above refer to VC firms that provided the number of deals and/or investment/loan amount.
Note 2: Percentages of the number of deals and the amount for Domestic and Overseas are calculated based on the sum of breakdown of each category.

Chart 1-9: Year-on-year Percentage change by region for investment/loan balance (Principal and Partnerships, as of the end of March 2016)

	Number of deals	y/y % change	Amount (Yen millions)	y/y % change
Domestic total	3,123	-3.8%	284,473	-1.0%
Hokkaido	30	-11.8%	1,152	3.0%
Tohoku	81	11.3%	5,121	-0.2%
Kanto (excl. Tokyo)	281	-17.5%	20,834	14.7%
Tokyo	1,488	0.1%	129,780	6.3%
Chubu	138	-10.7%	8,602	-3.1%
Kinki	458	-3.6%	27,270	1.4%
Chugoku	157	11.3%	5,616	20.8%
Shikoku	30	40.0%	2,047	17.8%
Kyushu and Okinawa	179	-5.3%	11,165	7.0%
Overseas total	555	-5.5%	194,069	-6.5%
China	100	-25.8%	39,657	-27.4%
Southeast Asia	54	3.9%	9,906	-35.1%
Other Asia-Pacific region	203	21.2%	52,041	2.1%
Europe	12	-8.3%	831	-25.1%
North America	170	-2.3%	87,658	8.2%
Other Regions	15	-18.8%	3,974	-4.0%
Total	3,927	-4.2%	490,186	-2.7%
N: Number of VC firms responded	N=94	N=82	N=92	N=80

Note 1: Numbers above refer to VC firms that provided the number of deals and/or investment/loan amount.
Note 2: y/y % change is based on answers from VC firms that provided the number of deals and/ or investment/loan amount for both 2015 and 2016 (as of the end of March).

Chart 1-10: Investment/loan balance per deal by region (as of the end of March 2016)

(Yen millions)

	Principal	y/y % change	Partnerships	y/y % change	Total	y/y % change
Domestic total	51.5	10.4%	106.1	0.6%	92.7	3.0%
Hokkaido	39.1	53.3%	38.2	8.5%	38.4	16.7%
Tohoku	7.2	15.3%	68.7	-9.9%	64.8	-10.3%
Kanto (excl. Tokyo)	19.7	-15.3%	98.2	48.9%	76.0	40.3%
Tokyo	37.8	7.2%	101.4	3.6%	87.7	6.6%
Chubu	41.4	4.8%	62.9	8.6%	62.6	8.5%
Kinki	39.7	5.7%	71.5	6.0%	59.7	5.2%
Chugoku	12.0	16.2%	48.2	6.2%	35.8	8.5%
Shikoku	42.9	0.0%	81.7	-23.7%	72.0	-15.8%
Kyushu and Okinawa	11.8	19.0%	71.2	7.3%	62.5	13.0%
Overseas total	448.9	43.1%	335.7	-9.2%	352.8	-2.2%
China	296.9	-6.7%	410.2	-0.4%	381.3	-2.2%
Southeast Asia	318.9	-12.7%	149.3	-46.1%	185.8	-37.6%
Other Asia-Pacific region	564.6	193.3%	243.9	-22.9%	259.9	-15.8%
Europe	0.0	-	74.3	-17.6%	67.6	-18.3%
North America	693.3	68.7%	489.3	0.2%	518.7	8.8%
Other Regions	0.0	-	315.7	20.0%	291.4	18.2%
Total	90.0	31.9%	137.4	-4.2%	126.9	1.5%
N: Number of VC firms responded	N=62	N=55	N=88	N=76	N=92	N=80

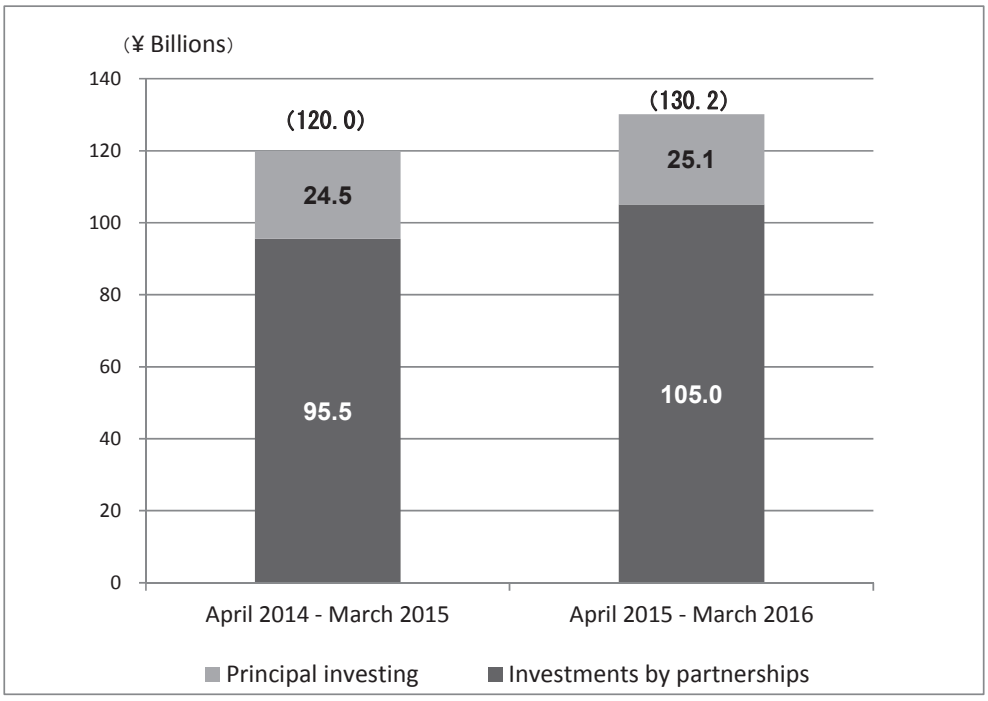
Note 1: Numbers above refer to VC firms that provided both the number of deals and investment/loan amount.
Note 2: y/y % change is based on answers from VC firms that provided both the number of deals and investment/loan amount for both 2015 and 2016 (as of the end of March).

2. Investment Amount Made During the Year

(1) Status of investment amount made during the year

Chart 2-1 shows the change in the investment amount made during the two most recent fiscal years. The breakdown of investment amount made during the most recent fiscal year is shown in Chart 2-2, and the breakdown of deals is shown in Chart 2-3. The amount of investments and the numbers of deals in the charts are calculated by simply adding up the figures given in survey answers.

Chart 2-1: Trend of VC investment amount in FY2014 and FY2015



Note 1: Numbers in parentheses indicate the total amount of investments during the year.
Note 2: Numbers for April 2014-March 2015 are based solely on the latest survey.

Chart 2-2: Investment amount made during the year (April 2015 – March 2016)

(Yen millions)

	Principal	y/y % change	Partnerships	y/y % change	Total	y/y % change
Common stocks	1,025	-27.2%	32,140	-15.7%	33,166	-16.9%
Class shares	1,047	63.6%	40,636	21.9%	41,683	22.7%
Bonds	666	11.9%	3,175	34.3%	3,841	32.5%
Other	90	-81.3%	1,538	-30.0%	1,628	-41.4%
Total	25,132	2.7%	105,039	7.2%	130,170	6.0%
N: Number of VC firms responded	N=63	N=47	N=90	N=76	N=97	N=84

Note 1: Numbers above are calculated by simply adding up the figures in answers.
Note 2: Numbers above refer to VC firms that provided investment amount.
Note 3: y/y % change refers to VC firms that provided the amounts for both periods, Apr. 2014-Mar. 2015 and Apr. 2015-Mar. 2016.

Chart 2-3: Number of deals during the year (April 2015 – March 2016)

(Number of deals)

	Principal	y/y % change	Partnerships	y/y % change	Total	y/y % change
Common stocks	23	-30.0%	368	-4.7%	391	-6.9%
Class shares	17	70.0%	417	32.0%	434	33.7%
Bonds	5	400.0%	59	20.0%	64	34.1%
Other	5	-58.3%	50	34.4%	55	4.3%
Total	76	-6.3%	1,086	14.3%	1,162	12.6%
N: Number of VC firms responded	N=63	N=47	N=92	N=77	N=99	N=85

Note 1: Numbers above are calculated by simply adding up the figures in answers.
Note 2: Numbers above refer to VC firms that provided the number of deals.
Note 3: y/y % change refers to VC firms that provided the number of deals for both periods, Apr. 2014-Mar. 2015 and Apr. 2015-Mar. 2016.

(2) Investment/loan amount per deal during the year

Chart 2-4 and 2-5 "Investment amount per deal" refers to VC firms that provided both the investment amount and the number of deals. Per-deal figure is calculated by dividing the total amount of investments by the total number of deals.

Chart 2-4: Investment amount per deal during the year (April 2014 – March 2016)

(Yen millions)

	April 2014 - March 2015		April 2015 - March 2016		y/y % change	
	Principal	Partnerships	Principal	Partnerships	Principal	Partnerships
Number of deals	81	912	76	1,076		
Investment amount	24,464	95,543	25,132	105,039		
Per deal	302.0	104.8	330.7	97.6	9.7%	-6.2%
N: Number of VC firms responded	N=52	N=80	N=63	N=90	N=47	N=76

Note 1: Numbers above refer to VC firms that provided both the number of deals and investment amount.
Note 2: y/y % change is based on answers from VC firms that provided the number of deals and investment amount for both periods, Apr. 2014-Mar. 2015 and Apr. 2015-Mar. 2016.

Chart 2-5: Investment amount per deal during the year
(Principal and Partnerships, April 2014 – March 2016)

(Yen millions)

	Principal and Partnerships		
	April 2014 - March 2015	April 2015 - March 2016	y/y % change
Number of deals	993	1,152	
Investment amount	120,006	130,170	
Per deal	120.9	113.0	-5.7%
N: Number of VC firms responded	N=88	N=97	N=84

Note 1: Numbers above refer to VC firms that provided both the number of deals and investment amount.
Note 2: y/y % change is based on answers from VC firms that provided the number of deals and investment amounts for both periods, Apr. 2014-Mar. 2015 and Apr. 2015-Mar. 2016.

(3) Distribution of VC firms by investment amount during the year

Shown below is the distribution of VC firms classified by investment amount made by principal and partnerships. Chart 2-6 shows the number of VC firms, the total amount of investment made during the year and the composition ratio for each range of the investment amount. Chart 2-7 compares the share of the top ten VC firms and firms ranking 11th to 20th to that of the rest of the VC firms in terms of investment amount.

Chart 2-6: Distribution of investment amount during the year (April 2015 - March 2016)

Investment amount (Yen billions)	Number of VC firms	Total amount of investment (Yen billions)	Percentage
1 or less	55	14.8	11.4%
over 1 - 5	22	49.9	38.3%
over 5 - 10	1	5.0	3.8%
over 10 - 20	2	32.5	25.0%
over 20	1	27.9	21.5%
Total	97	130.2	100.0%
N: Number of VC firms responded			N=97

Chart 2-7: Investment amount made during the year: Top 10 and the rest of VC firms comparison

	Total amount of investment (Yen billions)	Percentage
Top 10	88.7	68.1%
Top 11th to 20th	19.7	15.1%
Top 21th and below	21.8	16.7%
N: Number of VC firms responded		N=97

(4) New investment and Follow-on investment

Charts 2-8 to 2-10 show the simple totaling of investment amount or the number of deals, year-on-year percentage change, and the investment amount per deal. These figures are based on the answers from VC firms that provided new and follow-on investment amount or the number of deals.

Chart 2-8: New and follow-on investment amount (April 2015 – March 2016)

(Yen millions)

	Principal	y/y % change	Partnerships	y/y % change	Total	y/y % change
New investments	22,786	4.9%	79,762	17.3%	102,548	13.9%
Follow-on investments	2,283	-13.6%	17,693	-27.0%	19,975	-25.3%
Total	25,132	2.7%	105,039	7.2%	130,170	6.1%
N: Number of VC firms responded	N=63	N=47	N=90	N=76	N=97	N=84

Note 1: New and follow-on investment amount are calculated by simply adding up the figure in answers.
Note 2: y/y % change is based on answers from VC firms that provided the amount for both periods, Apr. 2014-Mar. 2015 and Apr. 2015-Mar. 2016.

Chart 2-9: Number of deals for New and follow-on investments (April 2015 – March 2016)

(Number of deals)

	Principal	y/y % change	Partnerships	y/y % change	Total	y/y % change
New investments	58	5.5%	758	19.3%	816	17.9%
Follow-on investments	17	-22.2%	221	-6.2%	238	-6.1%
Total	76	-6.3%	1,086	14.3%	1,162	12.6%
N: Number of VC firms responded	N=63	N=47	N=92	N=77	N=99	N=85

Note 1: Numbers of deals are calculated by simply adding up the figures in answers.
Note 2: y/y % change is based on answers from VC firms that provided the amount for both periods, Apr. 2014-Mar. 2015 and Apr. 2015-Mar. 2016.

Chart 2-10: New and follow-on investment amount per deal (Principal and Partnerships, April 2014 – March 2016)

(Yen millions)

	April 2014 - March 2015		April 2015 - March 2016		y/y % change	
	New	Follow-on	New	Follow-on	New	Follow-on
Number of deals	656	241	808	231		
Investment amount	86,513	26,277	102,548	19,975		
Per deal	131.9	109.0	126.9	86.5	-3.4%	-20.4%
N: Number of VC firms responded	N=84	N=73	N=94	N=83	N=79	N=66

Note 1: Numbers above refer to VC firms that provided both the number of deals and the investment amount.
Note 2: y/y % change is based on answers from VC firms that provided the number of deals and investment amount for both periods, Apr. 2014-Mar. 2015 and Apr. 2015-Mar. 2016.

(5) Region distribution of portfolio companies

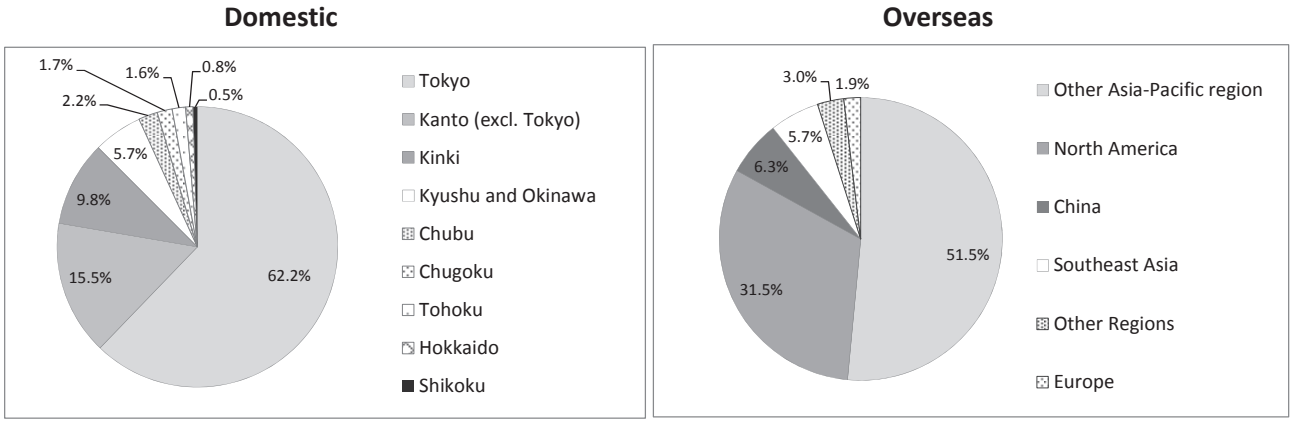
Chart 2-11 illustrates the number of deals and investment amount ("by Principal and Partnerships") categorized by the region according to the location of portfolio companies.

Chart 2-11: Number of deals and investment amount by region (Principal and Partnerships, April 2015 – March 2016)

	Number of deals	Percentage	Amount (Yen millions)	Percentage
Domestic total	954	84.1%	87,377	67.6%
Hokkaido	11	1.2%	498	0.5%
Tohoku	21	2.3%	920	0.9%
Kanto (excl. Tokyo)	66	7.1%	9,195	9.4%
Tokyo	440	47.3%	36,903	37.8%
Chubu	32	3.4%	1,312	1.3%
Kinki	97	10.4%	5,827	6.0%
Chugoku	18	1.9%	1,027	1.1%
Shikoku	10	1.1%	285	0.3%
Kyushu and Okinawa	59	6.3%	3,361	3.4%
Overseas total	180	15.9%	41,857	32.4%
China	9	1.0%	2,415	2.5%
Southeast Asia	30	3.2%	2,181	2.2%
Other Asia-Pacific region	67	7.2%	19,689	20.2%
Europe	4	0.4%	734	0.8%
North America	60	6.4%	12,060	12.4%
Other Regions	7	0.8%	1,151	1.2%
Total	1,134	100.0%	129,234	100.0%
N: Number of VC firms responded	N=98		N=96	

Note 1: Numbers above refer to VC firms that provided the number of deals and/or investment amount.
Note 2: Percentages of the number of deals and the amount for Domestic and Overseas are calculated based on the sum of breakdown of each category.

Chart 2-12: Distribution of investment amount by region



Note: Percentages of the amount for Domestic and Overseas are calculated based on the sum of breakdown of each category.

(6) Stage distribution of portfolio companies

Charts 2-13 to 2-15 show the total figures and the composition ratio for the number of deals and investment amount, and investment amount per deal for “New”, “Follow-on” and “New and Follow-on” investments. These figures are based on answers from VC firms that provided the number of deals and/or investment amount (by “Principal and Partnerships”) by stage.

Chart 2-13: Stage distribution of new investments (April 2015 – March 2016)

(Yen millions)

Stage	Number of deals	Percentage	Amount	Percentage	Amount per deal
Seed	139	20.1%	6,781	11.9%	48.8
Early	338	49.0%	29,062	50.9%	87.5
Expansion	155	22.5%	15,646	27.4%	102.3
Later	58	8.4%	5,655	9.9%	97.5
Total	779	100.0%	84,663	100.0%	109.8
N: Number of VC firms responded	N=90		N=88		N=88

Note 1: Numbers above refer to VC firms that provided the number of deals and/or investment amount.
Note 2: "Amount per deal" refers to VC firms that provided both the number of deals and investment amount by stage.
Note 3: Percentages of the number of deals and the amount are calculated based on the sum of breakdown of each stage.

Chart 2-14: Stage distribution of follow-on investments (April 2015 – March 2016)

(Yen millions)

Stage	Number of deals	Percentage	Amount	Percentage	Amount per deal
Seed	28	13.6%	2,111	10.5%	75.4
Early	98	47.6%	10,494	52.4%	109.3
Expansion	63	30.6%	5,761	28.8%	92.9
Later	17	8.3%	1,650	8.2%	97.1
Total	213	100.0%	20,529	100.0%	97.8
N: Number of VC firms responded	N=82		N=80		N=80

Note 1: Numbers above refer to VC firms that provided the number of deals and/or investment amount.
Note 2: "Amount per deal" refers to VC firms that provided both the number of deals and investment amount by stage.
Note 3: Percentages of the number of deals and the amount are calculated based on the sum of breakdown of each stage.

Chart 2-15: Stage distribution of new and follow-on investments (April 2015 – March 2016)

(Yen millions)

Stage	Number of deals	Percentage	Amount	Percentage	Amount per deal
Seed	167	18.6%	8,892	11.5%	53.2
Early	436	48.7%	39,556	51.3%	92.4
Expansion	218	24.3%	21,407	27.7%	99.6
Later	75	8.4%	7,305	9.5%	97.4
Total	992	100.0%	105,192	100.0%	107.2
N: Number of VC firms responded	N=93		N=91		N=91

Note 1: Numbers above refer to VC firms that provided the number of deals and/or investment amount.
Note 2: "Amount per deal" refers to VC firms that provided both the number of deals and investment amount by stage.
Note 3: Percentages of the number of deals and the amount are calculated based on the sum of the breakdown of each stage.

Stage distribution of portfolio companies (Domestic and Overseas comparison)

Charts 2-16 shows the total figures and the composition ratio for the number of deals and investment amount for "Domestic" and "Overseas" investments. These figures are based on answers from VC firms that provided the number of deals and/or investment amount (by "Principal and Partnerships") by stage.

Chart 2-16: Stage distribution (Domestic and Overseas comparison)

(April 2015 – March 2016)

(Yen millions)

Stage	Number of deals (Domestic)		Amount (Domestic)		Number of deals (Overseas)		Amount (Overseas)	
		Percentage		Percentage		Percentage		Percentage
Seed	142	19.6%	8,360	13.2%	18	14.8%	4,487	21.0%
Early	337	46.6%	30,608	48.2%	65	53.3%	10,189	47.8%
Expansion	171	23.7%	15,785	24.8%	32	26.2%	5,657	26.5%
Later	73	10.1%	8,815	13.9%	7	5.7%	1,000	4.7%
Total	760	100.0%	70,894	100.0%	177	100.0%	41,937	100.0%
N: Number of VC firms responded	N=108		N=108		N=107		N=107	

Note 1: Numbers above refer to VC firms that provided the number of deals and/or investment amount.

Note 2: Percentages of the number of deals and the amount are calculated based on the sum of the breakdown of each stage.

(7) Industry distribution of portfolio companies

Charts 2-17 to 2-19 show the total figures and the composition ratio of the number of deals and investment amount, and investment amount per deal for “New” “Follow-on” and “New and Follow-on” investment. These figures are based on answers from VC firms that provided the number of deals and/or investment amount (by “Principal and Partnerships”) by industry.

Chart 2-17: Industry distribution of new investment (April 2015 – March 2016)

(Yen millions)

	Number of deals	Percentage	Amount	Percentage	Amount per deal
IT-related	429	55.4%	49,704	58.7%	117.2
Telecommunications/Networking and Equipment	28	3.6%	1,774	2.1%	63.4
Computers and Peripherals/IT services	333	43.0%	44,094	52.1%	134.4
Software	36	4.7%	2,294	2.7%	63.7
Semi-conductors/Electrical Machinery & Equipment	32	4.1%	1,541	1.8%	48.2
Biotechnology, Medical and Healthcare	88	11.4%	8,851	10.5%	100.6
Biotechnology/Medicine	60	7.8%	7,073	8.4%	117.9
Medical Device and Equipment/Healthcare-related	28	3.6%	1,778	2.1%	63.5
Industrial/Energy/Other	106	13.7%	11,436	13.5%	107.9
Products and Services	151	19.5%	14,673	17.3%	99.1
Media/Entertainment/Retailing/Consumer Goods	101	13.0%	7,629	9.0%	77.9
Finance/Real Estate/Business Services	50	6.5%	7,043	8.3%	140.9
IoT-related (Among the above)	15	1.9%	675	0.8%	45.0
Total	779	100.0%	84,663	100.0%	109.8
N: Number of VC firms responded	N=90		N=88		N=88

Note 1: Numbers above refer to VC firms that provided the number of deals and/or investment amount.
Note 2: "Amount per deal" refers to VC firms that provided both the number of deals and investment amount by industry.
Note 3: Percentages of the number of deals and the amount are calculated based on the sum of the breakdown of each industry.

Chart 2-18: Industry distribution of follow-on investment
(April 2015 – March 2016)

(Yen millions)

	Number of deals	Percentage	Amount	Percentage	Amount per deal
IT-related	127	59.9%	11,172	54.4%	88.7
Telecommunications/Networking and Equipment	2	0.9%	195	0.9%	97.4
Computers and Peripherals/IT services	103	48.6%	8,734	42.5%	85.6
Software	12	5.7%	1,207	5.9%	100.6
Semi-conductors/Electrical Machinery & Equipment	10	4.7%	1,036	5.0%	103.6
Biotechnology, Medical and Healthcare	25	11.8%	1,642	8.0%	65.7
Biotechnology/Medicine	18	8.5%	1,346	6.6%	74.8
Medical Device and Equipment/Healthcare-related	7	3.3%	296	1.4%	42.3
Industrial/Energy/Other	23	10.8%	5,111	24.9%	222.2
Products and Services	37	17.5%	2,603	12.7%	74.4
Media/Entertainment/Retailing/Consumer Goods	19	9.0%	1,761	8.6%	103.6
Finance/Real Estate/Business Services	18	8.5%	842	4.1%	46.8
IoT-related (Among the above)	2	0.9%	0	0.0%	0.1
Total	213	100.0%	20,529	100.0%	97.8
N: Number of VC firms responded	N=82		N=80		N=80

Note 1: Numbers above refer to VC firms that provided the number of deals and/or investment amount.
Note 2: "Amount per deal" refers to VC firms that provided both the number of deals and investment amount by industry.
Note 3: Percentages of the number of deals and the amount are calculated based on the sum of the breakdown of each industry.

Chart 2-19: Industry distribution of new and follow-on investments
(April 2015 – March 2016)

(Yen millions)

	Number of deals	Percentage	Amount	Percentage	Amount per deal
IT-related	556	56.4%	60,875	57.9%	110.7
Telecommunications/Networking and Equipment	30	3.0%	1,969	1.9%	65.6
Computers and Peripherals/IT services	436	44.2%	52,828	50.2%	122.9
Software	48	4.9%	3,501	3.3%	72.9
Semi-conductors/Electrical Machinery & Equipment	42	4.3%	2,578	2.5%	61.4
Biotechnology, Medical and Healthcare	113	11.5%	10,493	10.0%	92.9
Biotechnology/Medicine	78	7.9%	8,419	8.0%	107.9
Medical Device and Equipment/Healthcare-related	35	3.5%	2,074	2.0%	59.2
Industrial/Energy/Other	129	13.1%	16,547	15.7%	128.3
Products and Services	188	19.1%	17,275	16.4%	94.4
Media/Entertainment/Retailing/Consumer Goods	120	12.2%	9,390	8.9%	81.7
Finance/Real Estate/Business Services	68	6.9%	7,885	7.5%	116.0
IoT-related (Among the above)	17	1.7%	675	0.6%	39.7
Total	992	100.0%	105,192	100.0%	107.2
N: Number of VC firms responded	N=93		N=91		N=91

Note 1: Numbers above refer to VC firms that provided the number of deals and/or investment amount.
Note 2: "Amount per deal" refers to VC firms that provided both the number of deals and investment amount by industry.
Note 3: Percentages of the number of deals and the amount are calculated based on the l of the breakdown of each industry.

Industry distribution of portfolio companies (Domestic and Overseas comparison)

Charts 2-20 shows the total figures and the composition ratio for the number of deals and investment amount for “Domestic” and “Overseas” investments. These figures are based on answers from VC firms that provided the number of deals and/or investment amount (by “Principal and Partnerships”) by industry.

Chart 2-20: Industry distribution (Domestic and Overseas comparison)

(April 2015 – March 2016)

(Yen millions)

	Number of deals		Amount		Number of deals		Amount	
	(Domestic)	Percentage	(Domestic)	Percentage	(Overseas)	Percentage	(Overseas)	Percentage
IT-related	443	52.3%	38,747	51.9%	114	61.0%	24,016	56.7%
Telecommunications/Networking and Equipment	19	2.2%	1,686	2.3%	7	3.7%	687	1.6%
Computers and Peripherals/IT services	316	37.3%	28,953	38.8%	89	47.6%	21,130	49.8%
Software	60	7.1%	3,815	5.1%	14	7.5%	1,768	4.2%
Semi-conductors/Electrical Machinery & Equipment	48	5.7%	4,293	5.8%	4	2.1%	432	1.0%
Biotechnology, Medical and Healthcare	113	13.3%	13,945	18.7%	22	11.8%	2,939	6.9%
Biotechnology/Medicine	74	8.7%	7,797	10.4%	19	10.2%	2,759	6.5%
Medical Device and Equipment/Healthcare-related	39	4.6%	6,148	8.2%	3	1.6%	180	0.4%
Industrial/Energy/Other	123	14.5%	11,751	15.7%	19	10.2%	8,009	18.9%
Products and Services	168	19.8%	10,208	13.7%	32	17.1%	7,425	17.5%
Media/Entertainment/Retailing/Consumer Goods	111	13.1%	7,322	9.8%	15	8.0%	2,120	5.0%
Finance/Real Estate/Business Services	57	6.7%	2,886	3.9%	17	9.1%	5,305	12.5%
IoT-related (Among the above)	25	3.0%	1,007	1.3%	4	2.1%	414	1.0%
Total	847	100.0%	74,651	100.0%	187	100.0%	42,389	100.0%
N: Number of VC firms responded	N=110		N=110		N=109		N=109	

Note 1: Numbers above refer to VC firms that provided the number of deals and/or investment amount.
Note 2: Percentages of the number of deals and the amount are calculated based on the total of the breakdown of each industry.

3. Overview of Investment Partnership

(1) Overall status of funds

Chart 3-1 shows the status of funds established by VC firms. Chart 3-2 shows the distribution of VC firms concerning the most recent number of funds and the total amount of money invested in such funds. Chart 3-3 shows the number of funds established or matured during the year as well as the number of limited partners and the total fund value of those funds.

Chart 3-1: Status of funds

	End of March 2015	End of March 2016	y/y % change
Number of funds	396	359	-1.4%
Total number of limited partners	2,499	2,464	1.3%
Total fund value (Yen billions)	1,678	1,647	5.4%
Average number of limited partners	8.8	8.9	1.3%
Average fund value (Yen billions)	4.3	4.6	7.5%
N: Number of VC firms responded			
(Average number of limited partners)	N=84	N=80	N=77
(Average fund value)	N=90	N=84	N=81

Note 1: Numbers above refer to VC firms that provided either the number of funds, the number of limited partners, or total fund value.

Note 2: Average figures (per fund) are calculated based on answers from VC firms that provided both the number of funds and the number of limited partners, or both the number of funds and the total fund value.

Note 3: y/y % change is based on answers from VC firms that provided the data for both 2015 and 2016 (as the end of March).

Note 4: Total fund value is based on the amounts committed to funds (In the absence of capital commitments, based on the amount actually paid into funds).

Chart 3-2: Distribution of VC firms by the number of funds and total fund value (as of the end of March 2016)

Number of funds	Number of VC firms
5 or less	70
6 - 10	10
11 - 20	3
21 - 30	1
Over 30	1
Total	85

Total fund value (Yen billions)	Number of VC firms
10 or less	56
over 10 - 50	24
over 50 - 100	2
over 100 - 200	0
over 200	2
Total	84

Chart 3-3: The number of limited partners and total fund value per fund for funds established and matured during the year (April 2015 – March 2016)

	Established	Matured
Number of funds	51	50
Total number of limited partners	360	268
Total fund value (Yen billions)	193.2	93.8
Average number of limited partners	8.4	7.1
Average fund value (Yen billions)	3.9	1.9
N: Number of VC firms responded		
(Average number of limited partners)	N=64	N=56
(Average fund value)	N=68	N=60

Note 1: "N" refers to VC firms that own at least one fund as of the end of March 2016, and that have answered concerning funds established or matured during the period.

Note 2: Average figures are calculated based on answers from VC firms that provided both the number of funds and the number of limited partners, or both the number of funds and the total fund value.

Note 3: Total fund value is based on the amounts committed to funds (In the absence of capital commitments, based on the amount actually paid into funds).

(2) Breakdown of investor type

Chart 3-4 shows the breakdown of investors to the funds newly established between April 2015 and March 2016.

Chart 3-4: Breakdown of investors (April 2015 – March 2016)

(Yen millions)

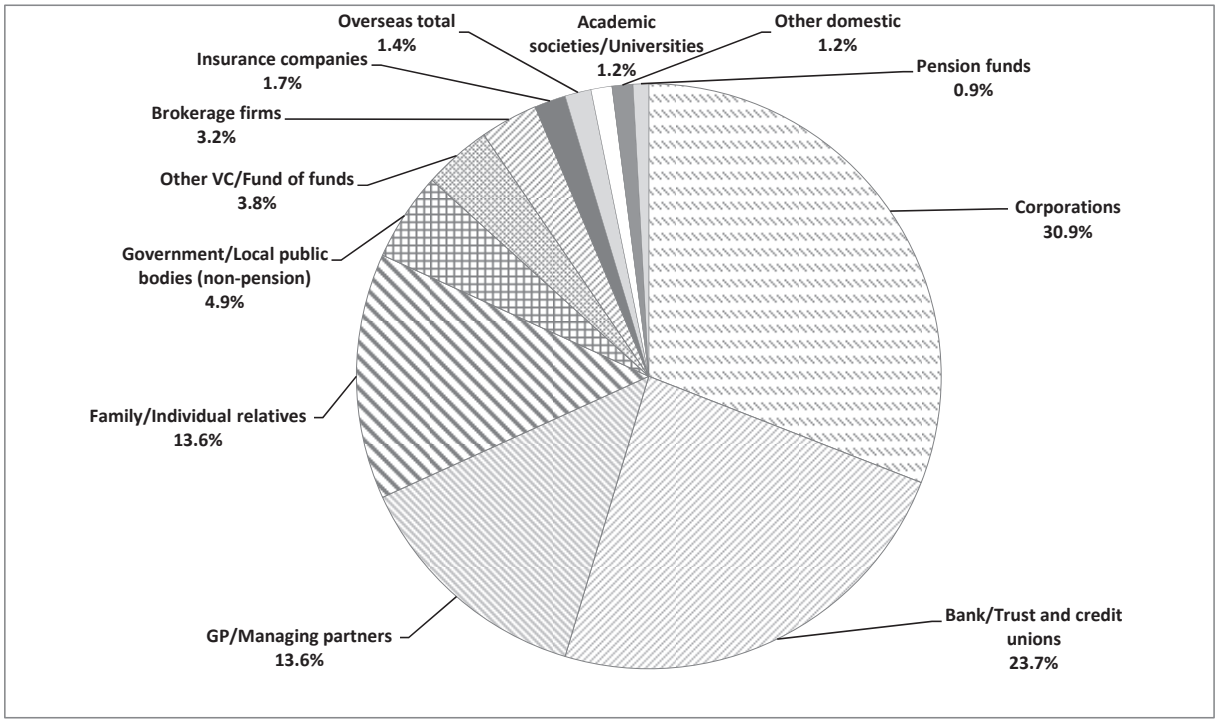
Type of investors	Number of investers	Percentage	Amount	Percentage	Per investor
I. GP/Managing partners	47	13.6%	8,402	5.5%	182.7
II. Domestic total	294	85.0%	142,363	93.4%	485.9
Family/Individual relatives	47	13.6%	3,125	2.0%	66.5
Other VC/Fund of funds	13	3.8%	5,695	3.7%	438.1
Corporations	107	30.9%	31,430	20.6%	296.5
Bank/Trust and credit unions	82	23.7%	27,738	18.2%	338.3
Insurance companies	6	1.7%	5,950	3.9%	991.7
Brokerage firms	11	3.2%	6,374	4.2%	579.5
Pension funds	3	0.9%	3,000	2.0%	1,000.0
Government/Local public bodies	17	4.9%	23,011	15.1%	1,353.6
Academic societies/Universities	4	1.2%	33,000	21.6%	8,250.0
Other domestic	4	1.2%	3,040	2.0%	760.0
III. Overseas total	5	1.4%	1,730	1.1%	346.0
Total (I+II+III)	346	100.0%	152,495	100.0%	443.3
N: Number of VC firms responded	N=58		N=57		N=33

Note 1: Numbers above refer to VC firms that provided the number of investors or investment amount (excluding VC firms that replied there was no investment from any type of investor).

Note 2: Per-investor figures refer to VC firms that provided both the number of investors and the amount.

Note 3: Total fund value is based on the amounts committed to funds (In the absence of committed amounts, based on the amount actually paid into funds).

Chart 3-5: Breakdown of investors in terms of the amount invested



4. Exit (Cashing out an investment) Status

Chart 4-1 shows the number of deals by exit route in the last five years. Chart 4-2 shows the percentage breakdown of exit route. The figures used in Charts 4-1 and 4-2 are based on simply adding up the figures in survey answers. “Trade sales” includes cases that a deal is “sold to a secondary fund” and “sold to a third party”.

Chart 4-1: Number of deals by exit route in the last five years

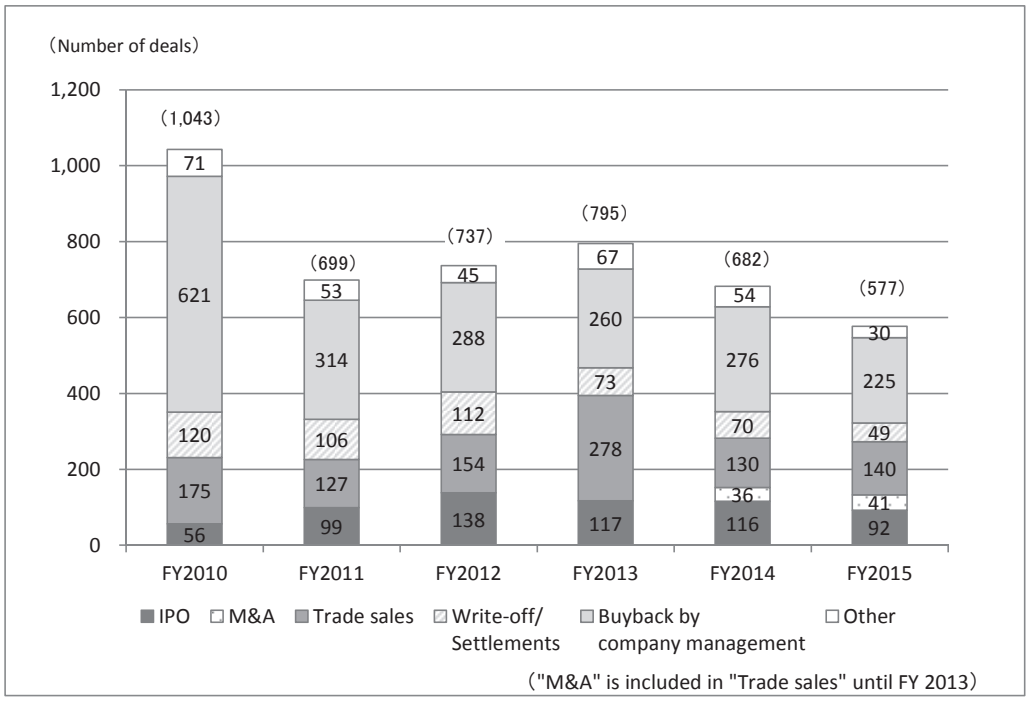
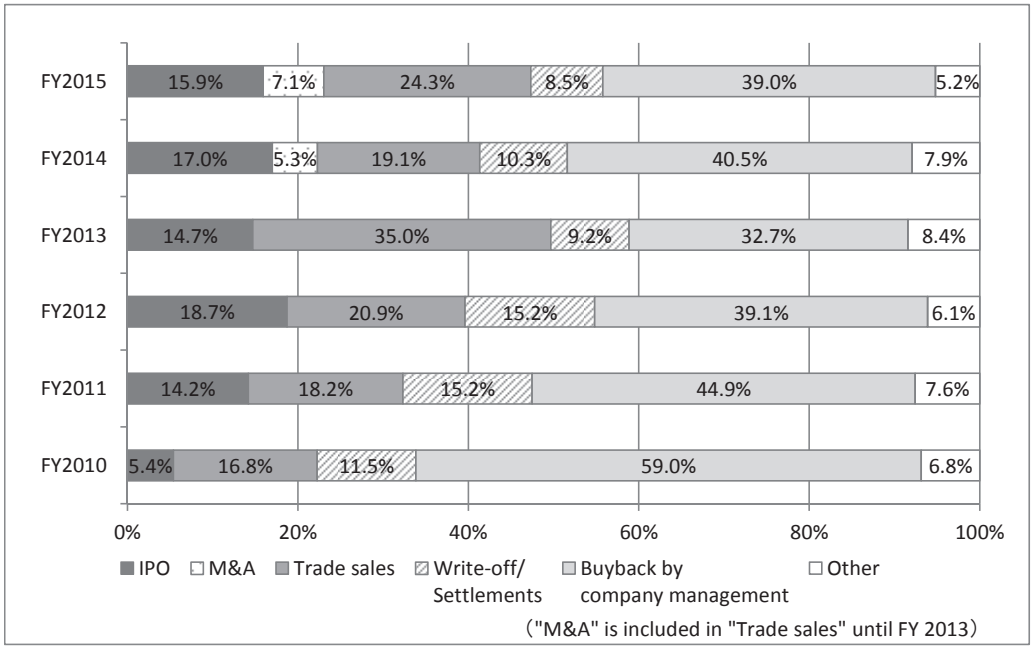


Chart 4-2: Percentage breakdown of deals by exit route in the last five years



5.International comparison of venture capital investment trends

Figure 5-1 shows a breakdown of venture capital investment data for the U.S., Europe, China, and Japan. It should be noted that the scope of venture capital investment differs from one set of published data to another. Japanese data alone are on a fiscal year basis (from April of each year to March of the next year), and data for the other three locations are on a calendar year basis (from January to December of each year).

Chart 5-1: Breakdown of venture capital investments in different data sets

	Region			
	US	Europe	China	Japan
	Source of data			
	NVCA YEARBOOK 2016 (NVCA)	2015 European Private Equity Activity (Invest Europe)	China VC/PE Market Review 2015 (Zero2IPO)	VEC YEARBOOK2016 (VEC)
Investment in domestic startup company with domestic venture capital (Note 1)	○	○	○	○
Investment in domestic startup company with foreign venture capital	○	×	○	×
Investment in foreign startup company with domestic venture capital (Note 1)	×	○	×	○
Investment by government agency	○	○	Unknown	○
Investment by angel, incubator, or accelerator	○Note 2	×	×	×
Standard for merger and acquisition data	・Not distinguished from sale ・Includes secondary sale ・Includes even minority investment in some instances	Included in sale	Unknown	Distinguished from sale
Other	–	Growth investment data include, to a certain degree, some companies that received capital contributions from venture capital because data on investments in relatively mature startup companies were compiled by deeming such investments as growth investments. Therefore, figures in data on venture capital investment may be shown as numbers lower than their actual levels.	–	–

NVCA: National Venture Capital Association, EVCA: European Private Equity and Venture Capital Association

Note1: Japan: VC firms having corporate status in Japan, Europe: PE/VC firms with office in charge of the investment is located in Europe, US/China: Details unknown

Note2: Angel, incubator and similar investments that are part of a qualifying venture capital round or follow a qualifying venture capital round are included to the extent that such investments can be fully verified as meeting all other criteria (e.g. cash for equity, not buyout ro services in kind)

Chart 5-2 and 5-3 show the comparison of VC investment trends between US, Europe, China and Japan.

Chart 5-2: International Comparison of VC investment amount

Region	2011		2012		2013		2014		2015	
	Number of deals	Amount	Number of deals	Amount	Number of deals	Amount	Number of deals	Amount	Number of deals	Amount
US （$ Bil）	4,050	29.9	3,991	27.7	4,295	30.3	4,442	50.8	4,380	59.1
Europe （€ Bil）	3,186	4.0	3,132	3.4	3,206	3.4	3,408	3.6	3,006	4.0
China （RMB Bil）	1,505	82.1	1,071	46.0	1,148	40.1	1,917	103.8	3,445	129.3
Japan （¥ Bil）	1,017	124.0	824	102.6	1,000	181.8	969	117.1	1,162	130.2

Note: Europe's data are based on Number of companies, not Number of deals.

Chart 5-3: International Comparison of VC investment amount（converted to USD）

（Amount: US $ Billions）

Region	2011		2012		2013		2014		2015	
	Number of deals	Amount	Number of deals	Amount	Number of deals	Amount	Number of deals	Amount	Number of deals	Amount
US	4,050	29.9	3,991	27.7	4,295	30.3	4,442	50.8	4,380	59.1
Europe	3,186	4.4	3,132	3.8	3,206	3.8	3,408	4.0	3,006	4.4
China	1,505	13.1	1,071	7.4	1,148	6.4	1,917	16.6	3,445	20.7
Japan	1,017	1.0	824	0.8	1,000	1.5	969	0.9	1,162	1.0

Note1: Converted at the rate of 1Euro=1.11USD, 1RMB=0.16USD, 1yen=0.008USD (annual average rates of exchange 2015)
Note2: Europe's data are based on Number of companies, not Number of deals.

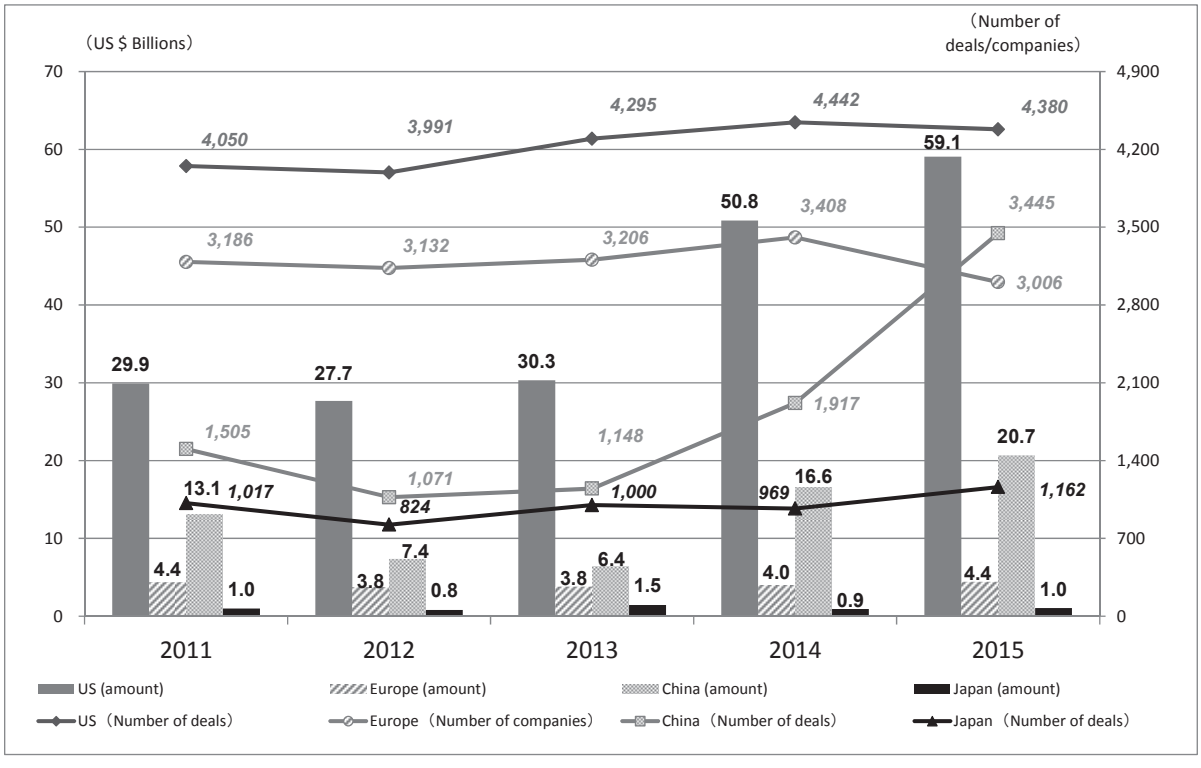


Chart 5-4 and 5-5 show the comparison of VC investment trends between US, Europe, China and Japan.

Chart 5-4: International Comparison of VC funds established

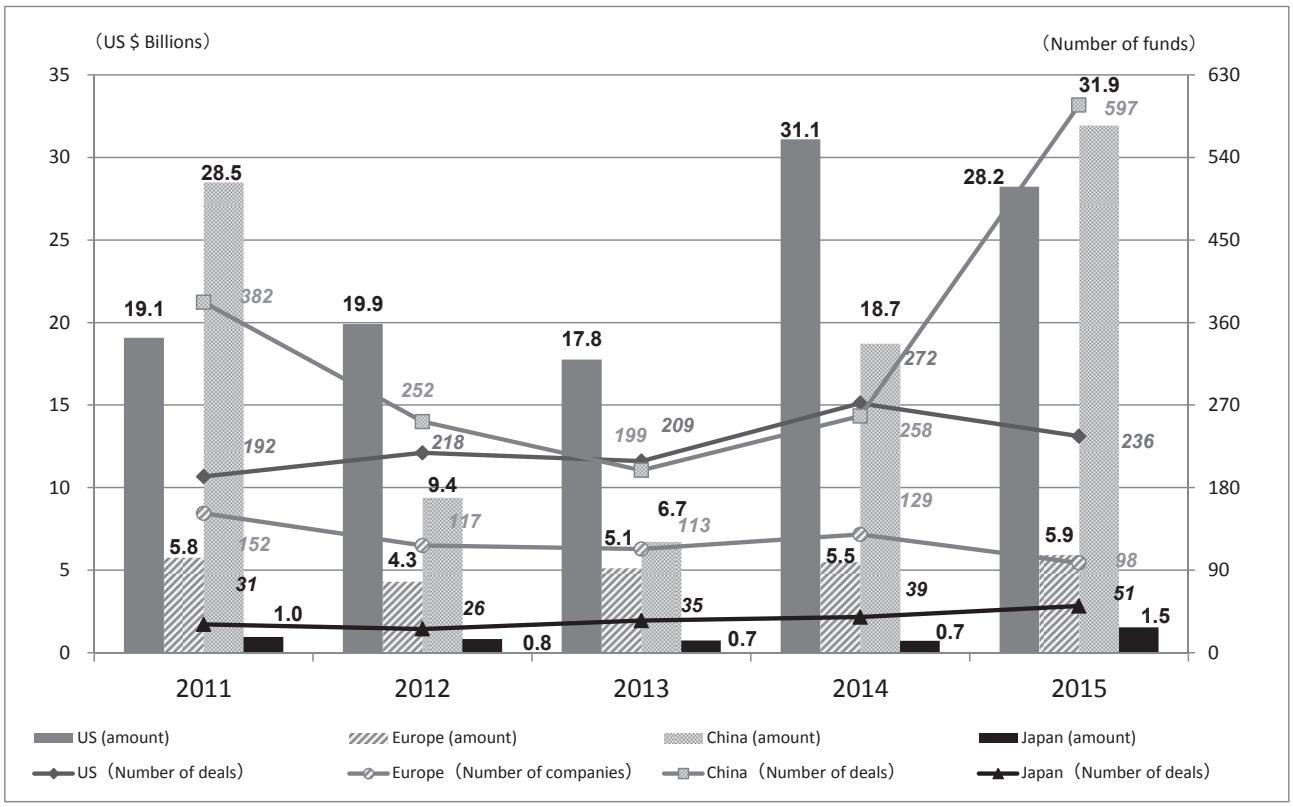
Region	2011		2012		2013		2014		2015	
	Number of funds	Amount	Number of funds	Amount	Number of funds	Amount	Number of funds	Amount	Number of funds	Amount
US （$ Bil）	192	19.1	218	19.9	209	17.8	272	31.1	236	28.2
Europe （€ Bil）	152	5.2	117	3.9	113	4.6	129	4.9	98	5.3
China （RMB Bil）	382	178.0	252	58.6	199	42.0	258	117.0	597	199.6
Japan （¥ Bil）	31	119.7	26	103.6	35	92.1	39	91.1	51	193.2

Chart 5-5: International Comparison of VC funds established（converted to USD）

（Amount: US $ Billions）

Region	2011		2012		2013		2014			
	Number of funds	Amount	Number of funds	Amount	Number of funds	Amount	Number of funds	Amount	Number of funds	Amount
US (amount)	192	19.1	218	19.9	209	17.8	272	31.1	236	28.2
Europe (amount)	152	5.8	117	4.3	113	5.1	129	5.5	98	5.9
China (amount)	382	28.5	252	9.4	199	6.7	258	18.7	597	31.9
Japan (amount)	31	1.0	26	0.8	35	0.7	39	0.7	51	1.5

Note: Converted at the rate of 1Euro=1.11USD, 1RMB=0.16USD, 1yen=0.008USD (annual average rates of exchange 2015)



6. Results of the Survey

Chart 6-1: Investment/loan balance of VC firms

	As of the end of March 2015		As of the end of March 2016	
	Number of deals	Amount (Yen millions)	Number of deals	Amount (Yen millions)
Investments	1,106	199,271	1,022	221,372
Loans	1	53	1	51
Total	1,107	226,901	1,023	221,423
N: Number of VC firms responded			N=71	N=71

Chart 6-2: Investment balance of Partnerships

	As of the end of March 2015		As of the end of March 2016	
	Number of deals	Amount (Yen millions)	Number of deals	Amount (Yen millions)
Investments	3,190	440,089	3,164	423,555
N: Number of VC firms responded			N=93	N=90

Chart 6-3: Investment/loan balance of VC firms and Partnerships

	As of the end of March 2015		As of the end of March 2016	
	Number of deals	Amount (Yen millions)	Number of deals	Amount (Yen millions)
Investments	4,296	639,360	4,186	644,927
Loans	1	53	1	51
Total	4,297	666,990	4,187	644,978
N: Number of VC firms responded			N=99	N=96

Note: The total may not correspond to the sum of breakdown owing to non-response.

Chart 6-4: Investment/loan balance by region: VC firms

	As of the end of March 2015		As of the end of March 2016	
	Number of deals	Amount (Yen millions)	Number of deals	Amount (Yen millions)
Domestic total	842	40,036	755	39,532
Hokkaido	8	204	7	273
Tohoku	4	25	5	36
Kanto (excl. Tokyo)	99	2,164	77	1,520
Tokyo	368	12,988	317	11,974
Chubu	48	2,661	36	2,174
Kinki	170	6,394	167	6,564
Chugoku	49	508	54	650
Shikoku	5	214	6	219
Kyushu and Okinawa	35	346	31	653
Overseas total	85	26,673	83	37,258
China	31	9,866	26	7,476
Southeast Asia	13	4,383	13	3,886
Other Asia-Pacific region	8	1,540	12	5,702
Europe	1	0	2	88
North America	28	10,683	29	20,107
Other Regions	1	0	1	0
Total	985	67,954	860	78,004
N: Number of VC firms responded			N=62	N=63

Chart 6-5: Investment/loan balance by region: Partnerships

	As of the end of March 2015		As of the end of March 2016	
	Number of deals	Amount (Yen millions)	Number of deals	Amount (Yen millions)
Domestic total	2,376	245,794	2,368	244,941
Hokkaido	29	1,075	23	879
Tohoku	68	5,114	76	5,085
Kanto (excl. Tokyo)	259	16,174	204	19,314
Tokyo	1,158	109,719	1,171	117,806
Chubu	113	6,481	102	6,428
Kinki	310	20,503	291	20,706
Chugoku	92	4,140	103	4,967
Shikoku	15	1,498	24	1,828
Kyushu and Okinawa	153	9,993	148	10,512
Overseas total	539	182,819	472	156,811
China	123	43,088	74	32,181
Southeast Asia	47	11,218	41	6,020
Other Asia-Pacific region	162	49,557	191	46,339
Europe	16	1,017	10	743
North America	159	70,492	141	67,551
Other Regions	15	3,946	14	3,974
Total	3,131	436,901	3,067	412,182
N: Number of VC firms responded			N=90	N=88

Chart 6-6: Investment/loan balance by region: VC firms and Partnerships

	As of the end of March 2015		As of the end of March 2016	
	Number of deals	Amount (Yen millions)	Number of deals	Amount (Yen millions)
Domestic total	3,218	285,830	3,123	284,473
Hokkaido	37	1,279	30	1,152
Tohoku	72	5,139	81	5,121
Kanto (excl. Tokyo)	358	18,339	281	20,834
Tokyo	1,526	122,707	1,488	129,780
Chubu	161	9,142	138	8,602
Kinki	480	26,898	458	27,270
Chugoku	141	4,648	157	5,616
Shikoku	20	1,712	30	2,047
Kyushu and Okinawa	188	10,339	179	11,165
Overseas total	624	209,491	555	194,069
China	154	52,953	100	39,657
Southeast Asia	60	15,601	54	9,906
Other Asia-Pacific region	170	51,097	203	52,041
Europe	17	1,017	12	831
North America	187	81,176	170	87,658
Other Regions	16	3,946	15	3,974
Total	4,116	504,855	3,927	490,186
N: Number of VC firms responded			N=94	N=92

Note: The total may not correspond to the sum of breakdown owing to non-response.

Chart 6-7: Breakdown of investments made during the year: VC firms

	April 2014 - March 2015					
	New investments		Follow-on investments		Total	
	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)
Common stocks	23	1,082	8	318	31	1,400
Class shares	10	640	0	0	10	640
Bonds	1	595	0	0	1	595
Other	2	3	11	483	13	486
Total	56	21,717	21	2,659	81	24,464
N: Number of VC firms responded					N=51	N=51

	April 2015 - March 2016					
	New investments		Follow-on investments		Total	
	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)
Common stocks	18	993	5	33	23	1,025
Class shares	17	1,047	0	0	17	1,047
Bonds	5	666	0	0	5	666
Other	0	0	5	90	5	90
Total	58	22,786	17	2,283	76	25,132
N: Number of VC firms responded					N=63	N=63

Chart 6-8: Breakdown of investments made during the year: Partnerships

	April 2014 - March 2015					
	New investments		Follow-on investments		Total	
	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)
Common stocks	283	28,254	84	7,011	357	35,005
Class shares	209	21,758	101	10,551	294	31,899
Bonds	30	1,197	20	995	45	2,172
Other	43	2,340	12	1,146	54	3,381
Total	600	64,796	220	23,619	915	95,543
N: Number of VC firms responded					N=81	N=80

	April 2015 - March 2016					
	New investments		Follow-on investments		Total	
	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)
Common stocks	294	26,571	74	5,570	368	32,140
Class shares	304	30,473	113	10,164	417	40,636
Bonds	40	1,701	19	1,474	59	3,175
Other	37	990	13	548	50	1,538
Total	758	79,762	221	17,693	1,086	105,039
N: Number of VC firms responded					N=92	N=90

Note: The total may not correspond to the sum of breakdown owing to non-response.

Chart 6-9: Breakdown of investments made during the year: VC firms and Partnerships

	April 2014 - March 2015					
	New investments		Follow-on investments		Total	
	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)
Common stocks	306	29,336	92	7,329	388	36,406
Class shares	219	22,398	101	10,551	304	32,539
Bonds	31	1,792	20	995	46	2,767
Other	45	2,342	23	1,629	67	3,867
Total	656	86,513	241	26,277	996	120,006
N: Number of VC firms responded					N=89	N=88

	April 2015 - March 2016					
	New investments		Follow-on investments		Total	
	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)
Common stocks	312	27,564	79	5,602	391	33,166
Class shares	321	31,520	113	10,164	434	41,683
Bonds	45	2,367	19	1,474	64	3,841
Other	37	990	18	638	55	1,628
Total	816	102,548	238	19,975	1,162	130,170
N: Number of VC firms responded					N=99	N=97

Note: The total may not correspond to the sum of breakdown owing to non-response.

Chart 6-10: New and follow-on investments by region: VC firms

	New investment		Follow-on investment		Total	
	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)
Domestic total	22	1,903	5	33	56	13,370
Hokkaido	1	100	0	0	1	100
Tohoku	0	0	1	2	1	2
Kanto (excl. Tokyo)	0	0	1	3	1	3
Tokyo	8	1,493	1	23	9	1,516
Chubu	2	4	0	0	2	4
Kinki	6	146	2	5	8	151
Chugoku	1	42	0	0	1	42
Shikoku	1	5	0	0	1	5
Kyushu and Okinawa	3	113	0	0	3	113
Overseas total	2	136	4	359	14	11,461
China	0	0	0	0	0	0
Southeast Asia	1	96	0	0	3	109
Other Asia-Pacific region	0	0	1	146	4	5,732
Europe	0	0	0	0	0	0
North America	1	40	3	213	6	2,158
Other Regions	0	0	0	0	0	0
Total	24	2,039	9	391	70	24,831
N: Number of VC firms responded	N=49	N=49	N=44	N=44	N=54	N=54

Chart 6-11: New and follow-on investments by region: Partnerships

	New investment		Follow-on investment		Total	
	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)
Domestic total	567	39,802	172	17,864	898	74,007
Hokkaido	8	356	2	42	10	398
Tohoku	17	781	3	137	20	918
Kanto (excl. Tokyo)	45	3,324	20	5,867	65	9,192
Tokyo	312	24,935	119	10,452	431	35,387
Chubu	27	1,226	3	82	30	1,308
Kinki	77	4,972	12	704	89	5,676
Chugoku	16	925	1	60	17	985
Shikoku	8	260	1	20	9	280
Kyushu and Okinawa	47	2,848	9	399	56	3,247
Overseas total	83	13,623	32	3,508	166	30,396
China	4	1,150	3	910	9	2,415
Southeast Asia	26	1,999	1	73	27	2,072
Other Asia-Pacific region	16	3,119	10	633	63	13,958
Europe	2	561	1	47	4	734
North America	31	6,216	16	1,835	54	9,902
Other Regions	4	578	1	10	7	1,151
Total	650	53,424	204	21,372	1,064	104,403
N: Number of VC firms responded	N=84	N=82	N=75	N=73	N=91	N=89

Chart 6-12: New and follow-on investments by region: VC firms and partnerships

	New investment		Follow-on investment		Total	
	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)	Number of deals	Amount (Yen mil)
Domestic total	589	41,705	177	17,896	954	87,377
Hokkaido	9	456	2	42	11	498
Tohoku	17	781	4	139	21	920
Kanto (excl. Tokyo)	45	3,324	21	5,870	66	9,195
Tokyo	320	26,428	120	10,475	440	36,903
Chubu	29	1,230	3	82	32	1,312
Kinki	83	5,118	14	709	97	5,827
Chugoku	17	967	1	60	18	1,027
Shikoku	9	265	1	20	10	285
Kyushu and Okinawa	50	2,962	9	399	59	3,361
Overseas total	85	13,759	36	3,867	180	41,857
China	4	1,150	3	910	9	2,415
Southeast Asia	27	2,095	1	73	30	2,181
Other Asia-Pacific region	16	3,119	11	779	67	19,689
Europe	2	561	1	47	4	734
North America	32	6,256	19	2,048	60	12,060
Other Regions	4	578	1	10	7	1,151
Total	674	55,464	213	21,763	1,134	129,234
N: Number of VC firms responded	N=89	N=87	N=80	N=78	N=98	N=96

Note: The total may not correspond to the sum of breakdown owing to non-response.

Chart 6-13: Industry and stage distribution of new investments by VC firms (Number of deals)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	0	3	0	0	3
Computers and Peripherals/IT services	0	3	2	0	7
Software	0	0	0	0	0
Semi-conductors/Electrical Machinery & Equipment	0	3	0	0	3
Biotechnology/Medicine	1	3	1	2	4
Medical Device and Equipment/Healthcare-related	0	0	0	0	0
Industrial/Energy/Other	0	3	2	3	7
Media/Entertainment/Retailing/Consumer Goods	0	1	1	1	4
Finance/Real Estate/Business Services	1	0	0	0	3
IoT-related (Among the above)	0	3	0	0	3
Total	2	16	6	6	36

N: Number of VC firms responded N=54

Chart 6-14: Industry and stage distribution of follow-on investments by VC firms (Number of deals)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	0	0	0	0	0
Computers and Peripherals/IT services	0	0	1	1	3
Software	0	0	0	0	0
Semi-conductors/Electrical Machinery & Equipment	0	0	1	0	1
Biotechnology/Medicine	0	1	0	0	1
Medical Device and Equipment/Healthcare-related	0	0	0	0	0
Industrial/Energy/Other	0	0	0	0	0
Media/Entertainment/Retailing/Consumer Goods	0	1	0	0	1
Finance/Real Estate/Business Services	0	0	1	0	3
IoT-related (Among the above)	0	0	0	0	0
Total	0	2	3	1	9

N: Number of VC firms responded N=50

Chart 6-15: Industry and stage distribution of new and follow-on investments by VC firms (Number of deals)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	0	3	0	0	3
Computers and Peripherals/IT services	0	3	3	1	10
Software	0	0	0	0	0
Semi-conductors/Electrical Machinery & Equipment	0	3	1	0	4
Biotechnology/Medicine	1	4	1	2	5
Medical Device and Equipment/Healthcare-related	0	0	0	0	0
Industrial/Energy/Other	0	3	2	3	7
Media/Entertainment/Retailing/Consumer Goods	0	2	1	1	5
Finance/Real Estate/Business Services	1	0	1	0	6
IoT-related (Among the above)	0	3	0	0	3
Total	2	18	9	7	45

N: Number of VC firms responded N=57

Note: The total may not correspond to the sum of breakdown owing to non-response.

Chart 6-16: Industry and stage distribution of new investments by VC firms (Amount)

(Yen millions)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	0	213	0	0	213
Computers and Peripherals/IT services	0	157	429	0	5,966
Software	0	0	0	0	0
Semi-conductors/Electrical Machinery & Equipment	0	45	0	0	45
Biotechnology/Medicine	7	300	30	824	1,161
Medical Device and Equipment/Healthcare-related	0	0	0	0	0
Industrial/Energy/Other	0	220	21	143	384
Media/Entertainment/Retailing/Consumer Goods	0	40	4	15	265
Finance/Real Estate/Business Services	1	0	0	0	1,906
IoT-related (Among the above)	0	213	0	0	213
Total	8	975	484	982	9,940

N: Number of VC firms responded N=54

Chart 6-17: Industry and stage distribution of follow-on investments by VC firms (Amount)

(Yen millions)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	0	0	0	0	0
Computers and Peripherals/IT services	0	0	3	23	27
Software	0	0	0	0	0
Semi-conductors/Electrical Machinery & Equipment	0	0	2	0	2
Biotechnology/Medicine	0	1	0	0	1
Medical Device and Equipment/Healthcare-related	0	0	0	0	0
Industrial/Energy/Other	0	0	0	0	0
Media/Entertainment/Retailing/Consumer Goods	0	0	0	0	0
Finance/Real Estate/Business Services	0	0	3	0	302
IoT-related (Among the above)	0	0	0	0	0
Total	0	1	8	23	332

N: Number of VC firms responded N=49

Chart 6-18: Industry and stage distribution of new and follow-on investments by VC firms (Amount)

(Yen millions)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	0	213	0	0	213
Computers and Peripherals/IT services	0	157	432	23	5,993
Software	0	0	0	0	0
Semi-conductors/Electrical Machinery & Equipment	0	45	2	0	47
Biotechnology/Medicine	7	301	30	824	1,162
Medical Device and Equipment/Healthcare-related	0	0	0	0	0
Industrial/Energy/Other	0	220	21	143	384
Media/Entertainment/Retailing/Consumer Goods	0	40	4	15	265
Finance/Real Estate/Business Services	1	0	3	0	2,208
IoT-related (Among the above)	0	213	0	0	213
Total	8	976	492	1,005	10,272

N: Number of VC firms responded N=56

Note: The total may not correspond to the sum of breakdown owing to non-response.

Chart 6-19: Industry and stage distribution of new investments by Partnerships (Number of deals)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	11	9	4	1	25
Computers and Peripherals/IT services	71	158	56	10	326
Software	1	21	13	1	36
Semi-conductors/Electrical Machinery & Equipment	5	17	4	3	29
Biotechnology/Medicine	12	20	11	5	56
Medical Device and Equipment/Healthcare-related	4	10	11	3	28
Industrial/Energy/Other	12	33	20	11	99
Media/Entertainment/Retailing/Consumer Goods	15	33	21	11	97
Finance/Real Estate/Business Services	6	21	9	7	47
IoT-related (Among the above)	7	3	2	0	12
Total	137	322	149	52	743

N: Number of VC firms responded N=85

Chart 6-20: Industry and stage distribution of follow-on investments by Partnerships (Number of deals)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	0	2	0	0	2
Computers and Peripherals/IT services	12	49	31	8	100
Software	0	6	6	0	12
Semi-conductors/Electrical Machinery & Equipment	2	3	3	1	9
Biotechnology/Medicine	4	10	3	0	17
Medical Device and Equipment/Healthcare-related	1	3	2	0	7
Industrial/Energy/Other	3	11	2	5	23
Media/Entertainment/Retailing/Consumer Goods	5	7	5	1	18
Finance/Real Estate/Business Services	1	5	8	1	15
IoT-related (Among the above)	0	0	2	0	2
Total	28	96	60	16	204

N: Number of VC firms responded N=77

Chart 6-21: Industry and stage distribution of new and follow-on investments by Partnerships (Number of deals)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	11	11	4	1	27
Computers and Peripherals/IT services	83	207	87	18	426
Software	1	27	19	1	48
Semi-conductors/Electrical Machinery & Equipment	7	20	7	4	38
Biotechnology/Medicine	16	30	14	5	73
Medical Device and Equipment/Healthcare-related	5	13	13	3	35
Industrial/Energy/Other	15	44	22	16	122
Media/Entertainment/Retailing/Consumer Goods	20	40	26	12	115
Finance/Real Estate/Business Services	7	26	17	8	62
IoT-related (Among the above)	7	3	4	0	14
Total	165	418	209	68	947

N: Number of VC firms responded 88

Note: The total may not correspond to the sum of breakdown owing to non-response.

Chart 6-22: Industry and stage distribution of new investments by Partnerships (Amount)

(Yen millions)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	468	686	159	250	1,562
Computers and Peripherals/IT services	3,611	18,392	8,245	1,340	38,128
Software	50	1,351	863	30	2,294
Semi-conductors/Electrical Machinery & Equipment	515	736	123	121	1,496
Biotechnology/Medicine	598	1,675	1,071	993	5,912
Medical Device and Equipment/Healthcare-related	125	878	641	134	1,778
Industrial/Energy/Other	775	2,337	2,054	579	11,052
Media/Entertainment/Retailing/Consumer Goods	425	1,128	1,154	858	7,364
Finance/Real Estate/Business Services	206	906	851	367	5,137
IoT-related (Among the above)	218	124	120	0	462
Total	6,773	28,088	15,162	4,673	74,723

N: Number of VC firms responded N=83

Chart 6-23: Industry and stage distribution of follow-on investments by Partnerships (Amount)

(Yen millions)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	0	165	30	0	195
Computers and Peripherals/IT services	949	3,335	3,309	1,114	8,707
Software	0	540	667	0	1,207
Semi-conductors/Electrical Machinery & Equipment	150	552	280	53	1,035
Biotechnology/Medicine	290	865	190	0	1,345
Medical Device and Equipment/Healthcare-related	58	75	63	0	296
Industrial/Energy/Other	185	4,444	55	315	5,111
Media/Entertainment/Retailing/Consumer Goods	460	362	802	137	1,761
Finance/Real Estate/Business Services	19	155	357	8	540
IoT-related (Among the above)	0	0	0	0	0
Total	2,111	10,493	5,753	1,627	20,197

N: Number of VC firms responded N=75

Chart 6-24: Industry and stage distribution of new and follow-on investments by Partnerships (Amount)

(Yen millions)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	468	850	189	250	1,756
Computers and Peripherals/IT services	4,560	21,727	11,554	2,454	46,835
Software	50	1,890	1,531	30	3,501
Semi-conductors/Electrical Machinery & Equipment	665	1,288	403	175	2,531
Biotechnology/Medicine	888	2,541	1,261	993	7,257
Medical Device and Equipment/Healthcare-related	183	952	704	134	2,074
Industrial/Energy/Other	960	6,781	2,109	893	16,163
Media/Entertainment/Retailing/Consumer Goods	885	1,490	1,956	995	9,125
Finance/Real Estate/Business Services	225	1,061	1,208	375	5,677
IoT-related (Among the above)	218	124	120	0	462
Total	8,884	38,581	20,915	6,300	94,920

N: Number of VC firms responded N=86

Note: The total may not correspond to the sum of breakdown owing to non-response.

Chart 6-25: Industry and stage distribution of new investments by VC firms and Partnerships (Number of deals)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	11	12	4	1	28
Computers and Peripherals/IT services	71	161	58	10	333
Software	1	21	13	1	36
Semi-conductors/Electrical Machinery & Equipment	5	20	4	3	32
Biotechnology/Medicine	13	23	12	7	60
Medical Device and Equipment/Healthcare-related	4	10	11	3	28
Industrial/Energy/Other	12	36	22	14	106
Media/Entertainment/Retailing/Consumer Goods	15	34	22	12	101
Finance/Real Estate/Business Services	7	21	9	7	50
IoT-related (Among the above)	7	6	2	0	15
Total	139	338	155	58	779

N: Number of VC firms responded N=90

Chart 6-26: Industry and stage distribution of follow-on investments by VC firms and Partnerships (Number of deals)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	0	2	0	0	2
Computers and Peripherals/IT services	12	49	32	9	103
Software	0	6	6	0	12
Semi-conductors/Electrical Machinery & Equipment	2	3	4	1	10
Biotechnology/Medicine	4	11	3	0	18
Medical Device and Equipment/Healthcare-related	1	3	2	0	7
Industrial/Energy/Other	3	11	2	5	23
Media/Entertainment/Retailing/Consumer Goods	5	8	5	1	19
Finance/Real Estate/Business Services	1	5	9	1	18
IoT-related (Among the above)	0	0	2	0	2
Total	28	98	63	17	213

N: Number of VC firms responded N=82

Chart 6-27: Industry and stage distribution of new and follow-on investments by VC firms and Partnerships (Number of deals)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	11	14	4	1	30
Computers and Peripherals/IT services	83	210	90	19	436
Software	1	27	19	1	48
Semi-conductors/Electrical Machinery & Equipment	7	23	8	4	42
Biotechnology/Medicine	17	34	15	7	78
Medical Device and Equipment/Healthcare-related	5	13	13	3	35
Industrial/Energy/Other	15	47	24	19	129
Media/Entertainment/Retailing/Consumer Goods	20	42	27	13	120
Finance/Real Estate/Business Services	8	26	18	8	68
IoT-related (Among the above)	7	6	4	0	17
Total	167	436	218	75	992

N: Number of VC firms responded N=93

Note: The total may not correspond to the sum of breakdown owing to non-response.

Chart 6-28: Industry and stage distribution of new investments by VC firms and Partnerships (Amount)

(Yen millions)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	468	898	159	250	1,774
Computers and Peripherals/IT services	3,611	18,549	8,674	1,340	44,094
Software	50	1,351	863	30	2,294
Semi-conductors/Electrical Machinery & Equipment	515	781	123	121	1,541
Biotechnology/Medicine	605	1,975	1,101	1,817	7,073
Medical Device and Equipment/Healthcare-related	125	878	641	134	1,778
Industrial/Energy/Other	775	2,557	2,075	722	11,436
Media/Entertainment/Retailing/Consumer Goods	425	1,168	1,158	873	7,629
Finance/Real Estate/Business Services	207	906	851	367	7,043
IoT-related (Among the above)	218	337	120	0	675
Total	6,781	29,062	15,646	5,655	84,663

N: Number of VC firms responded N=88

Chart 6-29: Industry and stage distribution of follow-on investments by VC firms and Partnerships (Amount)

(Yen millions)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	0	165	30	0	195
Computers and Peripherals/IT services	949	3,335	3,312	1,137	8,734
Software	0	540	667	0	1,207
Semi-conductors/Electrical Machinery & Equipment	150	552	282	53	1,036
Biotechnology/Medicine	290	866	190	0	1,346
Medical Device and Equipment/Healthcare-related	58	75	63	0	296
Industrial/Energy/Other	185	4,444	55	315	5,111
Media/Entertainment/Retailing/Consumer Goods	460	362	802	137	1,761
Finance/Real Estate/Business Services	19	155	360	8	842
IoT-related (Among the above)	0	0	0	0	0
Total	2,111	10,494	5,761	1,650	20,529

N: Number of VC firms responded N=80

Chart 6-30: Industry and stage distribution of new and follow-on investments by VC firms and Partnerships (Amount)

(Yen millions)

Industry	April 2015 - March 2016				
	Seed	Early	Expansion	Later	Total
Telecommunications/Networking and Equipment	468	1,063	189	250	1,969
Computers and Peripherals/IT services	4,560	21,884	11,986	2,477	52,828
Software	50	1,890	1,531	30	3,501
Semi-conductors/Electrical Machinery & Equipment	665	1,333	405	175	2,578
Biotechnology/Medicine	895	2,842	1,291	1,817	8,419
Medical Device and Equipment/Healthcare-related	183	952	704	134	2,074
Industrial/Energy/Other	960	7,001	2,130	1,036	16,547
Media/Entertainment/Retailing/Consumer Goods	885	1,530	1,960	1,010	9,390
Finance/Real Estate/Business Services	226	1,061	1,211	375	7,885
IoT-related (Among the above)	218	337	120	0	675
Total	8,892	39,556	21,407	7,305	105,192

N: Number of VC firms responded N=91

Note: The total may not correspond to the sum of breakdown owing to non-response.

Chart 6-31: Stage distribution of portfolio companies: Domestic and Overseas comparison (Number of deals)

Stage	April 2015 - March 2016						
	Domestic	China	India	Other Asian regions	Europe	North America	Other regions
Seed	142	0	0	9	1	8	0
Early	337	3	4	26	1	28	3
Expansion	171	3	0	15	0	14	0
Later	73	0	0	4	1	2	0
Total	760	8	8	94	4	60	3
N: Number of VC firms responded	N=108	N=107	N=107	N=107	N=107	N=107	N=107

Chart 6-32: Stage distribution of portfolio companies: Domestic and Overseas comparison (Amount)

(Yen millions)

Stage	April 2015 - March 2016						
	Domestic	China	India	Other Asian regions	Europe	North America	Other regions
Seed	8,360	0	0	3,937	5	545	0
Early	30,608	959	573	1,796	270	6,221	370
Expansion	15,785	1,033	0	2,861	0	1,763	0
Later	8,815	0	0	503	370	127	0
Total	70,894	2,347	2,805	23,233	771	12,411	370
N: Number of VC firms responded	N=108	N=107	N=107	N=107	N=107	N=107	N=107

Note1: The total may not correspond to the sum of breakdown owing to non-response.
Note2: For Overseas, some regional categories are different from the categories listed on other pages.

Chart 6-33: Industry distribution of portfolio companies: Domestic and Overseas comparison (Number of deals)

Industry	April 2015 - March 2016						
	Domestic	China	India	Other Asian regions	Europe	North America	Other regions
Telecommunications/Networking and Equipment	19	0	0	1	0	6	0
Computers and Peripherals/IT services	316	7	5	48	7	21	1
Software	60	0	0	2	1	9	2
Semi-conductors/Electrical Machinery & Equipment	48	2	0	1	0	1	0
Biotechnology/Medicine	74	0	0	10	0	9	0
Medical Device and Equipment/Healthcare-related	39	0	0	0	0	3	0
Industrial/Energy/Other	123	0	0	13	0	6	0
Media/Entertainment/Retailing/Consumer Goods	111	0	0	10	0	5	0
Finance/Real Estate/Business Services	57	0	3	10	0	4	0
IoT-related (Among the above)	25	0	0	1	0	3	0
Total	847	9	8	95	8	64	3
N: Number of VC firms responded	N=109	N=109	N=109	N=109	N=109	N=109	N=109

Chart 6-34: Industry distribution of portfolio companies: Domestic and Overseas comparison (Amount)

(Yen millions)

Industry	April 2015 - March 2016						
	Domestic	China	India	Other Asian regions	Europe	North America	Other regions
Telecommunications/Networking and Equipment	1,686	0	0	200	0	487	0
Computers and Peripherals/IT services	28,953	2,107	750	11,856	1,064	5,332	20
Software	3,815	0	0	135	5	1,278	350
Semi-conductors/Electrical Machinery & Equipment	4,293	309	0	112	0	11	0
Biotechnology/Medicine	7,797	0	0	2,065	0	694	0
Medical Device and Equipment/Healthcare-related	6,148	0	0	0	0	180	0
Industrial/Energy/Other	11,751	0	0	6,651	0	1,358	0
Media/Entertainment/Retailing/Consumer Goods	7,322	0	0	1,720	0	400	0
Finance/Real Estate/Business Services	2,886	0	2,055	543	0	2,707	0
IoT-related (Among the above)	1,007	1	0	200	0	213	0
Total	74,651	2,416	2,805	23,283	1,069	12,447	370
N: Number of VC firms responded	N=110	N=109	N=109	N=109	N=109	N=109	N=109

Note1: The total may not correspond to the sum of breakdown owing to non-response.

Note2: For Overseas, some regional categories are different from the categories listed on other pages.

Chart 6-35: Establishment and maturity of funds

	End of March 2015	April 2015 - March 2016		End of March 2016
		Established	Matured	
Number of funds	396	51	50	360
Total number of limited partners	2,499	363	268	2,467
Total fund value (Yen millions)	1,678,065	203,820	99,502	1,652,049

N: Number of VC firms responded N=97

Note 1: The term-end figures may not agree with the figures during the period owing to non-response.

Note 2: Total fund value is based on the amounts committed to funds (In the absence of capital commitments, based on the amount actually paid into funds).

Chart 6-36: Types of investors for funds established between April 2015 and March 2016

Type of investors	April 2015 - March 2016	
	Number of investers	Amount (Yen mil)
I. GP/Managing partners	48	9,012
II. Domestic total	296	146,753
Family/Individual relatives	47	3,125
Other VC/Fund of funds	14	9,195
Corporations	107	31,430
Bank/Trust and credit unions	83	28,628
Insurance companies	6	5,950
Brokerage firms	11	6,374
Pension funds	3	3,000
Government/Local public bodies (non-pension)	17	23,011
Academic societies/Universities	4	33,000
Other domestic	4	3,040
III. Overseas total	5	1,730
Total (I+II+III)	349	157,495

N: Number of VC firms responded N=34

Note 1: Numbers above refer to VC firms that provided the number of investors or investment amount (excluding VC firms that replied there was no investment from any type of investor).

Note 2: Total fund value is based on the amounts committed to funds (In the absence of capital commitments, based on the amount actually paid into funds).

Note: The total may not correspond to the sum of breakdown owing to non-response.

Chart 6-37: Exit status of companies invested by VC firms

(Yen millions)

		April 2015 - March 2016			
		Number of deals	Amount	Realized gain/loss	Unrealized gain/loss
IPO		15	696	627	2,873
Sale to a secondary fund		0	0	0	
Sale to another third party	M&A	2	61	17	
	Other	12	330	-150	
Write-off/Settlements		1	9	-9	
Buybacks by company management		19	322	-16	
Other		6	206	3	

N: Number of VC firms responded N=51

Chart 6-38: Exit status of companies invested by Partnerships

(Yen millions)

		April 2015 - March 2016			
		Number of deals	Amount	Realized gain/loss	Unrealized gain/loss
IPO		77	16,774	14,236	11,904
Sale to a secondary fund		14	295	-306	
Sale to another third party	M&A	39	9,174	7,511	
	Other	114	14,101	-1,715	
Write-off/Settlements		48	2,384	-3,508	
Buybacks by company management		206	8,110	-3,771	
Other		24	287	952	

N: Number of VC firms responded N=71

Chart 6-39: Exit status of companies invested by VC firms and Partnerships

(Yen millions)

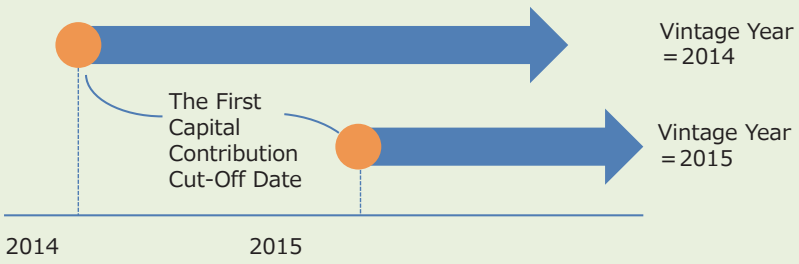
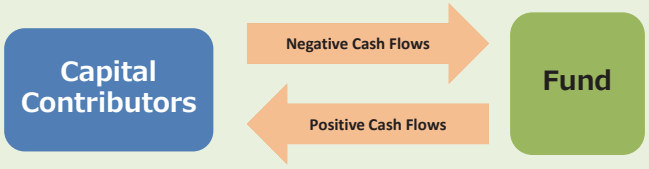
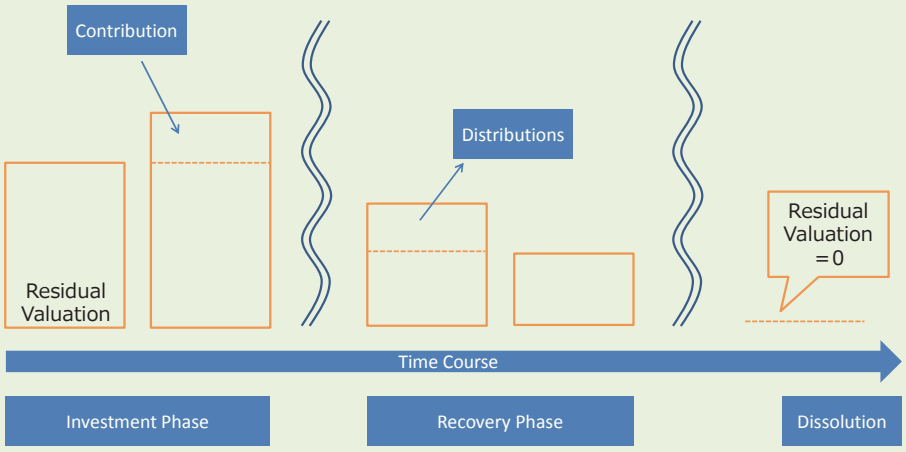
		April 2015 - March 2016			
		Number of deals	Amount	Realized gain/loss	Unrealized gain/loss
IPO		92	17,471	14,863	14,777
Sale to a secondary fund		14	295	-306	
Sale to another third party	M&A	41	9,235	7,528	
	Other	126	14,432	-1,866	
Write-off/Settlements		49	2,393	-3,517	
Buybacks by company management		225	8,431	-3,786	
Other		30	493	955	

N: Number of VC firms responded N=78

Note: The total may not correspond to the sum of breakdown owing to non-response.

CHAPTER II
Survey on Venture Capital Fund Status

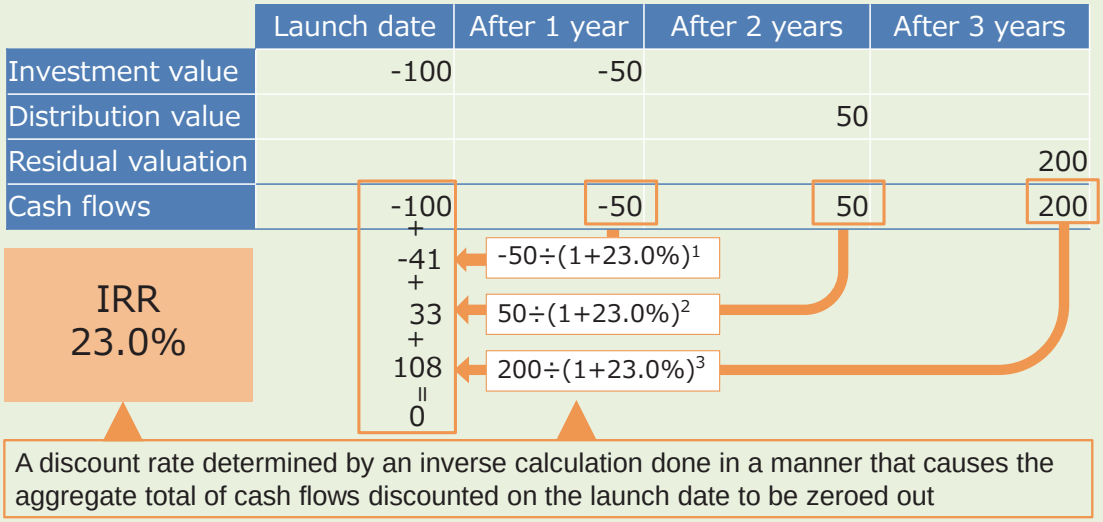
Terms and indices used for fund status surveys

Vintage Year	Signifies a year containing the first capital contribution cut-off date for a fund (launch date). Referred to also as “Launch Year” or “Vintage Year” 
Cash Flows	A fund survey treats investor capital contributions to a fund as negative cash flow and fund distributions to investors as positive cash flow. 
Residual Valuation	A startup company investment fund in operation is supposed to value unrealized gains and losses before recording their valuation as a residual valuation. VEC’s fund surveys compile data on the residual valuation of a given fund as of its latest valuation date. When computing the fund’s internal rate of return (IRR), we include its residual valuation as a positive cash flow. Residual valuation is also referred as “Residual Mark-to-Market Valuation.” 

IRR: Internal Rate of Return

Different startup investment funds, although differing in the length of investment term, can be compared in terms of performance for a given time frame if employing IRR. A fund currently in operation and a liquidated fund can be compared with an identical index by deeming the former's residual valuation as a distribution arising in the future, thus treating such a valuation as a positive cash flow.

IRR is a compound interest-based discount rate computed in a manner that makes net present value (NPV) equal to zero when discounting the following to the present value as of the fund's launch date: 1) capital contributions (negative cash flows); 2) distributions (positive cash flows); and, 3) the latest residual valuation (a positive cash flow for the sake of convenience). IRR represents the rate of return on investment (ROI).

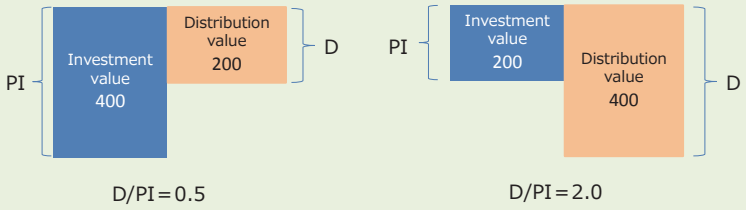
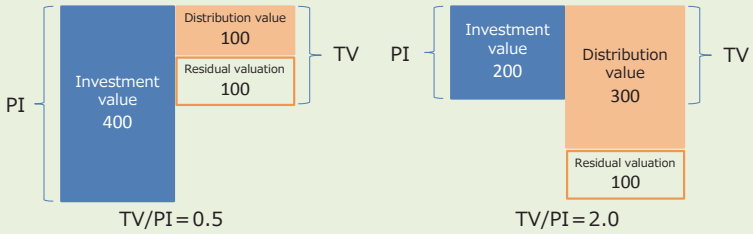


IRR Calculation Formula :

$$0 = \sum_{i=0}^{n} \frac{c_i}{(1+r)^{t_i}}$$

t_i	The period from launch (0) to the time point of "i"
C_i	Cash flow value at the time of ti Deem contributed capital as negative cash flows and distributions as positive cash flows. Add residual valuation at the final time point t_n as a positive cash flow at the time of t_n VEC makes calculations by deeming one month as 1/12 of a year, based on the assumption that any cash flow in a given month occurred in the end of the month.
r	IRR. Although the value of r is intended to be determined by solving a high-degree equation, no analytical solution usually exists, making it necessary to obtain an approximate solution with a sequential computation. VEC mainly employs the quasi-Newton method for obtaining such an approximate solution.

Simple Average IRR	A simple-average IRR of applicable funds that is determined irrespective of fund size. $\text{Simple Average IRR} = \frac{\sum_{i=1}^{n}(IRR)_i}{n}$ n Number of Funds i Individual Fund
Weighted Average IRR	In identifying the overall state of a startup company investment fund, one can assume that its return is affected more by larger funds than by smaller funds. Thus, weighted average IRR is something computed by applying different weights according to the fund size. VEC performs such a computation by deeming total capital contributions (total cumulative capital contributions) as the fund size. $\text{Weighted Average IRR} = \frac{\sum_{i=1}^{n}(\text{Total Contributions})_i (IRR)_i}{\sum_{i=1}^{n}(\text{Total Contributions})_i}$ n Number of Funds i Individual Fund
Pooled IRR	Pooled IRR is a type of IRR that is computed by obtaining different funds' total cash flows for each part of the data collection target period before deeming the funds as if they were a single fund. January / February / March / April Fund A: -100 / 50 / / 30 Fund B: / -500 / 20 / Fund C: -200 / / 50 / Total Cash Flows: -300 / -450 / 70 / 30 Pooled IRR = IRR computed on the basis of total cash flows

D/PI : Distribution to Paid - In	D/PI is a measure used to show cumulative total distributions against capital contributed. D/PI can be obtained by dividing cumulative distributions by total capital contributed. So, a D/PI in excess of one means cumulative distributions (namely, recovery value) are greater in value than capital contributed. 
TV/PI : Total Value to Paid - In	TV/PI is a measure used to show present fund value (total of recovered value and unrecovered portion valuation) against capital contributed. TV/PI can be obtained with the following formula: (Cumulative distributions + Residual valuation)/(Total capital contributed) Generally speaking, a liquidated fund's residual valuation becomes zero, making TV/PI equal to D/PI in value. 

Foreign exchange rate applied to a foreign currency-denominated fund

The total capital contributed of a foreign currency-denominated fund is translated into yen at the rate prevailing on the last day of the month containing the fund's first capital contribution cut-off date (launch date). When computing IRR, the total capital contributed is translated into yen at the rate prevailing on the last day of the month containing the date on which cash flow occurs.

About Survey on Venture Capital Fund Status in 2016

Survey on Venture Capital Fund Status in 2016 was conducted as follows:

Survey collection period	June 3 - August 10, 2016	
Target of survey	**Funds Exiting**	**Funds liquidated**
	The funds exiting as of May 31, 2016.	The funds exiting as of May 31, 2015 (The date of survey in 2015).
Number of companies surveyed	163 *Including VC firms that do not operate funds.	
Number of companies responded	87 *See II. Data: page II-136. The companies that responded to the fund status survey among list of VC firms.	
Response rate	53.4%	
provided data	350 funds	

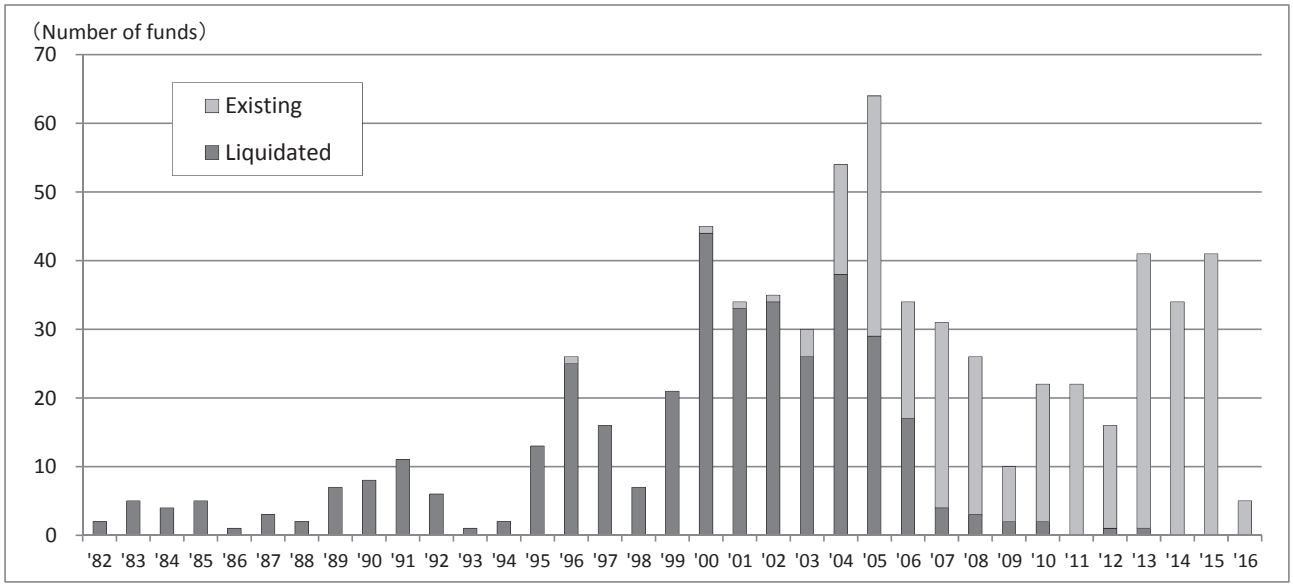
These data are combined with data on 334 liquidated funds obtained through our surveys done up to 2015 before being statistically processed. Target of Survey on Venture Capital Fund Status in 2016 as follows:

	Exiting	Liquidated	Total
All the funds	331 funds	373 funds	684 funds
The funds that targeted by the compilation	204 funds	223 funds	427 funds

1. Fund Category and Number of Funds

(1) Number of funds by vintage year

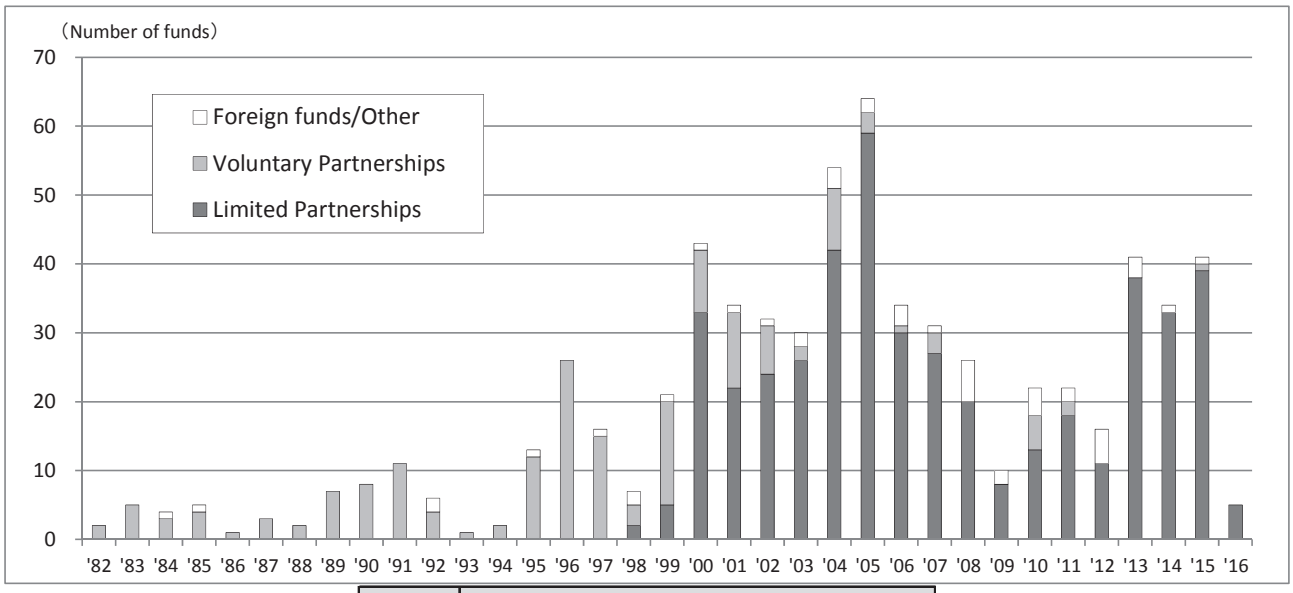
The following chart shows the number of funds by vintage year based on the first closing date. (Liquidated/Existing funds are separately shown.)



Vintage year	Number of Funds		
	All	Liquidated	Existing
'82	2	2	0
'83	5	5	0
'84	4	4	0
'85	5	5	0
'86	1	1	0
'87	3	3	0
'88	2	2	0
'89	7	7	0
'90	8	8	0
'91	11	11	0
'92	6	6	0
'93	1	1	0
'94	2	2	0
'95	13	13	0
'96	26	25	1
'97	16	16	0
'98	7	7	0
'99	21	21	0
'00	45	44	1
'01	34	33	1
'02	35	34	1
'03	30	26	4
'04	54	38	16
'05	64	29	35
'06	34	17	17
'07	31	4	27
'08	26	3	23
'09	10	2	8
'10	22	2	20
'11	22	0	22
'12	16	1	15
'13	41	1	40
'14	34	0	34
'15	41	0	41
'16	5	0	5
Total	684	373	311

(2) Number of funds by fund type

The following chart shows the number of funds established after the enactment of the Limited Partnership Act for Investment in November 1998. The funds are classified into limited partnerships based on the Act and voluntary partnerships ruled by the Civil Code.

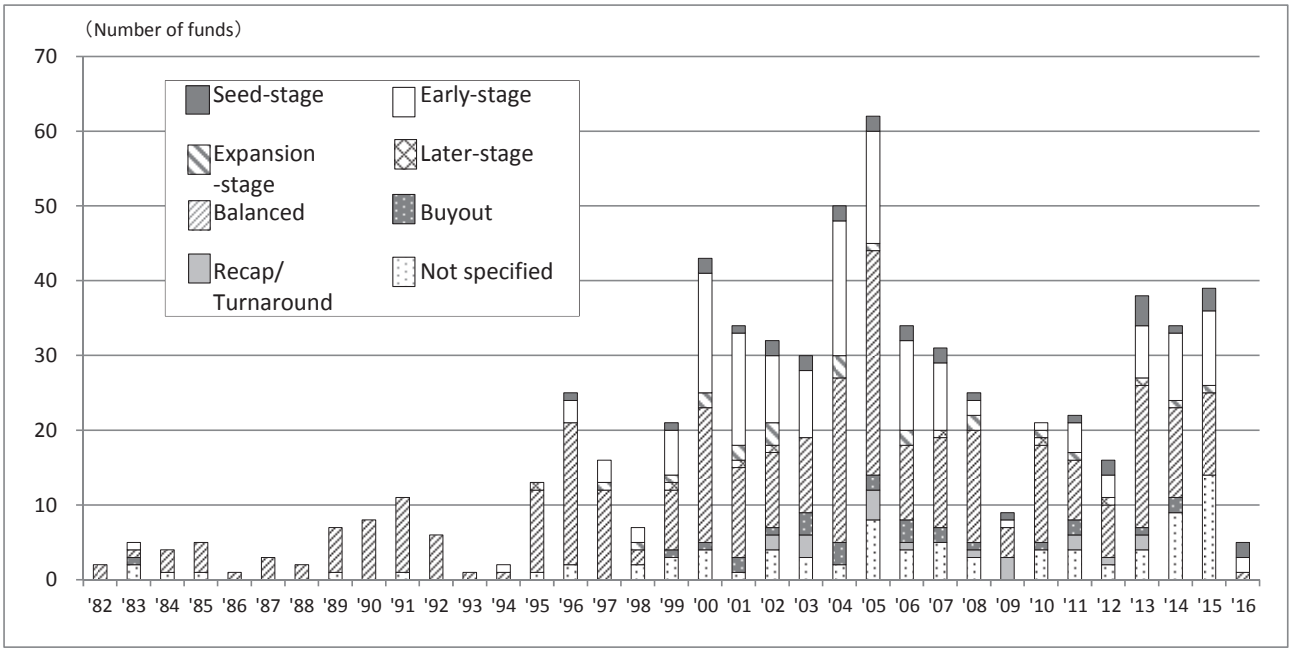


Vintage year	Number of Funds			
	All	Limited Partnerships	Voluntary Partnerships	Foreign funds/Other
'82	2	0	2	0
'83	5	0	5	0
'84	4	0	3	1
'85	5	0	4	1
'86	1	0	1	0
'87	3	0	3	0
'88	2	0	2	0
'89	7	0	7	0
'90	8	0	8	0
'91	11	0	11	0
'92	6	0	4	2
'93	1	0	1	0
'94	2	0	2	0
'95	13	0	12	1
'96	26	0	26	0
'97	16	0	15	1
'98	7	2	3	2
'99	21	5	15	1
'00	43	33	9	1
'01	34	22	11	1
'02	32	24	7	1
'03	30	26	2	2
'04	54	42	9	3
'05	64	59	3	2
'06	34	30	1	3
'07	31	27	3	1
'08	26	20	0	6
'09	10	8	0	2
'10	22	13	5	4
'11	22	18	2	2
'12	16	11	0	5
'13	41	38	0	3
'14	34	33	0	1
'15	41	39	1	1
'16	5	5	0	0
Total	679	455	177	47

Note: "Other" includes foreign-based corporate-type funds and US limited partnerships, etc.

(3) Number of funds by focused stage

The following chart shows the distribution of focused stages by vintage year.



Vintage year	Number of Funds								
	All	Seed-stage	Early-stage	Expansion -stage	Later-stage	Balanced	Buyout	Recap/ Turnaround	Not specified
'82	2	0	0	0	0	2	0	0	0
'83	5	0	1	0	0	1	1	0	2
'84	4	0	0	0	0	3	0	0	1
'85	5	0	0	0	0	4	0	0	1
'86	1	0	0	0	0	1	0	0	0
'87	3	0	0	0	0	3	0	0	0
'88	2	0	0	0	0	2	0	0	0
'89	7	0	0	0	0	6	0	0	1
'90	8	0	0	0	0	8	0	0	0
'91	11	0	0	0	0	10	0	0	1
'92	6	0	0	0	0	6	0	0	0
'93	1	0	0	0	0	1	0	0	0
'94	2	0	1	0	0	1	0	0	0
'95	13	0	0	0	1	11	0	0	1
'96	25	1	3	0	0	19	0	0	2
'97	16	0	3	1	0	12	0	0	0
'98	7	0	2	1	0	2	0	0	2
'99	21	1	6	1	1	8	1	0	3
'00	43	2	16	2	0	18	1	0	4
'01	34	1	15	2	1	12	2	0	1
'02	32	2	9	3	1	10	1	2	4
'03	30	2	9	0	0	10	3	3	3
'04	50	2	18	3	0	22	3	0	2
'05	62	2	15	1	0	30	2	4	8
'06	34	2	12	2	0	10	3	1	4
'07	31	2	9	0	1	12	2	0	5
'08	25	1	2	2	0	15	1	1	3
'09	9	1	1	0	0	4	0	3	0
'10	21	0	1	1	1	13	1	0	4
'11	22	1	4	1	0	8	2	2	4
'12	16	2	3	0	1	7	0	1	2
'13	38	4	7	0	1	19	1	2	4
'14	34	1	9	1	0	12	2	0	9
'15	39	3	10	1	0	11	0	0	14
'16	5	2	2	0	0	1	0	0	0
Total	664	32	158	22	8	314	26	19	85

(4) Number of funds by focused industry

The following table shows the breakdown of all funds classified by focused industry.

Industry	Number of Funds	Percentage
Telecommunications/Networking and Equipment	16	3%
Computers and Peripherals/IT services	37	6%
Software	2	0%
Semi-conductors/Electrical Machinery & Equipment	7	1%
Biotechnology/Medicine	31	5%
Medical Device and Equipment/Healthcare-related	6	1%
Industrial/Energy/Other	29	5%
Media/Entertainment/Retailing/Consumer Goods	8	1%
Finance/Real Estate/Business Services	5	1%
Clean Technology	6	1%
Not specified	481	77%
Total （1982-2016）	628	100%

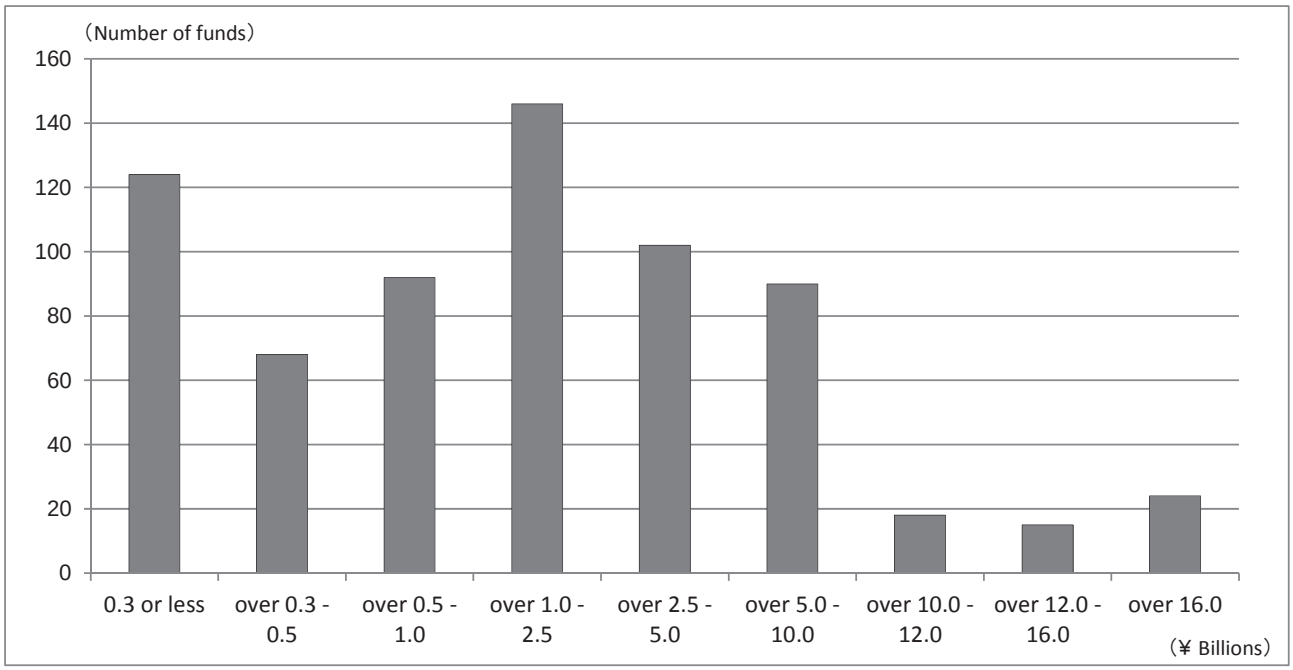
(5) Number of funds by focused region

The following table shows the breakdown of all funds classified by focused region.

Region	Number of Funds	Percentage
Hokkaido	10	35%
Tohoku	20	
Kanto (excl. Tokyo)	24	
Tokyo	30	
Chubu	25	
Kinki	45	
Chugoku	38	
Shikoku	7	
Kyushu and Okinawa	31	
Asia-Pacific	33	5%
Europe	0	0%
North America	13	2%
Mainly domestic	297	45%
Mainly overseas	22	3%
Not specified	61	9%
Total （1982-2016）	656	100%

(6) Number of funds by size

The following chart shows the number of funds by size, where size is represented by the cumulative capital contributions up to the time of survey (where there are multiple capital calls, the relevant sums are added).



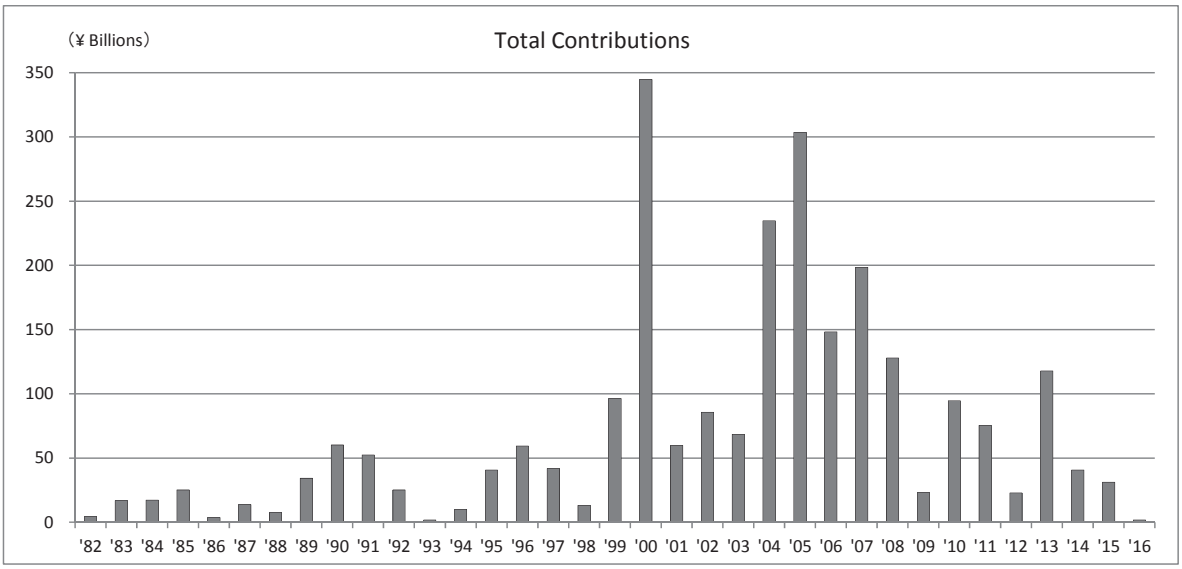
(Number of funds)

Fund Size (Yen billions))	2012	2013	2014	2015	2016	All Funds (1982-2016)
0.3 or less	5	15	17	23	3	124
over 0.3 - 0.5	3	2	5	5	1	68
over 0.5 - 1.0	1	5	2	3	1	92
over 1.0 - 2.5	4	8	4	7	0	146
over 2.5 - 5.0	2	3	3	3	0	102
over 5.0 - 10.0	1	5	3	0	0	90
over 10.0 - 12.0	0	1	0	0	0	18
over 12.0 - 16.0	0	1	0	0	0	15
over 16.0	0	1	0	0	0	24
Total	16	41	34	41	5	679

2. Fund Category and Average Size of Fund

(1) Total contributions by vintage year

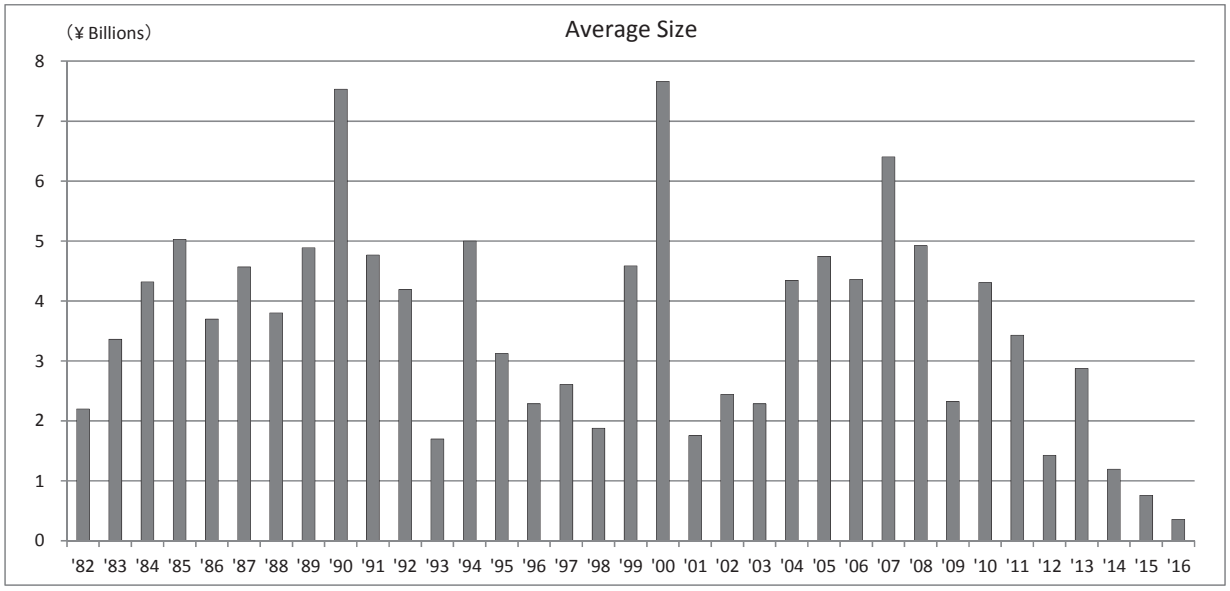
The following chart shows the cumulative total contributions up to the time of survey by vintage year (where there are multiple capital calls, the relevant sums are added).



Vintage Year	Number of Funds	Total Contributions (Yen billions)
'82	2	4.4
'83	5	16.8
'84	4	17.3
'85	5	25.1
'86	1	3.7
'87	3	13.7
'88	2	7.6
'89	7	34.2
'90	8	60.3
'91	11	52.4
'92	6	25.1
'93	1	1.7
'94	2	10.0
'95	13	40.7
'96	26	59.4
'97	16	41.7
'98	7	13.1
'99	21	96.3
'00	45	344.7
'01	34	59.7
'02	35	85.6
'03	30	68.5
'04	54	234.7
'05	64	303.6
'06	34	148.2
'07	31	198.4
'08	26	127.9
'09	10	23.2
'10	22	94.7
'11	22	75.5
'12	16	22.9
'13	41	117.9
'14	34	40.6
'15	41	31.2
'16	5	1.8
Total	684	2,502.8

(2) Average size of funds by vintage year

The following chart shows the average size of funds by vintage year.

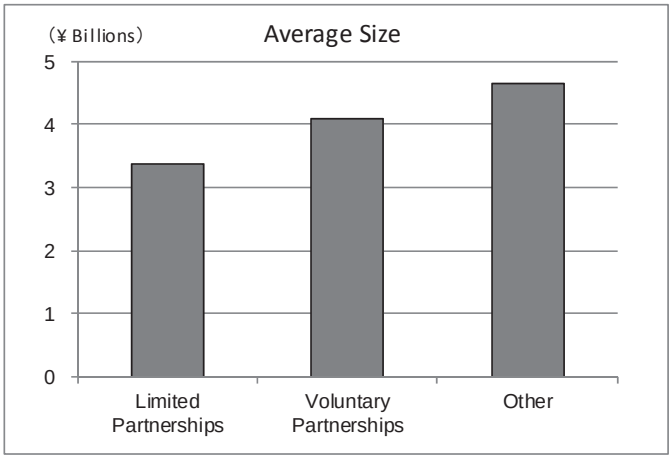


Vintage Year	Number of Funds	Average Size （Yen billions）
'82	2	2.2
'83	5	3.4
'84	4	4.3
'85	5	5.0
'86	1	3.7
'87	3	4.6
'88	2	3.8
'89	7	4.9
'90	8	7.5
'91	11	4.8
'92	6	4.2
'93	1	1.7
'94	2	5.0
'95	13	3.1
'96	26	2.3
'97	16	2.6
'98	7	1.9
'99	21	4.6
'00	45	7.7
'01	34	1.8
'02	35	2.4
'03	30	2.3
'04	54	4.3
'05	64	4.7
'06	34	4.4
'07	31	6.4
'08	26	4.9
'09	10	2.3
'10	22	4.3
'11	22	3.4
'12	16	1.4
'13	41	2.9
'14	34	1.2
'15	41	0.8
'16	5	0.4
Total	684	-

(3) Average size of funds by fund type

All funds are classified according to legal regulations, and the average sizes are computed for each type.

Type of funds	Number of Funds	Average Size (Yen billions)
Limited Partnerships	455	3.4
Voluntary Partnerships	177	4.1
Other	47	4.6
Total	679	-



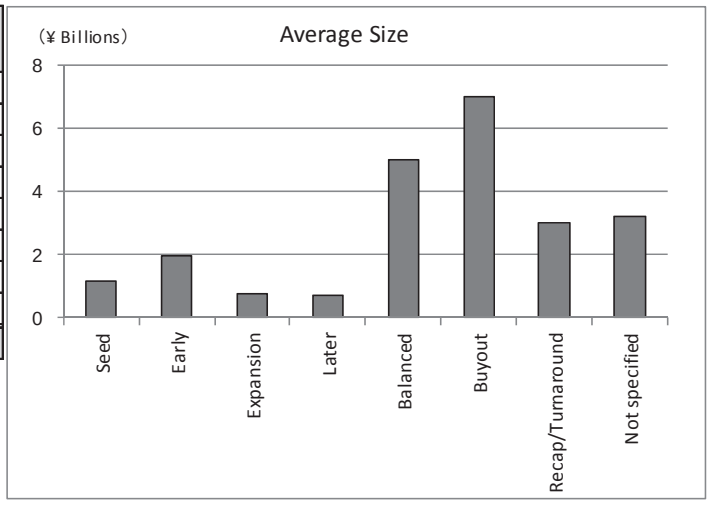
Note 1: "Other" includes foreign-based corporate-type funds and US limited partnerships, etc.

Note 2: Funds based on the Limited Partnership Act for Investment were started operating in 1999 onwards.

(4) Average size of funds by focused stage

All funds are classified according to their focused stage and the average sizes are computed for each stage.

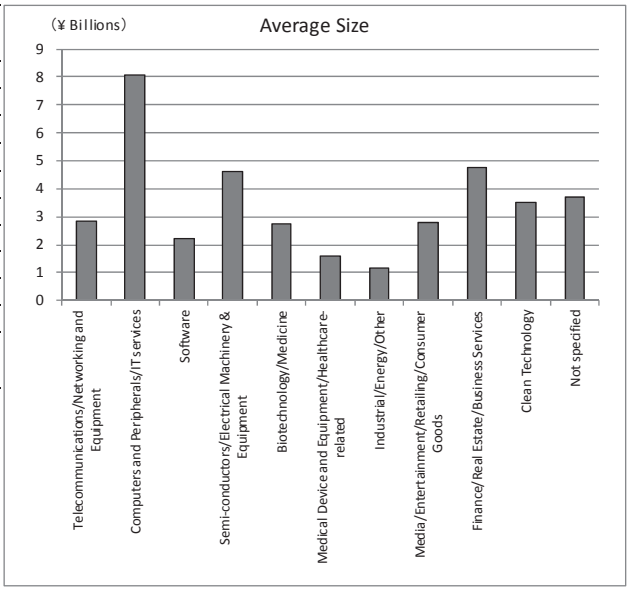
Stage	Number of Funds	Average Size (Yen billions)
Seed	32	1.1
Early	158	2.0
Expansion	22	0.7
Later	8	0.7
Balanced	314	5.0
Buyout	26	7.0
Recap/Turnaround	19	3.0
Not specified	85	3.2
Total	664	-



(5) Average size of funds by focused industry

All funds are classified according to their focused industry and the average sizes are computed for each industry.

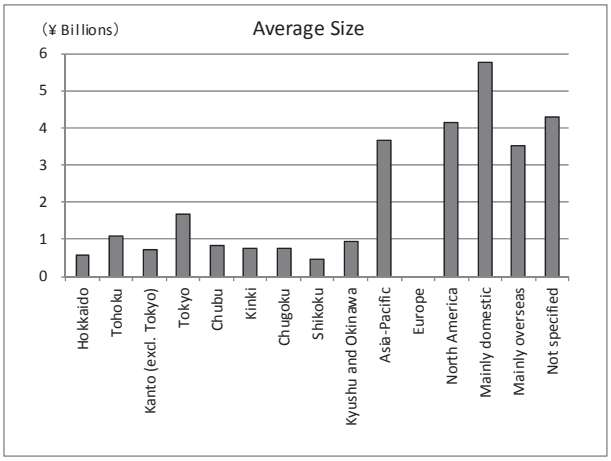
Industry	Number of Funds	Average Size (Yen billions)
Telecommunications/Networking and Equipment	16	2.8
Computers and Peripherals/IT services	37	8.1
Software	2	2.2
Semi-conductors/Electrical Machinery & Equipment	7	4.6
Biotechnology/Medicine	31	2.7
Medical Device and Equipment/Healthcare-related	6	1.6
Industrial/Energy/Other	29	1.1
Media/Entertainment/Retailing/Consumer Goods	8	2.8
Finance/Real Estate/Business Services	5	4.8
Clean Technology	6	3.5
Not specified	481	3.7
Total	628	-



(6) Average size of funds by focused region

All funds are classified according to their focused region and the average sizes are computed for each region.

Region	Number of Funds	Average Size (Yen billions)
Hokkaido	10	0.6
Tohoku	20	1.1
Kanto (excl. Tokyo)	24	0.7
Tokyo	30	1.7
Chubu	25	0.8
Kinki	45	0.7
Chugoku	38	0.7
Shikoku	7	0.5
Kyushu and Okinawa	31	0.9
Asia-Pacific	33	3.7
Europe	0	-
North America	13	4.1
Mainly domestic	297	5.8
Mainly overseas	22	3.5
Not specified	61	4.3
Total	656	-



3. Breakdown of investors

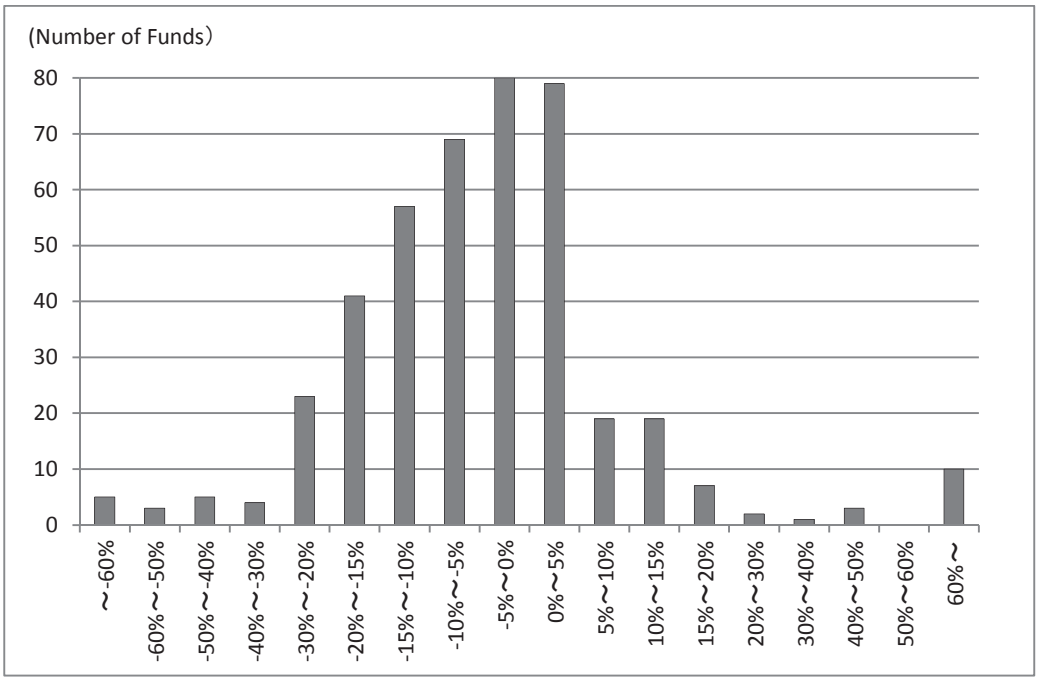
The following table shows the breakdown of investors by industry.

Vintage Year	Number of Funds	Percentage of Contributions											
		General Partners	Family/Private Individuals	Other VC/ Fund of Funds	Corporate Investors	Bank/Trust and Credit Unions	Insurance Companies	Brokerage Firms	Pension Funds	Government/ Local Public Bodies (Non-Pension)	Academic societies/ Universities	Other Domestic	Foreign Firms
'82	0	-	-	-	-	-	-	-	-	-	-	-	-
'83	2	5.9%	0.0%	3.9%	49.0%	9.8%	31.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
'84	1	-	-	-	-	-	-	-	-	-	-	-	-
'85	1	-	-	-	-	-	-	-	-	-	-	-	-
'86	0	-	-	-	-	-	-	-	-	-	-	-	-
'87	0	-	-	-	-	-	-	-	-	-	-	-	-
'88	0	-	-	-	-	-	-	-	-	-	-	-	-
'89	4	2.8%	0.0%	3.7%	28.6%	12.9%	28.3%	15.8%	0.0%	0.5%	0.0%	7.0%	0.6%
'90	4	3.5%	1.8%	7.5%	28.8%	7.0%	22.3%	5.1%	0.0%	0.9%	0.0%	23.1%	0.0%
'91	3	6.9%	0.0%	0.0%	50.6%	5.4%	9.9%	6.2%	0.0%	0.0%	0.0%	20.2%	0.8%
'92	2	20.0%	0.0%	0.0%	0.0%	0.0%	80.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
'93	0	-	-	-	-	-	-	-	-	-	-	-	-
'94	0	-	-	-	-	-	-	-	-	-	-	-	-
'95	6	36.9%	3.0%	3.0%	36.0%	12.3%	4.2%	0.6%	0.0%	0.0%	0.0%	3.0%	0.9%
'96	19	11.9%	0.4%	2.4%	26.1%	21.1%	13.6%	3.2%	0.0%	3.6%	0.0%	16.3%	1.3%
'97	10	19.9%	0.0%	9.7%	11.3%	8.1%	18.8%	3.2%	0.0%	1.5%	0.0%	25.9%	1.6%
'98	7	2.5%	1.7%	2.3%	55.0%	12.8%	23.6%	1.5%	0.0%	0.0%	0.0%	0.5%	0.3%
'99	15	25.5%	0.0%	4.0%	7.9%	18.7%	27.4%	0.0%	8.0%	0.0%	3.4%	1.7%	3.4%
'00	33	21.8%	10.0%	3.4%	18.2%	12.8%	16.3%	1.2%	6.8%	4.9%	0.6%	1.1%	2.9%
'01	25	11.7%	1.3%	28.5%	16.9%	12.1%	6.8%	18.1%	0.6%	3.1%	0.0%	0.2%	0.8%
'02	26	28.4%	0.9%	2.7%	15.8%	15.7%	4.5%	22.8%	0.0%	5.2%	0.4%	2.2%	1.4%
'03	25	12.5%	2.3%	20.7%	9.7%	28.6%	4.5%	0.4%	0.0%	6.4%	0.0%	14.6%	0.3%
'04	47	28.3%	2.0%	5.8%	14.2%	24.8%	11.8%	1.0%	0.9%	5.0%	1.3%	2.3%	2.6%
'05	54	18.9%	0.5%	4.4%	14.6%	27.9%	16.2%	2.9%	4.6%	5.7%	1.2%	2.3%	0.8%
'06	27	9.4%	0.2%	11.4%	26.6%	15.7%	11.0%	14.8%	1.2%	7.8%	0.0%	1.2%	0.8%
'07	26	24.4%	0.3%	2.3%	26.5%	21.1%	12.2%	1.7%	5.4%	3.5%	1.3%	0.8%	0.6%
'08	14	54.5%	0.0%	0.7%	4.7%	5.8%	20.2%	5.7%	0.0%	8.4%	0.0%	0.0%	0.0%
'09	7	3.1%	0.1%	2.5%	6.2%	36.8%	14.6%	0.0%	0.0%	36.2%	0.0%	0.5%	0.0%
'10	11	19.2%	0.1%	0.0%	27.5%	39.3%	6.5%	0.1%	0.0%	5.7%	0.0%	1.5%	0.0%
'11	16	5.2%	0.4%	0.4%	15.4%	23.3%	18.3%	4.3%	0.9%	25.3%	0.0%	3.4%	3.2%
'12	12	4.4%	0.6%	0.0%	7.1%	31.5%	49.4%	0.0%	0.0%	7.1%	0.0%	0.0%	0.0%
'13	34	32.2%	0.6%	0.7%	25.2%	21.5%	2.5%	1.5%	0.0%	11.2%	0.0%	4.1%	0.5%
'14	28	15.1%	0.5%	0.4%	24.0%	30.6%	26.9%	0.0%	0.0%	0.7%	0.0%	1.6%	0.2%
'15	39	7.7%	3.1%	0.9%	18.2%	29.9%	2.2%	5.2%	0.0%	16.5%	13.2%	0.6%	2.5%
'16	4	1.6%	0.0%	0.0%	25.9%	15.2%	0.0%	26.1%	0.0%	31.3%	0.0%	0.0%	0.0%
Total	502	21.0%	1.8%	4.7%	19.4%	20.7%	13.8%	4.1%	2.6%	6.1%	1.0%	3.3%	1.5%

4. Fund Performance

(1) Internal rate of return (IRR) on all funds

1. Distribution of IRR (as a whole)

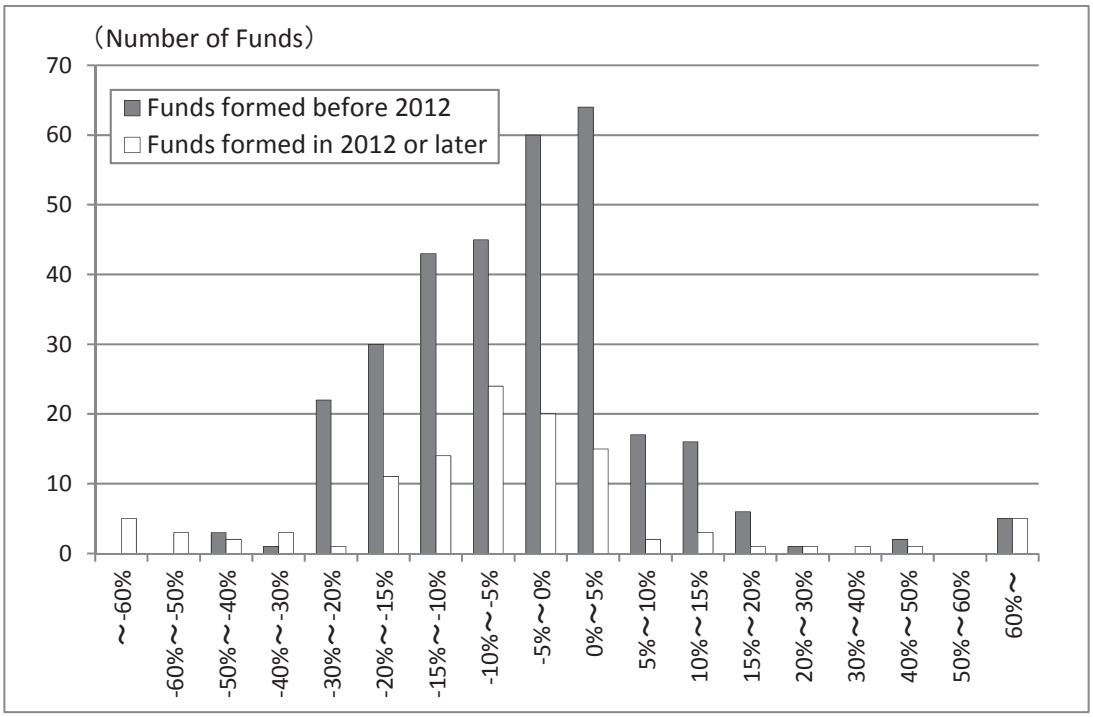


IRR	Number of Funds
～-60%	5
-60%～-50%	3
-50%～-40%	5
-40%～-30%	4
-30%～-20%	23
-20%～-15%	41
-15%～-10%	57
-10%～-5%	69
-5%～0%	80
0%～5%	79
5%～10%	19
10%～15%	19
15%～20%	7
20%～30%	2
30%～40%	1
40%～50%	3
50%～60%	0
60%～	10
Total	427

Note: Each range of IRR is “x% and over but less than xx%”.

2. Distribution of IRR (by period of fund management)

The next chart shows the distributions of the internal rate of return (IRR) on individual funds classified by investment.



	Number of Funds		
	Total	Funds formed before 2012	Funds formed in 2012 or later
～-60%	5	0	5
-60%～-50%	3	0	3
-50%～-40%	5	3	2
-40%～-30%	4	1	3
-30%～-20%	23	22	1
-20%～-15%	41	30	11
-15%～-10%	57	43	14
-10%～-5%	69	45	24
-5%～0%	80	60	20
0%～5%	79	64	15
5%～10%	19	17	2
10%～15%	19	16	3
15%～20%	7	6	1
20%～30%	2	1	1
30%～40%	1	0	1
40%～50%	3	2	1
50%～60%	0	0	0
60%～	10	5	5
Total	427	315	112

Note: Each range of IRR is "x% and over but less than xx%".

3. IRR distribution by fund type

IRR	Number of Funds		
	Total	Limited Partnerships	Voluntary Partnerships
～-60%	5	5	0
-60%～-50%	3	3	0
-50%～-40%	5	2	2
-40%～-30%	4	4	0
-30%～-20%	23	21	1
-20%～-15%	41	37	4
-15%～-10%	57	49	7
-10%～-5%	69	64	5
-5%～0%	80	60	18
0%～5%	79	37	38
5%～10%	19	13	5
10%～15%	19	6	11
15%～20%	7	3	3
20%～30%	2	2	0
30%～40%	1	0	0
40%～50%	3	2	0
50%～60%	0	0	0
60%～	10	6	3
Total	427	314	97

Note: Each range of IRR is “x% and over but less than xx%”.

4. IRR distribution by focused stage

IRR	Number of Funds								
	Total	Seed	Early	Expansion	Later	Balanced	Buyout	Recap/ Turnaround	Not specified
～-60%	4	0	1	0	0	1	0	0	2
-60%～-50%	3	1	0	0	0	0	0	0	2
-50%～-40%	4	0	1	1	0	2	0	0	0
-40%～-30%	4	0	1	0	0	2	0	0	1
-30%～-20%	23	0	9	2	0	9	0	1	2
-20%～-15%	40	5	15	1	0	12	1	0	6
-15%～-10%	55	3	25	4	2	13	0	2	6
-10%～-5%	66	3	22	1	0	25	2	4	9
-5%～0%	77	2	19	4	1	37	1	1	12
0%～5%	76	3	16	2	0	38	3	0	14
5%～10%	18	2	3	1	0	11	0	0	1
10%～15%	19	0	4	0	0	13	1	0	1
15%～20%	7	1	2	1	0	3	0	0	0
20%～30%	2	0	1	0	0	0	0	1	0
30%～40%	1	1	0	0	0	0	0	0	0
40%～50%	3	0	2	0	0	0	0	0	1
50%～60%	0	0	0	0	0	0	0	0	0
60%～	10	1	4	1	0	1	1	0	2
Total	412	22	125	18	3	167	9	9	59

Note: Each range of IRR is “x% and over but less than xx%”.

5. IRR distribution by focused industry

IRR	Number of Funds											
	All	Telecommunications /Networking and Equipment	Computers and Peripherals/ IT Services	Software	Semi-conductors/ Electrical Machinery & Equipment	Biotechnology/ Medicine	Medical Device and Equipment /Healthcare-related	Industrial/ Energy/ Other	Media/ Entertainment/ Retailing/ Consumer Goods	Finance/ Real Estate/ Business Services	Clean Technology	Not specified
～-60%	4	0	0	0	0	0	0	0	0	0	0	4
-60%～-50%	3	0	0	0	0	0	0	1	0	0	0	2
-50%～-40%	4	0	1	0	0	0	0	2	0	0	0	1
-40%～-30%	3	0	0	0	0	0	0	1	0	1	0	1
-30%～-20%	23	1	1	0	0	1	0	1	0	0	1	18
-20%～-15%	40	1	1	0	0	4	0	1	1	0	1	31
-15%～-10%	55	0	2	0	1	3	2	1	0	0	1	45
-10%～-5%	65	3	1	1	0	5	0	2	1	0	1	51
-5%～0%	72	1	2	0	1	4	0	2	0	0	1	61
0%～5%	71	1	5	1	1	3	0	2	0	0	0	58
5%～10%	18	0	0	0	0	2	0	0	2	0	0	14
10%～15%	17	0	0	0	0	0	0	0	0	0	0	17
15%～20%	7	0	0	0	0	0	0	0	0	0	0	7
20%～30%	2	1	0	0	0	0	0	0	0	0	0	1
30%～40%	1	0	0	0	0	0	0	0	0	0	0	1
40%～50%	3	1	0	0	0	0	0	0	0	0	0	2
50%～60%	0	0	0	0	0	0	0	0	0	0	0	0
60%～	10	3	1	0	0	2	0	0	0	0	0	4
Total	398	12	14	2	3	24	2	13	4	1	5	318

Note: Each range of IRR is “x% and over but less than xx%”.

6. IRR distribution by focused region

IRR	Number of Funds				
	Domestic Region	Overseas Region	Mainly Domestic	Mainly Overseas	Not specified
～-60%	4	0	0	0	0
-60%～-50%	1	0	0	0	2
-50%～-40%	2	0	0	0	2
-40%～-30%	3	0	0	1	0
-30%～-20%	10	0	8	0	4
-20%～-15%	18	0	21	0	1
-15%～-10%	32	0	15	0	7
-10%～-5%	37	0	21	0	11
-5%～0%	30	0	34	0	9
0%～5%	15	2	45	3	10
5%～10%	4	0	11	0	3
10%～15%	1	0	16	0	0
15%～20%	2	0	5	0	0
20%～30%	2	0	0	0	0
30%～40%	0	0	1	0	0
40%～50%	0	1	1	0	1
50%～60%	0	0	0	0	0
60%～	2	3	4	0	1
Total	163	6	182	4	51

Domestic Region	Hokkaido, Tohoku, Kanto (excl. Tokyo), Tokyo, Chubu, Kinki,Chugoku, Shikoku, Kyushu and Okinawa
Overseas Region	Asia-Pacific, Europe, North America

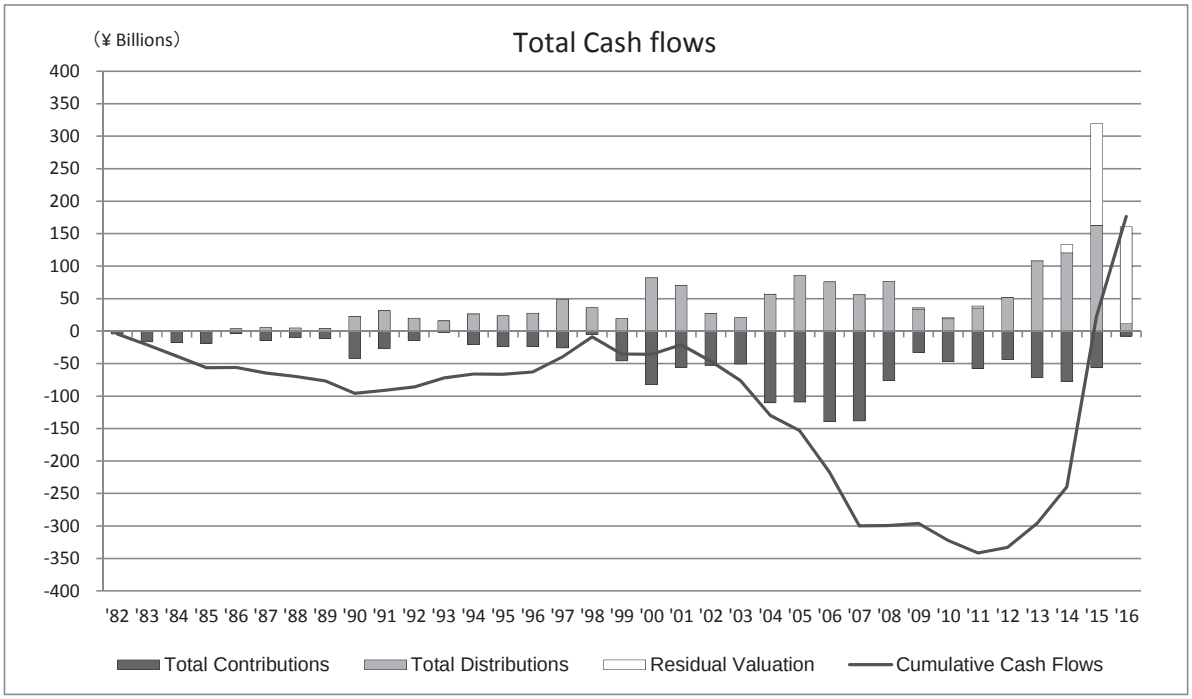
Note: Each range of IRR is “x% and over but less than xx%”.

(2) Cash flow and performance of all funds

The following table shows the cash flow for individual funds by vintage year, and the computed results of the distribution to paid-in ratio (DPI) and the total value to paid-in ratio (TVPI).

Note: For years 1986, 1993 and 1994, only one fund was under survey. To avoid disclosing the performance of individual funds, no data are shown.

Vintage Year	Number of Funds	DPI	TVPI
'82	2	3.13	3.13
'83	5	2.74	2.74
'84	4	2.68	2.68
'85	5	2.18	2.18
'86	1	-	-
'87	3	1.40	1.40
'88	2	1.01	1.01
'89	4	0.87	0.87
'90	4	1.04	1.04
'91	8	1.15	1.15
'92	4	1.33	1.33
'93	1	-	-
'94	1	-	-
'95	5	1.86	1.86
'96	7	1.10	1.10
'97	7	3.23	3.23
'98	4	1.14	1.14
'99	13	1.25	1.27
'00	27	0.91	0.93
'01	21	0.74	0.75
'02	23	0.65	0.73
'03	17	0.88	0.93
'04	33	0.89	0.95
'05	47	0.53	0.59
'06	24	0.53	0.83
'07	22	0.91	1.18
'08	14	0.83	1.08
'09	7	0.21	0.75
'10	11	0.54	1.20
'11	15	0.41	1.18
'12	10	0.01	0.95
'13	30	0.10	1.10
'14	20	0.00	1.08
'15	23	0.00	0.91
'16	3	0.02	1.00
Total	427	0.87	1.88



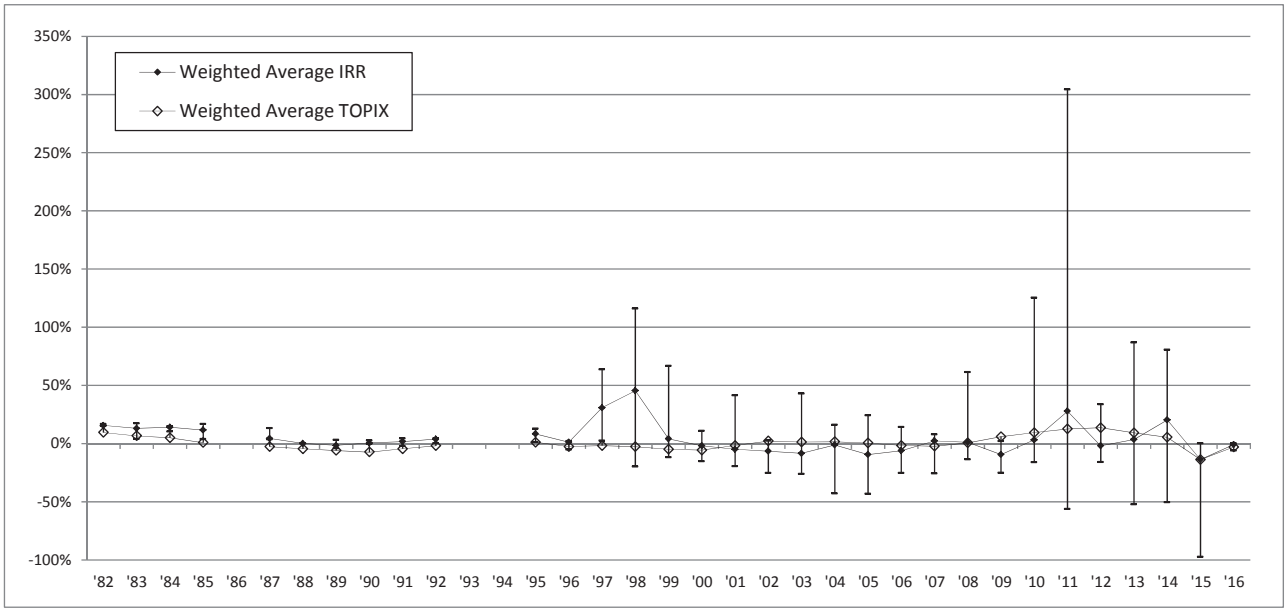
(Yen billions)

Year When Cash Flow Occurred	Total Contributions	Total Distributions	Residual Valuation	Cumulative Cash Flows
'82	-4.4	0.0	0.0	-4.4
'83	-16.8	0.0	0.0	-21.2
'84	-17.3	0.0	0.0	-38.4
'85	-18.8	1.0	0.0	-56.2
'86	-3.7	3.8	0.0	-56.1
'87	-14.0	5.8	0.0	-64.3
'88	-10.3	4.9	0.0	-69.7
'89	-11.4	4.3	0.0	-76.8
'90	-41.7	22.8	0.0	-95.7
'91	-27.1	31.8	0.0	-91.1
'92	-14.6	19.8	0.0	-85.9
'93	-1.9	15.7	0.0	-72.1
'94	-20.4	26.4	0.0	-66.1
'95	-24.0	23.7	0.0	-66.4
'96	-24.0	27.5	0.0	-62.9
'97	-25.9	49.2	0.0	-39.6
'98	-5.4	36.2	0.0	-8.9
'99	-46.0	19.7	0.0	-35.1
'00	-82.3	82.0	0.0	-35.5
'01	-56.0	70.5	0.0	-21.0
'02	-52.2	27.1	0.0	-46.1
'03	-50.7	20.7	0.0	-76.1
'04	-110.3	56.6	0.0	-129.8
'05	-109.1	85.8	0.0	-153.1
'06	-139.6	75.7	0.0	-217.0
'07	-138.3	55.8	0.0	-299.5
'08	-76.3	76.6	0.0	-299.3
'09	-33.0	34.1	2.3	-295.9
'10	-47.1	19.1	1.5	-322.4
'11	-57.4	35.8	2.5	-341.5
'12	-43.4	51.5	0.3	-333.0
'13	-71.8	106.9	2.2	-295.7
'14	-77.7	120.5	13.0	-239.9
'15	-56.4	162.8	156.7	23.2
'16	-7.6	11.7	149.1	176.5
Total	-1,537.1	1,385.9	327.6	

5. IRR by vintage year

Here, the capital weighted average IRR based on calculating IRR for each fund and the performance of the stock market (TOPIX) are compared.

*For years 1986, 1993 and 1994, only one fund was under survey. To avoid disclosing the performance of individual funds, no data are shown.



Vintage Year	Number of Funds	Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value	Weighted Average TOPIX
'82	2	15.61%	15.59%	15.84%	1.29%	16.75%	16.29%	15.84%	15.38%	14.93%	9.46%
'83	5	13.83%	13.07%	8.76%	6.13%	17.16%	13.44%	4.92%	4.42%	3.84%	6.63%
'84	4	14.17%	14.06%	13.05%	2.00%	14.82%	14.40%	13.51%	12.16%	10.35%	4.93%
'85	5	10.91%	11.62%	9.81%	4.64%	16.76%	10.14%	9.20%	9.20%	3.72%	0.81%
'86	1	-	-	-	-	-	-	-	-	-	-
'87	3	4.23%	4.40%	6.80%	5.48%	13.12%	8.38%	3.64%	3.64%	3.64%	-2.64%
'88	2	0.10%	0.10%	0.10%	0.03%	0.12%	0.11%	0.10%	0.09%	0.08%	-4.49%
'89	4	-1.60%	-1.65%	-1.39%	3.51%	3.24%	0.39%	-2.34%	-4.12%	-4.12%	-5.97%
'90	4	0.50%	0.51%	0.69%	1.32%	2.51%	1.23%	0.29%	-0.25%	-0.33%	-7.32%
'91	8	2.04%	1.77%	0.84%	2.27%	4.31%	2.06%	1.35%	-0.92%	-2.30%	-4.48%
'92	4	4.03%	3.80%	3.17%	1.98%	4.40%	4.39%	4.02%	2.80%	0.25%	-1.91%
'93	1	-	-	-	-	-	-	-	-	-	-
'94	1	-	-	-	-	-	-	-	-	-	-
'95	5	9.13%	8.32%	8.66%	4.65%	12.89%	10.92%	10.90%	7.47%	1.11%	1.05%
'96	7	1.18%	1.16%	-0.69%	2.85%	2.01%	1.65%	0.06%	-2.40%	-5.38%	-2.61%
'97	7	30.71%	30.79%	15.18%	21.84%	63.65%	12.50%	6.22%	4.52%	2.34%	-1.79%
'98	4	3.11%	45.38%	25.02%	61.74%	116.02%	35.04%	1.98%	-8.05%	-19.91%	-2.68%
'99	13	5.10%	4.06%	3.15%	20.10%	66.73%	3.44%	0.18%	-9.16%	-11.98%	-4.93%
'00	27	-1.29%	-1.87%	-2.41%	6.97%	10.92%	1.01%	-2.16%	-8.74%	-15.33%	-5.66%
'01	21	-4.71%	-4.93%	-5.64%	12.72%	41.42%	-2.82%	-6.65%	-12.80%	-19.56%	-1.58%
'02	23	-4.77%	-6.56%	-10.43%	7.78%	2.63%	-6.27%	-10.97%	-15.21%	-25.47%	2.17%
'03	17	-1.63%	-8.38%	-6.70%	14.26%	43.00%	-5.66%	-7.90%	-14.02%	-26.15%	1.30%
'04	33	-0.89%	-1.10%	-7.39%	12.26%	16.12%	0.91%	-10.20%	-14.70%	-43.10%	1.53%
'05	47	-7.64%	-9.42%	-10.98%	12.80%	24.23%	-3.53%	-8.71%	-17.67%	-43.24%	0.44%
'06	24	-2.78%	-6.15%	-10.78%	10.03%	14.20%	-4.03%	-10.84%	-18.83%	-25.52%	-1.59%
'07	22	3.04%	2.31%	-7.37%	10.56%	7.70%	1.68%	-9.58%	-13.79%	-25.78%	-2.31%
'08	14	1.78%	1.22%	1.32%	18.13%	61.35%	2.01%	-2.44%	-6.78%	-13.60%	0.55%
'09	7	-7.96%	-9.42%	-9.22%	9.90%	2.06%	-1.52%	-9.37%	-14.46%	-25.31%	5.92%
'10	11	6.54%	3.24%	9.02%	39.71%	125.29%	6.97%	-2.38%	-9.12%	-16.06%	9.35%
'11	15	8.23%	27.87%	14.47%	81.81%	304.26%	2.02%	-5.01%	-7.11%	-56.33%	12.56%
'12	10	-2.30%	-1.93%	-2.36%	13.39%	33.61%	-3.14%	-5.82%	-7.44%	-15.89%	13.62%
'13	30	5.43%	3.47%	-2.44%	26.87%	86.86%	0.25%	-6.70%	-13.72%	-52.34%	9.22%
'14	20	6.17%	20.34%	-6.55%	27.47%	80.67%	-0.36%	-3.31%	-14.78%	-50.45%	5.44%
'15	23	-12.25%	-13.68%	-27.05%	31.47%	0.00%	-7.87%	-14.44%	-20.11%	-97.55%	-13.81%
'16	3	-1.14%	-0.87%	-2.01%	3.48%	0.00%	0.00%	0.00%	-3.01%	-6.03%	-2.96%
Total	427	3.01%	1.35%	-4.06%	24.74%	304.26%	1.20%	-4.57%	-12.44%	-97.55%	0.16%

6. Management situation by vintage year

(1)Funds starting in 1982

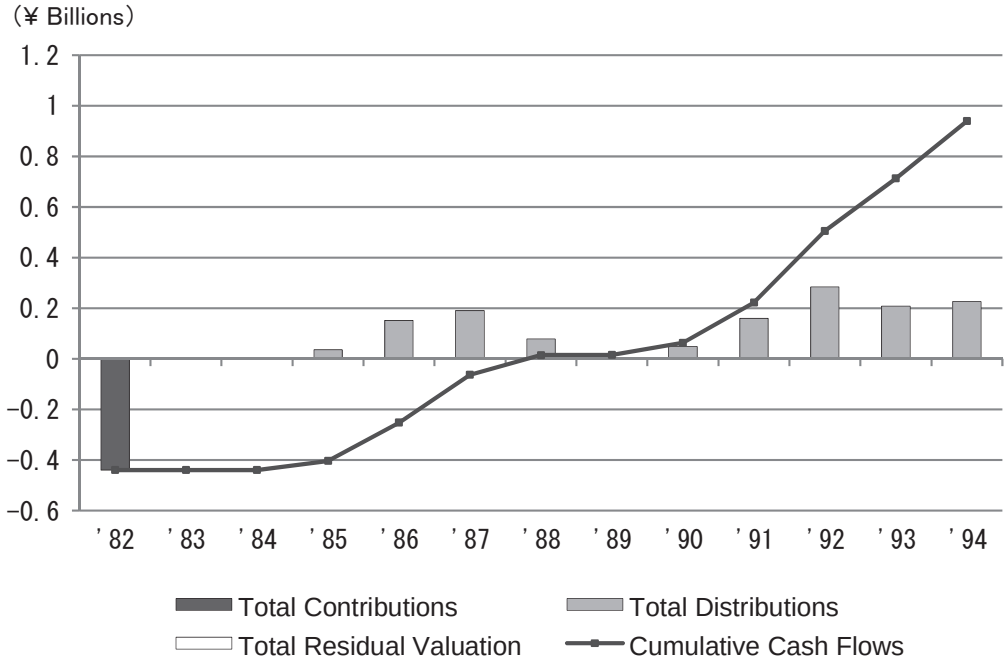
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1982	2	15.61%	15.59%	15.84%	1.29%	16.75%	16.29%	15.84%	15.38%	14.93%
Liquidated	2	15.61%	15.59%	15.84%	1.29%					
Existing	0	NA	NA	NA	NA					

D/PI	3.13
TV/PI	3.13

Total Contributions	¥4.4 billion
Average Contributions	¥2.2 billion

Average Term	11.8

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	2
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	0
Expansion-stage	0
Later-stage	0
Balanced	2
Buyout	0
Recap/Turnaround	0
Not Specified	0
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	0
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	2
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	0
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	2
Unknown	0

(2)Funds starting in 1983

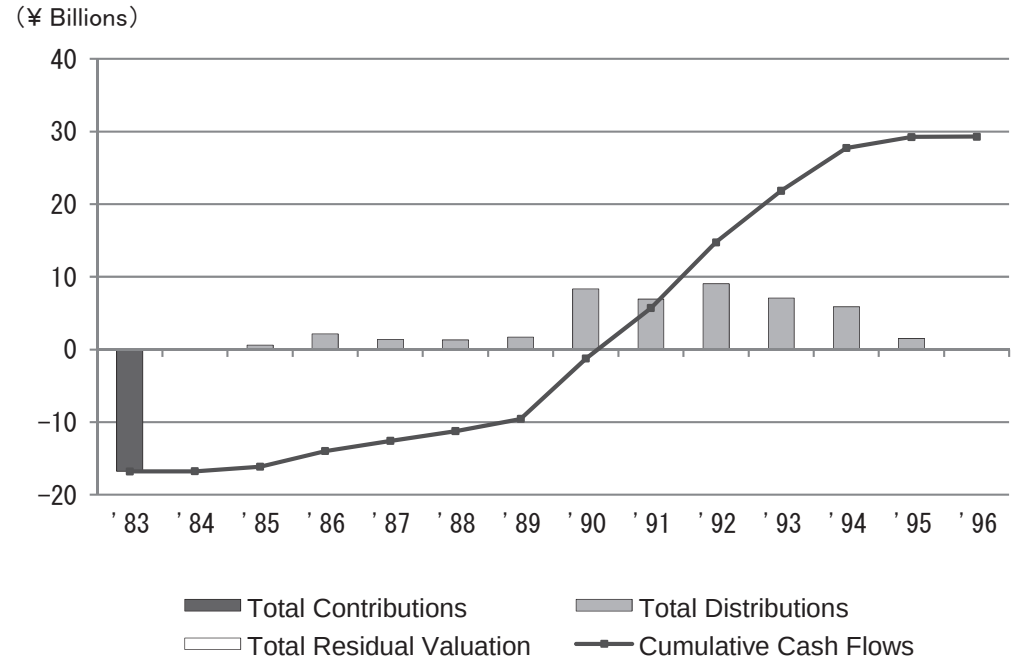
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1983	5	13.83%	13.07%	8.76%	6.13%	17.16%	13.44%	4.92%	4.42%	3.84%
Liquidated	5	13.83%	13.07%	8.76%	6.13%					
Existing	0	NA	NA	NA	NA					

D/PI	2.74
TV/PI	2.74

Total Contributions	¥16.8 billion
Average Contributions	¥3.4 billion

Average Term	12

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	5
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	1
Expansion-stage	0
Later-stage	0
Balanced	1
Buyout	1
Recap/Turnaround	0
Not Specified	2
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	0
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	5
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	0
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	5
Unknown	0

(3)Funds starting in 1984

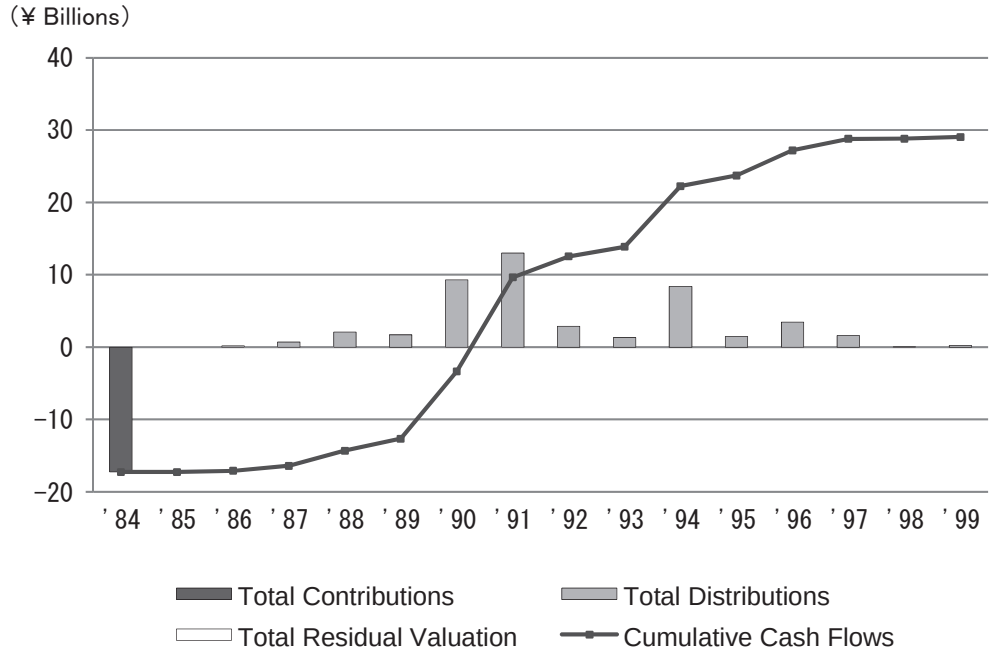
		IRR								
	Number of Funds	Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1984	4	14.17%	14.06%	13.05%	2.00%	14.82%	14.40%	13.51%	12.16%	10.35%
Liquidated	4	14.17%	14.06%	13.05%	2.00%					
Existing	0	NA	NA	NA	NA					

D/PI	2.68
TV/PI	2.68

Total Contributions	¥17.3 billion
Average Contributions	¥4.3 billion

Average Term	14.1

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	3
Foreign funds /Other	1
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	0
Expansion-stage	0
Later-stage	0
Balanced	3
Buyout	0
Recap/Turnaround	0
Not Specified	1
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	0
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	4
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	0
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	4
Unknown	0

(4)Funds starting in 1985

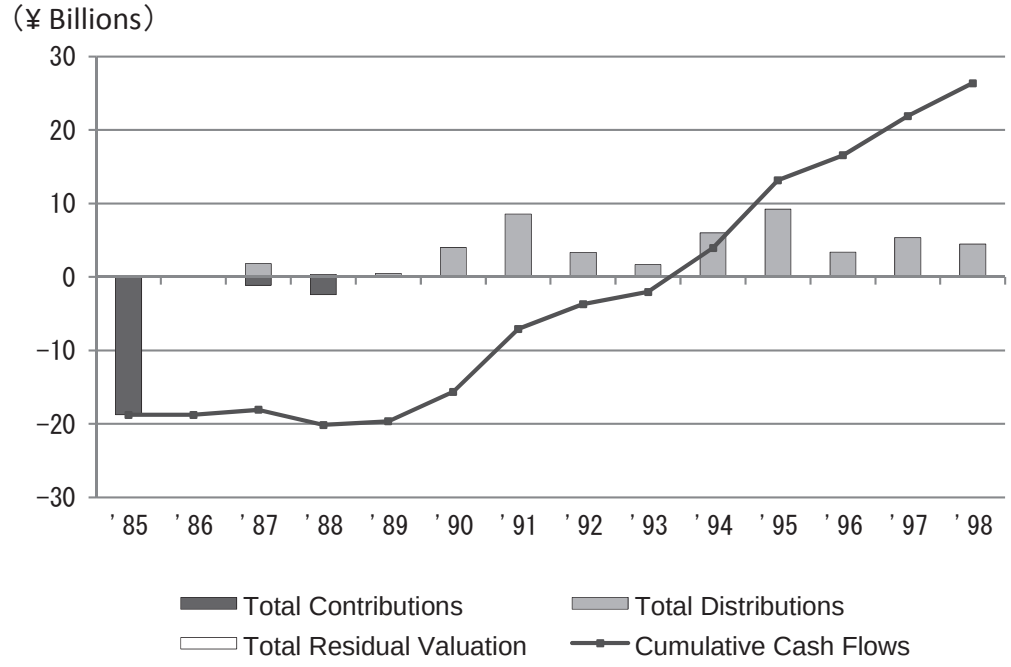
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1985	5	10.91%	11.62%	9.81%	4.64%	16.76%	10.14%	9.20%	9.20%	3.72%
Liquidated	5	10.91%	11.62%	9.81%	4.64%					
Existing	0	NA	NA	NA	NA					

D/PI	2.18
TV/PI	2.18

Total Contributions	¥25.1 billion
Average Contributions	¥5.0 billion

Average Term	12.2

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	4
Foreign funds /Other	1
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	0
Expansion-stage	0
Later-stage	0
Balanced	4
Buyout	0
Recap/Turnaround	0
Not Specified	1
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	0
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	5
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	0
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	5
Unknown	0

(5)Funds starting in 1986

	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1986	1	-	-	-	-	-	-	-	-	-
Liquidated	1	-	-	-	-					
Existing	0	NA	NA	NA	NA					

D/PI	-
TV/PI	-

Total Contributions	¥3.7 billion
Average Contributions	¥3.7 billion

Average Term	12

Cash Flows

Only one fund was under survey.

No data are shown to avoid disclosing the performance of individual funds.

Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	1
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	0
Expansion-stage	0
Later-stage	0
Balanced	1
Buyout	0
Recap/Turnaround	0
Not Specified	0
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	0
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	0
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	0
Unknown	1

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	0
Unknown	1

(6)Funds starting in 1987

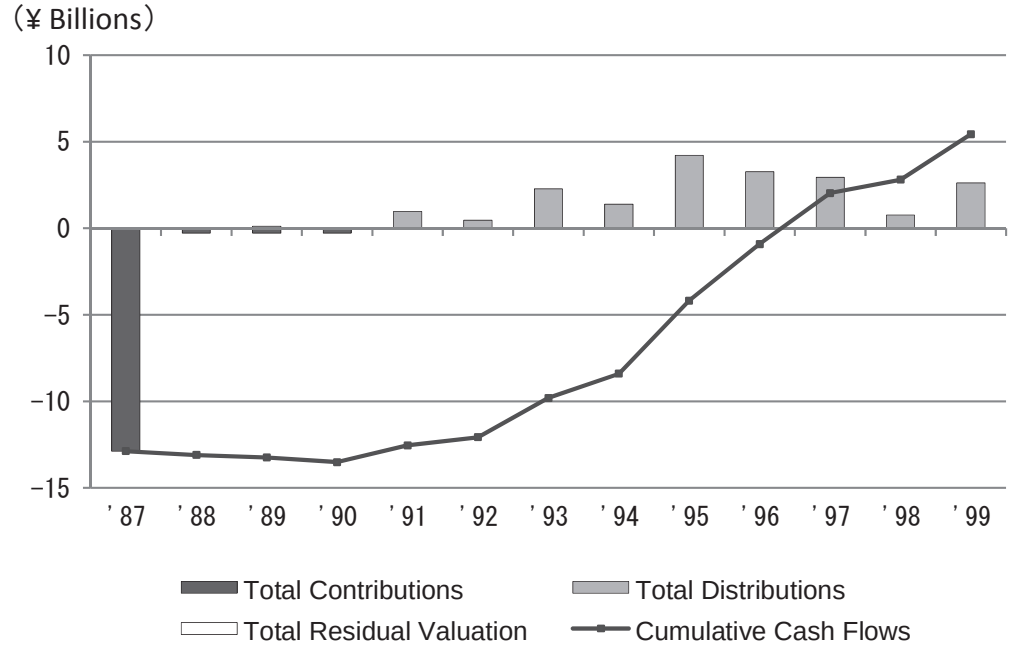
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1987	3	4.23%	4.40%	6.80%	5.48%	13.12%	8.38%	3.64%	3.64%	3.64%
Liquidated	3	4.23%	4.40%	6.80%	5.48%					
Existing	0	NA	NA	NA	NA					

D/PI	1.40
TV/PI	1.40

Total Contributions	¥13.7 billion
Average Contributions	¥4.6 billion

Average Term	12.1

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	3
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	0
Expansion-stage	0
Later-stage	0
Balanced	3
Buyout	0
Recap/Turnaround	0
Not Specified	0
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	0
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	2
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	0
Unknown	1

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	2
Unknown	1

(7)Funds starting in 1988

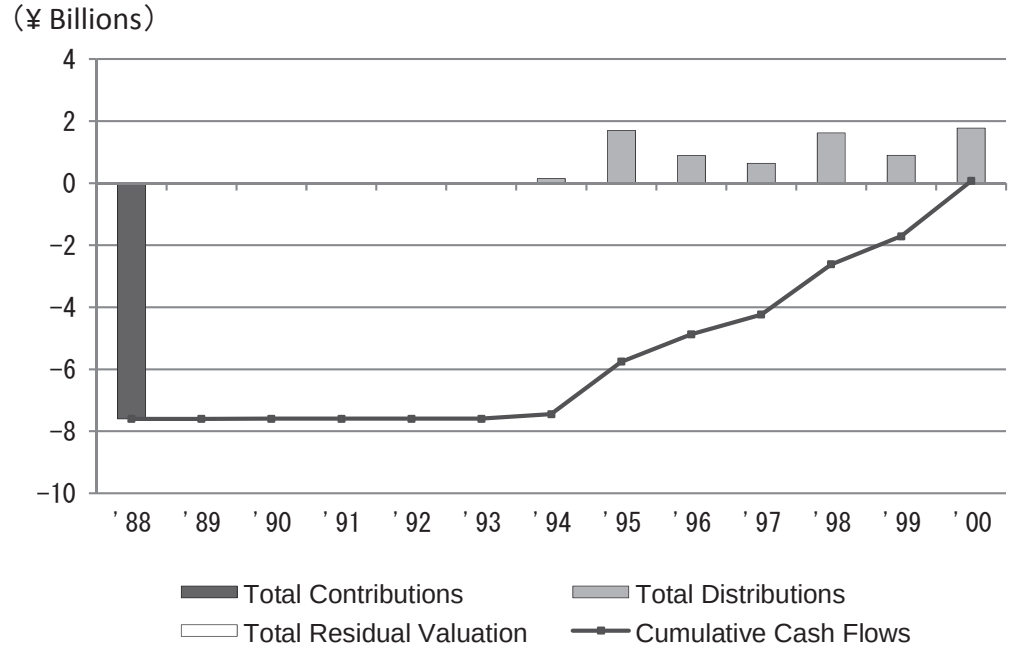
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1988	2	0.10%	0.10%	0.10%	0.03%	0.12%	0.11%	0.10%	0.09%	0.08%
Liquidated	2	0.10%	0.10%	0.10%	0.03%					
Existing	0	NA	NA	NA	NA					

D/PI	1.01
TV/PI	1.01

Total Contributions	¥7.6 billion
Average Contributions	¥3.8 billion

Average Term	12

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	2
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	0
Expansion-stage	0
Later-stage	0
Balanced	2
Buyout	0
Recap/Turnaround	0
Not Specified	0
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	0
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	2
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	0
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	2
Unknown	0

(8)Funds starting in 1989

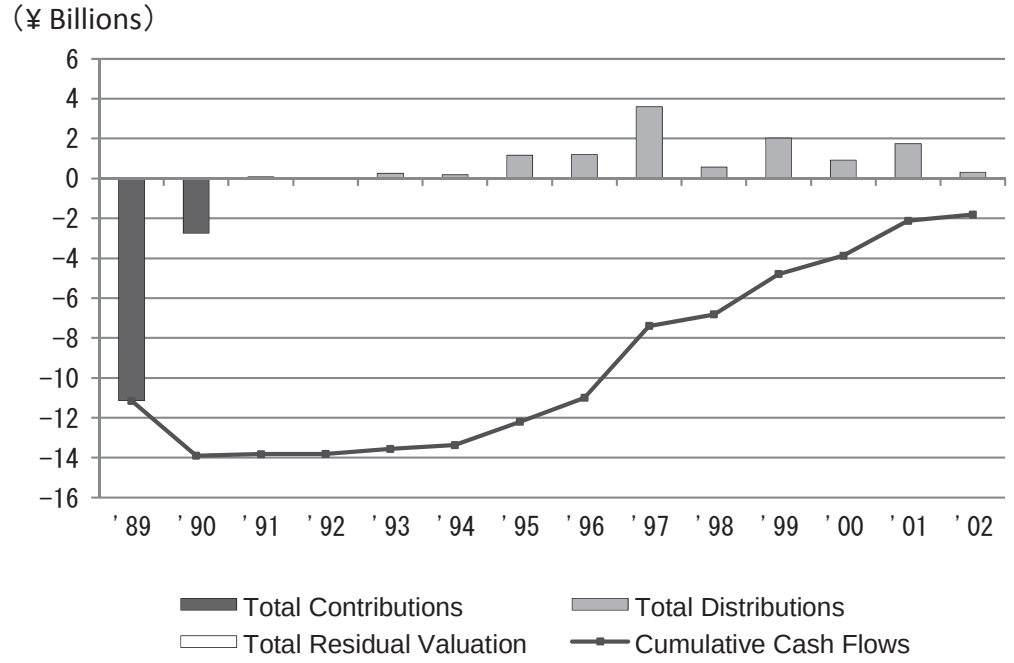
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1989	4	-1.60%	-1.65%	-1.39%	3.51%	3.24%	0.39%	-2.34%	-4.12%	-4.12%
Liquidated	4	-1.60%	-1.65%	-1.39%	3.51%					
Existing	0	NA	NA	NA	NA					

D/PI	0.87
TV/PI	0.87

Total Contributions	¥13.9 billion
Average Contributions	¥3.5 billion

Average Term	11.9

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	4
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	0
Expansion-stage	0
Later-stage	0
Balanced	3
Buyout	0
Recap/Turnaround	0
Not Specified	1
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	0
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	2
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	0
Unknown	2

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	2
Unknown	2

(9)Funds starting in 1990

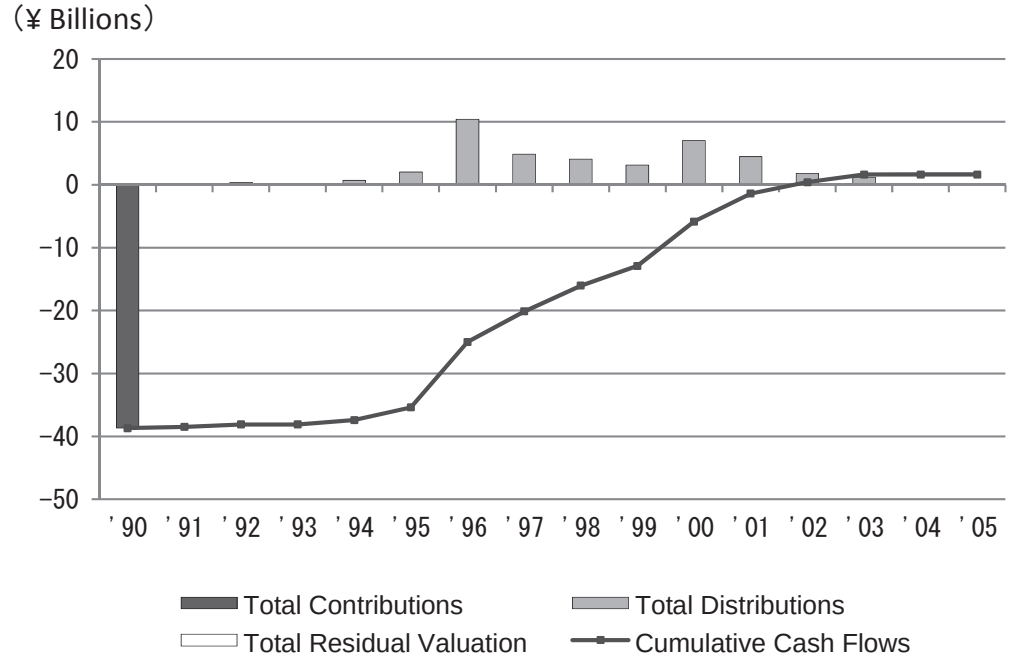
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1990	4	0.50%	0.51%	0.69%	1.32%	2.51%	1.23%	0.29%	-0.25%	-0.33%
Liquidated	4	0.50%	0.51%	0.69%	1.32%					
Existing	0	NA	NA	NA	NA					

D/PI	1.04
TV/PI	1.04

Total Contributions	¥38.7 billion
Average Contributions	¥9.7 billion

Average Term	12.7

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	4
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	0
Expansion-stage	0
Later-stage	0
Balanced	4
Buyout	0
Recap/Turnaround	0
Not Specified	0
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	0
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	3
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	0
Unknown	1

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	3
Unknown	1

(10)Funds starting in 1991

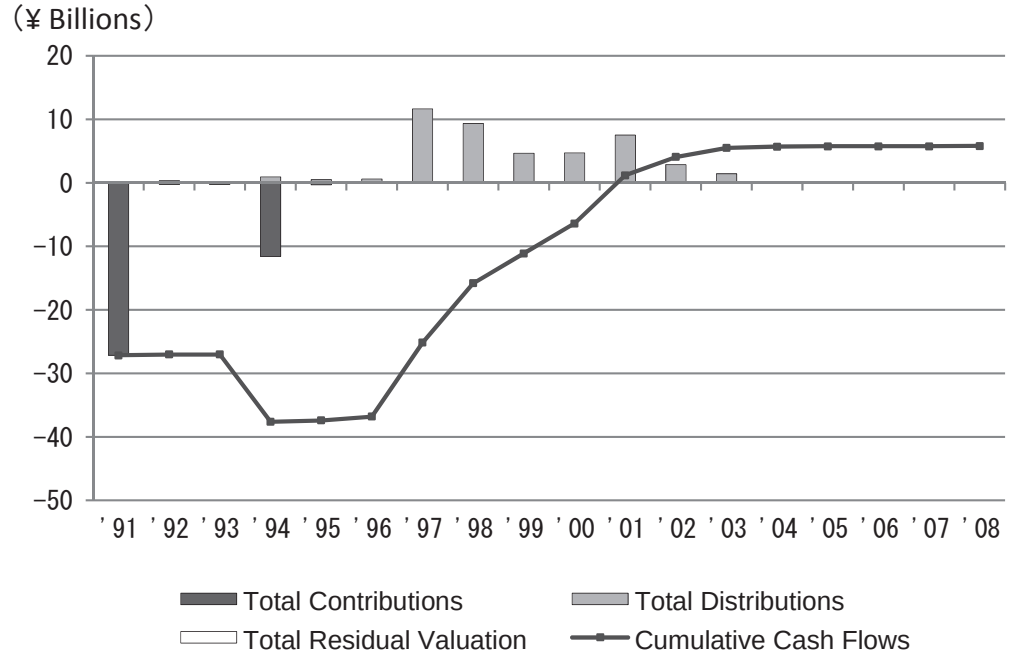
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1991	8	2.04%	1.77%	0.84%	2.27%	4.31%	2.06%	1.35%	-0.92%	-2.30%
Liquidated	8	2.04%	1.77%	0.84%	2.27%					
Existing	0	NA	NA	NA	NA					

D/PI	1.15
TV/PI	1.15

Total Contributions	¥39.4 billion
Average Contributions	¥4.9 billion

Average Term	12.8

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	8
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	0
Expansion-stage	0
Later-stage	0
Balanced	7
Buyout	0
Recap/Turnaround	0
Not Specified	1
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	0
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	5
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	0
Unknown	3

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	4
Unknown	4

(11)Funds starting in 1992

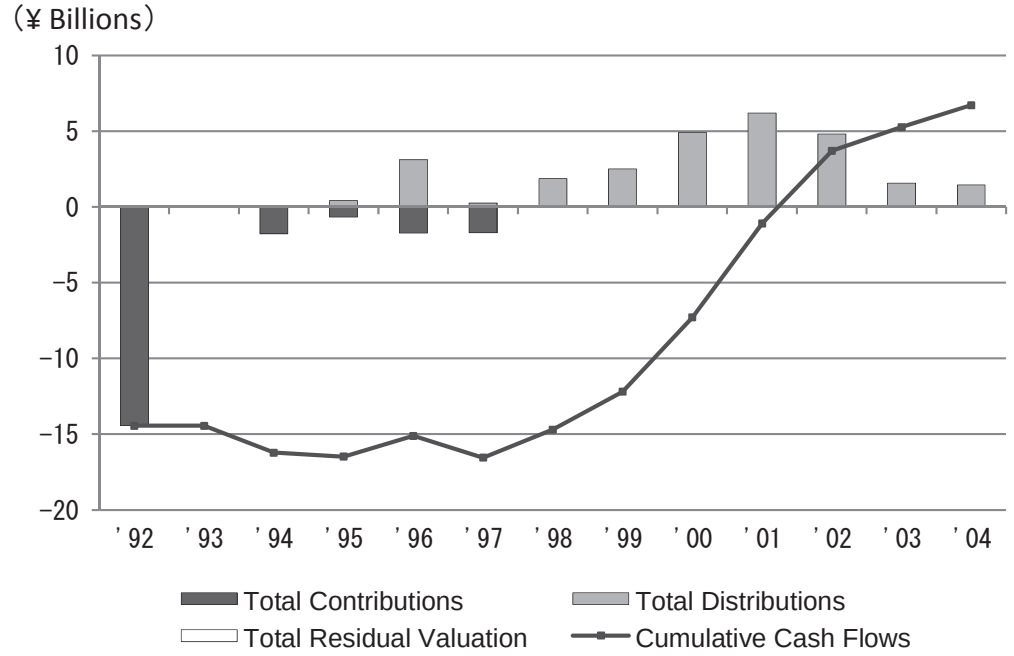
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1992	4	4.03%	3.80%	3.17%	1.98%	4.40%	4.39%	4.02%	2.80%	0.25%
Liquidated	4	4.03%	3.80%	3.17%	1.98%					
Existing	0	NA	NA	NA	NA					

D/PI	1.33
TV/PI	1.33

Total Contributions	¥21.7 billion
Average Contributions	¥5.4 billion

Average Term	12.1

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	3
Foreign funds /Other	1
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	0
Expansion-stage	0
Later-stage	0
Balanced	4
Buyout	0
Recap/Turnaround	0
Not Specified	0
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	0
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	4
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	0
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	4
Unknown	0

(12)Funds starting in 1993

	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1993	1	-	-	-	-	-	-	-	-	-
Liquidated	1	-	-	-	-					
Existing	0	NA	NA	NA	NA					

D/PI	-
TV/PI	-

Total Contributions	¥1.7 billion
Average Contributions	¥1.7 billion

Average Term	11.4

Cash Flows

Only one fund was under survey.

No data are shown to avoid disclosing the performance of individual funds.

Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	1
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	0
Expansion-stage	0
Later-stage	0
Balanced	1
Buyout	0
Recap/Turnaround	0
Not Specified	0
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	0
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	0
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	0
Unknown	1

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	0
Unknown	1

(13)Funds starting in 1994

	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1994	1	-	-	-	-	-	-	-	-	-
Liquidated	1	-	-	-	-					
Existing	0	NA	NA	NA	NA					

D/PI	-
TV/PI	-

Total Contributions	¥7.0 billion
Average Contributions	¥7.0 billion

Average Term	12.1

Cash Flows

Only one fund was under survey.

No data are shown to avoid disclosing the performance of individual funds.

Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	1
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	1
Expansion-stage	0
Later-stage	0
Balanced	0
Buyout	0
Recap/Turnaround	0
Not Specified	0
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	0
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	0
Asia-Pacific	0
Europe	0
North America	1
Mainly Overseas	0
Not Specified	0
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	1
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	0
Unknown	0

(14)Funds starting in 1995

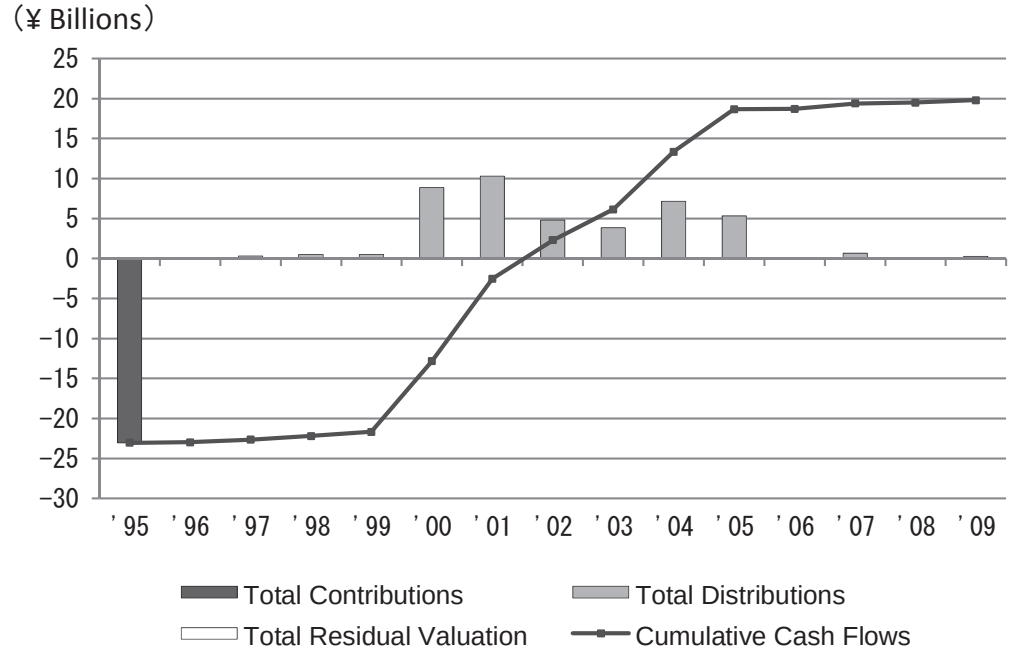
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1995	5	9.13%	8.32%	8.66%	4.65%	12.89%	10.92%	10.90%	7.47%	1.11%
Liquidated	5	9.13%	8.32%	8.66%	4.65%					
Existing	0	NA	NA	NA	NA					

D/PI	1.86
TV/PI	1.86

Total Contributions	¥23.1 billion
Average Contributions	¥4.6 billion

Average Term	12.6

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	5
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	0
Expansion-stage	0
Later-stage	0
Balanced	4
Buyout	0
Recap/Turnaround	0
Not Specified	1
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	0
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	4
Asia-Pacific	1
Europe	0
North America	0
Mainly Overseas	0
Not Specified	0
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	1
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	4
Unknown	0

(15)Funds starting in 1996

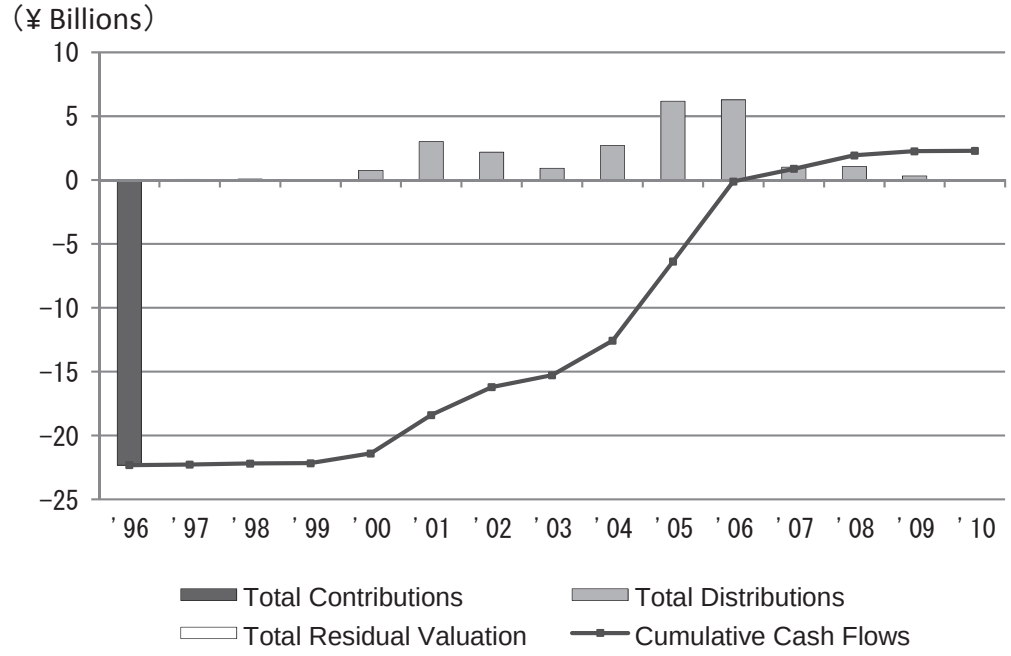
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1996	7	1.18%	1.16%	-0.69%	2.85%	2.01%	1.65%	0.06%	-2.40%	-5.38%
Liquidated	7	1.18%	1.16%	-0.69%	2.85%					
Existing	0	NA	NA	NA	NA					

D/PI	1.10
TV/PI	1.10

Total Contributions	¥22.3 billion
Average Contributions	¥3.2 billion

Average Term	12

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	7
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	1
Early-stage	2
Expansion-stage	0
Later-stage	0
Balanced	2
Buyout	0
Recap/Turnaround	0
Not Specified	2
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	1
Kinki	0
Chugoku	1
Shikoku	0
Kyushu and Okinawa	1
Mainly domestic	1
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	3
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	7
Unknown	0

(16)Funds starting in 1997

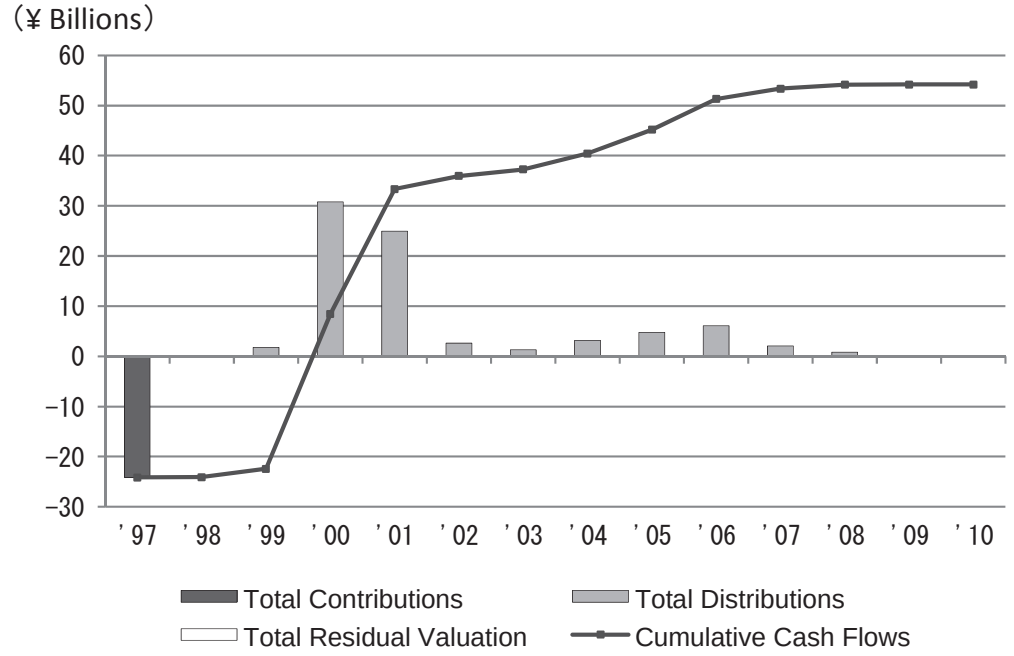
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1997	7	30.71%	30.79%	15.18%	21.84%	63.65%	12.50%	6.22%	4.52%	2.34%
Liquidated	7	30.71%	30.79%	15.18%	21.84%					
Existing	0	NA	NA	NA	NA					

D/PI	3.23
TV/PI	3.23

Total Contributions	¥24.3 billion
Average Contributions	¥3.5 billion

Average Term	11.6

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	0
Volantary Partnerships	6
Foreign funds /Other	1
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	3
Expansion-stage	0
Later-stage	0
Balanced	4
Buyout	0
Recap/Turnaround	0
Not Specified	0
Unknown	0

Investment focus by region	
Hokkaido	1
Tohoku	0
Kanto (excl. Tokyo)	1
Tokyo	0
Chubu	0
Kinki	0
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	3
Asia-Pacific	0
Europe	0
North America	1
Mainly Overseas	0
Not Specified	1
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	1
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	6
Unknown	0

(17)Funds starting in 1998

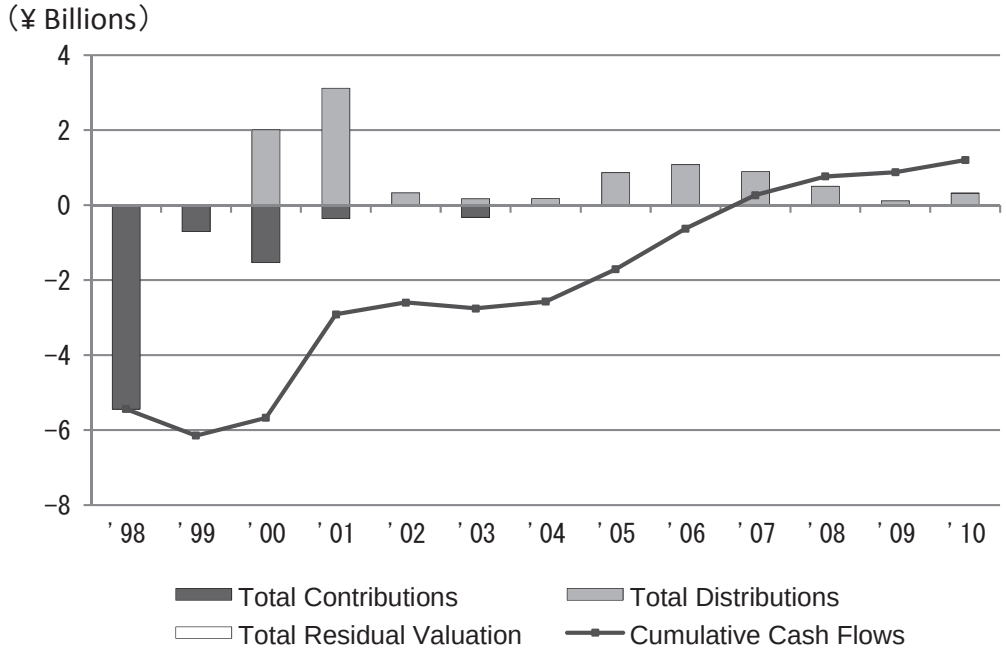
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1998	4	3.11%	45.38%	25.02%	61.74%	116.02%	35.04%	1.98%	-8.05%	-19.91%
Liquidated	4	3.11%	45.38%	25.02%	61.74%					
Existing	0	NA	NA	NA	NA					

D/PI	1.14
TV/PI	1.14

Total Contributions	¥9.3 billion
Average Contributions	¥2.3 billion

Average Term	11

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	1
Volantary Partnerships	2
Foreign funds /Other	1
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	2
Expansion-stage	1
Later-stage	0
Balanced	1
Buyout	0
Recap/Turnaround	0
Not Specified	0
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	2
Chugoku	1
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	0
Asia-Pacific	0
Europe	0
North America	1
Mainly Overseas	0
Not Specified	0
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	1
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	1
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	2
Unknown	0

(18)Funds starting in 1999

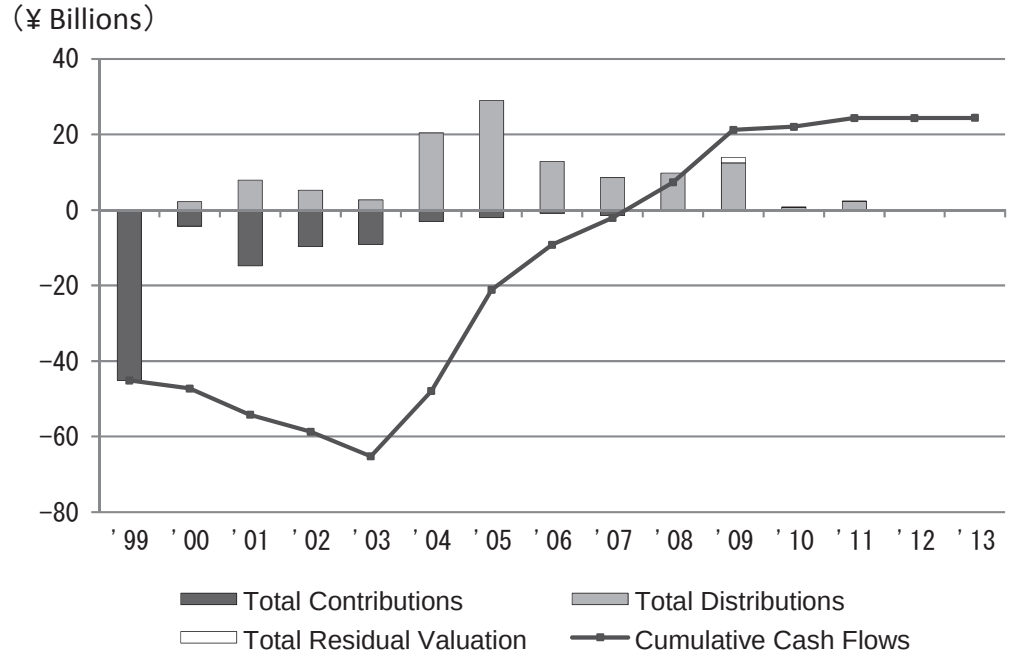
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 1999	13	5.10%	4.06%	3.15%	20.10%	66.73%	3.44%	0.18%	-9.16%	-11.98%
Liquidated	13	5.10%	4.06%	3.15%	20.10%					
Existing	0	NA	NA	NA	NA					

D/PI	1.25
TV/PI	1.27

Total Contributions	¥91.0 billion
Average Contributions	¥7.0 billion

Average Term	11.6

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	5
Volantary Partnerships	7
Foreign funds /Other	1
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	5
Expansion-stage	1
Later-stage	0
Balanced	3
Buyout	1
Recap/Turnaround	0
Not Specified	3
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	2
Tokyo	0
Chubu	0
Kinki	1
Chugoku	0
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	7
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	3
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	1
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	12
Unknown	0

(19)Funds starting in 2000

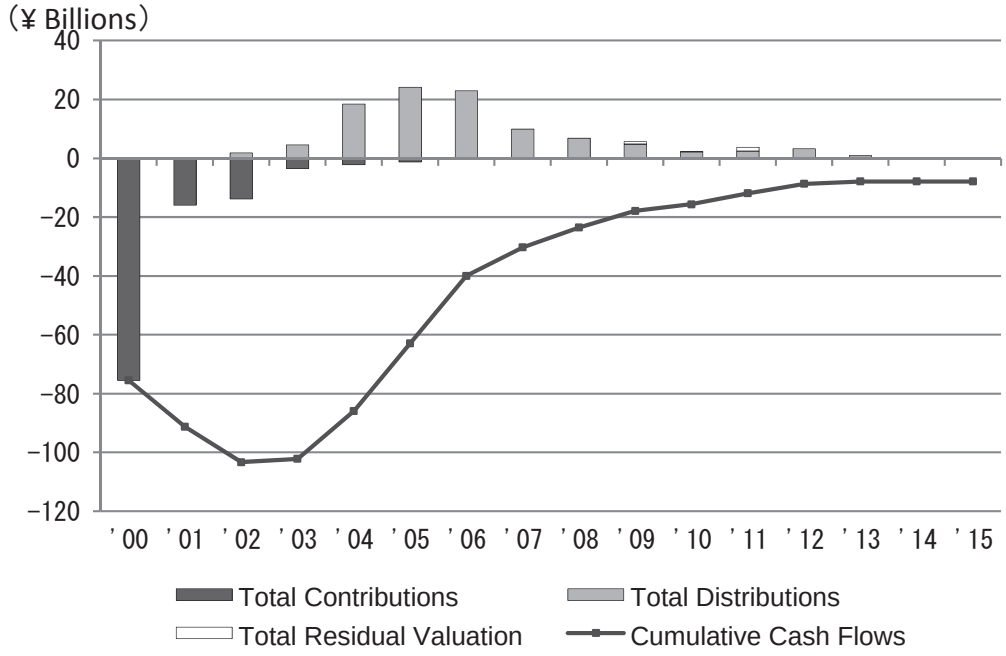
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2000	27	-1.29%	-1.87%	-2.41%	6.97%	10.92%	1.01%	-2.16%	-8.74%	-15.33%
Liquidated	26	-1.33%	-1.92%	-2.59%	7.05%					
Existing	1	-	-	-	-					

D/PI	0.91
TV/PI	0.93

Total Contributions	¥112.3 billion
Average Contributions	¥4.2 billion

Average Term	11.7 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	19
Volantary Partnerships	8
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	1
Early-stage	10
Expansion-stage	1
Later-stage	0
Balanced	11
Buyout	0
Recap/Turnaround	0
Not Specified	3
Unknown	1

Investment focus by region	
Hokkaido	1
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	1
Chubu	0
Kinki	1
Chugoku	1
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	16
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	1
Not Specified	5
Unknown	1

Investment focus by industry	
Telecommunications/Networking and Equipment	3
Computers and Peripherals/IT services	1
Software	1
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	2
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	1
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	18
Unknown	1

(20)Funds starting in 2001

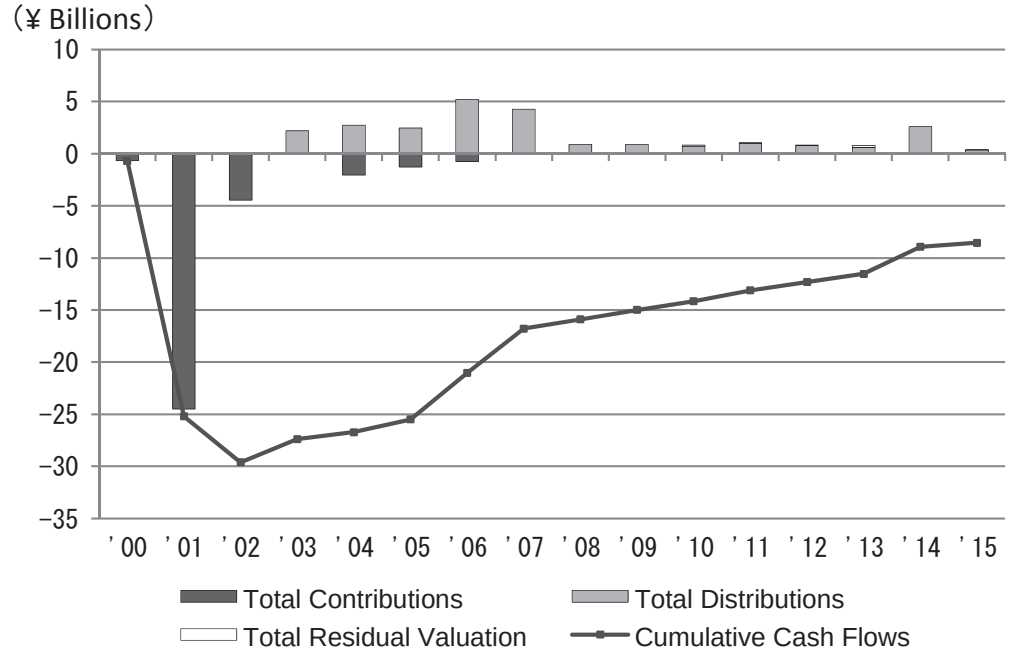
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2001	21	-4.71%	-4.93%	-5.64%	12.72%	41.42%	-2.82%	-6.65%	-12.80%	-19.56%
Liquidated	20	-4.66%	-4.87%	-5.59%	13.04%					
Existing	1	-	-	-	-					

D/PI	0.74
TV/PI	0.75

Total Contributions	¥34.5 billion
Average Contributions	¥1.6 billion

Average Term	10.3 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	17
Volantary Partnerships	4
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	1
Early-stage	11
Expansion-stage	2
Later-stage	0
Balanced	6
Buyout	0
Recap/Turnaround	0
Not Specified	1
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	1
Tokyo	2
Chubu	1
Kinki	4
Chugoku	0
Shikoku	0
Kyushu and Okinawa	2
Mainly domestic	9
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	1
Unknown	1

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	2
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	1
Not specified	18
Unknown	0

(21)Funds starting in 2002

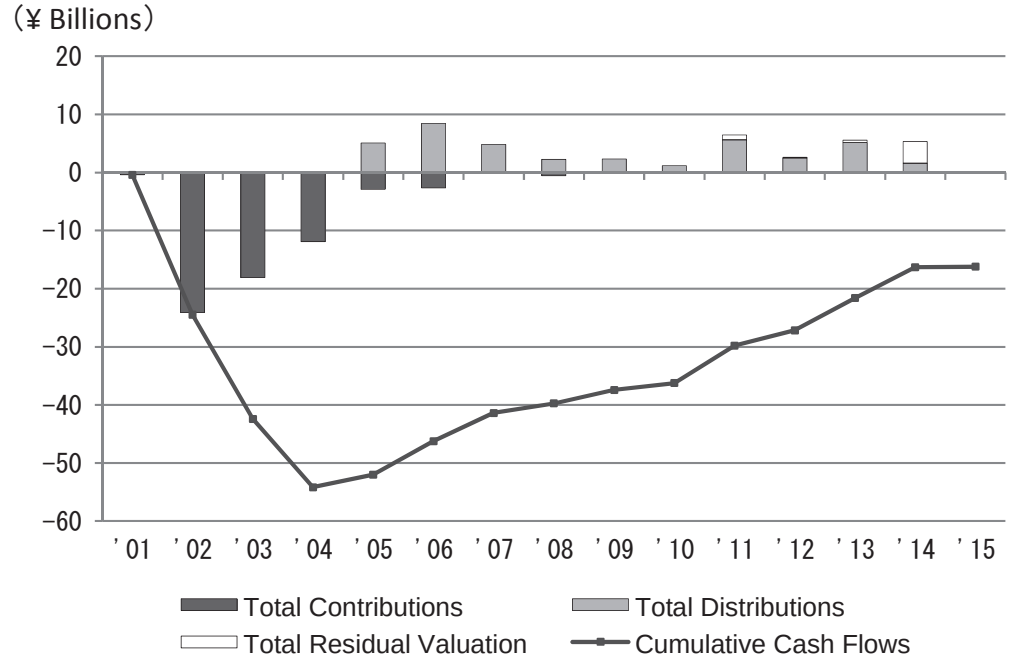
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2002	23	-4.77%	-6.56%	-10.43%	7.78%	2.63%	-6.27%	-10.97%	-15.21%	-25.47%
Liquidated	22	-4.76%	-6.55%	-10.11%	7.81%					
Existing	1	-	-	-	-					

D/PI	0.65
TV/PI	0.73

Total Contributions	¥60.6 billion
Average Contributions	¥2.6 billion

Average Term	10.7 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	21
Volantary Partnerships	1
Foreign funds /Other	0
Unknown	1

Investment focus by stage	
Seed-stage	2
Early-stage	9
Expansion-stage	2
Later-stage	0
Balanced	5
Buyout	0
Recap/Turnaround	0
Not Specified	2
Unknown	3

Investment focus by region	
Hokkaido	0
Tohoku	1
Kanto (excl. Tokyo)	0
Tokyo	1
Chubu	1
Kinki	4
Chugoku	2
Shikoku	0
Kyushu and Okinawa	1
Mainly domestic	10
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	1
Unknown	2

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	19
Unknown	4

(22)Funds starting in 2003

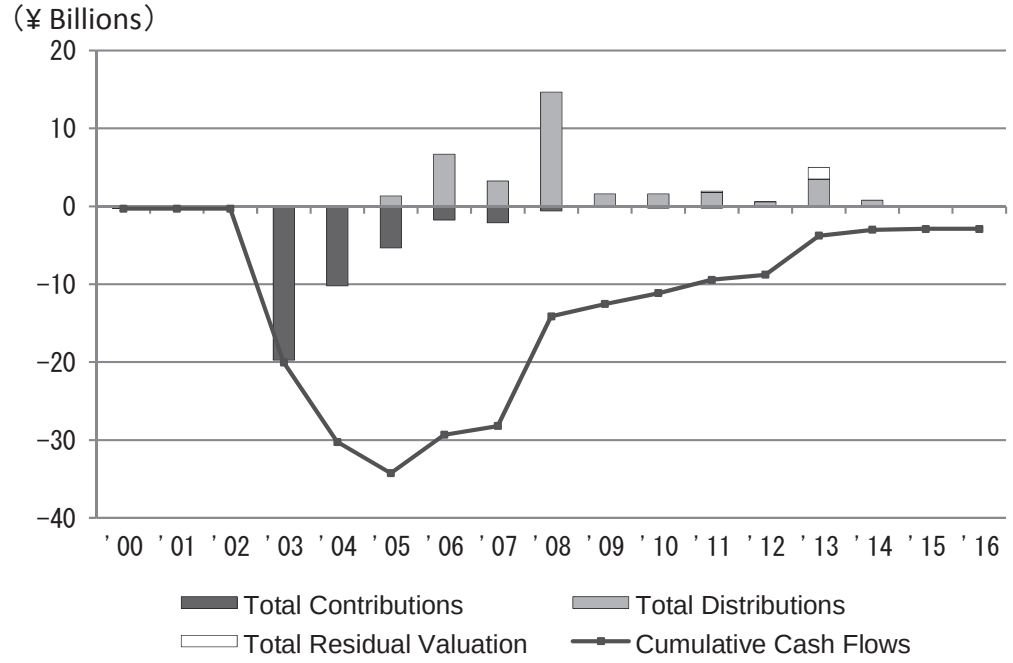
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2003	17	-1.63%	-8.38%	-6.70%	14.26%	43.00%	-5.66%	-7.90%	-14.02%	-26.15%
Liquidated	16	-8.02%	-8.38%	-9.80%	6.48%					
Existing	1	-	-	-	-					

D/PI	0.88
TV/PI	0.93

Total Contributions	¥33.3 billion
Average Contributions	¥2.0 billion

Average Term	10.6 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	15
Volantary Partnerships	1
Foreign funds /Other	1
Unknown	0

Investment focus by stage	
Seed-stage	1
Early-stage	6
Expansion-stage	0
Later-stage	0
Balanced	6
Buyout	0
Recap/Turnaround	2
Not Specified	2
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	1
Kanto (excl. Tokyo)	1
Tokyo	0
Chubu	2
Kinki	2
Chugoku	0
Shikoku	0
Kyushu and Okinawa	3
Mainly domestic	5
Asia-Pacific	0
Europe	0
North America	1
Mainly Overseas	0
Not Specified	2
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	1
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	1
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	15
Unknown	0

(23)Funds starting in 2004

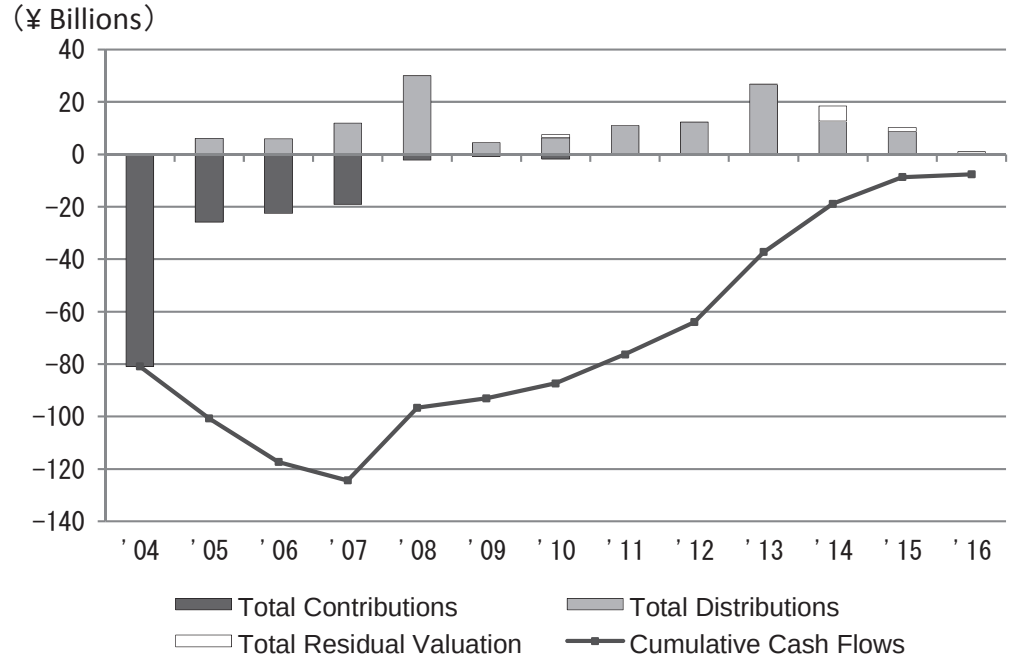
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2004	33	-0.89%	-1.18%	-7.45%	12.11%	16.12%	0.29%	-9.81%	-14.55%	-43.10%
Liquidated	22	-0.30%	-0.60%	-10.73%	11.87%					
Existing	11	-1.25%	-1.72%	-0.90%	10.12%					

D/PI	0.89
TV/PI	0.95

Total Contributions	¥153.4 billion
Average Contributions	¥4.6 billion

Average Term	10.3 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	27
Volantary Partnerships	4
Foreign funds /Other	2
Unknown	0

Investment focus by stage	
Seed-stage	2
Early-stage	13
Expansion-stage	3
Later-stage	0
Balanced	10
Buyout	2
Recap/Turnaround	0
Not Specified	0
Unknown	3

Investment focus by region	
Hokkaido	1
Tohoku	1
Kanto (excl. Tokyo)	4
Tokyo	2
Chubu	2
Kinki	2
Chugoku	0
Shikoku	2
Kyushu and Okinawa	0
Mainly domestic	13
Asia-Pacific	0
Europe	0
North America	1
Mainly Overseas	0
Not Specified	2
Unknown	3

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	4
Medical Device and Equipment/ Healthcare-related	1
Industrial/Energy/Other	1
Media/Entertainment/ Retailing/Customer Goods	1
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	23
Unknown	3

(24)Funds starting in 2005

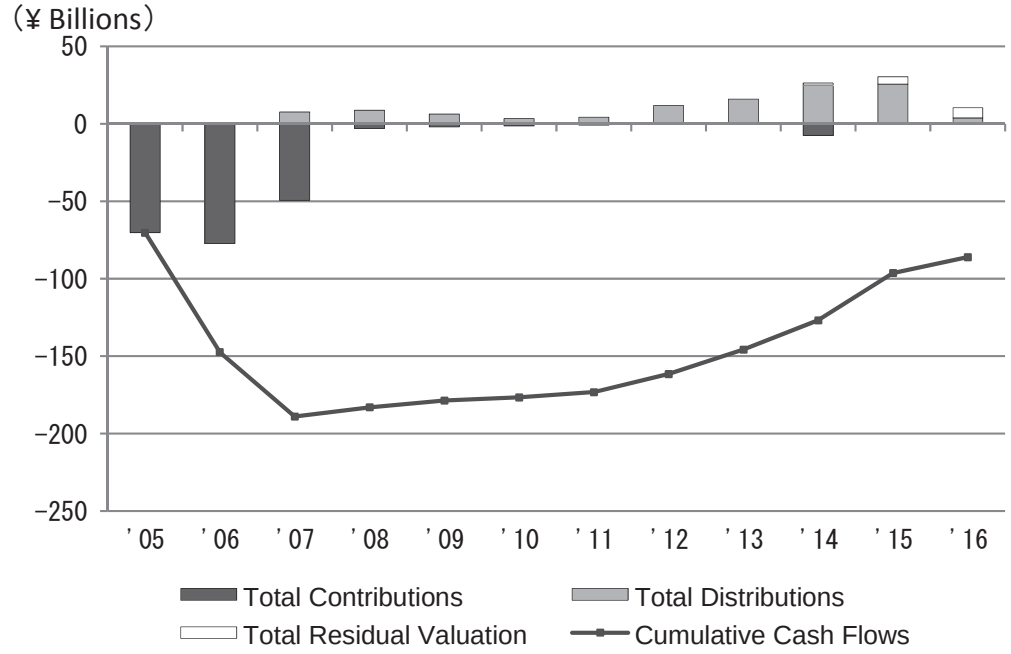
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2005	47	-7.64%	-9.42%	-10.98%	12.80%	24.23%	-3.53%	-8.71%	-17.67%	-43.24%
Liquidated	21	-11.53%	-13.89%	-10.82%	13.74%					
Existing	26	-6.30%	-7.59%	-11.12%	12.26%					

D/PI	0.53
TV/PI	0.59

Total Contributions	¥211.3 billion
Average Contributions	¥4.5 billion

Average Term	10 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	43
Volantary Partnerships	3
Foreign funds /Other	1
Unknown	0

Investment focus by stage	
Seed-stage	2
Early-stage	15
Expansion-stage	0
Later-stage	0
Balanced	20
Buyout	1
Recap/Turnaround	1
Not Specified	6
Unknown	2

Investment focus by region	
Hokkaido	1
Tohoku	1
Kanto (excl. Tokyo)	2
Tokyo	3
Chubu	2
Kinki	5
Chugoku	2
Shikoku	0
Kyushu and Okinawa	3
Mainly domestic	21
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	1
Not Specified	3
Unknown	3

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	1
Software	0
Semi-conductors/ Electrical machinery & equipment	1
Biotechnology/Medicine	6
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	1
Clean Technology	0
Not specified	33
Unknown	5

(25)Funds starting in 2006

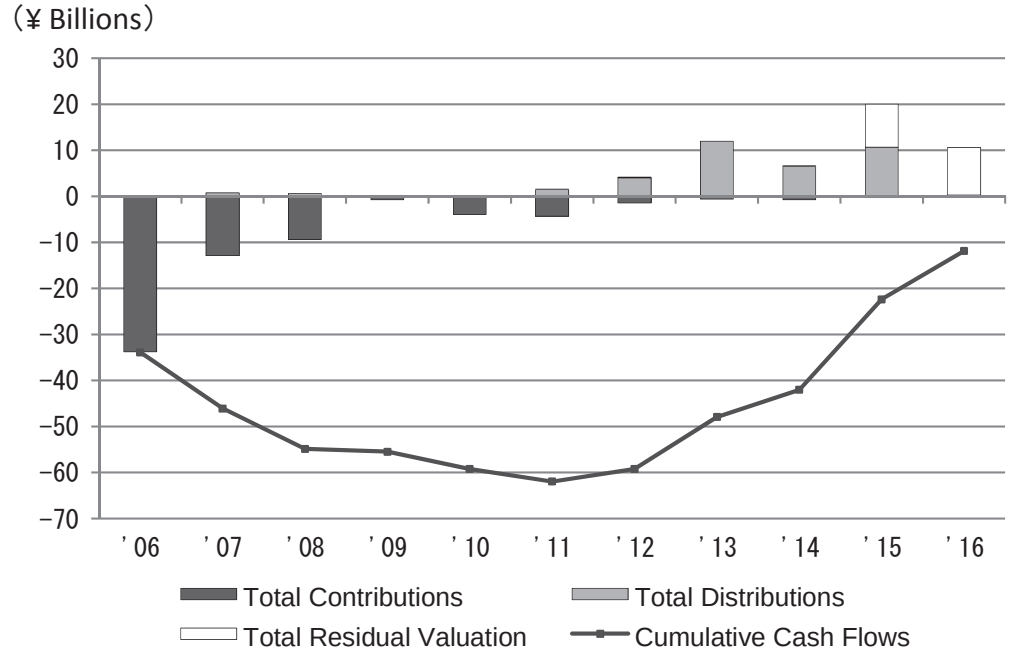
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2006	24	-2.78%	-6.15%	-10.78%	10.03%	14.20%	-4.03%	-10.84%	-18.83%	-25.52%
Liquidated	11	-15.04%	-18.89%	-13.66%	10.75%					
Existing	13	-0.91%	-2.85%	-8.34%	9.08%					

D/PI	0.53
TV/PI	0.83

Total Contributions	¥68.5 billion
Average Contributions	¥2.9 billion

Average Term	9.4 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	20
Volantary Partnerships	1
Foreign funds /Other	3
Unknown	0

Investment focus by stage	
Seed-stage	1
Early-stage	10
Expansion-stage	2
Later-stage	0
Balanced	7
Buyout	0
Recap/Turnaround	0
Not Specified	4
Unknown	0

Investment focus by region	
Hokkaido	2
Tohoku	2
Kanto (excl. Tokyo)	2
Tokyo	1
Chubu	2
Kinki	1
Chugoku	1
Shikoku	0
Kyushu and Okinawa	1
Mainly domestic	9
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	3
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	3
Computers and Peripherals/IT services	1
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	2
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	1
Not specified	17
Unknown	0

(26)Funds starting in 2007

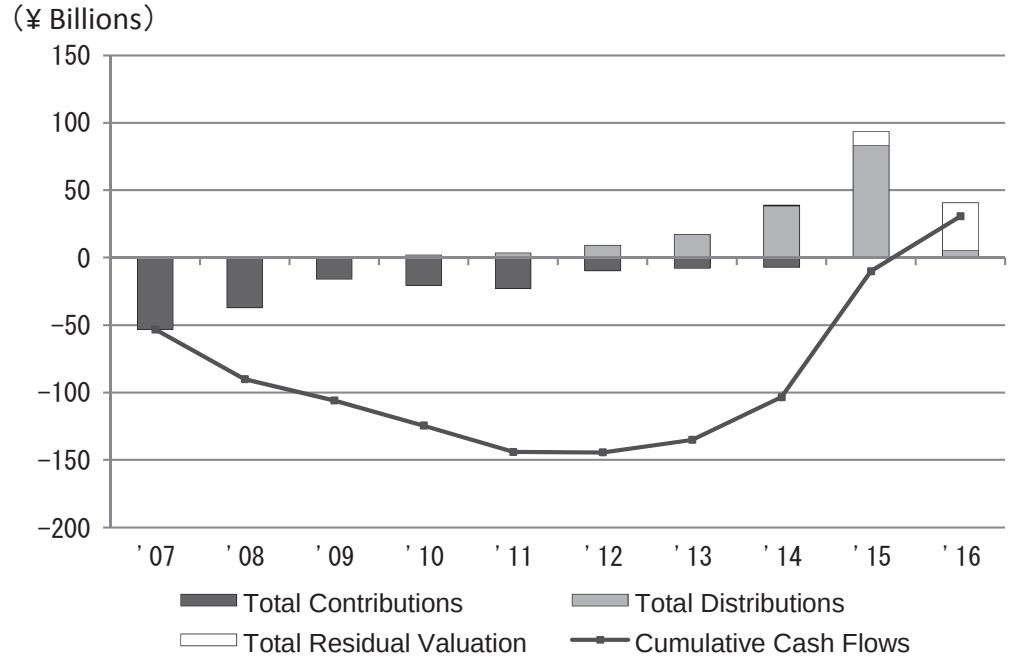
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2007	22	3.04%	2.31%	-7.37%	10.56%	7.70%	1.68%	-9.58%	-13.79%	-25.78%
Liquidated	2	-5.99%	-6.04%	-4.31%	4.83%					
Existing	20	3.10%	2.36%	-7.67%	10.99%					

D/PI	0.91
TV/PI	1.18

Total Contributions	¥174.7 billion
Average Contributions	¥7.9 billion

Average Term	8.9 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	19
Volantary Partnerships	2
Foreign funds /Other	1
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	9
Expansion-stage	0
Later-stage	1
Balanced	8
Buyout	1
Recap/Turnaround	0
Not Specified	3
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	1
Kanto (excl. Tokyo)	1
Tokyo	1
Chubu	1
Kinki	1
Chugoku	0
Shikoku	1
Kyushu and Okinawa	1
Mainly domestic	9
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	6
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	1
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	1
Not specified	20
Unknown	0

(27)Funds starting in 2008

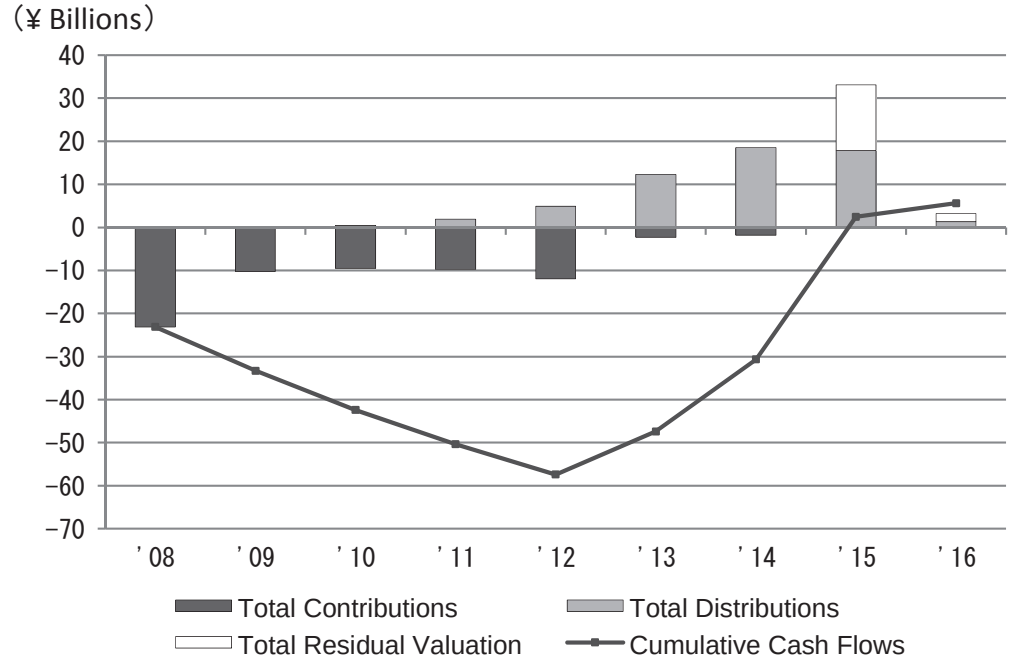
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2008	14	1.78%	1.22%	1.32%	18.13%	61.35%	2.01%	-2.44%	-6.78%	-13.60%
Liquidated	0	NA	NA	NA	NA					
Existing	14	1.78%	1.22%	1.32%	18.13%					

D/PI	0.83
TV/PI	1.08

Total Contributions	¥68.8 billion
Average Contributions	¥4.9 billion

Average Term	8 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	14
Volantary Partnerships	0
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	1
Early-stage	2
Expansion-stage	2
Later-stage	0
Balanced	6
Buyout	0
Recap/Turnaround	0
Not Specified	3
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	1
Chubu	0
Kinki	1
Chugoku	2
Shikoku	0
Kyushu and Okinawa	2
Mainly domestic	6
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	2
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	1
Software	1
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	1
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	11
Unknown	0

(28)Funds starting in 2009

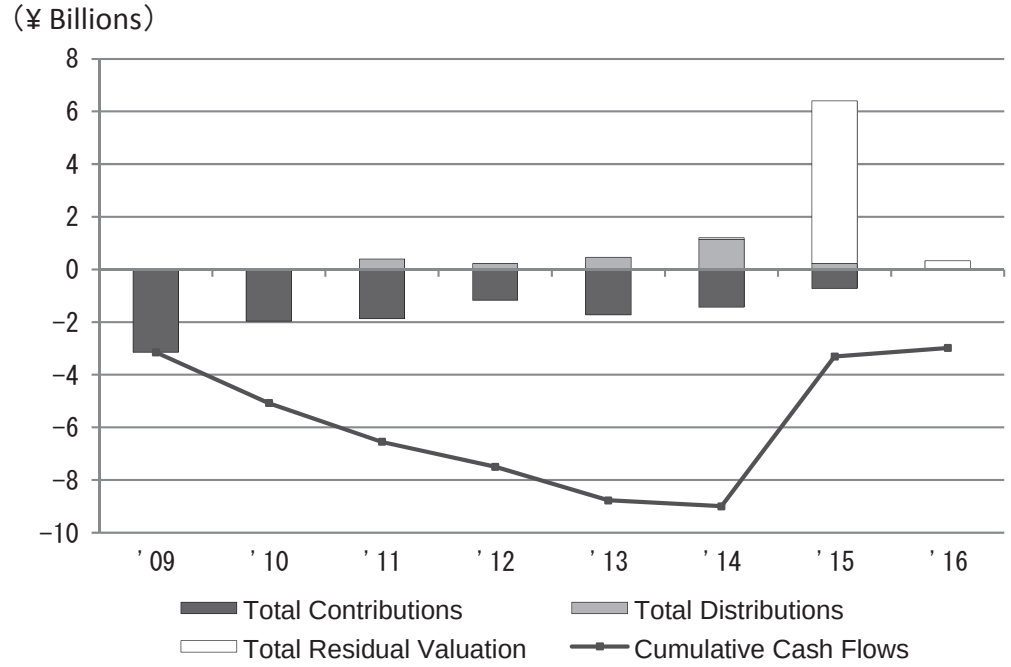
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2009	7	-7.96%	-9.42%	-9.22%	9.90%	2.06%	-1.52%	-9.37%	-14.46%	-25.31%
Liquidated	1	-	-	-	-					
Existing	6	-7.55%	-8.99%	-6.54%	7.57%					

D/PI	0.21
TV/PI	0.75

Total Contributions	¥12.0 billion
Average Contributions	¥1.7 billion

Average Term	6.9 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	7
Volantary Partnerships	0
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	1
Early-stage	1
Expansion-stage	0
Later-stage	0
Balanced	2
Buyout	0
Recap/Turnaround	2
Not Specified	0
Unknown	1

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	1
Tokyo	0
Chubu	0
Kinki	0
Chugoku	1
Shikoku	0
Kyushu and Okinawa	2
Mainly domestic	2
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	1
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	1
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	1
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	4
Unknown	1

(29)Funds starting in 2010

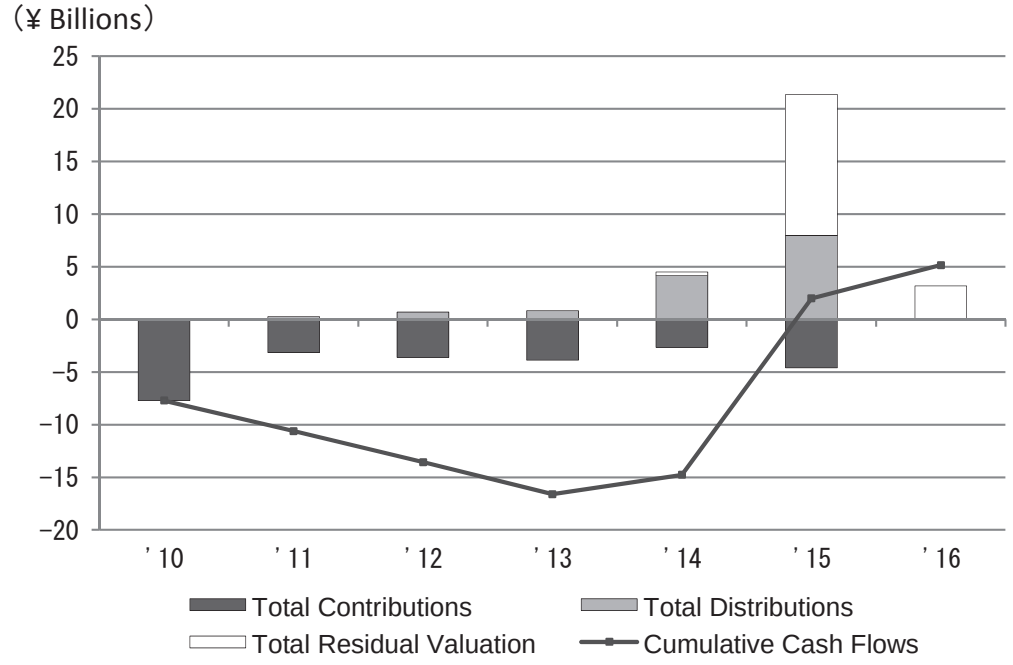
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2010	11	6.54%	3.24%	9.02%	39.71%	125.29%	6.97%	-2.38%	-9.12%	-16.06%
Liquidated	1	-	-	-	-					
Existing	10	7.29%	4.10%	11.53%	40.93%					

D/PI	0.54
TV/PI	1.20

Total Contributions	¥25.4 billion
Average Contributions	¥2.3 billion

Average Term	5.9 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	8
Volantary Partnerships	3
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	1
Expansion-stage	1
Later-stage	0
Balanced	6
Buyout	0
Recap/Turnaround	0
Not Specified	2
Unknown	1

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	1
Chugoku	1
Shikoku	0
Kyushu and Okinawa	1
Mainly domestic	6
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	1
Not Specified	1
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	1
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	1
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	8
Unknown	1

(30)Funds starting in 2011

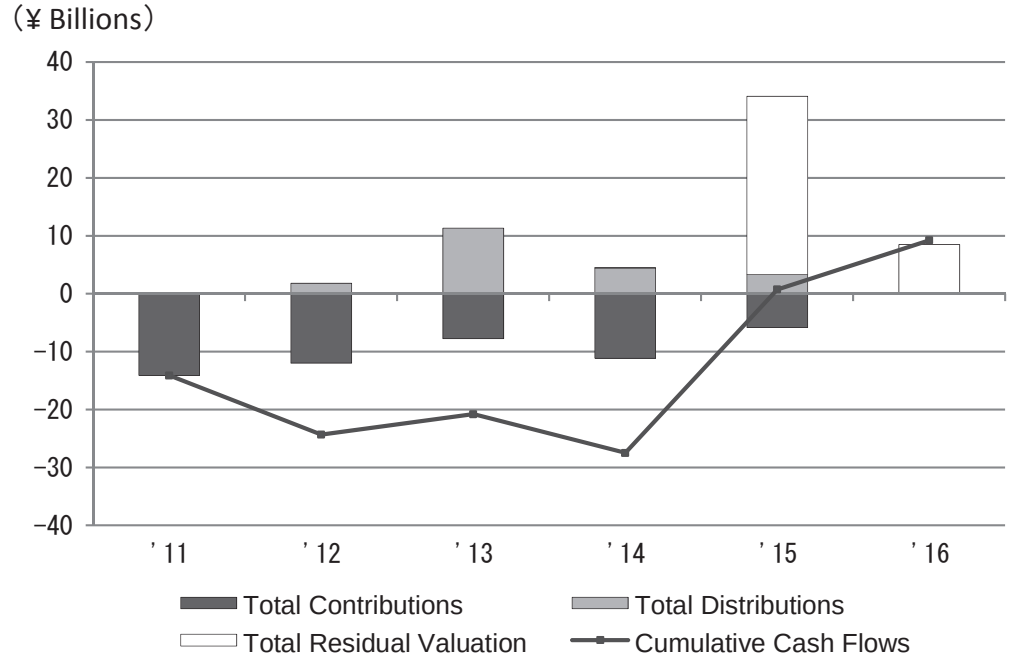
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2011	15	8.23%	27.87%	14.47%	81.81%	304.26%	2.02%	-5.01%	-7.11%	-56.33%
Liquidated	0	NA	NA	NA	NA					
Existing	15	8.23%	27.87%	14.47%	81.81%					

D/PI	0.41
TV/PI	1.18

Total Contributions	¥51.0 billion
Average Contributions	¥3.4 billion

Average Term	4.8 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	13
Volantary Partnerships	2
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	1
Early-stage	2
Expansion-stage	1
Later-stage	0
Balanced	3
Buyout	2
Recap/Turnaround	2
Not Specified	4
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	2
Kanto (excl. Tokyo)	2
Tokyo	1
Chubu	0
Kinki	2
Chugoku	1
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	4
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	1
Not Specified	2
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	1
Computers and Peripherals/IT services	1
Software	0
Semi-conductors/ Electrical machinery & equipment	1
Biotechnology/Medicine	1
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	1
Finance/Real Estate/ Business Services	0
Clean Technology	1
Not specified	9
Unknown	0

(31)Funds starting in 2012

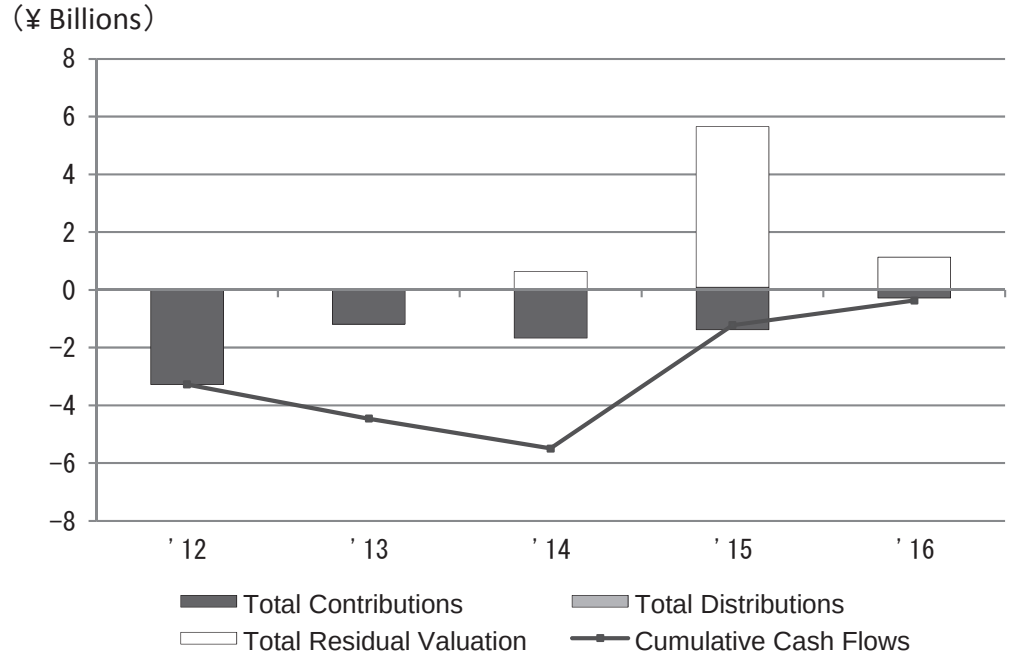
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2012	10	-2.30%	-1.93%	-2.36%	13.39%	33.61%	-3.14%	-5.82%	-7.44%	-15.89%
Liquidated	0	NA	NA	NA	NA					
Existing	10	-2.30%	-1.93%	-2.36%	13.39%					

D/PI	0.01
TV/PI	0.95

Total Contributions	¥7.9 billion
Average Contributions	¥0.8 billion

Average Term	3.9 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	9
Volantary Partnerships	0
Foreign funds /Other	1
Unknown	0

Investment focus by stage	
Seed-stage	2
Early-stage	2
Expansion-stage	0
Later-stage	1
Balanced	3
Buyout	0
Recap/Turnaround	0
Not Specified	2
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	2
Kanto (excl. Tokyo)	0
Tokyo	0
Chubu	0
Kinki	0
Chugoku	2
Shikoku	0
Kyushu and Okinawa	2
Mainly domestic	3
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	1
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	0
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	1
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	9
Unknown	0

(32)Funds starting in 2013

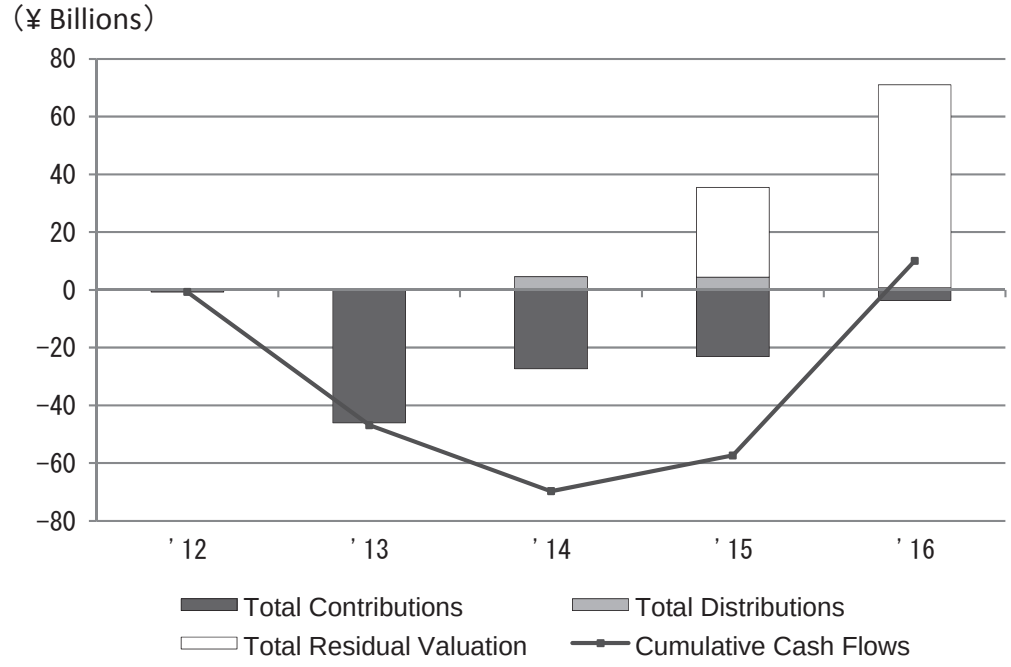
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2013	30	5.43%	3.47%	-2.44%	26.87%	86.86%	0.25%	-6.70%	-13.72%	-52.34%
Liquidated	1	-	-	-	-					
Existing	29	5.11%	3.08%	-4.00%	25.92%					

D/PI	0.10
TV/PI	1.10

Total Contributions	¥100.9 billion
Average Contributions	¥3.4 billion

Average Term	3 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	30
Volantary Partnerships	0
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	2
Early-stage	5
Expansion-stage	0
Later-stage	1
Balanced	13
Buyout	1
Recap/Turnaround	2
Not Specified	4
Unknown	2

Investment focus by region	
Hokkaido	1
Tohoku	3
Kanto (excl. Tokyo)	1
Tokyo	2
Chubu	0
Kinki	0
Chugoku	3
Shikoku	1
Kyushu and Okinawa	5
Mainly domestic	10
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	4
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	2
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	1
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	5
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	21
Unknown	1

(33)Funds starting in 2014

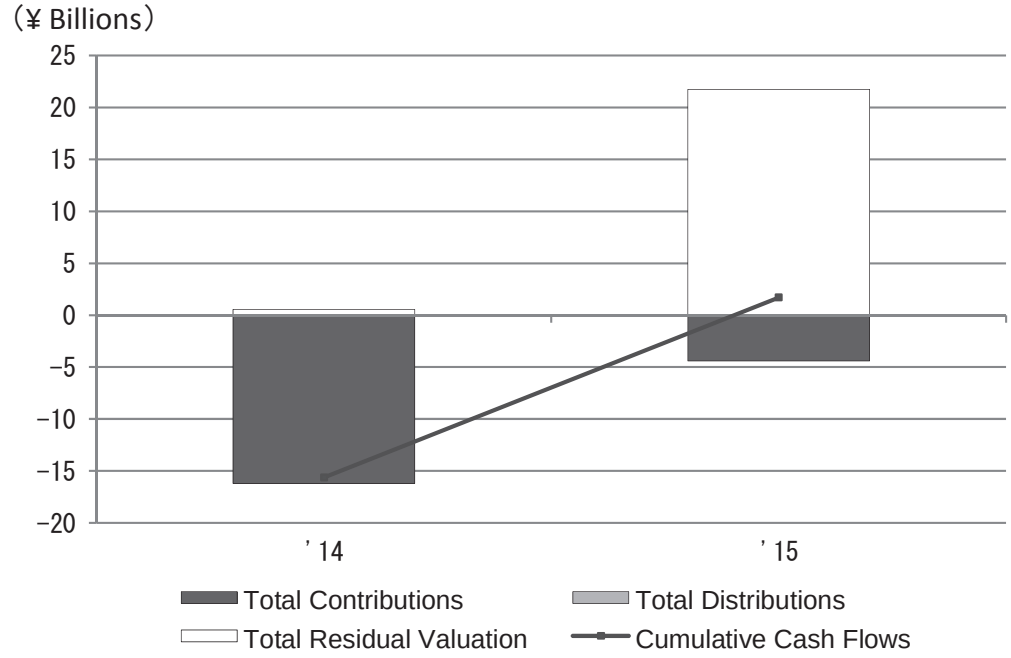
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2014	20	6.17%	20.34%	-6.55%	27.47%	80.67%	-0.36%	-3.31%	-14.78%	-50.45%
Liquidated	0	NA	NA	NA	NA					
Existing	20	6.17%	20.34%	-6.55%	27.47%					

D/PI	0.00
TV/PI	1.08

Total Contributions	¥24.6 billion
Average Contributions	¥1.2 billion

Average Term	2 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	20
Volantary Partnerships	0
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	0
Early-stage	7
Expansion-stage	1
Later-stage	0
Balanced	8
Buyout	0
Recap/Turnaround	0
Not Specified	4
Unknown	0

Investment focus by region	
Hokkaido	1
Tohoku	1
Kanto (excl. Tokyo)	1
Tokyo	0
Chubu	1
Kinki	4
Chugoku	1
Shikoku	0
Kyushu and Okinawa	1
Mainly domestic	4
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	6
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	2
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	2
Medical Device and Equipment/ Healthcare-related	1
Industrial/Energy/Other	2
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	12
Unknown	1

(34)Funds starting in 2015

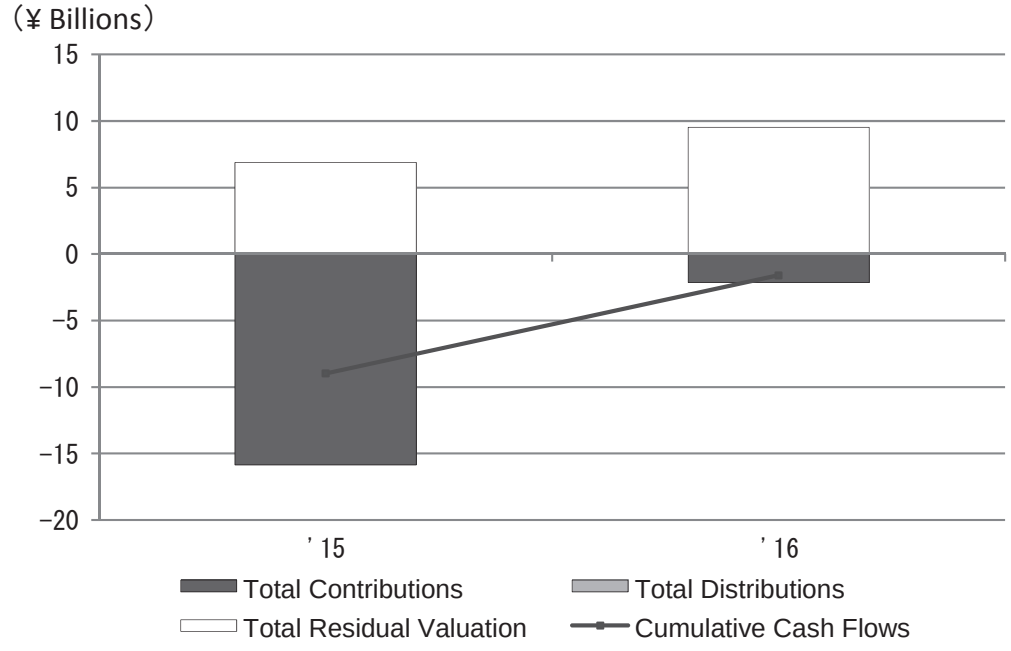
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2015	23	-12.25%	-13.68%	-27.05%	31.47%	0.00%	-7.87%	-14.44%	-20.11%	-97.55%
Liquidated	0	NA	NA	NA	NA					
Existing	23	-12.25%	-13.68%	-27.05%	31.47%					

D/PI	0.00
TV/PI	0.91

Total Contributions	¥18.5 billion
Average Contributions	¥0.8 billion

Average Term	0.9 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	23
Volantary Partnerships	0
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	3
Early-stage	6
Expansion-stage	1
Later-stage	0
Balanced	4
Buyout	0
Recap/Turnaround	0
Not Specified	7
Unknown	2

Investment focus by region	
Hokkaido	1
Tohoku	3
Kanto (excl. Tokyo)	1
Tokyo	0
Chubu	0
Kinki	2
Chugoku	3
Shikoku	1
Kyushu and Okinawa	0
Mainly domestic	6
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	4
Unknown	2

Investment focus by industry	
Telecommunications/Networking and Equipment	0
Computers and Peripherals/IT services	1
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	3
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	1
Not specified	16
Unknown	2

(35)Funds starting in 2016

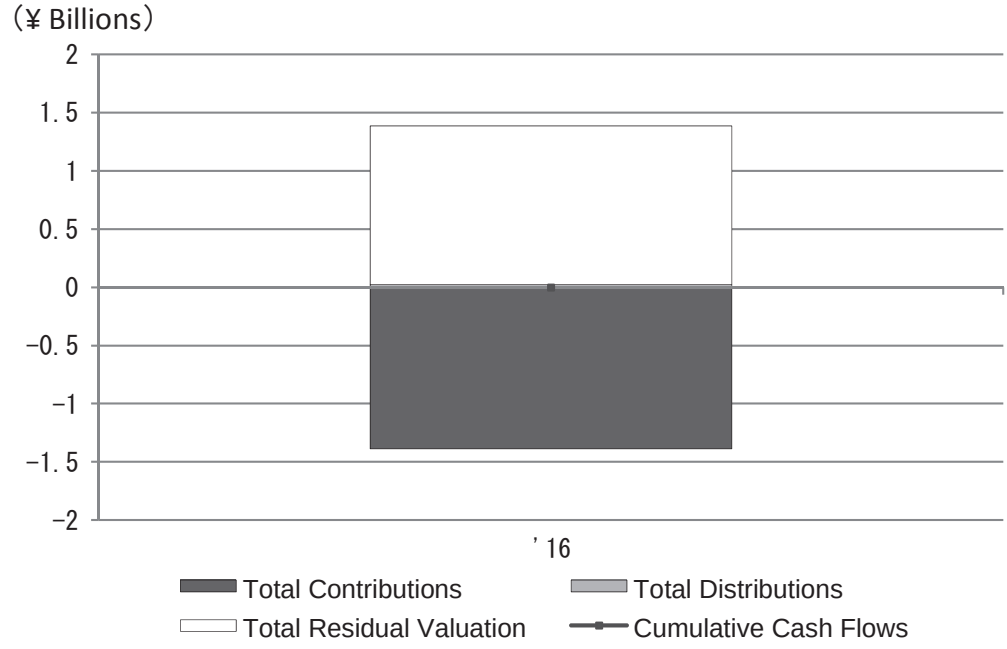
	Number of Funds	IRR								
		Pooled IRR	Weighted Average IRR	Average IRR	Standard Deviation	Maximum Value	Upper Quartile	Median	Lower Quartile	Minimum Value
Funds formed in 2016	3	-1.14%	-0.87%	-2.01%	3.48%	0.00%	0.00%	0.00%	-3.01%	-6.03%
Liquidated	0	NA	NA	NA	NA					
Existing	3	-1.14%	-0.87%	-2.01%	3.48%					

D/PI	0.02
TV/PI	1.00

Total Contributions	¥1.4 billion
Average Contributions	¥0.5 billion

Average Term	0.3 (From inception to either dissolution date or the end of May 2016, whichever comes first.)

Cash Flows



Number of Funds by Characterstics

Fund type	
Limited Partnerships	3
Volantary Partnerships	0
Foreign funds /Other	0
Unknown	0

Investment focus by stage	
Seed-stage	1
Early-stage	2
Expansion-stage	0
Later-stage	0
Balanced	0
Buyout	0
Recap/Turnaround	0
Not Specified	0
Unknown	0

Investment focus by region	
Hokkaido	0
Tohoku	0
Kanto (excl. Tokyo)	0
Tokyo	2
Chubu	0
Kinki	0
Chugoku	1
Shikoku	0
Kyushu and Okinawa	0
Mainly domestic	0
Asia-Pacific	0
Europe	0
North America	0
Mainly Overseas	0
Not Specified	0
Unknown	0

Investment focus by industry	
Telecommunications/Networking and Equipment	1
Computers and Peripherals/IT services	1
Software	0
Semi-conductors/ Electrical machinery & equipment	0
Biotechnology/Medicine	0
Medical Device and Equipment/ Healthcare-related	0
Industrial/Energy/Other	0
Media/Entertainment/ Retailing/Customer Goods	0
Finance/Real Estate/ Business Services	0
Clean Technology	0
Not specified	1
Unknown	0

List of venture capital firms responded to the VEC annual survey (121 firms in total)

ABC DREAM VENTURES, Inc.
AG Capital Co., Ltd.
Akinai Research Institute
Ant Capital Partners Co., Ltd.
Archetype* Ventures Inc.
B Dash Ventures Inc.
BioFrontier Partners, Inc.
Bio-sight Capital, Inc.
CHIBAGIN CAPITAL Co., Ltd.
Chushin Venture Capital Co., Ltd.
Citic Capital Partners Japan Limited
CyberAgent Ventures, Inc.
Daiwa Corporate Investment Co., Ltd.
DBJ Capital Co., Ltd.
DCI Partners Co., Ltd.
Dentsu Digital Holdings, Inc.
DOGAN, Inc.
Energy & Environment Investment, Inc.
Entrepia Ventures
euglena SMBC Nikko Leave-a-Nest Capital L.L.C.
Fast Track Initiative, Inc.
Femto Growth Capital LLP
FFG Business Consulting Co., Ltd.
FinTech Global Incorporated
Fuji Startup Ventures Inc.
FUJITSU LIMITED
Future Venture Capital Co., Ltd.
Genuine Startups Ltd.
Global Brain Corporation
Global Catalyst Partners Japan
Global Venture Capital inc.
GLOBIS CAPITAL PARTNERS & Co.
GMO Venture Partners
GREE Ventures, inc.
GUNGIN LEASING Co., Ltd.
Hachijuni Capital Co., Ltd.
Hack Ventures, Inc.
Hamashin Lease, Co., Ltd.
Hibishin Capital Co., Ltd.
Higin Capital Co., Ltd.
Hiroshima Innovation Network Inc.
Hiroshima Venture Capital Co., Ltd
Hokkaido Venture Capital, Inc.
Hokuhoku Capital Co., Ltd.
Incubate Fund
INNOTECH CORPORATION
Innovation Engine Inc.
Innovation Network Corporation of Japan
Inspire Investment
INTEC IT Capital
Integral Corporation
IT-Farm Corporation
ITOCHU Technology Ventures, Inc.
JAFCO Co., Ltd.
Japan Asia Investment Company, Limited
Japan Science and Technology Agency
K&P Partners Corp.
KLab Venture Partners Co., Ltd.
KSP, Inc.
Kyoritsu Capital Co., Ltd.
Kyoto University Innovation Capital Co., Ltd.
LINE Ventures Corporation
MBL Venture Capital Co., Ltd.
MedVenture Partners, Inc.
Mitsubishi UFJ Capital Co., Ltd.
MITSUI SUMITOMO INSURANCE Venture Capital Co., Ltd.
Miyagin Venture Capital Co., Ltd.
Mizuho Capital Co., Ltd.
Mobile Internet Capital, Inc.
NEOSTELLA CAPITAL CO.,LTD.
Nippon Venture Capital Co., Ltd.
NISSAY CAPITAL Co., Ltd
Nomura Research & Advisory Co., Ltd.
NTT DOCOMO Ventures, Inc.
Oita Venture Capital Co., Ltd.
OMRON VENTURES CO., LTD.
ORIX Capital Corporation
OSAKA University Venture Capital Co., Ltd.
PE&HR Co., Ltd.
Phoenix Capital Co., Ltd.
Polaris Capital Group Co., Ltd.
QB Capital, LLC
S.K.VENTURES Co., Ltd.
Sagamihara Incubation Center Ltd.
Saison Ventures
Sansei Capital Investment Co., Ltd.
SBI Holdings, Inc.
Seibu Shinkin Capital
SENSHU IKEDA CAPITAL Co., Ltd.
SHIGAGIN LEASE CAPITAL Co., Ltd.
Shigin Regional Economic Research Institute Inc.
Shinkin Capital Co., Ltd.
Shinsei Corporate Investment Limited
Shizuoka Capital Company Limited
SMBC Venture Capital
Solution Design Co.,Ltd
Strategic Investment Partners Inc.
Sumitomo Mitsui Trust Investment Co., Ltd.
SunBridge Global Ventures Inc.
Sync Partners Co., Ltd.
T Hands On Investment Inc.
TechAccel Ventures, LLC.
The Agribusiness Investment & Consultation Co., Ltd.
The Gogin Capital Co., Ltd.
The Kiyo Lease & Capital Co., Ltd.
The University of Tokyo Edge Capital Co., Ltd.
TNP On The Road Corporation
Tohoku Innovation Capital Corporation
TOHOKU University Venture Partners Co., Ltd.
Tottori Capital Co., Ltd.
TSUNEISHI PARTNERS Co., Ltd.
Universal Materials Incubator Co., Ltd.
Venture Labo Investment
VENTURE UNITED, inc
VOYAGE GROUP, Inc.
Watervein Partners
WERU INVESTMENT Co., Ltd.
Whiz Partners Inc.
Yasuda Enterprise Development Co., Ltd.
YJ Capital Inc.
Yokohama Capital Co., Ltd.

(Alphabetical order)

VEC YEARBOOK 2016

Annual Report on Japanese Startup Businesses

March 30, 2017
Edited, published
Venture Enterprise Center, Japan
Funato Bldg 6F
1-2-3, Kudan-kita, Chiyoda-ku,
Tokyo, 102-0073, Japan
TEL：+81-3-3230-8902
FAX：+81-3-3230-1110
E-mail ：vcdoukou@vec.or.jp
URL：http://www.vec.or.jp

ISBN 978-4-908965-01-2