



Silicon Valley
Venture Capital Survey
Fourth Quarter 2017

Full Analysis

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FENWICK
& WEST

Full Analysis

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Background

We analyzed the terms of 190 venture financings closed in the fourth quarter of 2017 by companies headquartered in Silicon Valley.

Overview of Fenwick & West Results

Valuation results continued to be strong in Q4 2017, but the percentage price increases declined moderately compared to the prior quarter, following three consecutive quarters of increases.

- Up rounds exceeded down rounds 70% to 19%, with 11% flat in Q4 2017, a decrease from Q3 when up rounds exceeded down rounds 79% to 10%, with 11% flat. This was the lowest percentage of up rounds since Q4 2016 and the highest percentage of down rounds since Q2 2013.
- The Fenwick & West Venture Capital Barometer™ showed an average price increase in Q4 2017 of 74%, a decrease from the 80% recorded in Q3 and the first quarter in 2017 in which the average percentage price increase had decreased compared to the prior quarter.
- The median price increase of financings in Q4 2017 was 42%, a decrease from the 46% in Q3. This was also the first quarter in 2017 in which the median price increase had decreased compared to the prior quarter.
- The internet/digital media industry recorded the strongest valuation results in Q4 2017 compared to the other industries, with an average price increase of 179% and a median price increase of 51%, both up from the prior quarter. The software industry also recorded strong valuation results in Q4, though moderately weaker compared to Q3. The life sciences and hardware industries recorded the weakest valuation metrics in Q4.
- Series D financings recorded the weakest valuation results in Q4 2017 compared to the other financing rounds, with the highest percentage of down rounds and the lowest average and median price increases of all the financing rounds. The valuation metrics for Series D financings in Q4 also declined sharply compared to the prior quarter. In contrast, the valuation results for Series E+ financings in Q4 improved moderately compared to the prior quarter.

Overview of Other Industry Data

The fourth quarter of 2017 bookended a strong year in the U.S. venture environment.

- Although the pace of investments declined, the amount of capital invested was flat from Q3 to Q4 of 2017. For the year, the pace of investments declined moderately compared to 2016, but the amount of capital invested increased significantly.
- Later stage investment allocation increased in 2017 while seed/angel investment allocation continued the downward trend observed over the past several years.
- The market for initial public offerings finished the year strongly, partially realizing the expectations at the beginning of 2017 for a strengthening IPO environment. For the year, there was a significant uptick from 2016 in both the number of deals and the amount of capital raised.
- The number of acquisitions of U.S. venture-backed companies in 2017 and the value of these deals declined from elevated 2016 levels.
- Venture capital fundraising remained strong in 2017 on a historical basis, but both the amount of capital raised and the number of funds closed were the lowest since 2013.

Venture Capital Investment

U.S. venture capital investment deal flow in Q4 2017 declined compared to the prior quarter and the year ago period and remained significantly below the peak levels of 2015. Despite the decline in deal count, the total dollar value of financings in Q4 2017 was relatively flat compared to Q3 2017 and substantially higher compared to Q4 2016. For the year, deal flow in 2017 declined moderately compared to 2016, but the amount of capital invested in 2017 increased significantly compared to 2016.

A summary of results published by three leading providers of venture data is below:

Comparison between Q4 and Q3 2017:

	Q4 2017 (\$Billions)	Q3 2017 (\$Billions)	Difference %	Q4 2017 Deals	Q3 2017 Deals	Difference %
VentureSource ¹	\$18.9	\$19.1	-1%	957	1,059	-10%
PitchBook-NVCA ²	\$23.8	\$21.2	12%	1,778	1,997	-11%
MoneyTree ³	\$18.7	\$19.2	-2%	1,158	1,299	-11%
Average	\$20.5	\$19.8	3%	1,298	1,452	-11%

Comparison between Q4 2017 and Q4 2016:

	Q4 2017 (\$Billions)	Q4 2016 (\$Billions)	Difference %	Q4 2017 Deals	Q4 2016 Deals	Difference %
VentureSource ¹	\$18.9	\$11.2	69%	957	965	-1%
PitchBook-NVCA ²	\$23.8	\$14.3	66%	1,778	1,891	-6%
MoneyTree ³	\$18.7	\$12.9	45%	1,158	1,221	-5%
Average	\$20.5	\$12.8	60%	1,298	1,359	-5%

Comparison between 2017 and 2016:

	2017 (\$Billions)	2016 (\$Billions)	Difference %	2017 Deals	2016 Deals	Difference %
VentureSource ¹	\$73.2	\$57.4	27%	4,259	4,129	3%
PitchBook-NVCA ²	\$84.2	\$72.4	16%	8,076	8,635	-6%
MoneyTree ³	\$71.9	\$61.4	17%	5,052	5,268	-4%
Average	\$76.4	\$63.7	20%	5,796	6,011	-4%

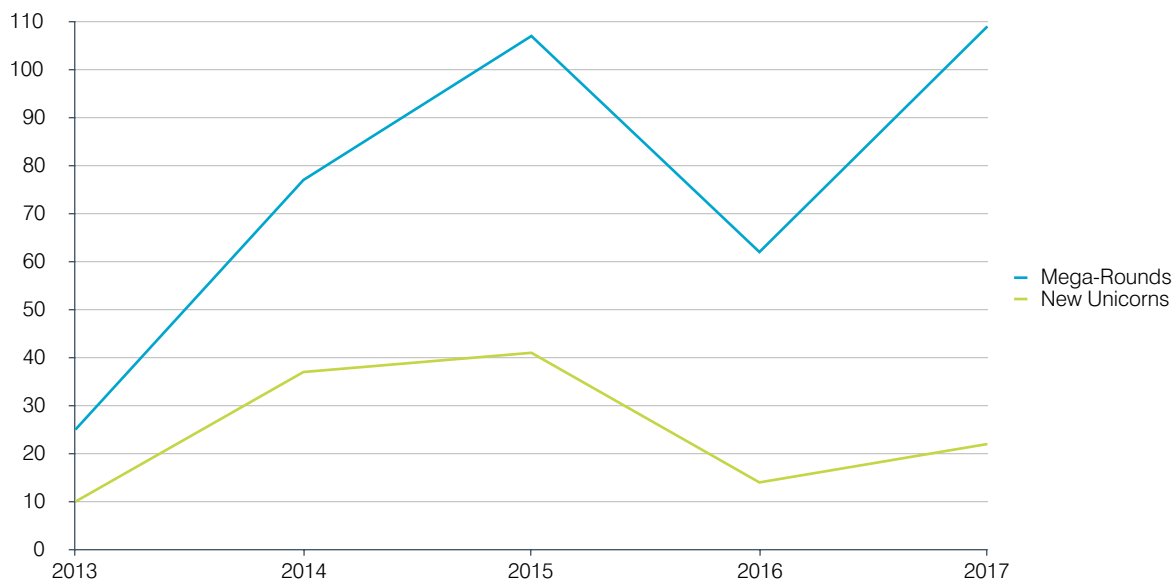
¹ Dow Jones VentureSource ("VentureSource")

² PitchBook-NVCA Venture Monitor ("PitchBook-NVCA")

³ PwC/CB Insights MoneyTree™ Report ("MoneyTree")

According to MoneyTree, a record 107 mega-rounds (investments of at least \$100 million) closed in 2017, surpassing 2015's previous record by two deals. In addition, 22 new VC-backed companies reached unicorn status (a valuation of at least \$1 billion) in 2017, up from the 14 new unicorns in 2016, but still down compared to the elevated unicorn creation rates of 2014 and 2015.

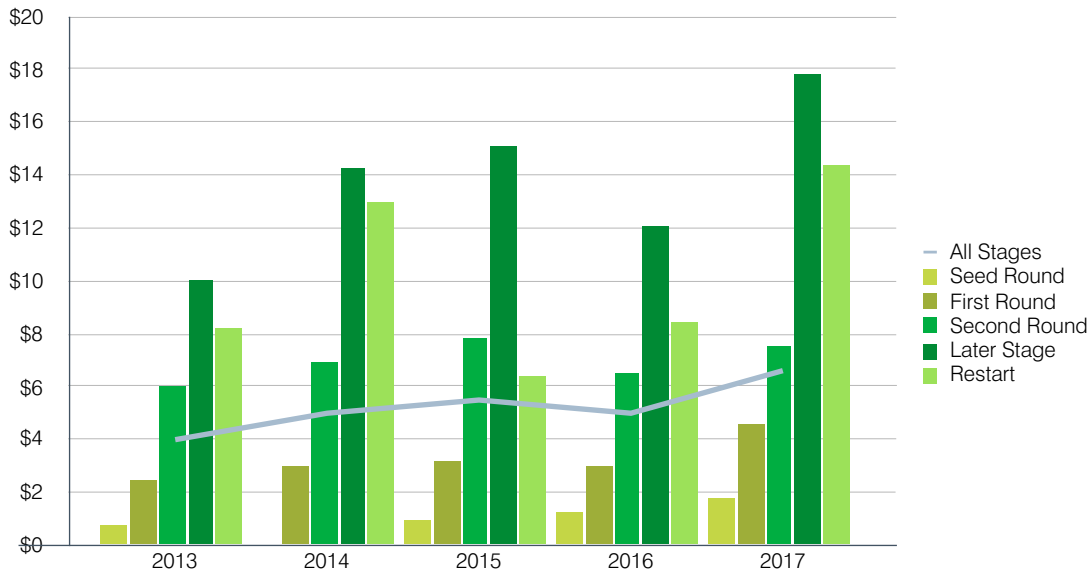
MEGA-ROUNDS AND NEW UNICORNS



Source: MoneyTree

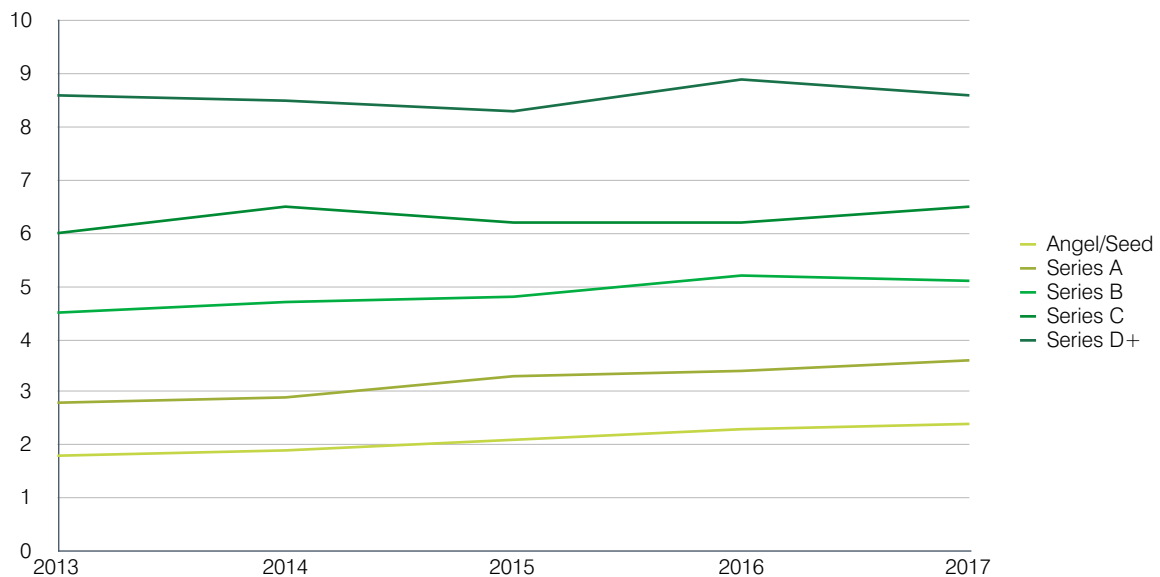
According to VentureSource, the median amount invested per financing round by venture capitalists or venture capital-type investors (i.e., those making equity investments in early-stage companies from a fund with multiple limited partners) was \$6.6 million in 2017, up from \$5.0 million in 2016 and the highest median amount since 2007. While median deal sizes have increased across all stages in recent years, later stage rounds recorded the biggest gains with the median amount for later stage rounds increasing from \$12.0 million in 2016 to \$17.8 million in 2017, the highest median amount invested per later stage round by VCs since 2000. At the same time, according to PitchBook-NVCA, the median age of companies receiving funding at each stage has also increased over the past several years.

MEDIAN AMOUNT INVESTED PER FINANCING



Source: VentureSource

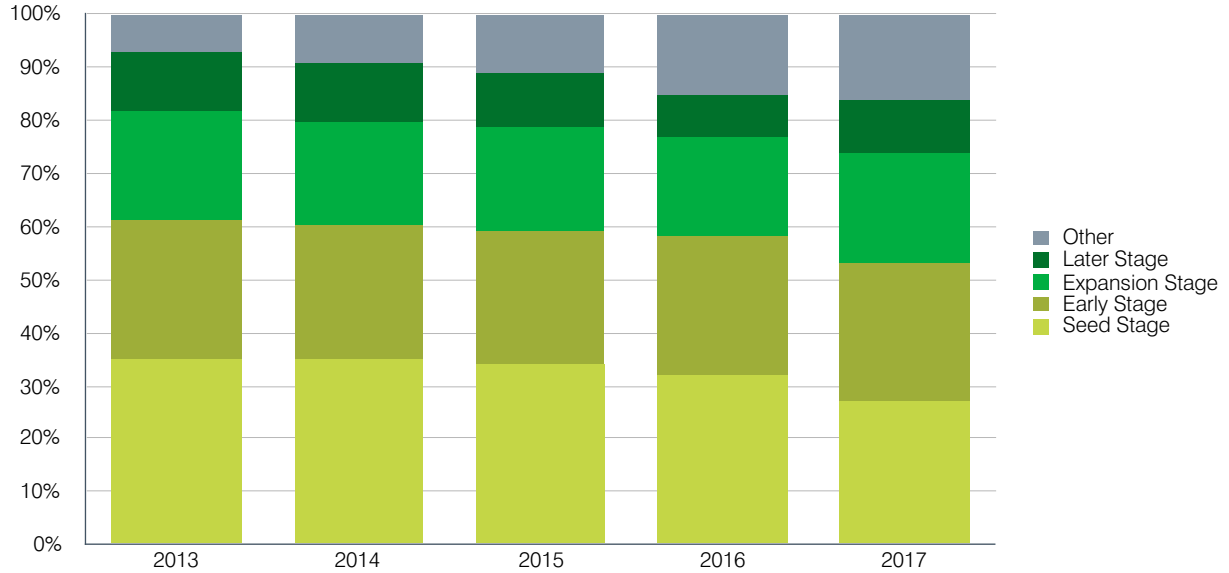
MEDIAN COMPANY AGE BY FINANCING ROUND



Source: PitchBook-NVCA

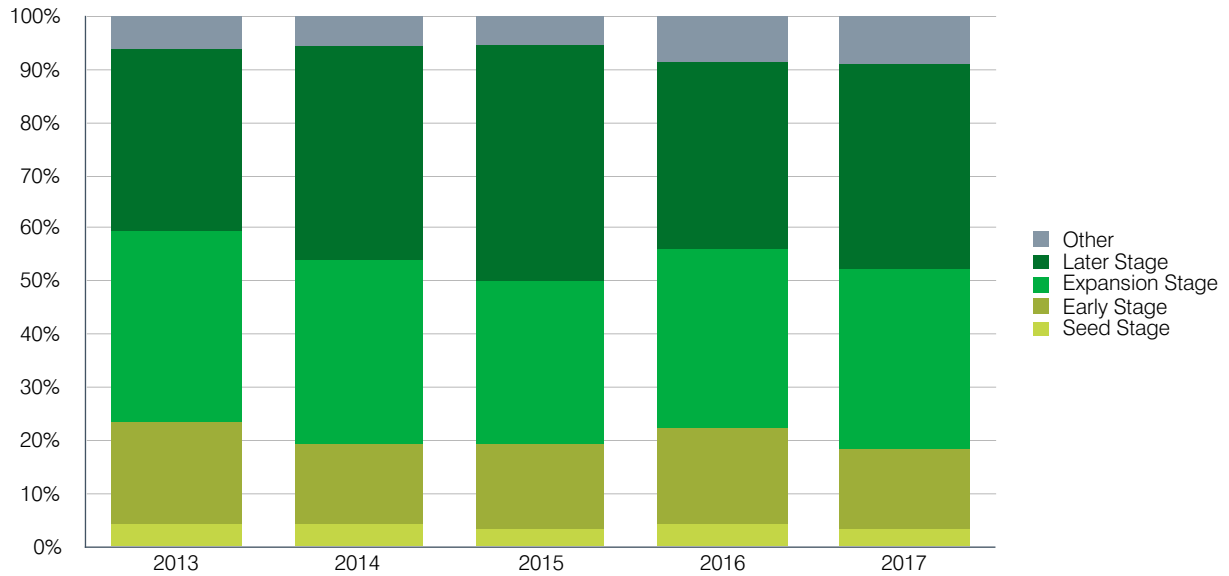
According to Moneytree, seed/angel investment deal allocation (i.e. allocation by number of deals) declined from 32% in 2016 to 27% in 2017, the lowest percentage since 2010. Seed/angel invested capital allocation (i.e. allocation by amount of invested capital) also declined moderately from 4% in 2016 to 3% in 2017. Meanwhile, later stage (Series D and E+) deal and invested capital allocations saw the greatest gains, increasing from 8% and 35%, respectively, in 2016 to 10% and 38%, respectively, in 2017.

DEAL ALLOCATION BY FINANCING STAGE



Source: MoneyTree

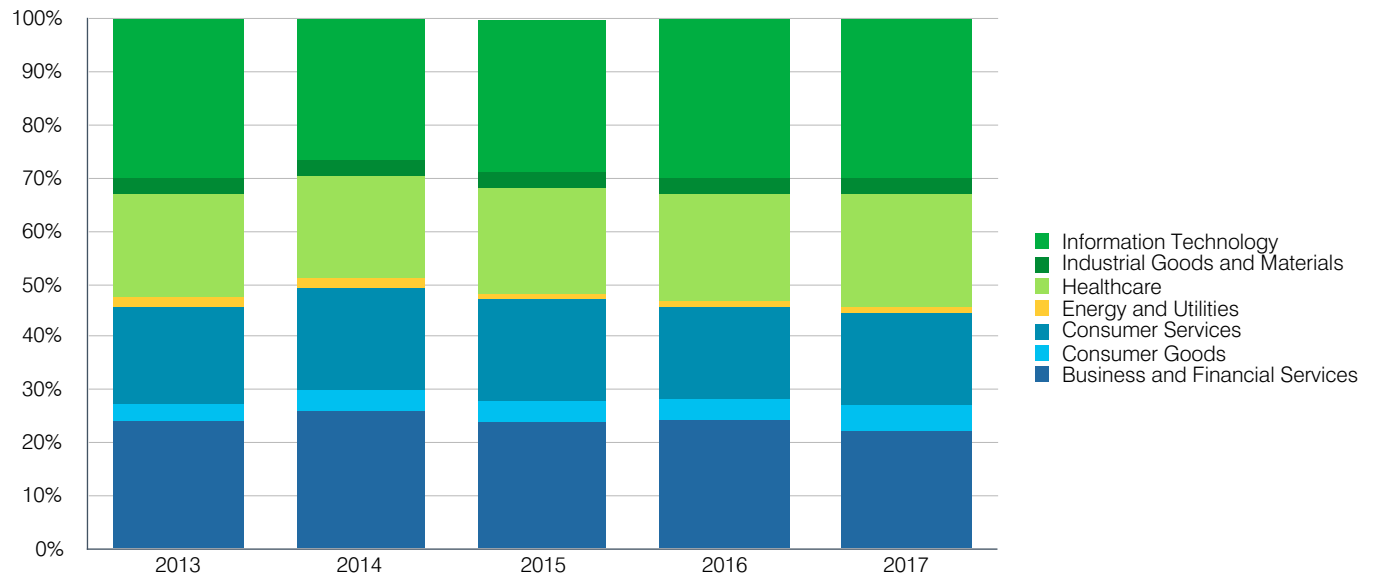
INVESTED CAPITAL ALLOCATION BY FINANCING STAGE



Source: MoneyTree

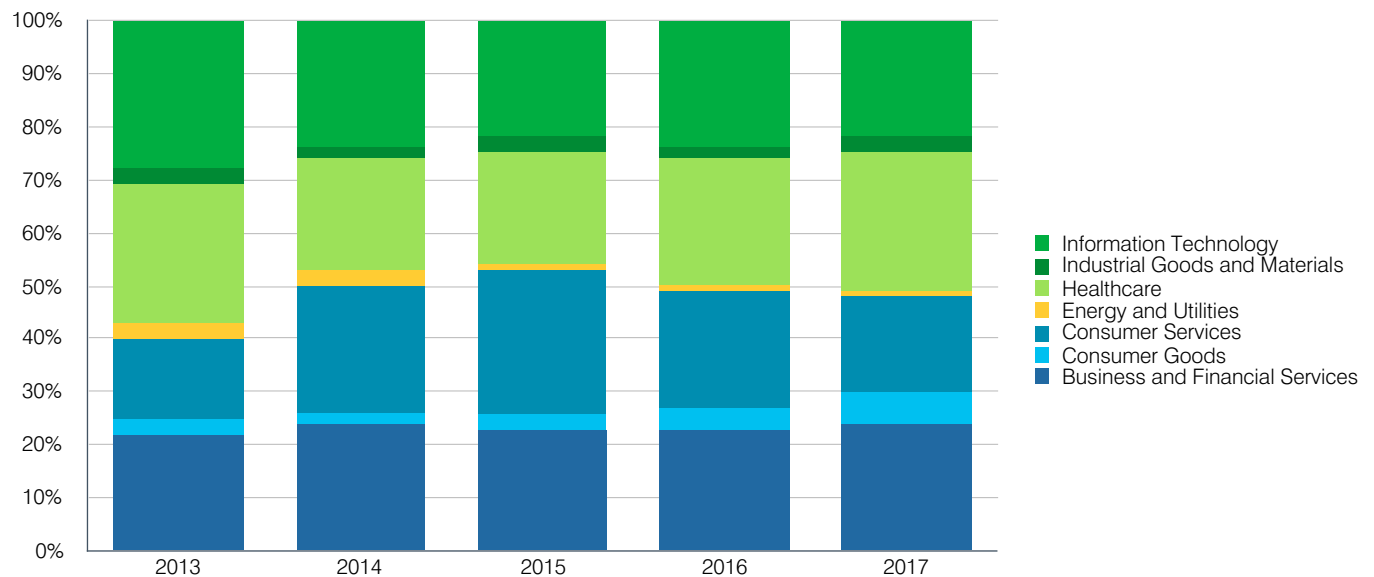
Investments into healthcare companies recorded the largest gains in 2017, comprising 26% of the invested capital and 21% of the total number of deals in 2017, according to VentureSource, up from 24% and 20%, respectively, in 2016. Compared to the prior year, deal allocation for information technology companies was flat at 30%, yet invested capital allocation declined for IT companies from 24% in 2016 to 22% in 2017. Investments into business and financial services companies comprised of the second largest share of investments in terms of both the number of deals and the amount of invested capital.

DEAL ALLOCATION BY INDUSTRY



Source: VentureSource

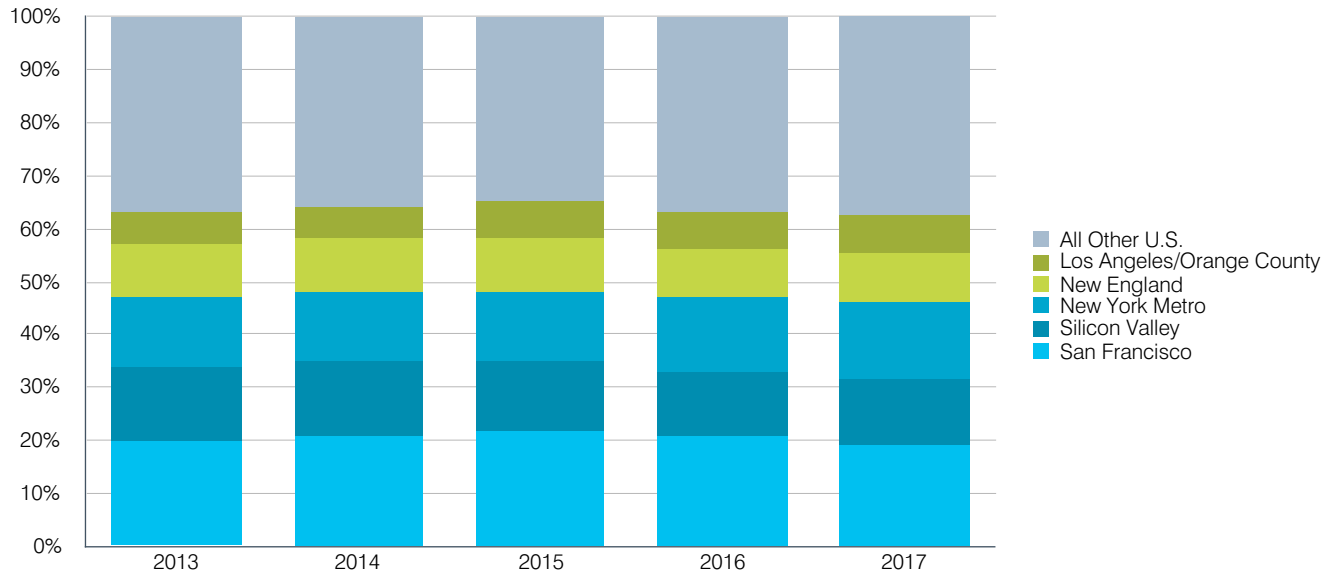
INVESTED CAPITAL ALLOCATION BY INDUSTRY



Source: VentureSource

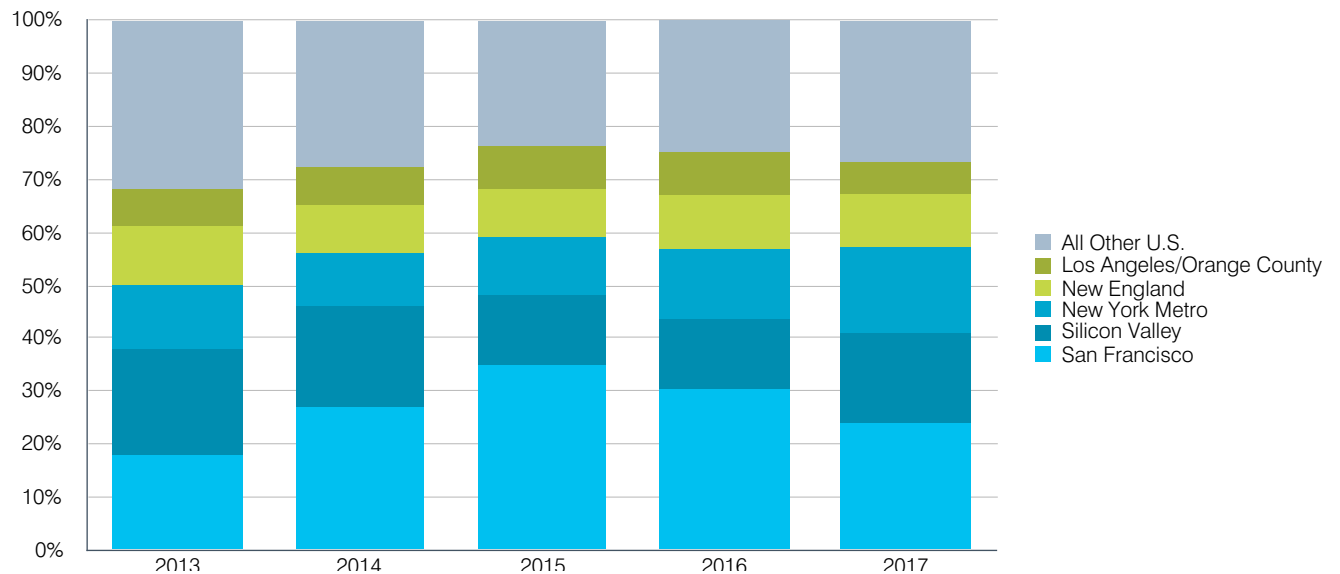
Regionally, while the San Francisco area continued to take in the largest share of investments at 24% of the invested capital and 19% of the total number of deals in 2017 according to MoneyTree, this represented a decline from 30% and 21%, respectively, in 2016. Moreover, the 980 deals in 2017 was the lowest number of deals in the San Francisco area since 2012, and the \$17.1 billion in 2017 was the lowest amount of capital invested in companies located in the San Francisco area since 2014. Meanwhile, the amount of capital invested into companies in the Silicon Valley and New York Metro areas were at 10-year highs with both areas recording an increase in invested capital allocation from 13% and 13%, respectively, in 2016 to 17% and 16%, respectively, in 2017, although deal allocation for both areas was flat at 12% and 14%, respectively, in 2016 and 2017.

DEAL ALLOCATION BY REGION



Source: MoneyTree

INVESTED CAPITAL ALLOCATION BY INDUSTRY

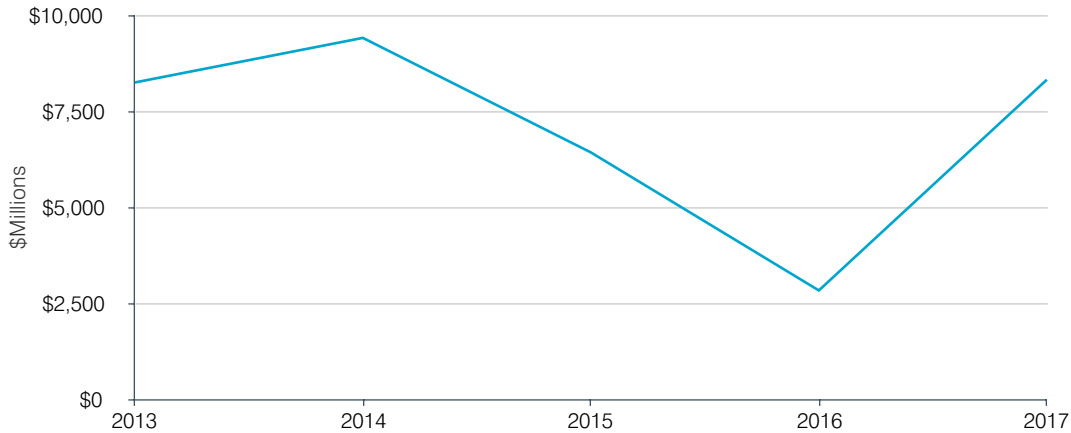


Source: MoneyTree

IPO Activity

The market for initial public offerings finished the year strongly. According to VentureSource, there were 24 venture-backed IPOs that raised an aggregate of \$2.03 billion in Q4 2017. This was the highest number of IPOs in a quarter since Q2 2015. Both the number of deals and the amount of capital raised grew significantly from the prior quarter when there were eight U.S. venture-backed IPOs that raised an aggregate of \$618 million. For the year, there were 57 U.S. venture-backed IPOs that raised an aggregate of \$8.3 billion, a significant uptick from 2016 when there were 38 IPOs that raised an aggregate of \$2.9 billion.

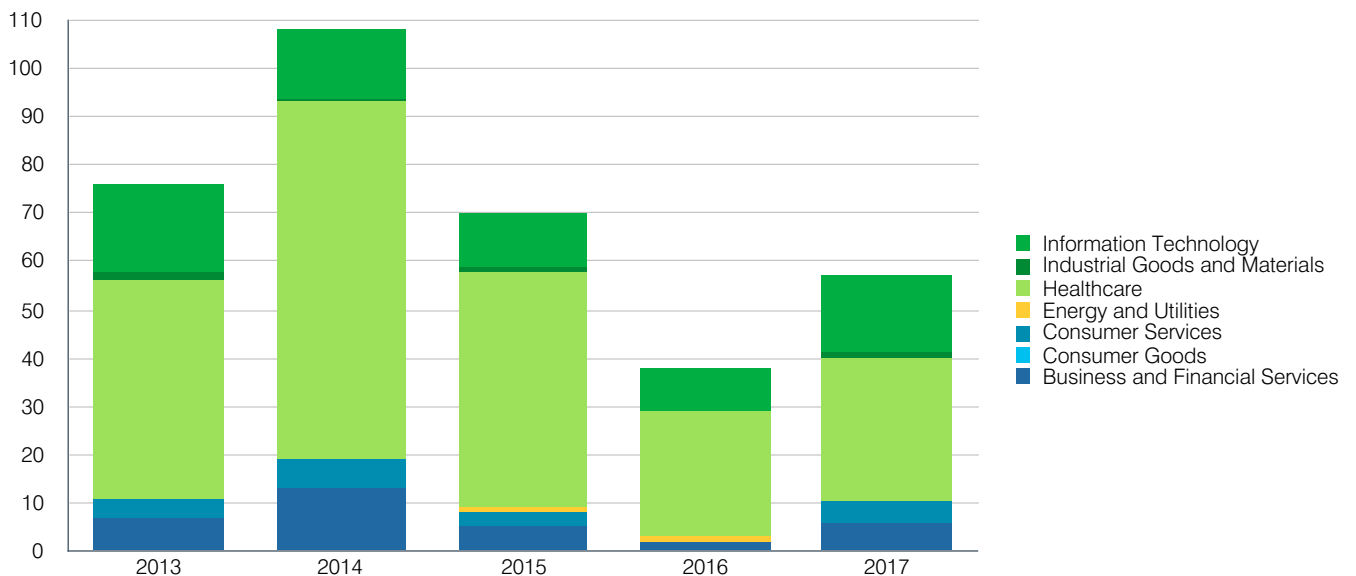
U.S. VENTURE-BACKED IPOs DOLLARS RAISED



Source: VentureSource

The healthcare industry recorded the greatest number of IPOs with 30 in 2017, up from 26 healthcare IPOs in 2016. The number of IPOs of information technology companies recorded the biggest gains, increasing from eight IPOs in 2016 to 16 IPOs in 2017, the highest number of IPOs of IT companies since 2013.

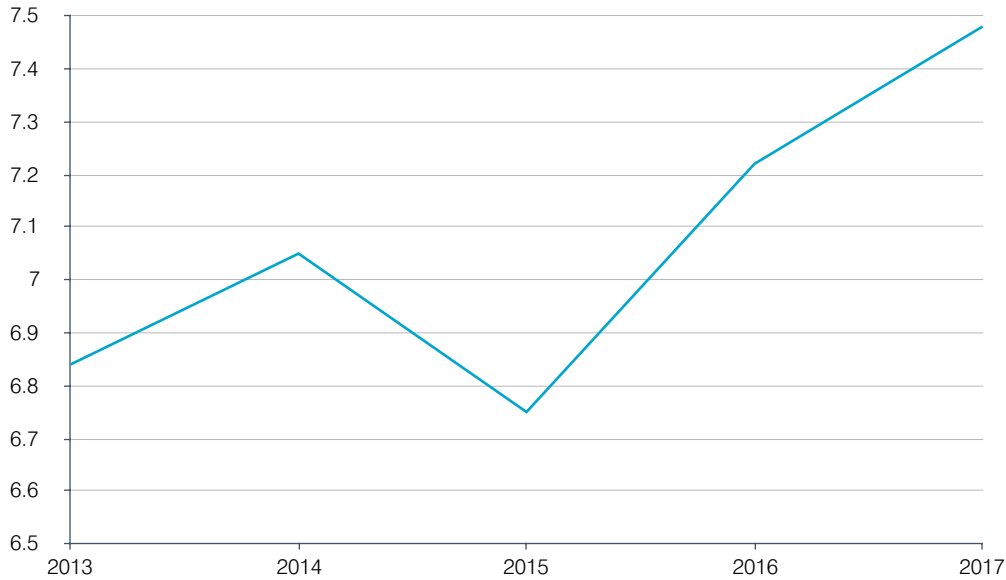
U.S. VENTURE-BACKED IPOs BY INDUSTRY



Source: VentureSource

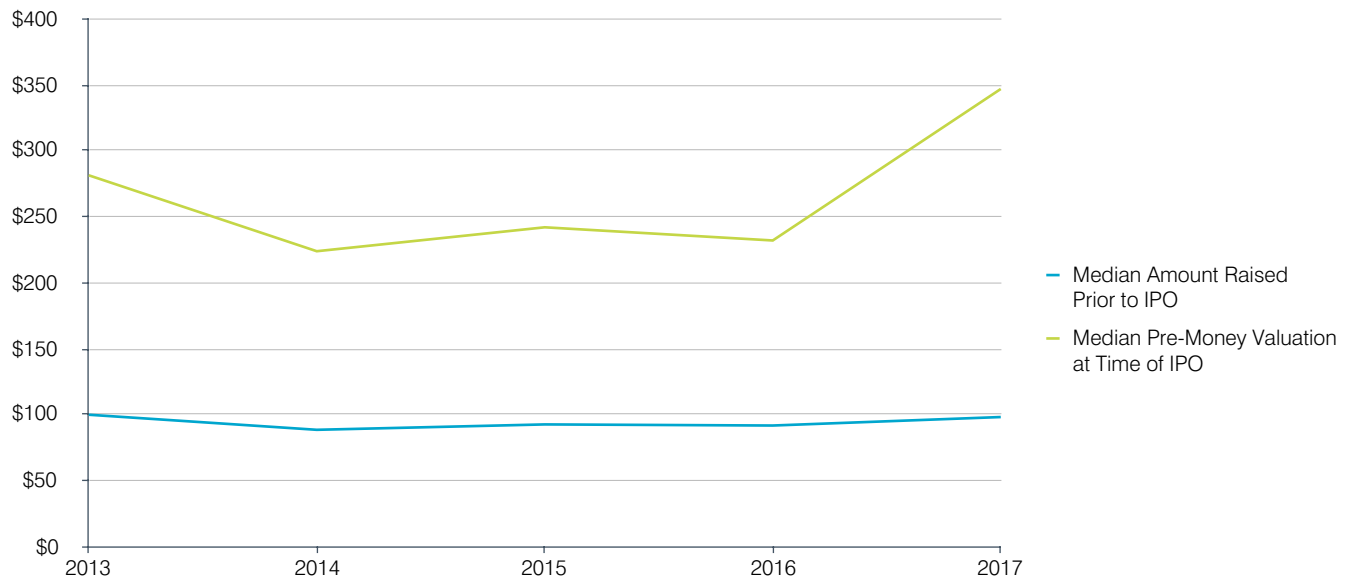
According to VentureSource, the median time from initial equity funding to IPO increased from 7.2 years in 2016 to 7.5 years in 2017, the longest IPO timeline observed since 2010. In addition, the median amount raised prior to IPO increased from \$92.0 million in 2016 to \$98.4 million in 2017 and the median pre-money valuation at time of IPO increased from \$232.2 million in 2016 to \$347.0 million in 2017.

MEDIAN TIME FROM INITIAL EQUITY FUNDING TO IPO



Source: VentureSource

U.S. VENTURE-BACKED IPOs MEDIAN AMOUNT RAISED PRIOR TO IPO AND PRE-MONEY VALUATION AT TIME OF IPO

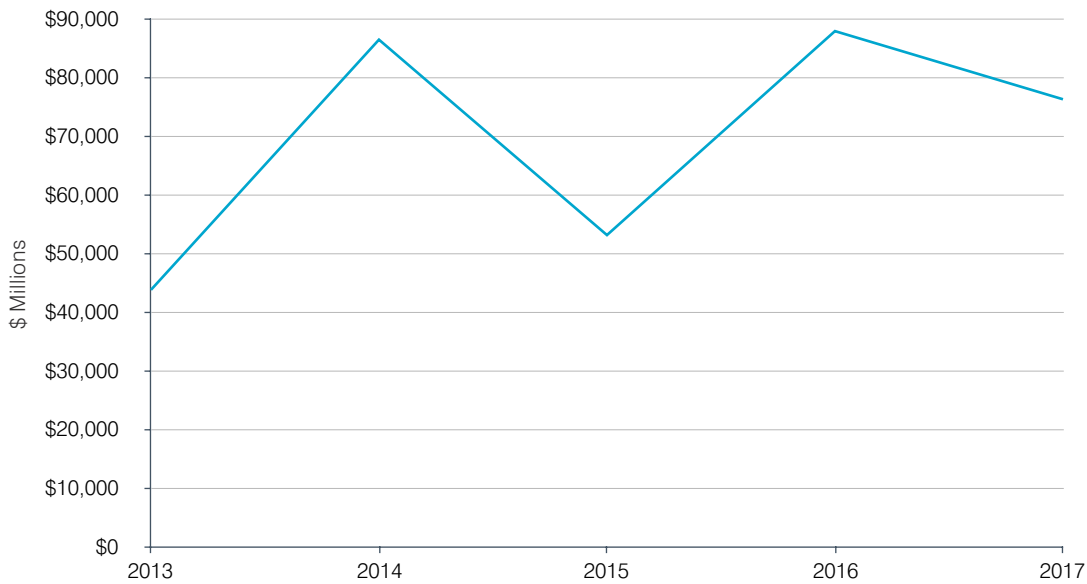


Source: VentureSource

Merger and Acquisition Activity

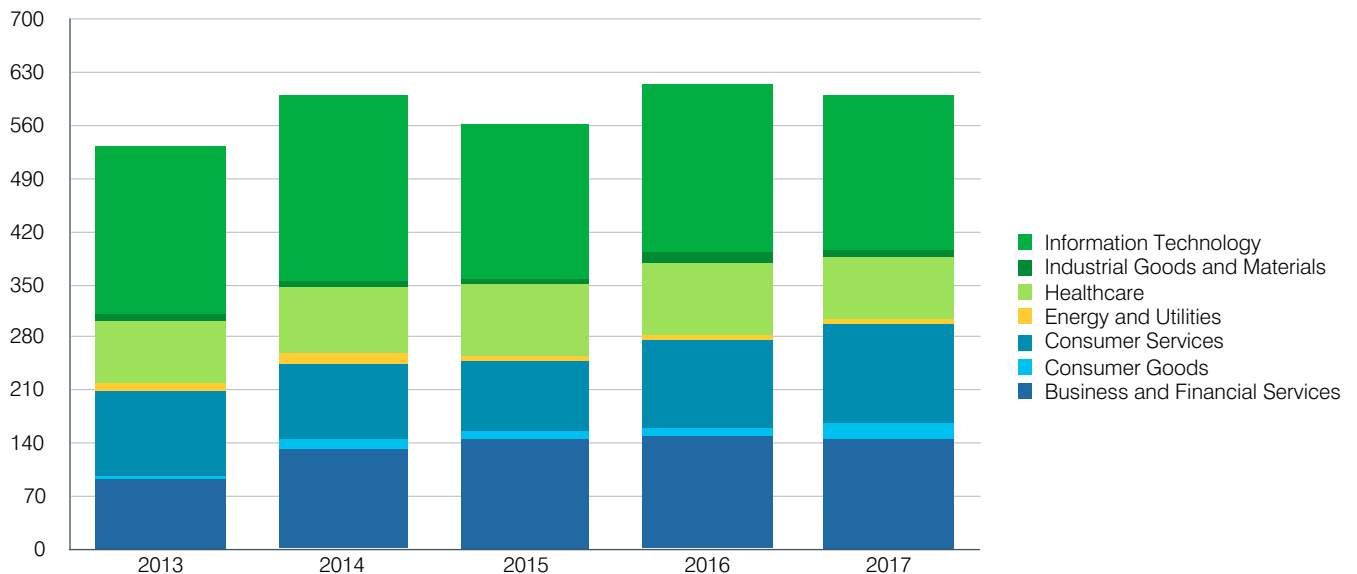
U.S. M&A deal volume decreased marginally in 2017, with VentureSource reporting a decline in the number of acquisitions of U.S. venture-backed companies from 613 in 2016 to 600 in 2017. The overall value of these deals, however, declined by a greater margin from \$88.0 billion in 2016 to \$76.4 billion in 2017. The healthcare industry recorded the largest decline in M&A activity with 82 deals for an aggregate value of \$9.9 billion in 2017 compared to 97 deals for an aggregate value of \$17.7 billion in 2016. Meanwhile, although M&A deal volume for IT companies declined moderately from 221 deals in 2016 to 204 deals in 2017, the overall value of these deals increased from \$22.1 billion in 2016 to \$29.7 billion in 2017.

U.S. VENTURE-BACKED M&A DEAL AMOUNTS



Source: VentureSource

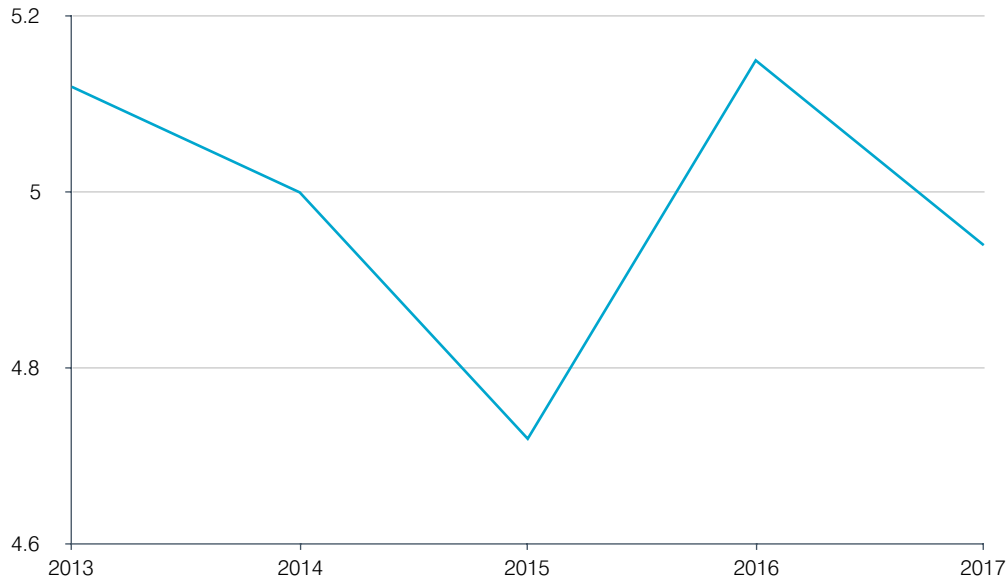
U.S. VENTURE-BACKED M&A DEALS BY INDUSTRY



Source: VentureSource

Younger companies are being acquired in 2017 in comparison to 2016. According to VentureSource, the median time from initial equity funding to acquisition was 4.9 years in 2017 compared to 5.2 years in 2016. Bucking this trend were healthcare companies where the median time from initial equity funding to acquisition increased from 5.6 years in 2016 to 7.5 years in 2017.

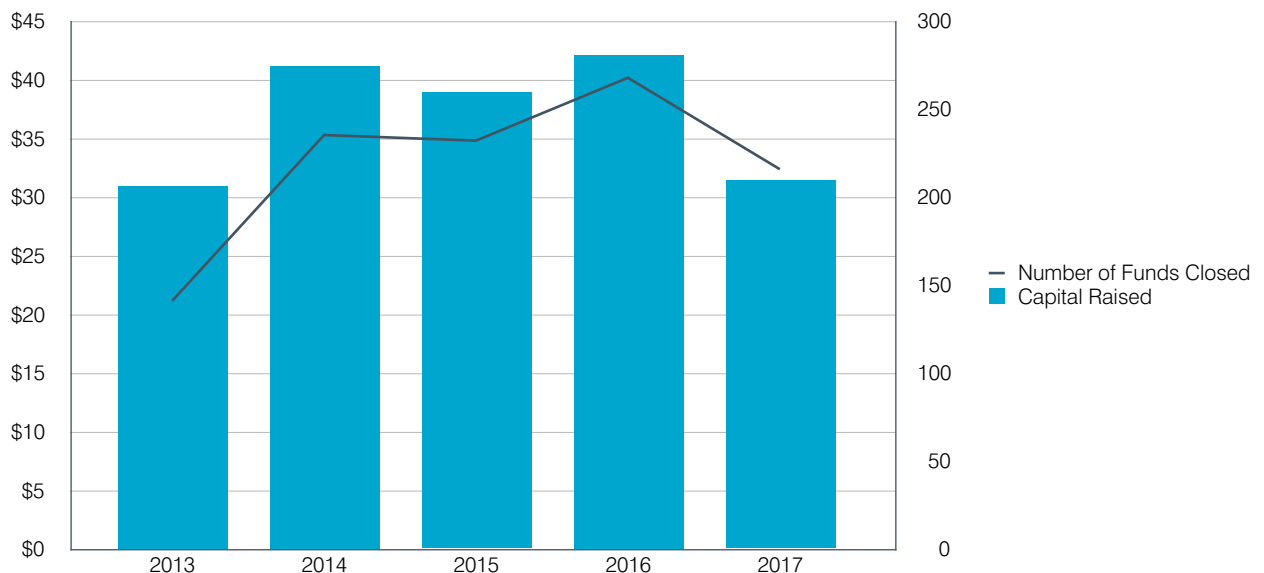
MEDIAN TIME FROM INITIAL FUNDING TO M&A EXIT



Source: VentureSource

Venture Capital Fundraising

According to PitchBook-NVCA, venture capitalist firms raised \$32.4 billion across 209 funds in 2017, including \$6.7 billion across 45 funds in Q4 2017. While VC fundraising remained strong in 2017 on a historical basis, it declined from elevated 2016 levels when \$40.2 billion was raised across 281 funds. Both the amount of capital raised and the number of funds closed were the lowest since 2013.



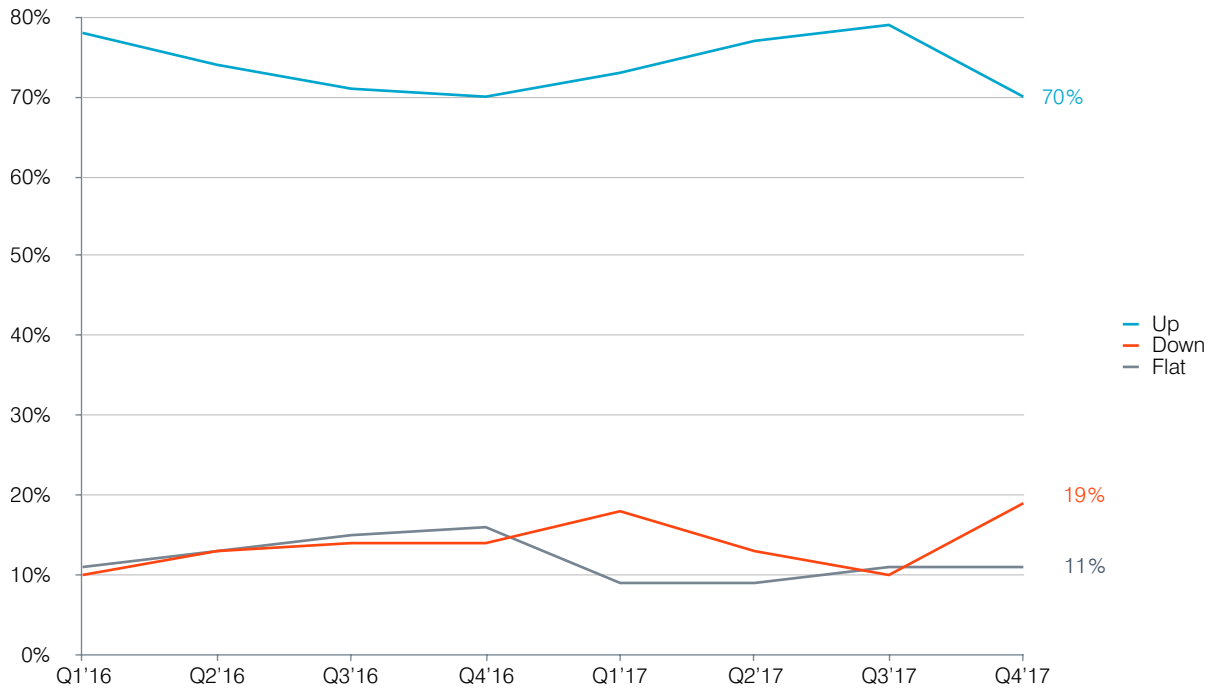
Source: PitchBook-NVCA

Despite the decline in fundraising level, first-time funds recorded strong fundraising numbers, with \$3.3 billion raised across 35 first-time funds in 2017 compared to \$2.2 billion raised across 25 funds in 2016. In addition, the average and median number of months to close a fund declined significantly from 19.4 months and 19.0 months, respectively, in 2016 to 15.9 months and 13.1 months, respectively, in 2017.

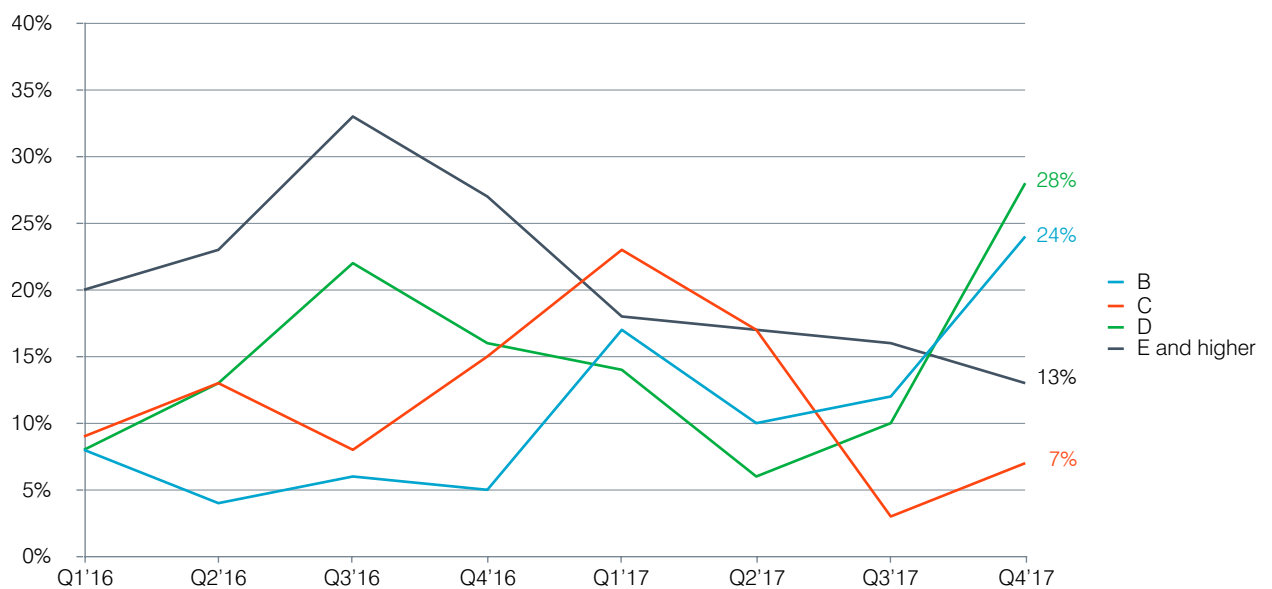
Average and median fund size continued their increases over the past several years to \$156.4 million and \$60.1 million, respectively, in 2017 from \$149.3 million and \$50 million, respectively, in 2016. This increase in fund size is attributed to an increase in the number of funds valued between \$250 million and \$500 million. Meanwhile, the number of funds valued at \$500 million or more and the number of funds valued at less than \$50 million both declined.

Fenwick & West Data on Valuation

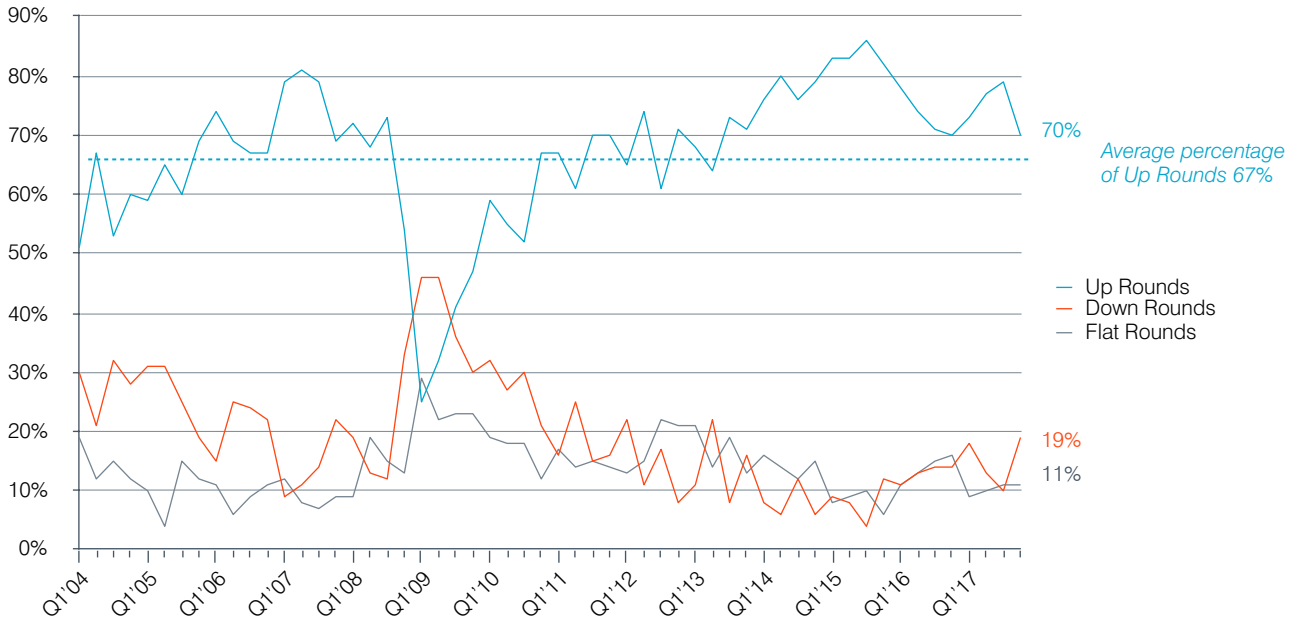
PRICE CHANGE—The direction of price changes for companies receiving financing in a quarter, compared to their prior round of financing.



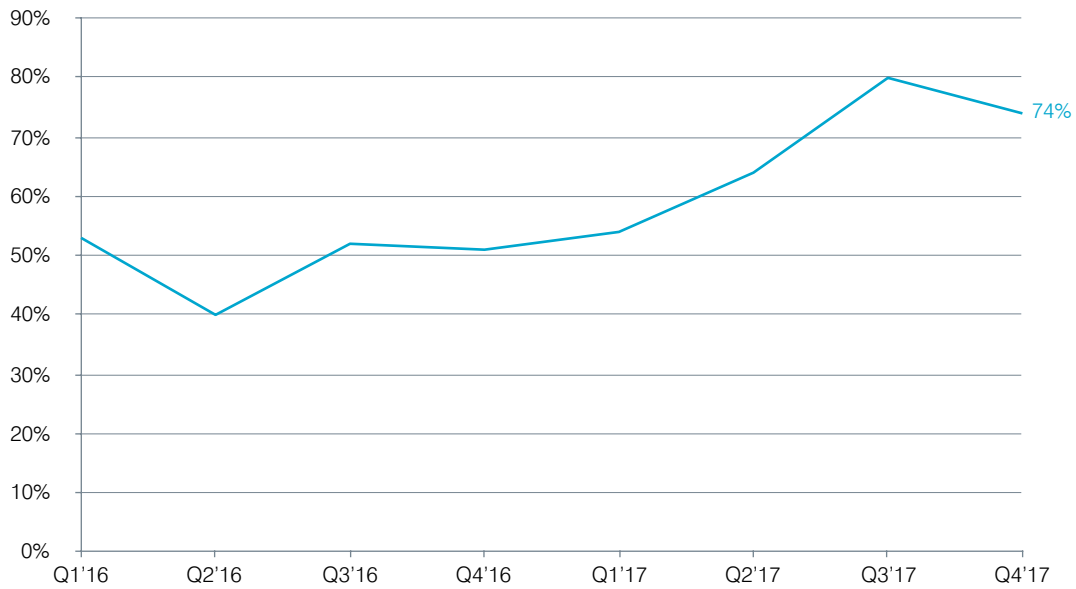
The percentage of **DOWN ROUNDS** by series were as follows:



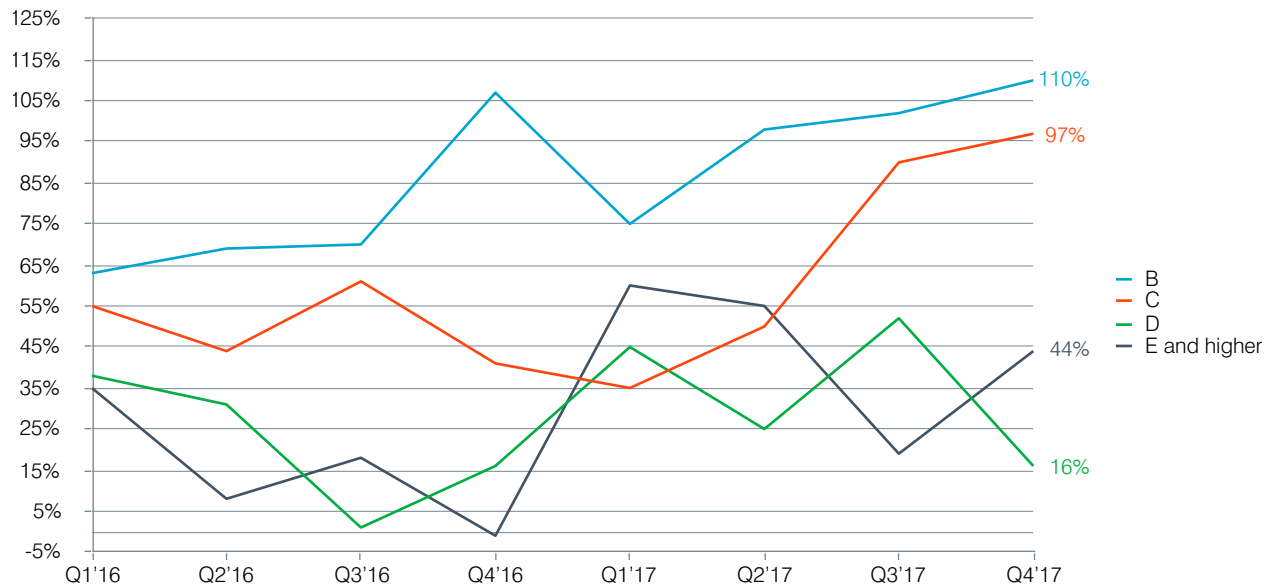
EXPANDED PRICE CHANGE GRAPH — Set forth below is the direction of price changes for each quarter since 2004.



THE FENWICK & WEST VENTURE CAPITAL BAROMETER™ (magnitude of price change) — Set forth below is the average percentage change between the price per share at which companies raised funds in a quarter, compared to the price per share at which such companies raised funds in their prior round of financing. In calculating the average, all rounds (up, down and flat) are included, and results are not weighted for the amount raised in a financing.



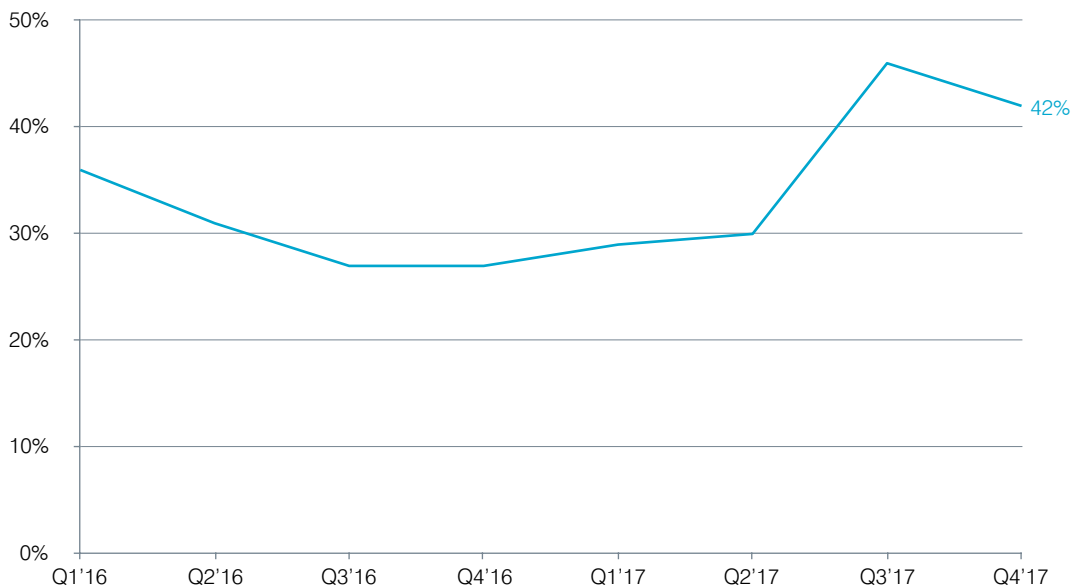
The Barometer results by series are as follows:



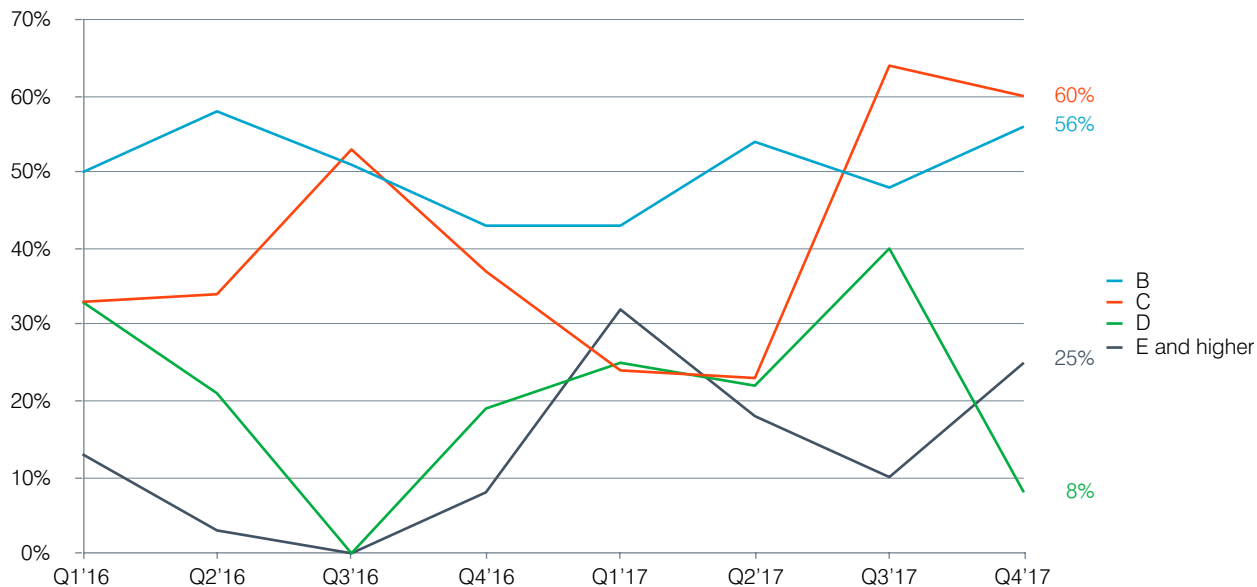
EXPANDED BAROMETER GRAPH — Set forth below is the average percentage price change for each quarter since we began calculating this metric in 2004.



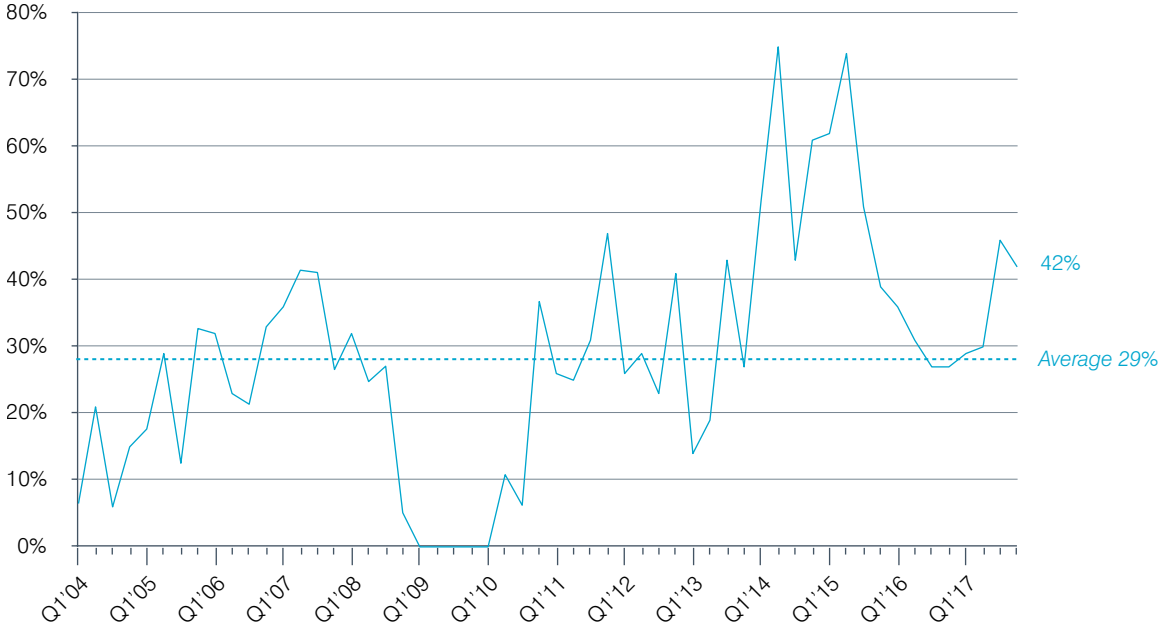
MEDIAN PERCENTAGE PRICE CHANGE— Set forth below is the median percentage change between the price per share at which companies raised funds in a quarter, compared to the price per share at which such companies raised funds in their prior round of financing. In calculating the median, all rounds (up, down and flat) are included, and results are not weighted for the amount raised in the financing. Please note that this is different than the Barometer, which is based on average percentage price change.



MEDIAN PERCENTAGE PRICE CHANGE BY SERIES.



EXPANDED MEDIAN PRICE CHANGE GRAPH— Set forth below is the median percentage price change for each quarter since we began calculating this metric in 2004.



RESULTS BY INDUSTRY FOR DIRECTION OF PRICE CHANGES AND AVERAGE AND MEDIAN

PRICE CHANGES — The table below sets forth the direction of price changes, and average and median price change results for companies receiving financing in this quarter, compared to their previous round, by industry group. Companies receiving Series A financings are excluded as they have no previous rounds to compare.

Industry	Up Rounds	Down Rounds	Flat Rounds	Average Price Change	Median Price Change	Number of Financings
Software	70%	18%	11%	62%	37%	61
Hardware	56%	28%	17%	40%	13%	18
Life Science	63%	21%	16%	31%	24%	19
Internet/Digital Media	81%	14%	5%	179%	51%	21
Other	81%	13%	6%	73%	63%	16
Total all Industries	70%	19%	11%	74%	42%	135

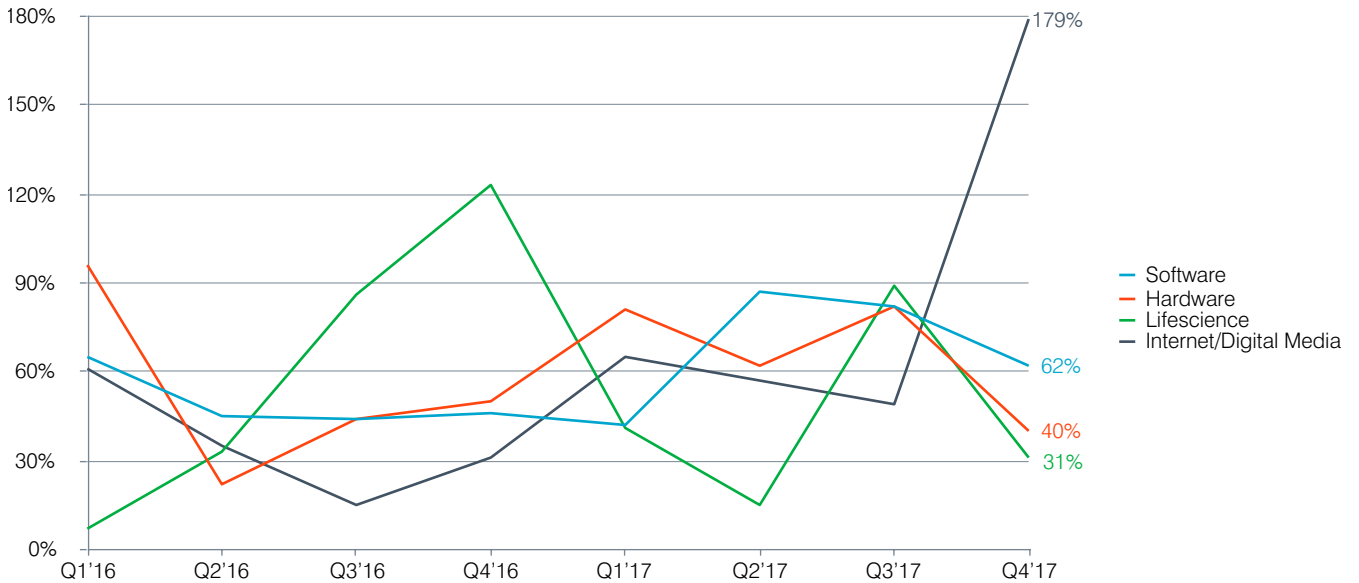
DOWN ROUND RESULTS BY INDUSTRY — The table below sets forth the percentage of “down rounds,” by industry groups, for each of the past eight quarters.

Down Rounds	Q1'16	Q2'16	Q3'16	Q4'16	Q1'17	Q2'17	Q3'17	Q4'17
Software	7%	13%	14%	13%	20%	14%	10%	18%
Hardware	18%	15%	8%	18%	18%	17%	8%	28%
Life Science	17%	13%	18%	13%	17%	16%	9%	21%
Internet/Digital Media	10%	13%	20%	15%	24%	11%	8%	14%
Other	0%	8%	0%	17%	0%	8%	15%	13%
Total all Industries	10%	13%	14%	14%	18%	13%	10%	19%

BAROMETER RESULTS BY INDUSTRY — The table below sets forth Barometer results by industry group for each of the last eight quarters.

Industry	Q1'16	Q2'16	Q3'16	Q4'16	Q1'17	Q2'17	Q3'17	Q4'17
Software	65%	45%	44%	46%	42%	87%	82%	62%
Hardware	96%	22%	44%	50%	81%	62%	82%	40%
Life Science	7%	33%	86%	123%	41%	15%	89%	31%
Internet/Digital Media	61%	35%	15%	31%	65%	57%	49%	179%
Other	16%	56%	78%	-5%	69%	43%	107%	73%
Total all Industries	53%	40%	52%	51%	54%	64%	80%	74%

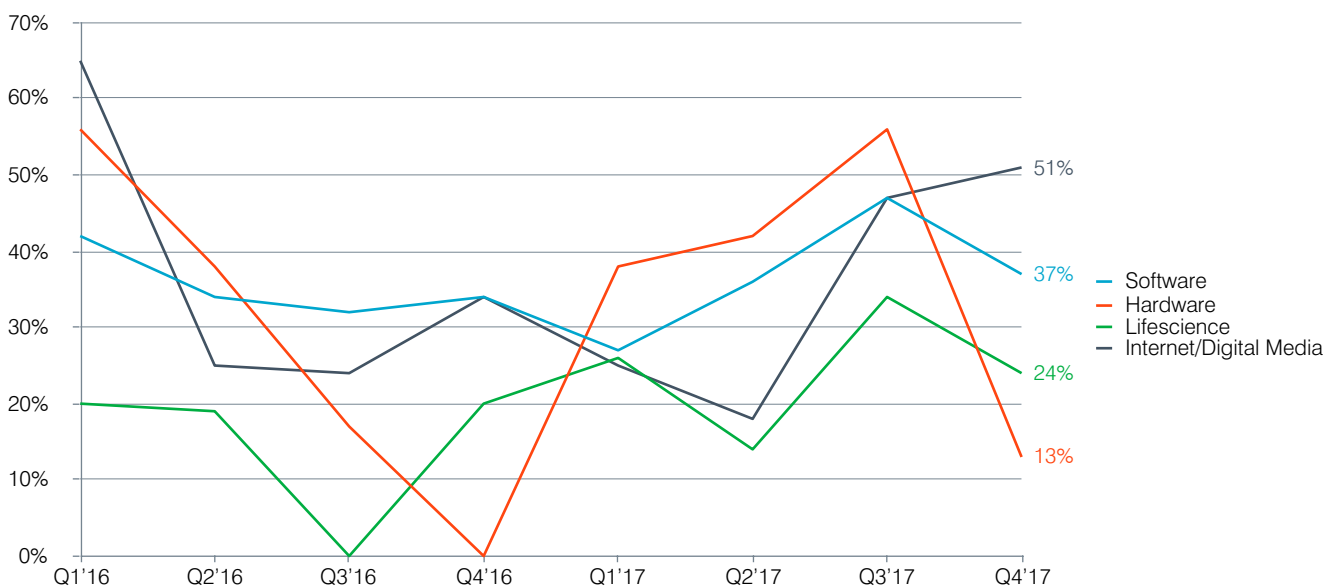
A graphical representation of the above is below.



MEDIAN PERCENTAGE PRICE CHANGE RESULTS BY INDUSTRY —The table below sets forth the median percentage price change results by industry group for each of the last eight quarters. Please note that this is different than the Barometer, which is based on average percentage price change.

Median % Price Change	Q1'16	Q2'16	Q3'16	Q4'16	Q1'17	Q2'17	Q3'17	Q4'17
Software	42%	34%	32%	34%	27%	36%	47%	37%
Hardware	56%	38%	17%	0%	38%	42%	56%	13%
Life Science	20%	19%	0%	20%	26%	14%	34%	24%
Internet/Digital Media	65%	25%	24%	34%	25%	18%	47%	51%
Other	2%	39%	53%	0%	59%	44%	18%	63%
Total all Industries	36%	31%	27%	27%	29%	30%	46%	42%

A graphical representation of the above is below.

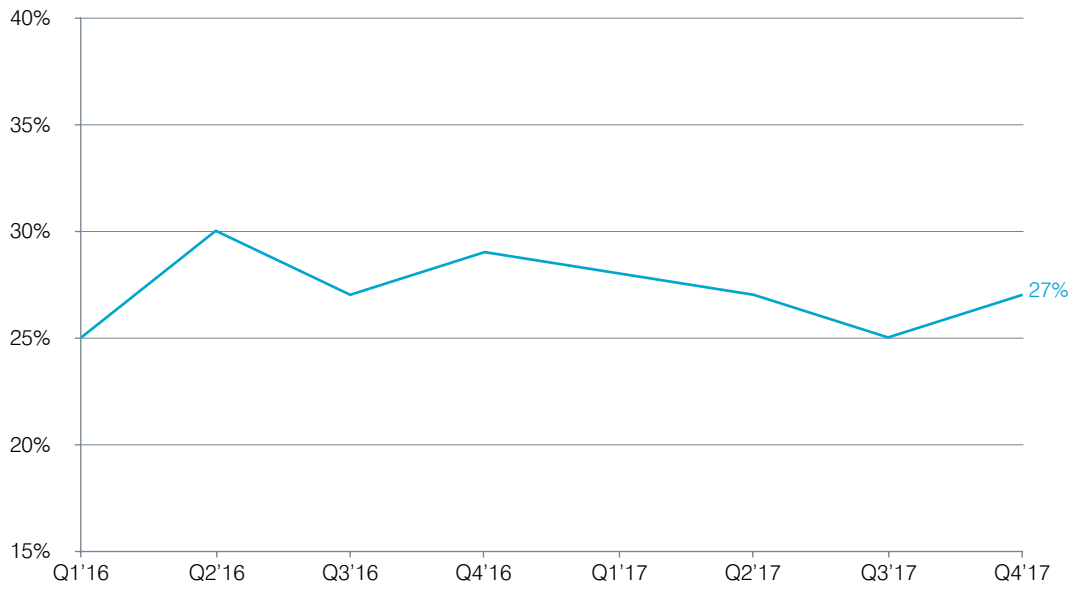


FINANCING ROUND—This quarter’s financings broke down by series according to the chart below.

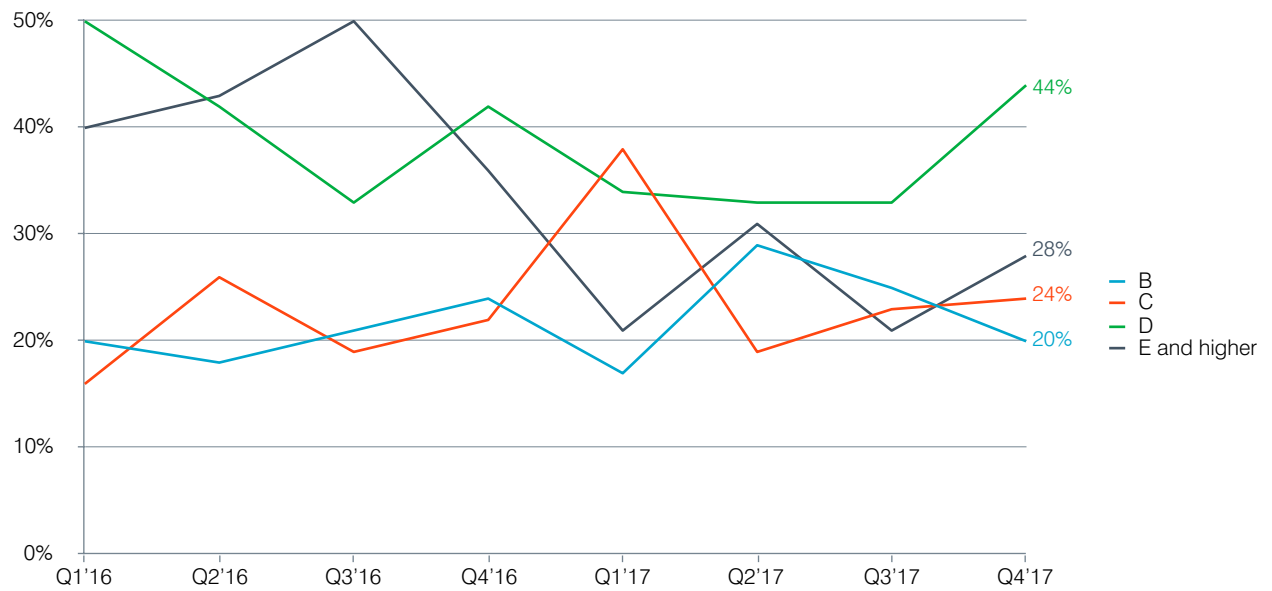
Series	Q1'16	Q2'16	Q3'16	Q4'16	Q1'17	Q2'17	Q3'17	Q4'17
Series A	22%	21%	26%	22%	29%	28%	27%	29%
Series B	27%	23%	32%	28%	18%	23%	32%	26%
Series C	29%	24%	17%	20%	20%	23%	19%	15%
Series D	8%	12%	12%	14%	15%	9%	11%	13%
Series E and Higher	14%	21%	12%	16%	17%	17%	10%	17%

Fenwick & West Data on Legal Terms

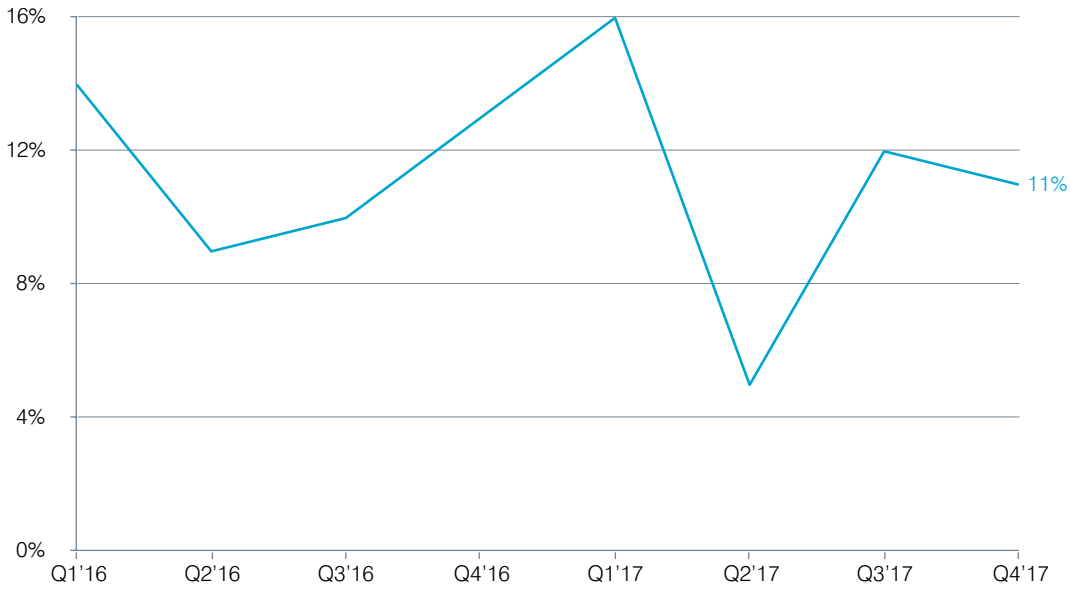
LIQUIDATION PREFERENCE — Senior liquidation preferences were used in the following percentages of financings.



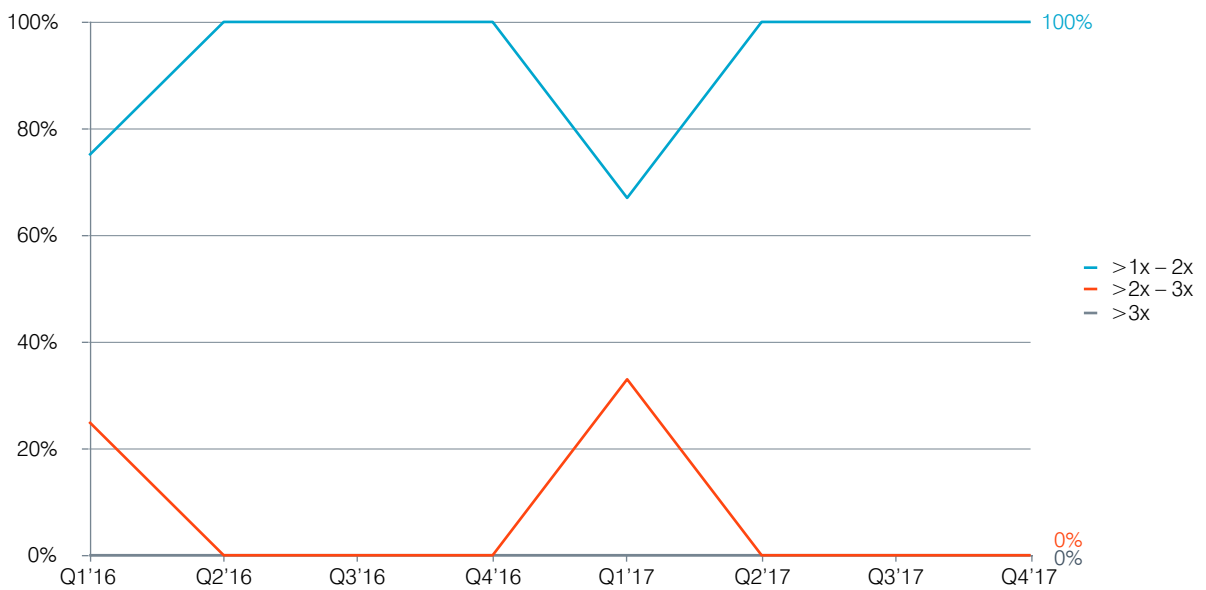
The percentage of senior liquidation preference by series was as follows:



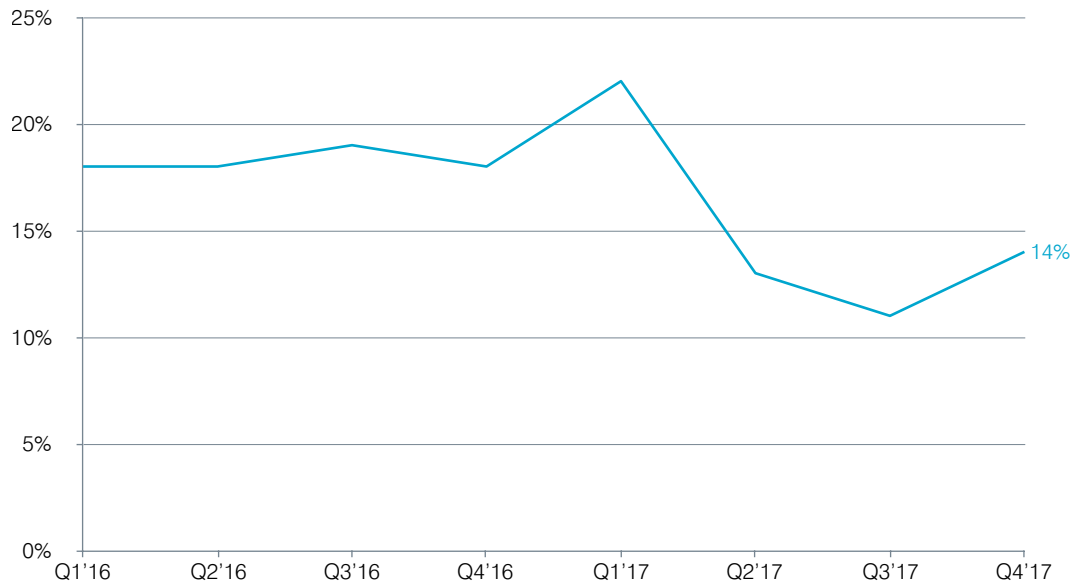
MULTIPLE LIQUIDATION PREFERENCES — The percentage of senior liquidation preferences that were multiple liquidation preferences were as follows:



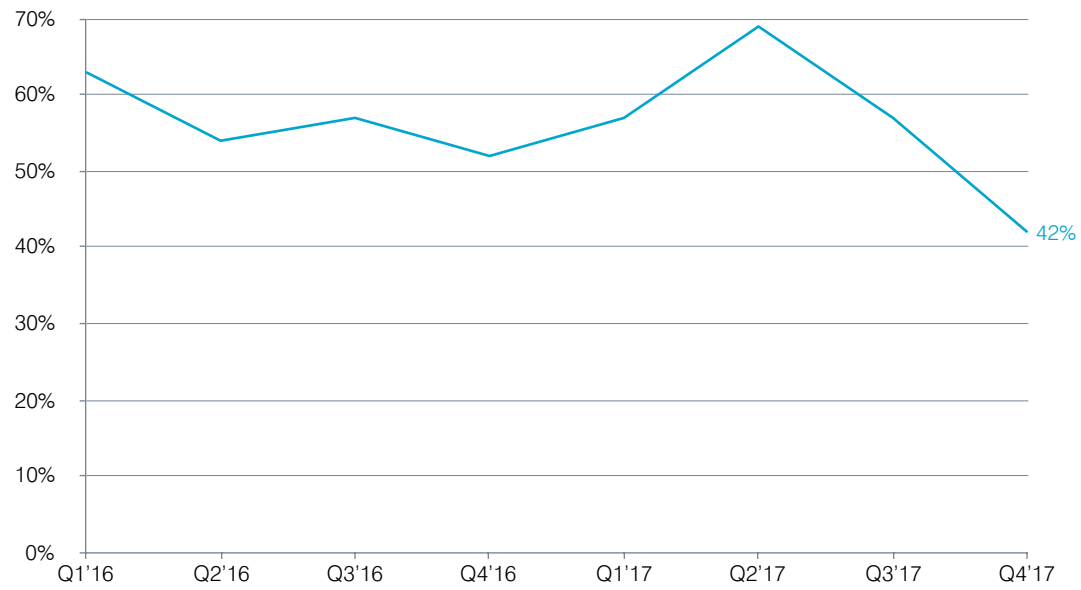
Of the senior liquidation preferences that were a multiple preference, the ranges of the multiples broke down as follows:



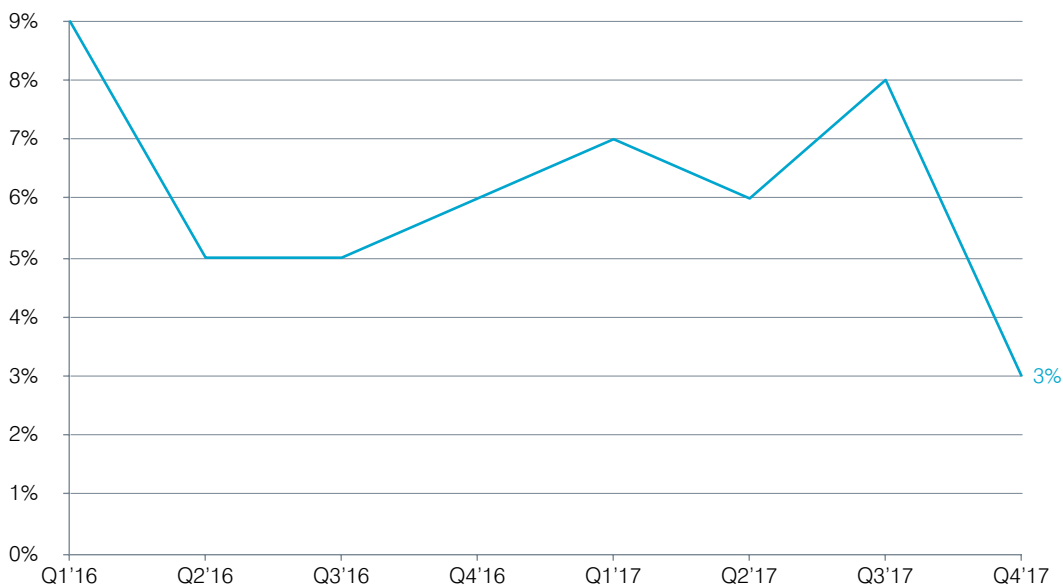
PARTICIPATION IN LIQUIDATION — The percentages of financings that provided for participation were as follows:



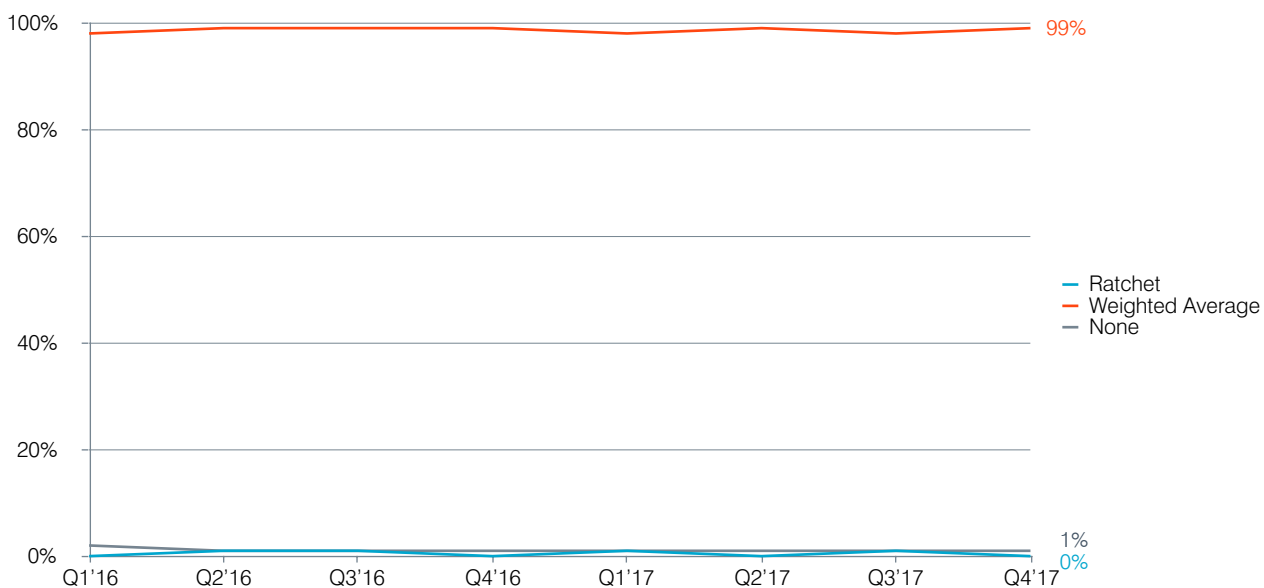
Of the financings that had participation, the percentages that were not capped were as follows:



CUMULATIVE DIVIDENDS – Cumulative dividends were provided for in the following percentages of financings:

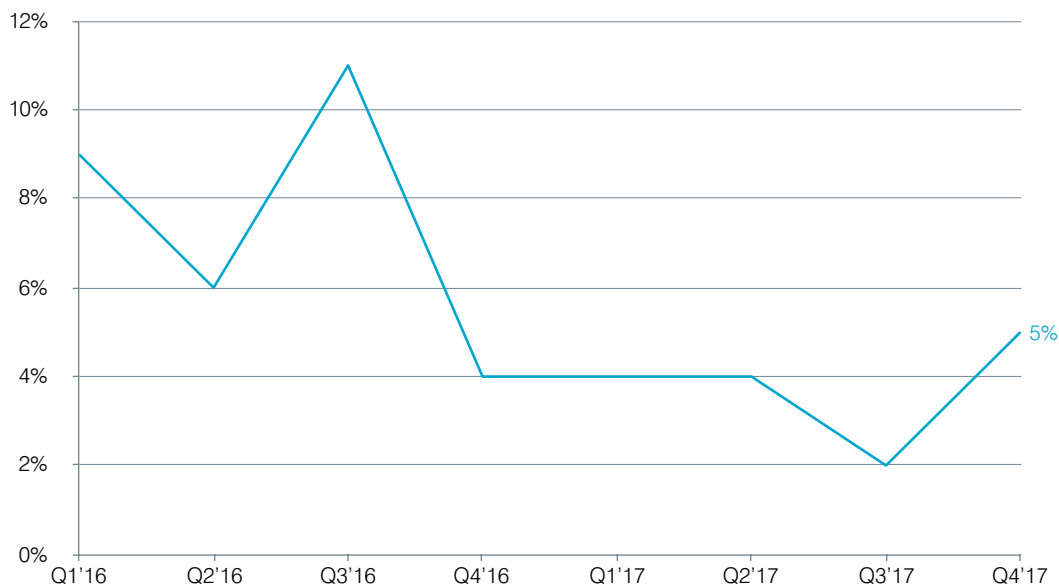


ANTIDILUTION PROVISIONS –The uses of (non-IPO) antidilution provisions in the financings were as follows:

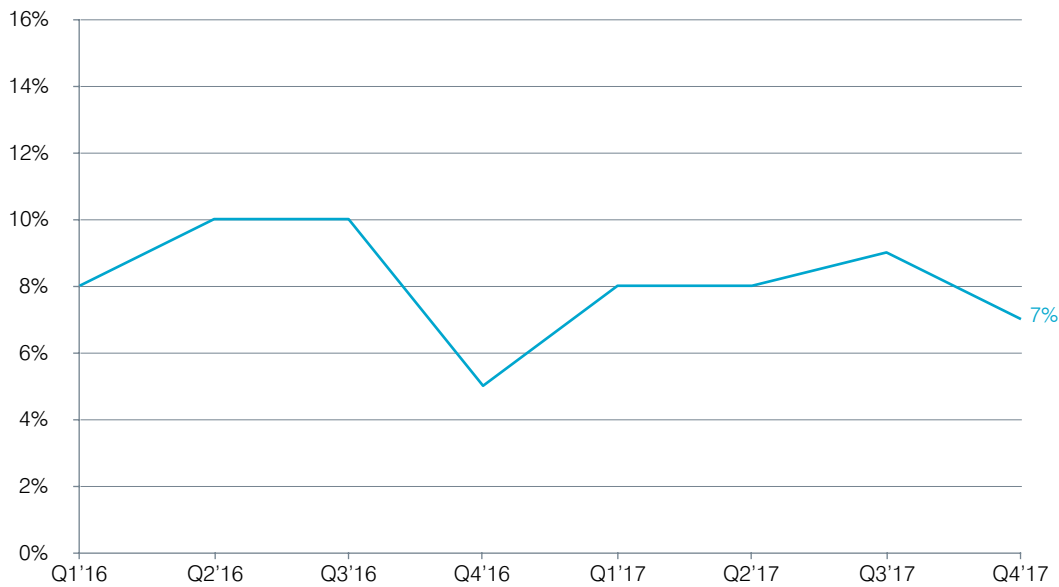


Please note that the chart above only applies to non-IPO anti-dilution provisions. In other words, the chart refers to anti-dilution provisions that protect the investor against a future venture financing at a price below what the investor paid. The chart does not include anti-dilution provisions designed to protect against an IPO at a price below the price paid by the venture investor (e.g., an IPO ratchet), because those provisions are generally only negotiated/included in very late stage, high value deals. We believe it would not be useful to provide a percentage of all financings that have IPO anti-dilution provisions, because it will provide a result that is artificially low. An analysis of IPO anti-dilution provisions is included in our Unicorn Survey, which by its nature is focused on late stage, high value deals.

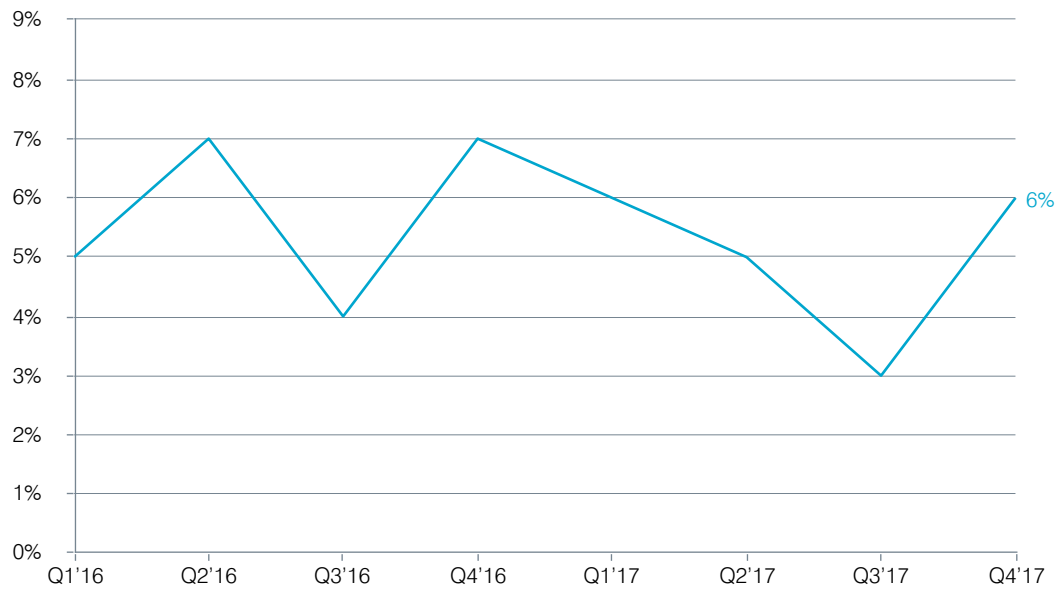
PAY-TO-PLAY PROVISIONS – The percentages of financings having pay-to-play provisions were as follows:



REDEMPTION – The percentages of financings providing for mandatory redemption or redemption at the option of the investor were as follows:



CORPORATE REORGANIZATIONS – The percentages of post-Series A financings involving a corporate reorganization (i.e. reverse splits or conversion of shares into another series or classes of shares) were as follows:



About our Survey

The Fenwick & West Venture Capital Survey was first published in the first quarter of 2002 and has been published every quarter since then. Its goal is to provide information to the global entrepreneurial and venture community on the terms of venture financings in Silicon Valley.

The survey is available to all, without charge, by signing up at www.fenwick.com/vcsurvey/sign-up. We are pleased to be a source of information to entrepreneurs, investors, educators, students, journalists and government officials.

Our analysis of Silicon Valley financings is based on independent data collection performed by our lawyers and paralegals, and is not skewed towards or overly representative of financings in which our firm is involved. We believe that this approach, compared to only reporting on deals handled by a specific firm, provides a more statistically valid and larger dataset.

For purposes of determining whether a company is based in “Silicon Valley” we use the area code of the corporate headquarters. The area codes included are 650, 408, 415, 510, 925, 916, 707, 831 and 209.

Note on Methodology

When interpreting the Barometer results please bear in mind that the results reflect the average price increase of companies raising money in a given quarter compared to their prior round of financing, which was on average about 18 months prior. By definition the Barometer does not include companies that do not do follow-on financings (which may be because they went out of business, were acquired or went public). Accordingly we believe that our results are most valuable for identifying trends in the venture environment, as opposed to calculating absolute venture returns. Please also note that our calculations are not “dollar weighted,” i.e. all venture rounds are treated equally, regardless of size.

About the Authors



[Cynthia Clarfield Hess](#) is Co-Chair of Fenwick's Startup and Venture Capital Group. In her 25 plus years as a corporate attorney, Cindy has counseled technology companies on a broad range of corporate transactional matters, from formation matters and venture capital financings to mergers and acquisitions and public offerings, representing both companies and underwriters. She has worked with a wide range of high-technology clients—from established technology stalwarts to emerging companies developing disruptive technologies, which include some of the hottest and most innovative companies in the mobile, SaaS and social media spaces.



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[Khang Tran](#) supports the firm's knowledge management efforts by collecting and sharing knowledge and expertise across the firm, which in turn, is leveraged to improve the quality of legal services to the firm's clients.

Contact/Sign Up Information

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To view the most recent survey please visit fenwick.com/vcsurvey. To be placed on an email list for future editions of this survey please visit fenwick.com/vcsurvey/sign-up.

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