PitchBook

NATIONAL VENTURE CAPITAL ASSOCIATION

# Venture Monitor

3Q 2017

2017 on pace for record deal value, averaging more than $20B in quarterly value
*Page 4-6*

Exits have slowed, but several outsized transactions keeping total value high
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League tables for 3Q deals, investors, exits and more
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The definitive quarterly review of the US venture capital ecosystem and trends.

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The data in this report comes from the PitchBook Platform–our data software for VC, PE and M&A. Contact sales@pitchbook.com to request a free trial.

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# Executive Summary

Nearly 1,700 US venture-backed companies raised $21.5 billion in funding in the third quarter of 2017 to build and grow their innovative businesses, bringing the year-to-date total to 5,811 companies raising $61.4 billion. After an uptick in venture capital (VC) investment activity in the first two quarters, the industry witnessed a downturn in 3Q in both capital deployed and the number of companies receiving VC funding. If this pace holds through year-end, full-year 2017 VC dollars invested are on track to be the highest in the past decade, while the number of VC deals completed in 2017 may be the lowest annual total since 2012.

At the surface, capital invested into startups in 2017 uncovers the impact unicorns have had on VC, as investments into these companies valued at $1 billion+ continue to inflate deal value and valuations for later-stage financings and can skew the underlying trends. Though these late-stage mega-rounds represent a new normal in the VC market, excluding these investments depicts deal value aligning more closely with the drop in deal count, unveiling a contraction and compression in the market where fewer companies are receiving funding but with more capital.

A closer look at investment data also shows that after the burst of dollars mutual funds and hedge funds deployed into VC-backed companies in 2014, 2015 and 2016, their recent retraction has coincided with other nontraditional investors—notably sovereign wealth funds and SoftBank's $100 billion Vision Fund—taking positions in venture-backed companies. SoftBank's 3Q investments included a $3 billion funding round in WeWork, the largest deal of the quarter, which alone accounted for 17% of overall investment into VC-backed companies.

Nontraditional investors taking positions in VC-backed companies has also translated into opportunities for secondary private investments. This comes as the optimism surrounding the IPO market at the beginning of 2017 has waned, particularly as 3Q saw only eight venture-backed offerings. With these exits tapering and M&A activity slowing down, private equity firms have stepped in as a more popular source of liquidity. The challenging IPO environment for VC-backed companies emphasizes the longer-term trend and need for capital markets reform, an issue that NVCA continues to advocate for on behalf of the venture ecosystem.

As the number of companies receiving VC funding and VC-backed IPOs dipped in 3Q, the number of VC funds holding a final close also dropped to its lowest quarterly level in the past five years. VC firms closed on $5.3 billion across 34 funds in 3Q, which comes after a strong fundraising quarter in 2Q led by a $3.3 billion final close for New Enterprise Associates 16, bringing total fundraising year-to-date to $24.4 billion. The decline in 3Q fundraising is not surprising given the cyclical nature of fundraising and the large amount of fresh funds raised in recent quarters. First-time funds continued their run toward a strong year, with $2.4 billion raised across 25 first-time funds year-to-date, on pace for the highest annual capital raised in the past decade.

One of the biggest industry trends making headlines in 3Q has been the rise of initial coin offerings, or ICOs. The process enables companies to raise capital directly from early adopters by selling cryptocurrency tokens. Though generating buzz, the sustainability of these investments remains questionable given limited opportunity for due diligence, no working product in most cases and thinly traded secondary markets creating significant mark-to-market volatility. Whether venture investors embrace this alternative form of investing or remain skeptical, the fact remains that more than 140 ICOs have raised over $2.2 billion so far this year, according to CoinSchedule.

Also making headlines has been the recent lawsuit filed by NVCA, entrepreneurs and startups against the Department of Homeland Security (DHS) challenging the agency's delay of the International Entrepreneur Rule (IER). Finalized by the Obama Administration, the rule would have allowed talented foreign-born entrepreneurs to travel to or stay in the US to grow their companies. Less than a week before the IER was to go into effect on July 17, DHS announced that the rule would be delayed and that DHS will be proposing to rescind the final rule. Because DHS did not solicit advance comment from the public on the delay, it violated clear requirements of the Administrative Procedure Act.

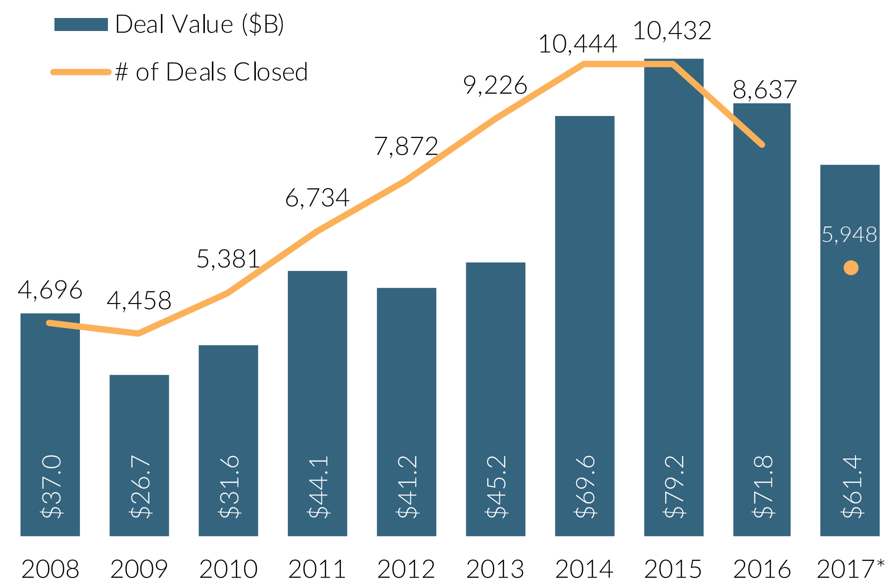
Finally, this edition of the PitchBook-NVCA Venture Monitor marks the one-year anniversary of the report and the PitchBook-NVCA partnership. Thank you for helping to make this publication the go-to resource for quarterly VC data. We welcome your feedback as we continue to shape this report to provide meaningful insights to you, our readers.

# Overview

Three quarters into the year, 2017 is on pace to set a decade-high record in terms of total VC invested. Despite the average quarterly deal value figure through the year coming in at more than $20 billion, total deal count is set to decline for the third consecutive year. To date, just 5,948 deals have been completed, which represents an 11% YoY decline relative to the same period last year. This divergence comes as the industry continues to transition, putting more capital into fewer deals and working toward growth that couples traditional KPIs with the hockey stick user growth that VC demands. In spite of industry reservations concerning the sustainability of how large rounds have become in recent years, deal sizes have continued to grow across all stages, bolstered by record fundraising levels and a high amount of dry powder. Further, not only are round sizes increasing, but these rounds are being raised later in companies' lifecycles, in turn prolonging the time to exit for many businesses.

## 2017 pacing for record year in deal value

US VC activity

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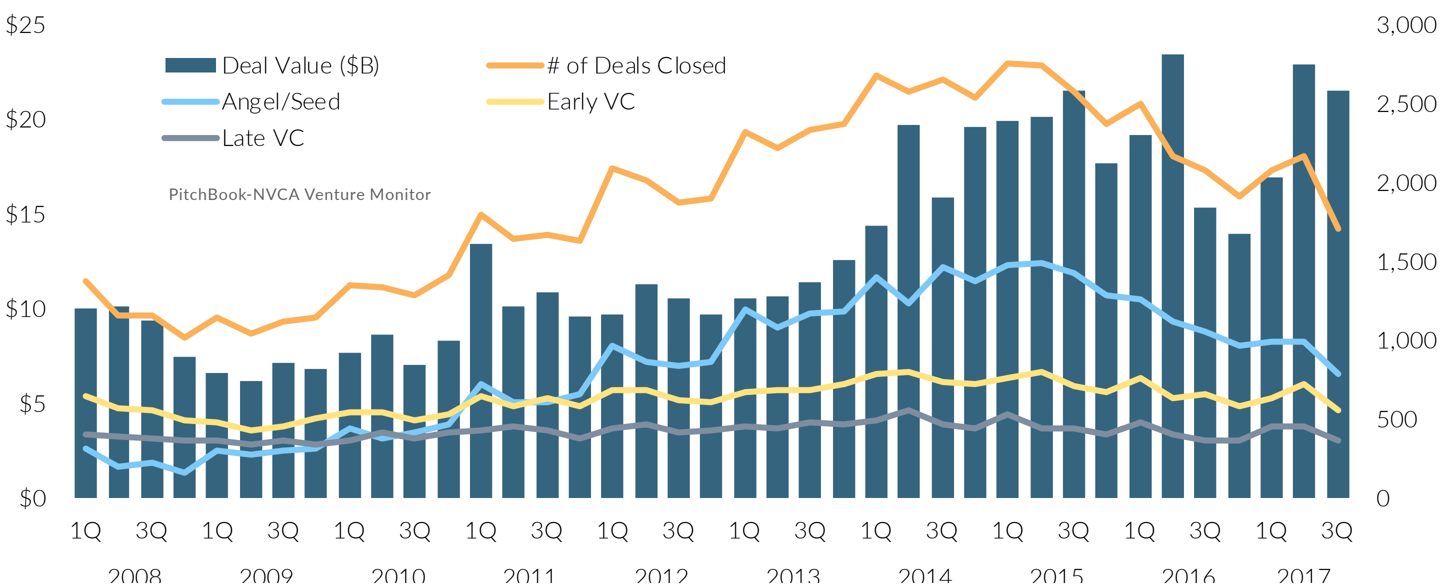
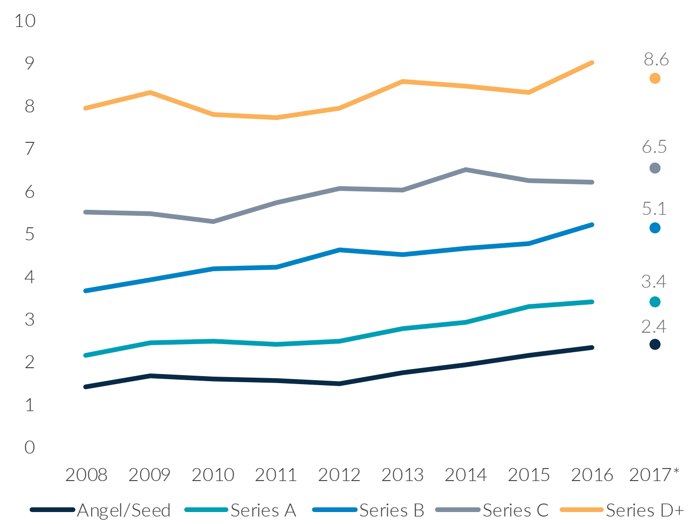
## More than $20B invested in each of past two quarters

US VC activity



Median company age (years) by series

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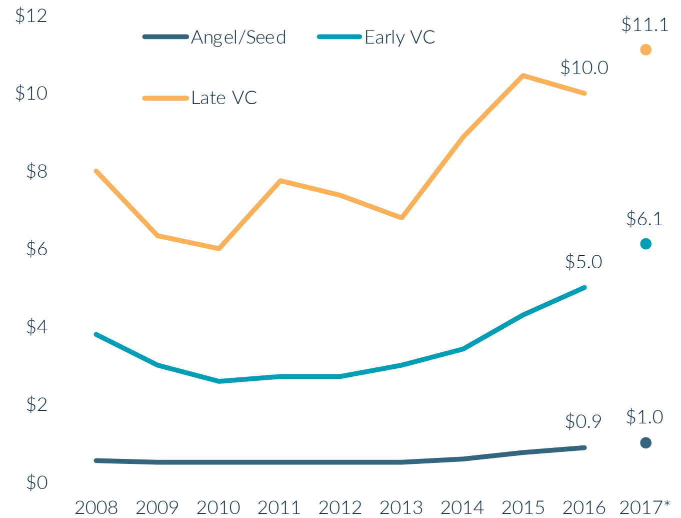
Median deal size ($M) by stage

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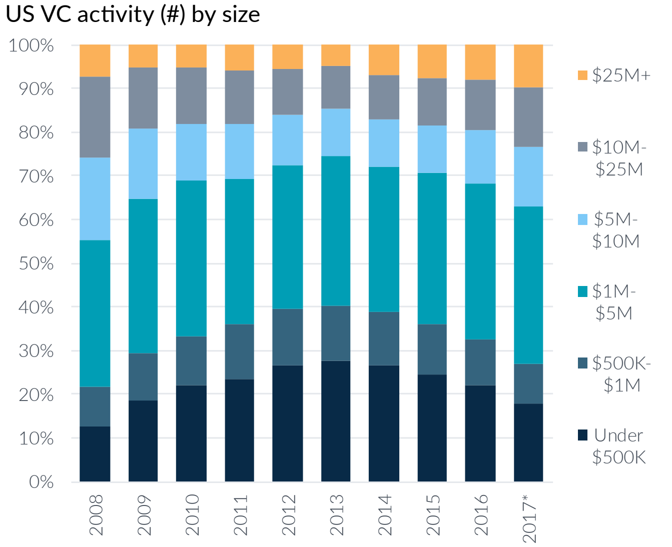
In recent quarters, the decline in aggregate VC deal flow closely mirrors the explicit decline we've seen in the angel & seed market. So far this year, angel & seed investments represent less than 50% of all completed deals for the first time since 2012, the culmination of quarter-over-quarter declines in seven of the past 10 quarters. But rather than investors shying away from funding companies, the declines are in large part due to how seed deals have moved further into the venture lifecycle. The median age of companies raising an angel or seed round has moved to 2.4 years, almost a full year older than just six years ago. While investors in venture's earliest stage have ushered in the era of increased activity, the maturation of the stage has inspired more discipline in capital deployment. As these investors have sought companies with more traction, deals have naturally moved larger and later. In addition, the median angel & seed deal surpassed $1 million in size for the first time in the past decade. The early and late stages have made similar transformations. "Series A is the new Series B" comments are not only becoming more common, but may have more legs to stand on. In fact, year-to-date, the median early-stage deal size of $6.1 million has surpassed the median late-stage deal size of 2010—$6 million—another VC "first" that has been recorded this year.

But that movement can only explain part of the transition we continue to see the venture industry move through. Companies continue to remain private and delay exits as they are able to raise late-stage capital in the private markets. The last two quarters mark just the second time in the past decade that more than $20 billion was invested in

US VC activity (#) by size

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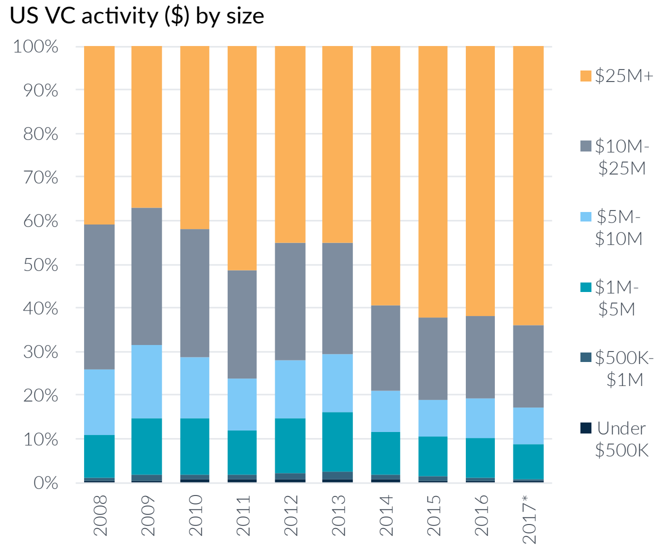
US VC activity ($) by size

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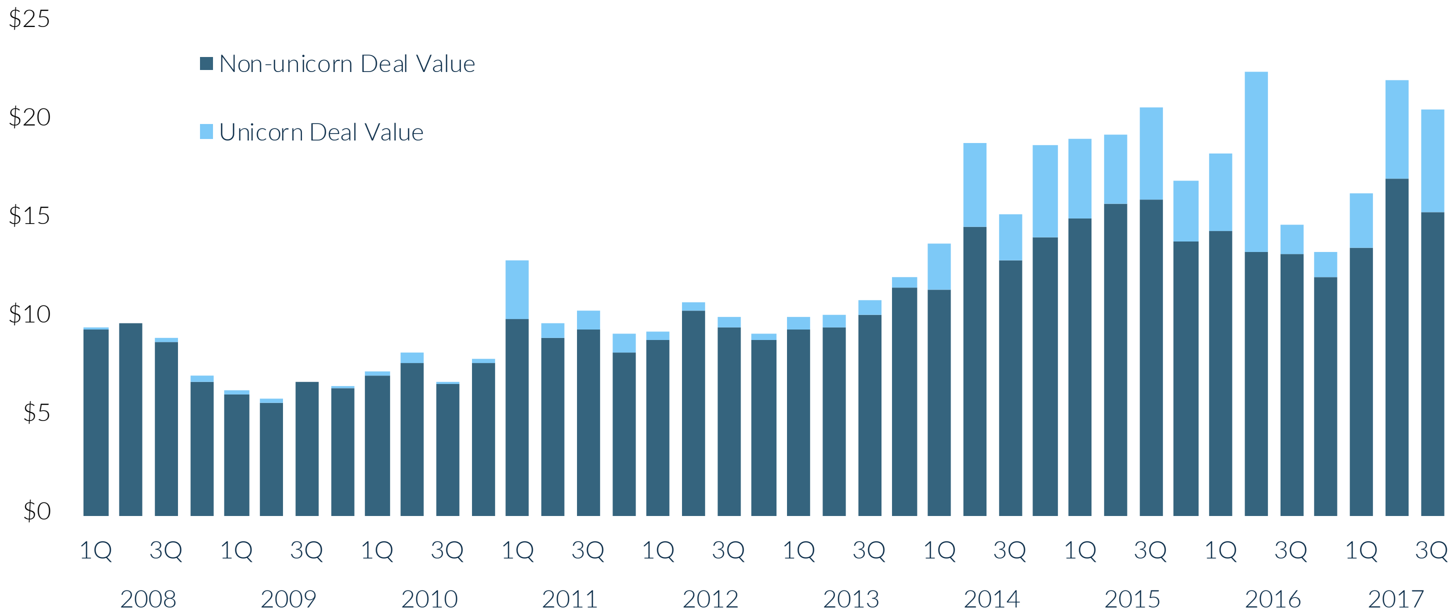
## Unicorn deals driving growth of aggregate value

Unicorn round deal value versus non-unicorn round deal value ($B)

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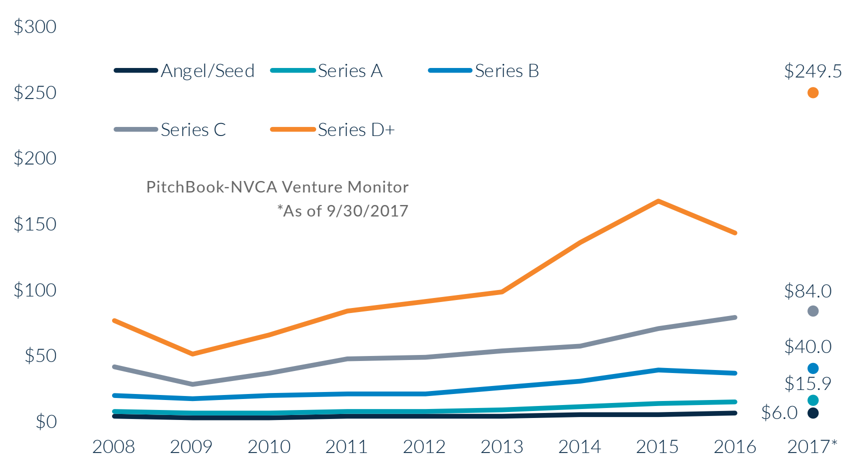
Median pre-money valuation ($M) by series




two consecutive terms, and the total raised during that time is the highest we have seen in a such a timespan. What is often overlooked is just how much that figure is the product of the enormous rounds that have become the new normal: WeWork raised a total of $4.4 billion last quarter, with $3 billion of that invested in its US operations; Airbnb raised a $1 billion round in 2Q; and five other companies in the US have raised rounds of at least $500 million in 2017. In fact, deals that carry a valuation of $1 billion or more represent less than 1% of 2017 deal count but account for nearly 22% of the aggregate deal value year-to-date. As these companies continue to raise private rounds, investors increase exposure to market and liquidity risks that could threaten their eventual ROI—there is currently more than $575 billion in value locked up in companies valued at over $1 billion. These unicorn private rounds have seemingly come at the expense of traditional return timelines. The average time to exit has grown to 6.2 years, with the median pushing past five years for the first time in the past decade. IPOs, which could be a more suitable exit route for companies with valuations that may be tough to stomach for both strategic and financial buyers, have lagged over the past few years. IPOs of companies valued at less than $500 million have fallen by the wayside—just 18 US IPOs in 2017 were completed by companies valued at or above $500 million. For reference, 92 such offerings were completed just three years ago in 2014.

It is likely these trends will continue for at least the near term. The extension of exit timelines will perpetuate as US VC investors have more dry powder ($92 billion) than any time in the past decade, and many mega-funds remain within their investment periods. While SoftBank's Vision Fund and other nontraditional investors will continue to provide capital to late-stage companies, we think PE-backed buyouts will continue to account for a larger group of VC-backed exits. PE players have already increased the amount they invest in software businesses, and, given the makeup of many VC-backed SaaS businesses, we have confidence this trend will continue to bridge the gap between PE and VC.

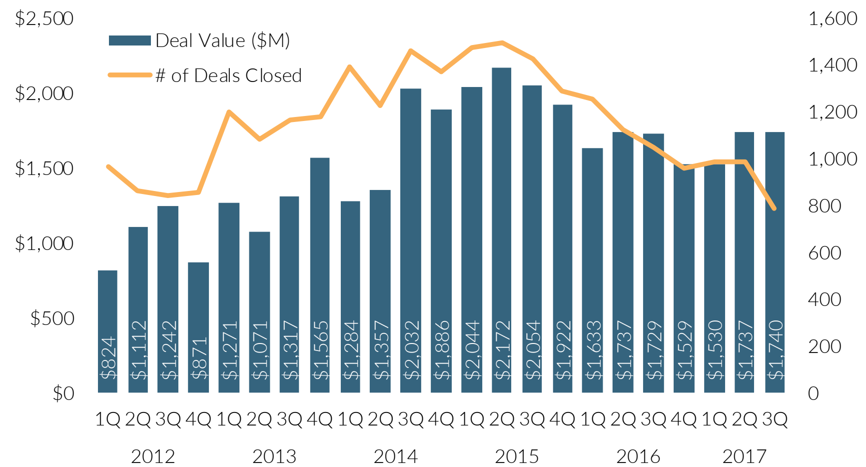
# *Angel & seed activity*

Having declined nearly every quarter since 2Q 2015, deal count across the angel & seed stage appeared to have stabilized before falling again last quarter. However, on par with what has been observed across the broader venture market, total capital invested rose on both a QoQ and YoY basis to $1.74 billion deployed across 788 angel & seed fundings.

As we've seen across the venture spectrum, companies raising capital even as early as the angel & seed stage appear to be older. On average, companies entering the seed stage in 2017 are one full year older than similar companies were 10 years ago. This trend has been extended by the proliferation of accelerators and incubators in the US, as well as the emergence of angel groups and online platforms for angel investing or equity crowdfunding. The investment opportunities before formal angel or seed funding have prompted many seed-stage VCs to shift toward larger deals. This movement has caused a domino effect in which investors at subsequent stages are interacting with more mature businesses and inking larger deals than they have historically.

We believe the online options for angel investing (e.g., AngelList) and equity crowdfunding sites for accredited investors (e.g., SeedInvest, MicroVentures) will likely continue to drive angel deal sizes higher. These marketplaces have provided investors with access to greater deal flow as well as opportunities in varied geographies. Should it remain as easy as it has become today for investors to pool funding, we may well see an increase in the supply of capital at the stage, despite the plethora of capital already available to back such companies. However, a dramatic increase in the supply of capital comes with significant risk. As angel & seed-stage deal count rose some 230% between 2010 and 2015 in large part driven by an abundance of capital, another surge of investment money at the stage could come with significant failure and ultimately, investor losses.

US angel & seed activity

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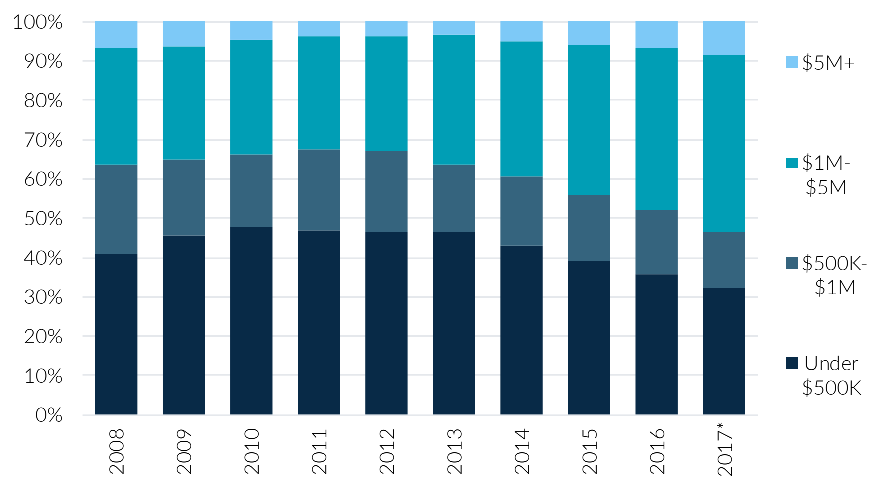
US angel & seed activity (#) by size

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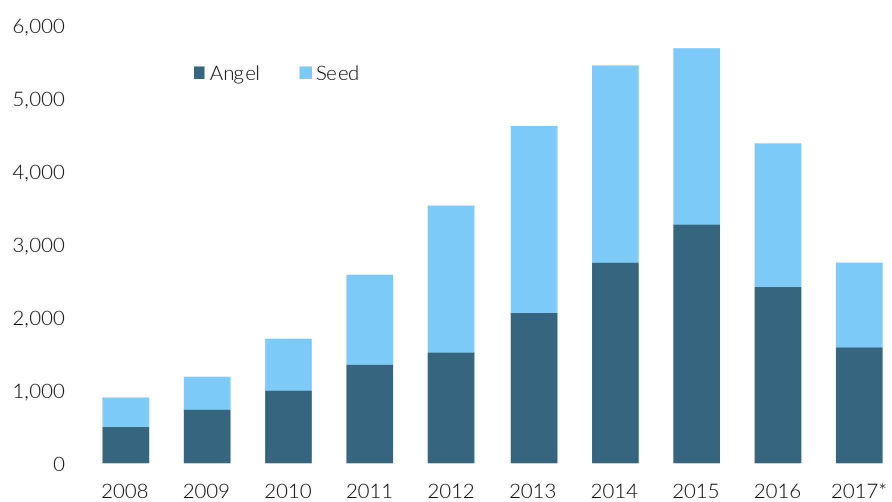
US angel rounds versus seed rounds by count

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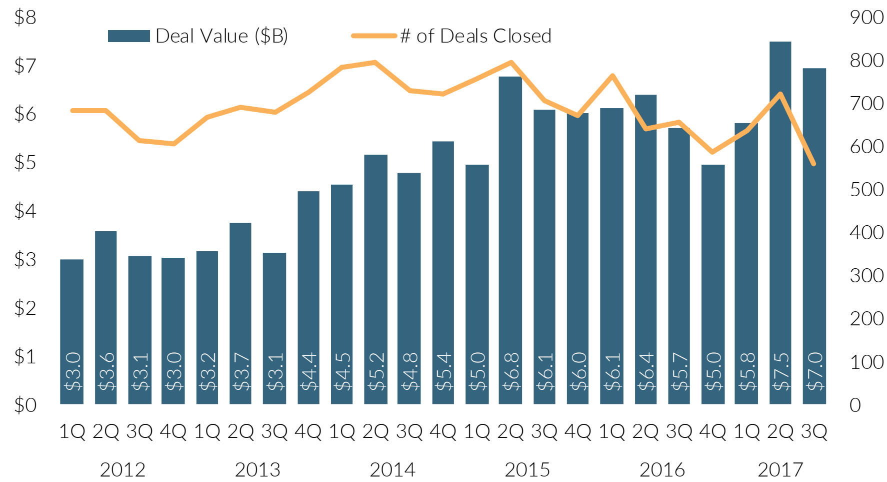
# Early-stage activity

Early-stage deal counts may have dropped QoQ in 3Q 2017, but we still see robust activity in the stage on a historical basis. The influx of companies that received financing at the angel & seed stages in the past five years has introduced greater competition for early-stage VC dollars. The explosion of startups looking for funding has afforded early-stage VC firms the ability to be more selective when targeting companies. We believe greater selectivity has manifested itself in higher quality and more developed companies flowing through the early stage, a factor that has contributed to the increases we've seen in both deal sizes and valuations over the past couple of years. Over the last decade, not only has the average number of VCs participating in each early-stage round jumped by 40%, but the average early-stage check size for each VC investor also climbed 36%. The fact that more co-investors are contributing larger amounts demonstrates how substantial the increases we've seen in average deal size since 2007 have been.

Looking at activity on a sector basis, early-stage investors have been especially active in funding artificial intelligence (AI) startups. So far in 2017, 201 early-stage deals have closed, representing over $2.1 billion in deal value—more than half of the total capital invested in AI across all stages year-to-date. Within AI, many VCs have been focusing on healthcare and biotechnology, as the industry is beginning to produce large, valuable datasets; however, there are challenges because healthcare data is fraught with privacy and fragmentation issues, making it a difficult market for AI to capture. That said, the two largest AI deals in 2017 were early-stage healthcare companies: WuXi NextCODE, which specializes in genomic sequence analytics, raised $240 million, and diagnostic intelligence company Human Longevity took in $200 million. We believe the healthcare AI space will continue to see an outsized allocation of capital as the AI approach to healthcare gains traction and more operators adopt these services.

US early-stage activity

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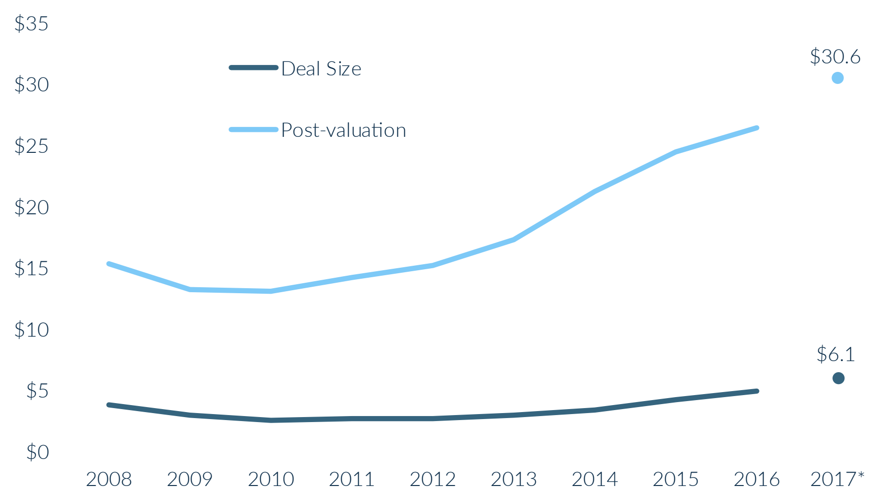
US early-stage medians ($M)

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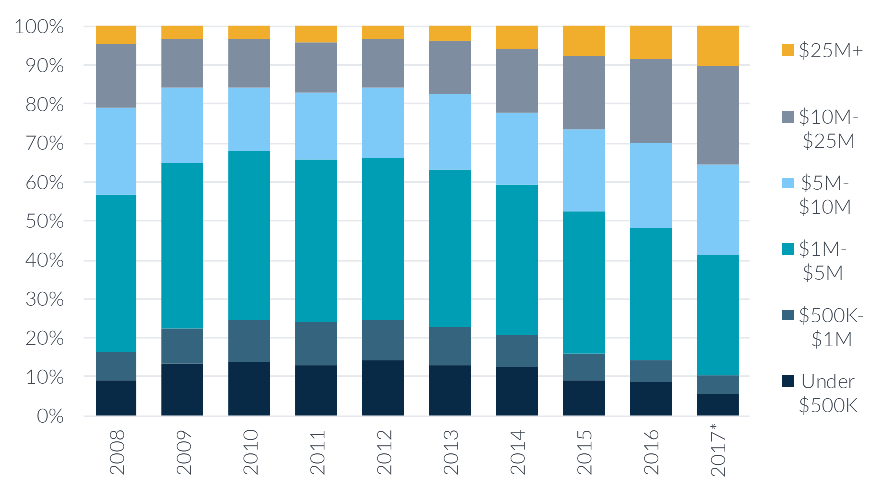
US early-stage activity (#) by size

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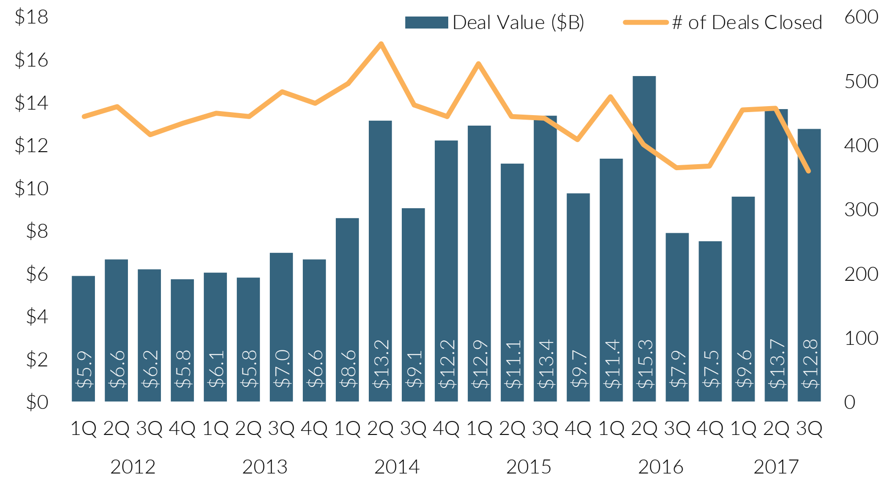
# *Late-stage activity*

Through nine months, more than $36 billion has been invested in late-stage VC companies during 2017, higher than any year prior to 2014 during the past decade. This sizable deal value figure is composed of more than $17.7 billion derived from deals of $100 million or more, roughly 50% of total late-stage capital. With 61 rounds of this size completed thus far, 2017 is on pace to reach the highest number of $100 million+ deals in the past decade, already topping 2016's total. Moreover, deals of $50 million+ have accounted for 65% of all deal value at the late-stage, roughly 40% higher than 10 years ago.

Such growth can be attributed to the excess of capital available for investment. The 21 US VC funds that have closed on $1 billion or more since 2014 are more than had been closed in the seven years prior to that time. These vehicles, along with capital deployed by nontraditional and growth-equity investors, are able to support companies with private capital at a time in their lifecycles where these companies may have exited historically. As a result, the median late-stage deal size has grown 1.85x since 2010, and the median Series D+ pre-money valuation has jumped by 3.8x in that same time—by 75% since last year.

US late-stage activity

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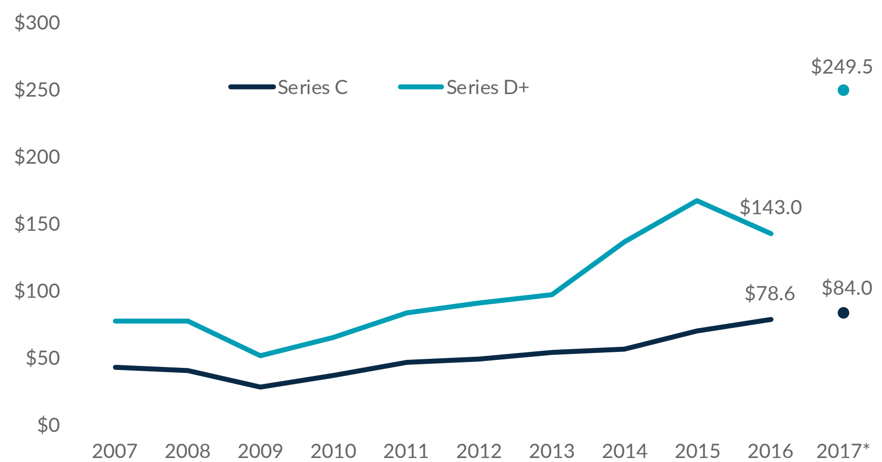
US late-stage median pre-money valuations ($M)

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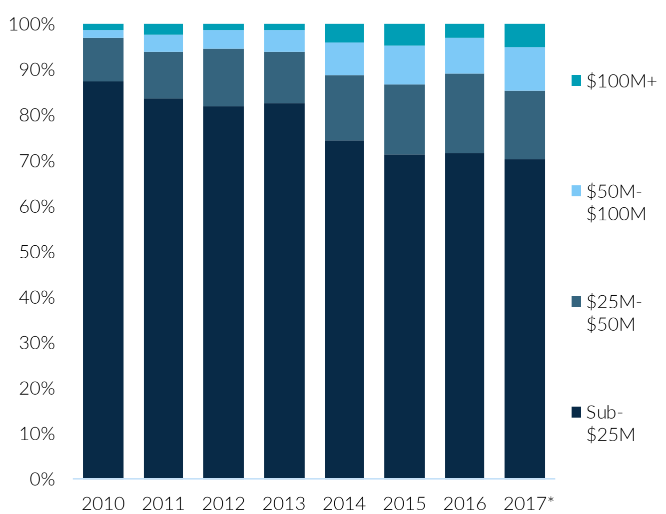
US late-stage activity (#) by size

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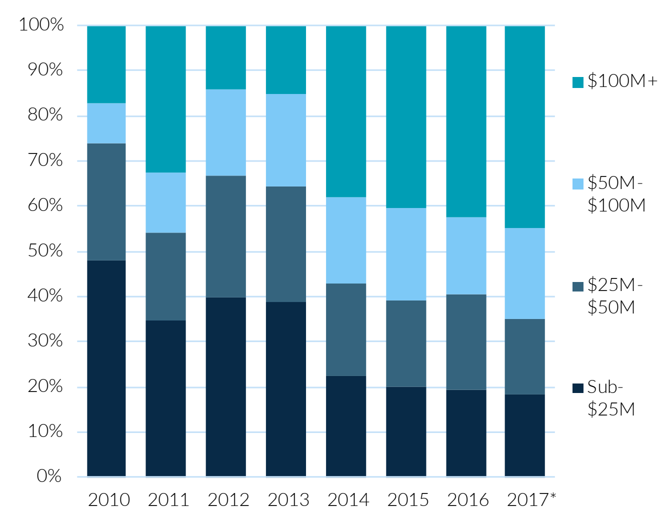
US late-stage activity (#) by size

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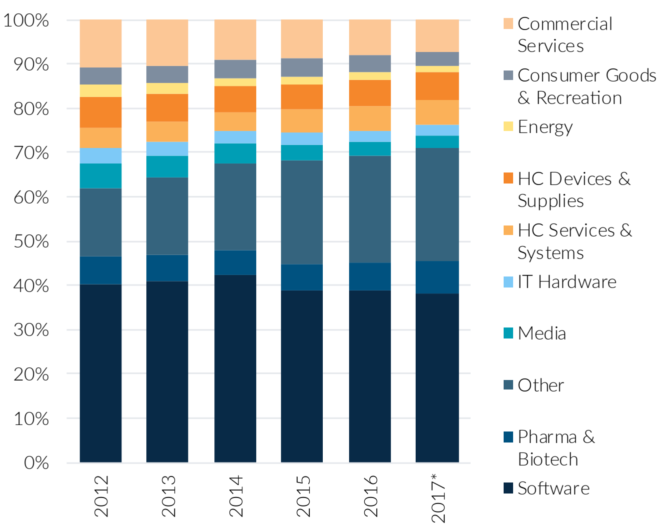
# Rounds by sector

## *Deal trends remain largely unchanged*

US VC activity (#) by sector

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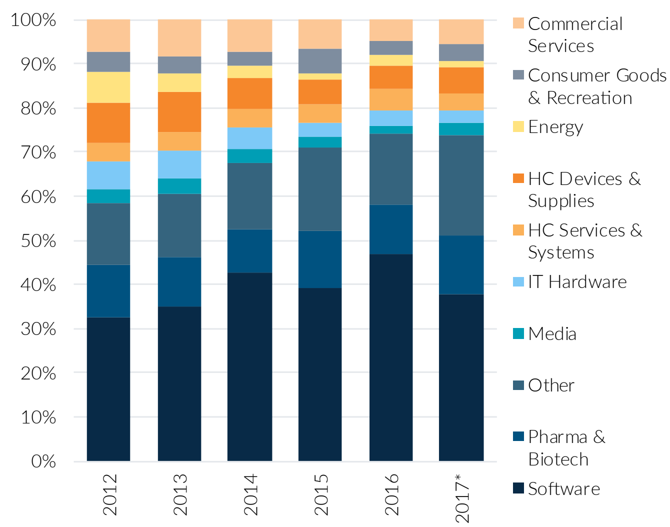
## *IT hardware slipping in deal value*

US VC activity (#) by sector

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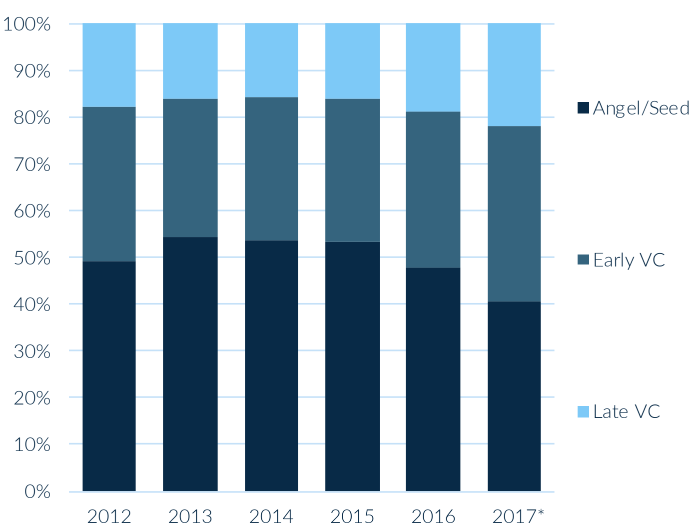
## *Just 40% of software deals at angel & seed*

US VC activity in software (#) by stage

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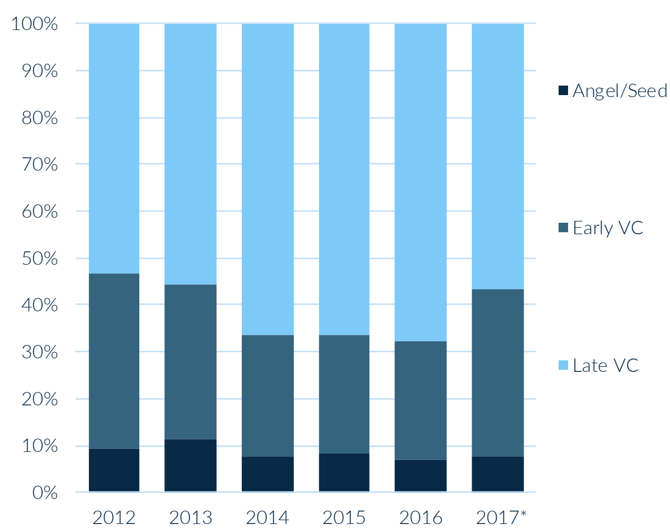
## *Deal value showing sector maturity*

US VC activity in software ($) by stage

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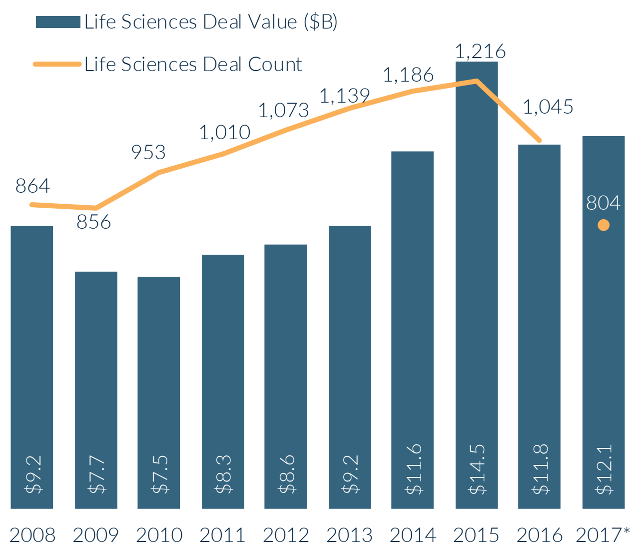
# Activity in life sciences

## *Life sciences set for record 2017*

US VC activity (#) in life sciences

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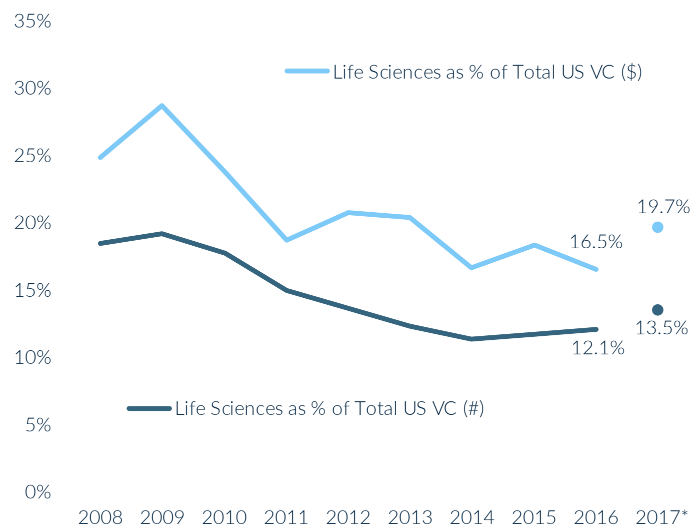
## *Portion of US activity increasing*

Life sciences percentage of total US VC activity

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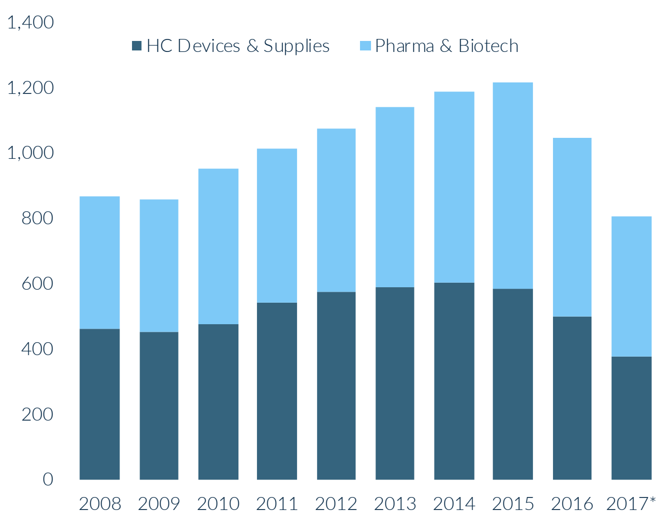
## *Activity nearly split between sectors*

US VC activity in life sciences (#) by sector

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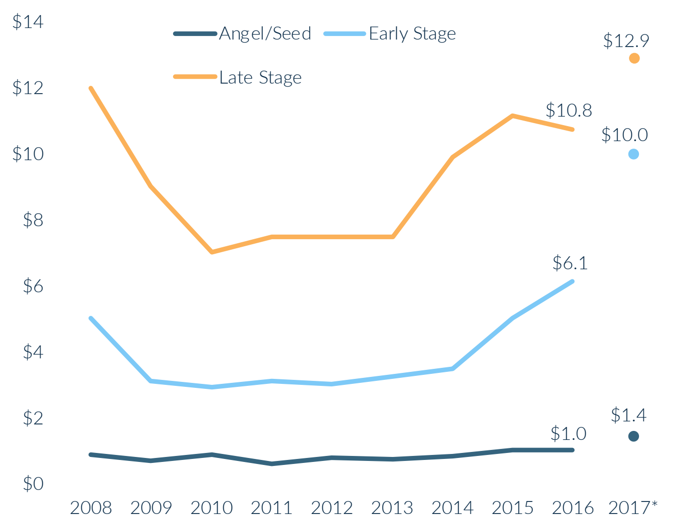
## *Early-stage rounds showing large growth*

Median life sciences deal size ($M) by stage

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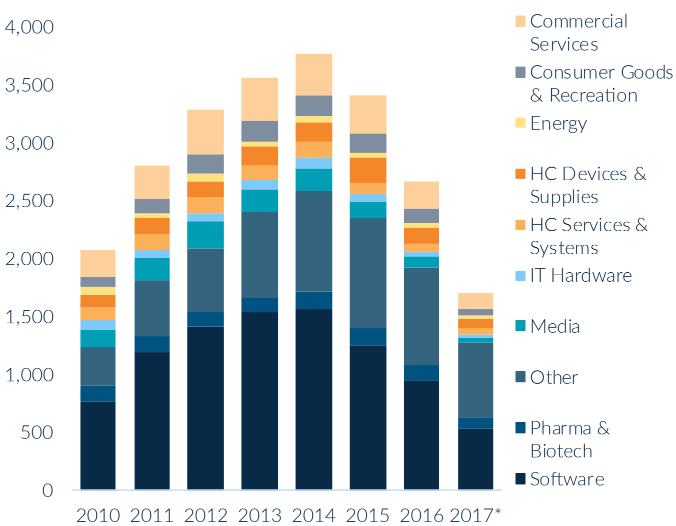
Note: Life sciences is composed of pharma & biotech and healthcare devices & supplies combined together.

# First financings

## Software not leading all sectors

US VC activity in first financings (#) by sector

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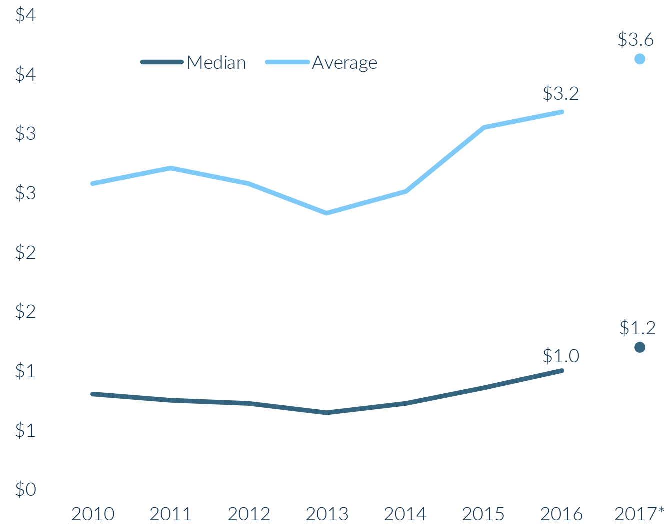
## Average first financing deal passes $3M

Median and average first financing deal size ($M)

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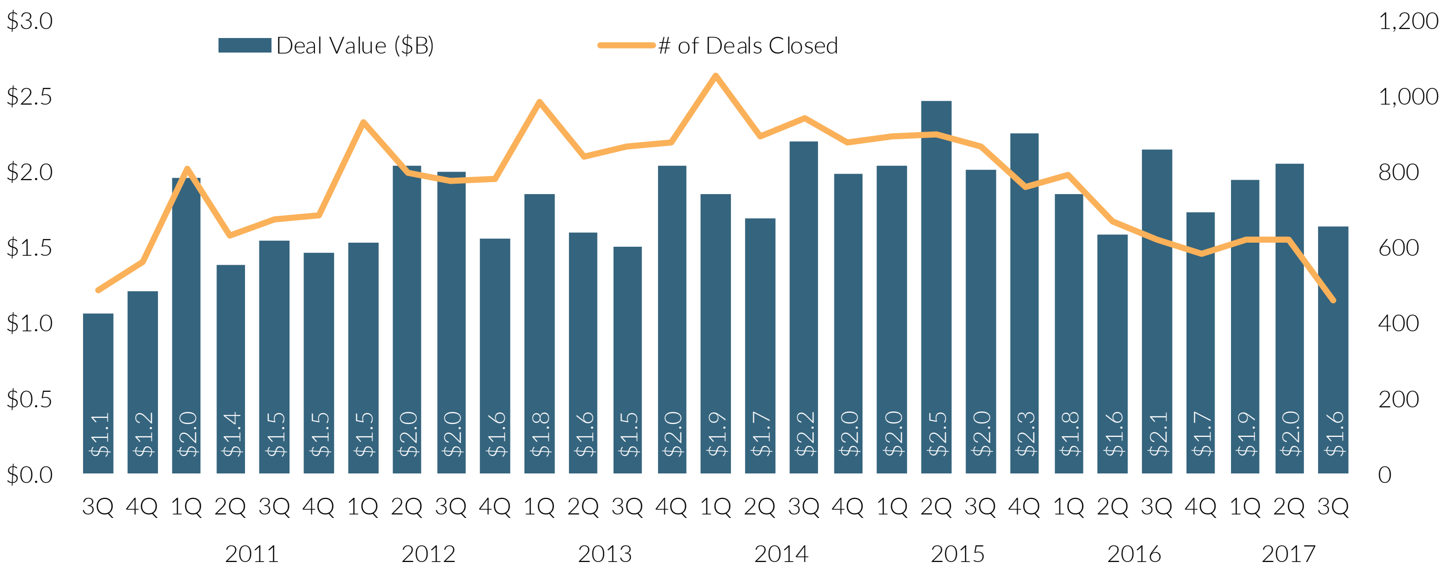
## First-financings continuing to decline

US first financing VC activity

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Note: First financings are defined as the first round of equity funding in a startup by an institutional venture investor.

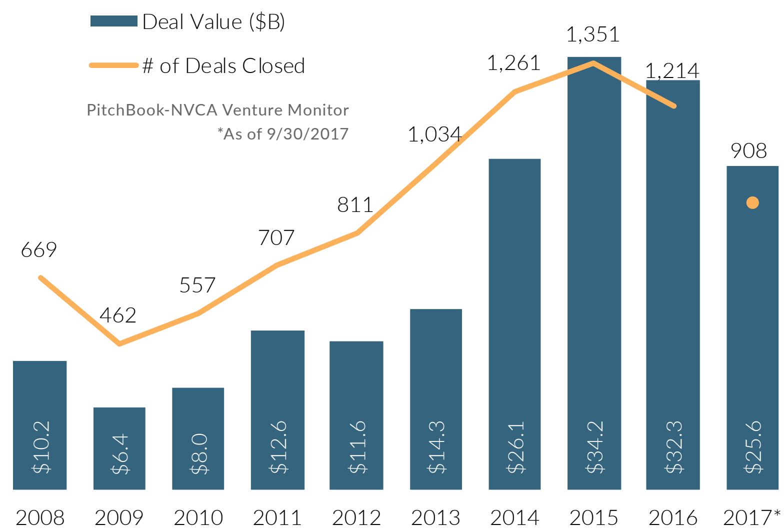
# Corporate venture capital

Relative to the overall VC market, deals with corporate venture participation have declined at a much more subdued pace. In general, CVC investors aren't driving the recent uptick in late-stage valuations, as these groups tend to be price-takers. However, their participation does enable the completion of many large deals, with CVC investors participating in 39 deals of over $100 million through the first three quarters of 2017, totaling more than $11.4 billion in capital invested.

Folding in startups can be an important source of growth for corporations and a way to avoid potential disruptions, but the companies targeted by CVCs do not necessarily need to fit the strategic plans of the parent company today. As the CVC strategy has gained popularity, large corporations have displayed more willingness to explore areas beyond their normal purview. An example of CVC's evolution is the dichotomy between Intel Capital and Google Ventures. Since 1996, Intel Corporation has executed 93 acquisitions, 15 of which were previously invested in by Intel Capital. While that may not seem like a significant percentage in absolute terms, it is large relative to peers. For example, only 4.5% of Alphabet's M&A activity is sourced via GV portfolio companies. For context, Intel's two most recent acquisitions of Intel Capital portfolio companies are the 2016 purchases of virtual reality platform Voke VR and drone manufacturer Ascending Technologies.

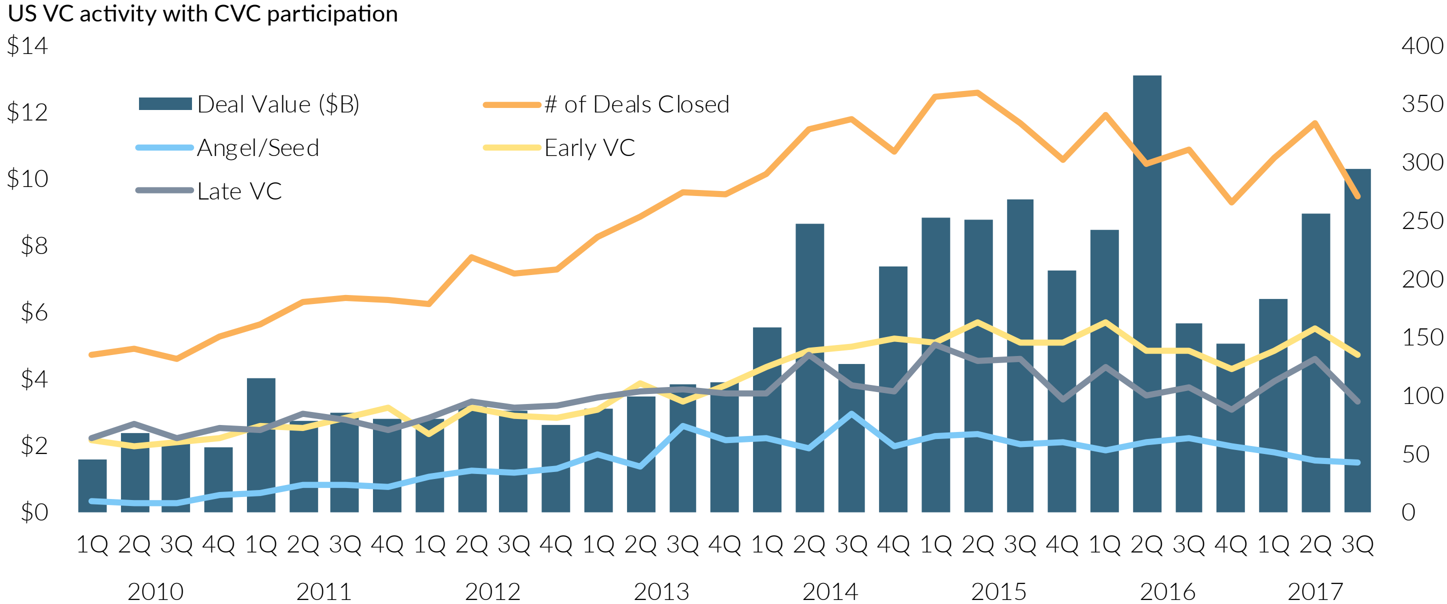
## CVC participation continues strong

US VC activity with CVC participation




## Associated value increases with CVC participation increases for third straight quarter

US VC activity with CVC participation

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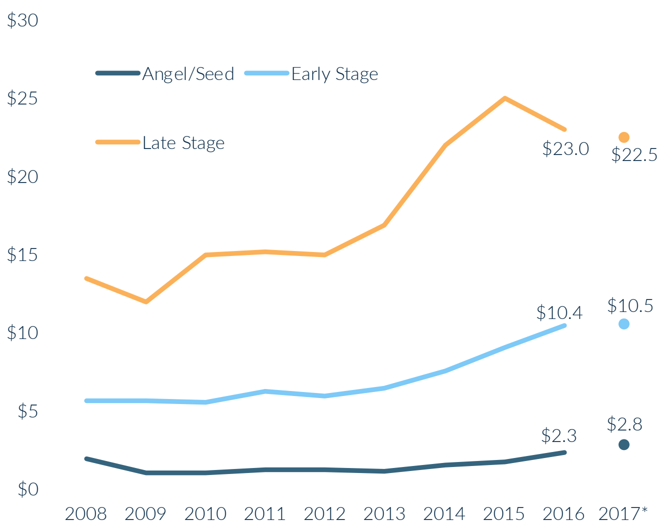
## *Late-stage deal size showing decrease*

Median US deal size ($M) with CVC participation by stage




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

*Despite relatively different strategy than traditional VC, corporate VCs target similar sectors*

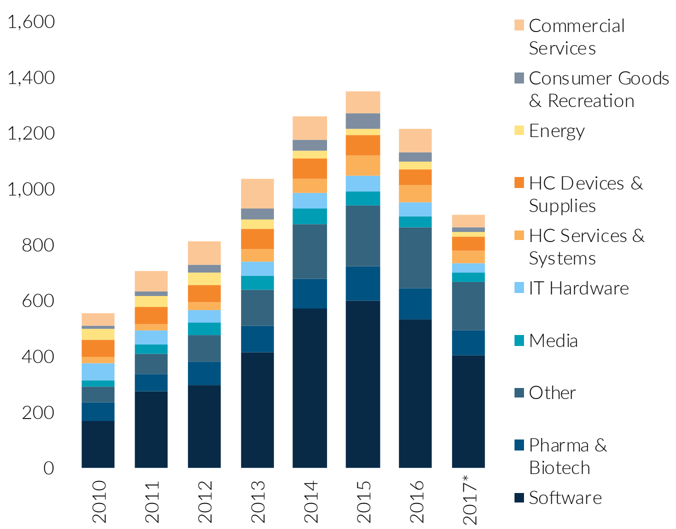
Most active CVC investors in 2017

| Investor | Deals* |
|---|---|
| GV | 58 |
| Salesforce Ventures | 28 |
| GE Ventures | 27 |
| Intel Capital | 23 |
| Alexandria Venture Investments | 22 |
| Comcast Ventures | 18 |
| Dell Technologies | 17 |
| Qualcomm Ventures | 17 |
| Microsoft Ventures | 16 |
| Bloomberg Beta | 13 |
| SoftBank Capital | 13 |
| Slack | 12 |
| BMW iVentures | 9 |
| Cisco Investments | 9 |
| Samsung Venture Investment | 9 |
| TPG Biotech | 9 |
| MassMutual Ventures | 8 |
| Novo | 8 |

PitchBook-NVCA Venture Monitor
*As of 9/30/2017

## *Software investment remains flat*

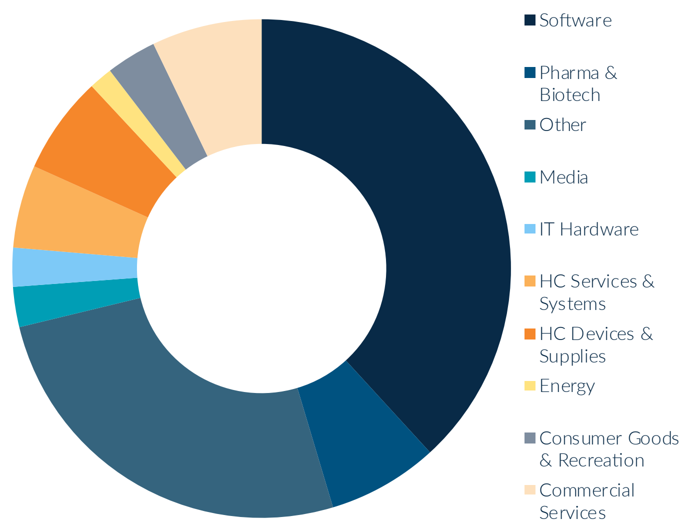
US venture activity (#) with CVC participation by sector




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

## *Life sciences receiving more CVC*

2017 US venture activity (#) with CVC participation by sector




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

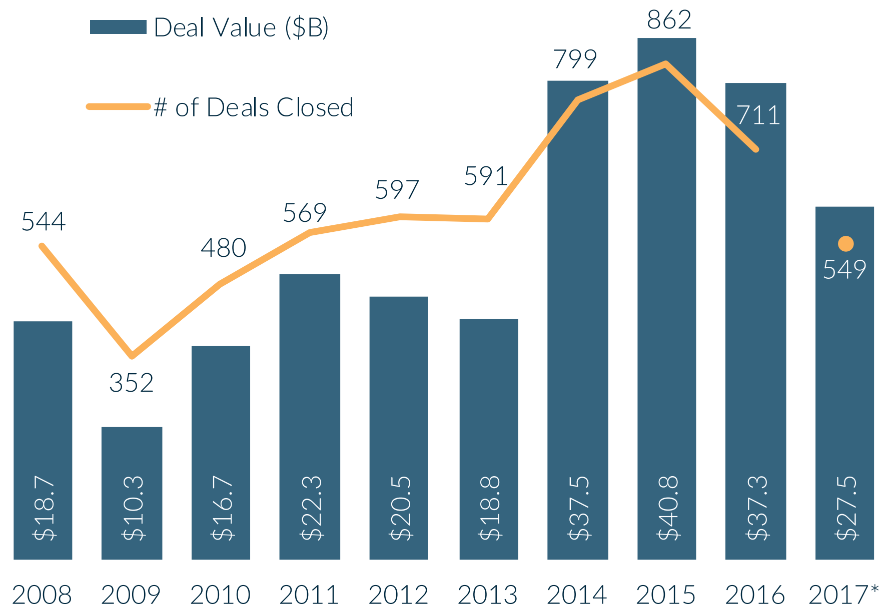
Note: Above figures represent the number of venture investments with CVC participation and the total deal size (including non-CVC portions) where at least one CVC participated. See Methodology on page 30 for more details.

# Growth equity

As 3Q total growth equity deal counts have fallen below the average of the last three years, it begins to look like the flurry of capital invested in 2Q was an outlier. Similar to late-stage VC, 2017's growth equity capital invested has been buoyed by deals on the upper bound. So far this year, 25 deals of at least $200 million have been competed, a figure that already comes in larger than what 2016 saw in its entirety. This development is logical, as growth equity exhibits dealmaking preferences that can be closer to the spectrum of PE, e.g., targeting more mature and stable companies. To that point, we've seen commercial services as the second most popular sector of growth equity investment after software, a common target area for more traditional PE deals.

## *GE deal value set to pass $30B for 4th straight year*

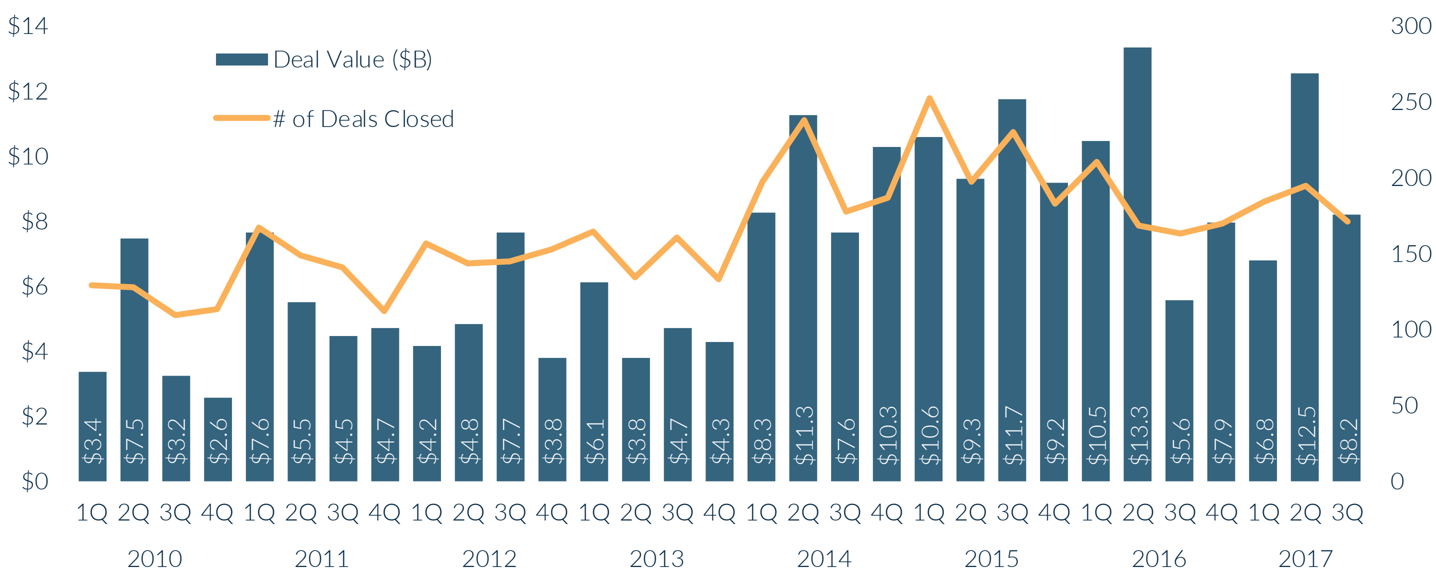
US growth equity activity




PitchBook -NVCA Venture Monitor
*As of 9/30/2017

## *$20B+ in GE invested in past two quarters*

US growth equity activity

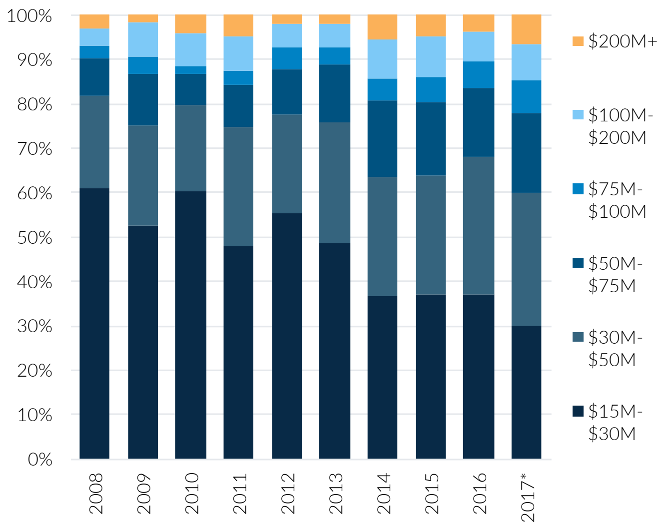



PitchBook-NVCA Venture Monitor

Note: Growth equity is not included as a subset of overall VC data, but is rather its own unique dataset. See the Methodology, page 30, for more details on this particular category.

## Growth equity rounds trending larger

Growth equity deals (#) by deal size

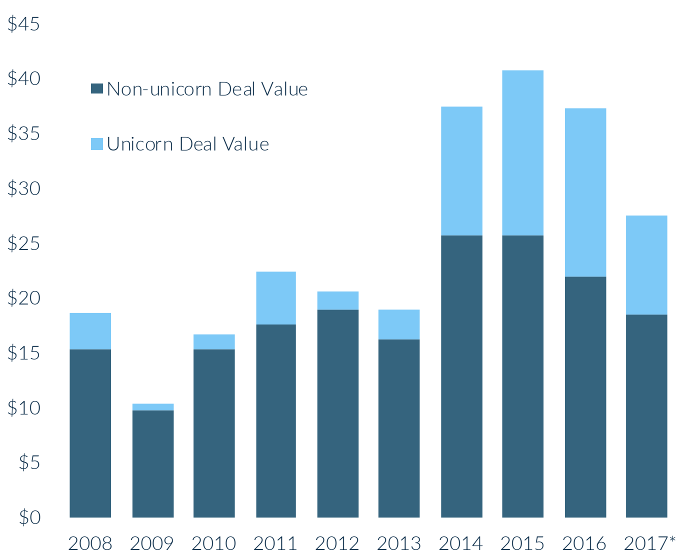



PitchBook-NVCA Venture Monitor
*As of 9/30/2017

*Growth equity has contributed heavily to the growing number of unicorn deals*

## GE heavily investing in unicorns

US growth equity activity ($B) by unicorn rounds

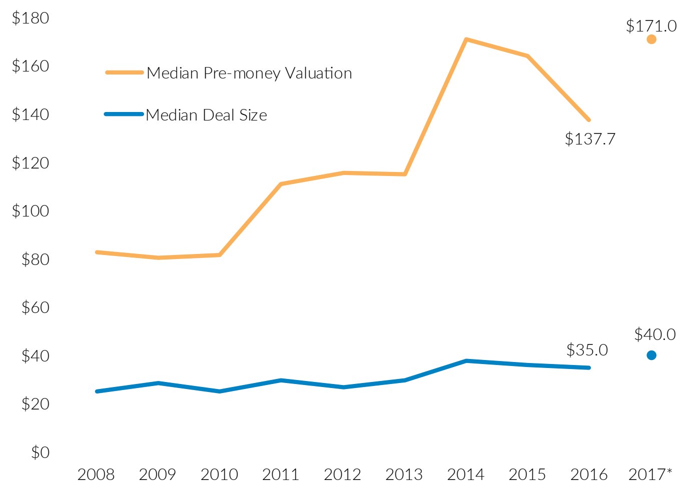



PitchBook-NVCA Venture Monitor
*As of 9/30/2017

*While the median GE deal size has shown only slight growth in recent years, valuations have skyrocketed*

## Median GE deal size reaches $40M

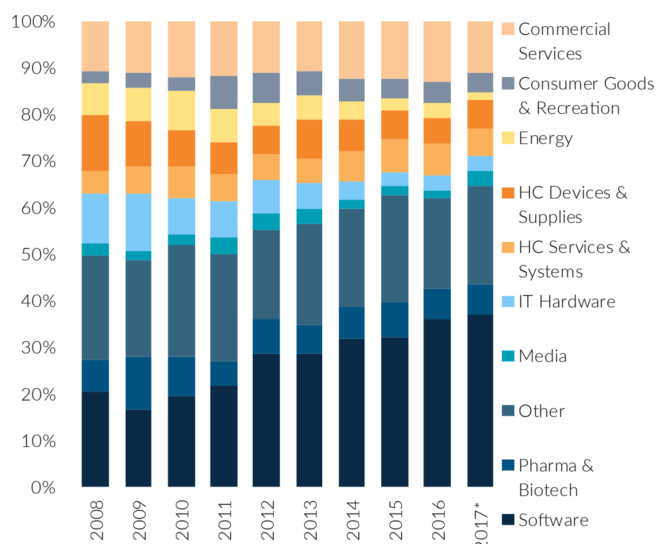
US growth equity medians




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

## Software commanding more activity

US growth equity activity (#) by sector




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

Note: Growth equity is not included as a subset of overall VC data, but is rather its own unique dataset. See the Methodology, page 30, for more details on this particular category.

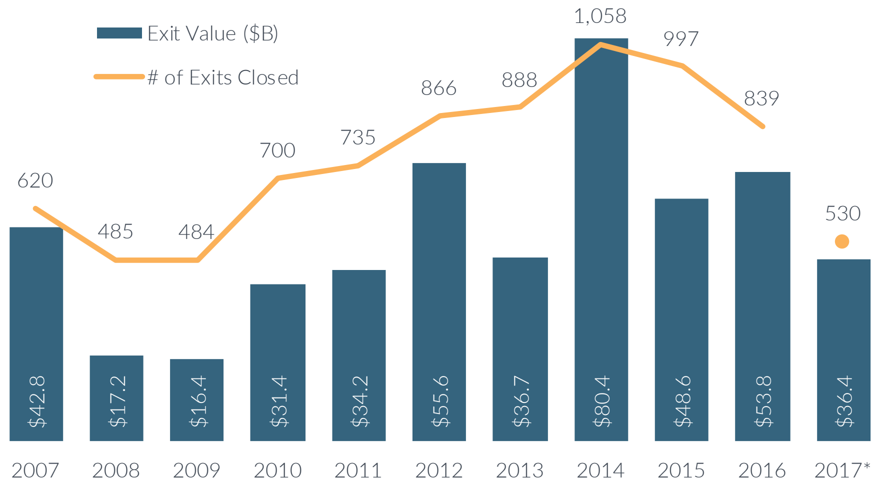
# Exits

The exit environment for 2017 to date can be characterized as sluggish. Just 530 exits have been completed through the first nine months, including just 144 in 3Q, the lowest quarterly total since 2009. This has driven the VC investment-to-exit ratio to exceed 11x—up from 10.3x in 2016—despite the overall slowdown in the number of completed deals.

There have been bright spots, however. Eight unicorns have completed an exit—not including Jawbone, which is in the process of liquidating its assets. Though several of those companies took large haircuts to their valuation, the fact that the value packed in these investments has been unlocked should be seen as a positive step for the industry. While unicorn exits propped up the overall exit value figure, just three transactions have accounted for nearly $11 billion in total exit value. Despite these massive exits, however, there is still a combined worth of unicorns yet to exit of $575 billion, translating into a significant portion of unrealized value remaining in venture funds.

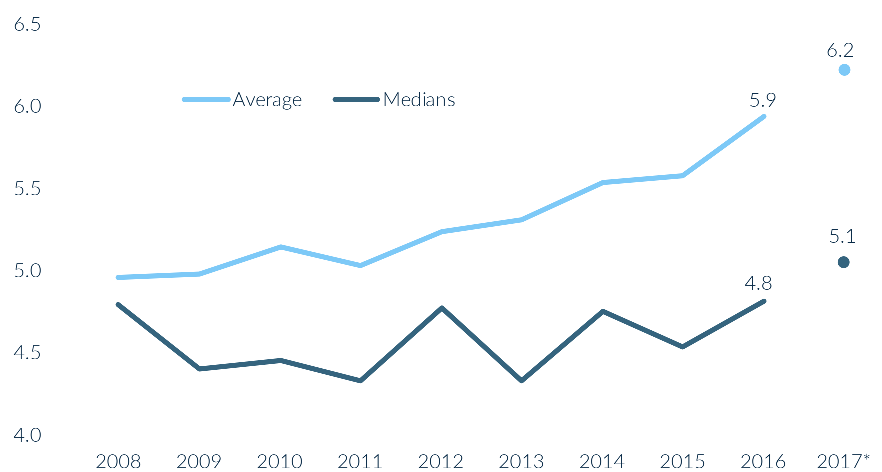
There are several reasons for the lagging exit market, but the trend of companies delaying exits has remained a major driver. The average time to exit has grown for all exit types, reaching over 7.4 years for buyouts and over eight years for IPOs. This extended hold period could put pressure on some VCs looking to return capital to LPs, exposing them to greater risk. One area that has seen an increase in activity over recent years is PE buyouts of VC-backed companies. So far this year, more than $5 billion in exit value has come from PE buyouts, and while that amount does include the $3.4 billion buyout of Chewy, the remainder nearly equals the yearly average from the past decade. At just over 18% of 2017 exits, buyouts this year have increased significantly as a proportion of exits from the 10% average realized since 2006. With PE shops raising multibillion-dollar tech-focused vehicles, VC-backed companies should continue to find buyouts to be a more common and lucrative exit opportunity, especially given the shield from the public markets such deals offer as well.

US venture-backed exit activity



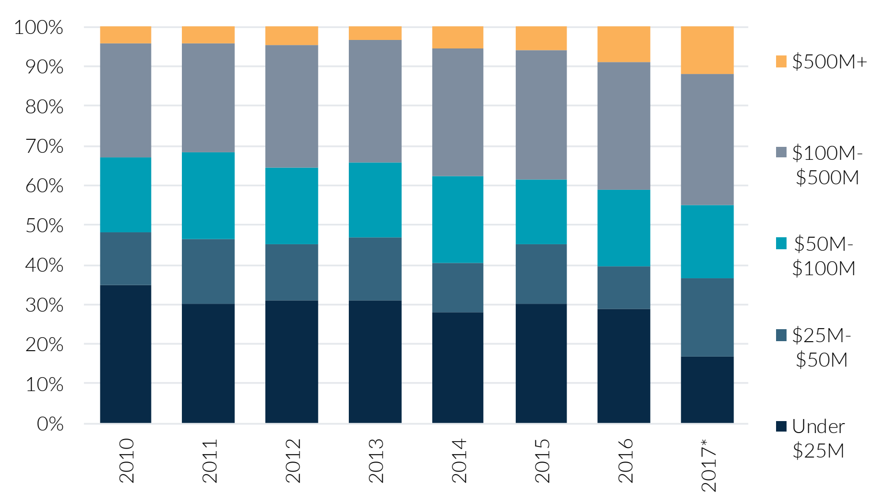

PitchBook-NVCA Venture Monitor
*As of 9/30/2017

Average and median time (years) from first financing to exit




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

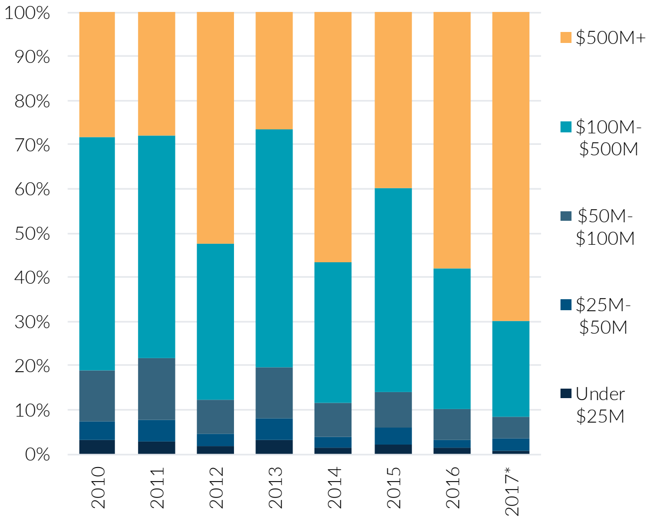
US venture-backed exit activity (#) by size




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

## $11B derived from just three exits

US venture-backed exits ($) by size



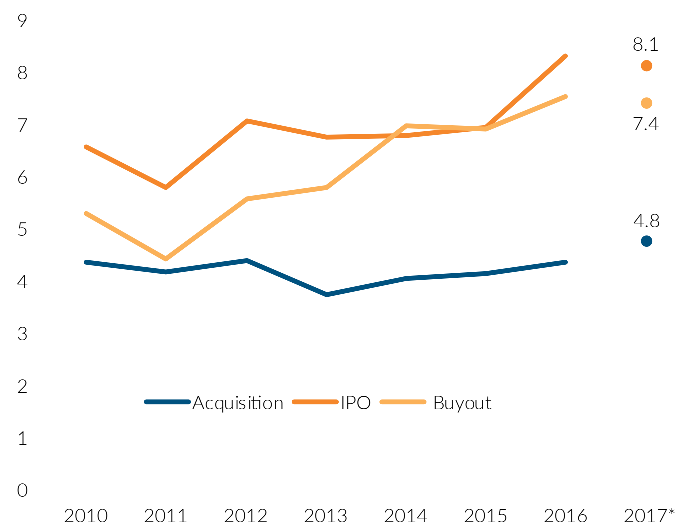

PitchBook-NVCA Venture Monitor
*As of 9/30/2017

*While median exit sizes have converged, IPO valuations have far outpaced those of acquisitions*

*As exit times grow, VCs may look toward secondary transactions to realize return*

## Hold times continue extension

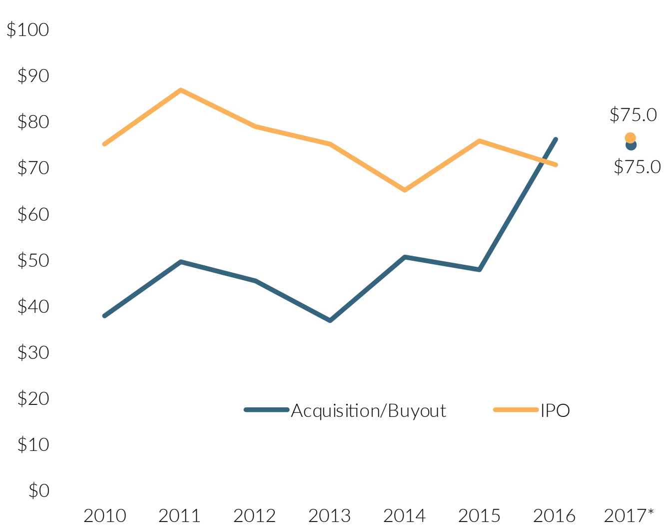
Median time to exit (years) from first VC financing by type




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

## Median exit sizes are have equaled

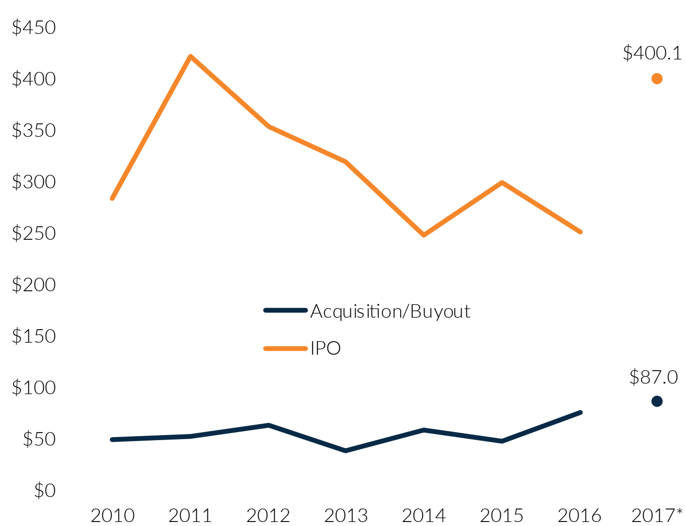
Median VC-backed exit size ($M) by type




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

## 70% of exit value from $500M+ deals

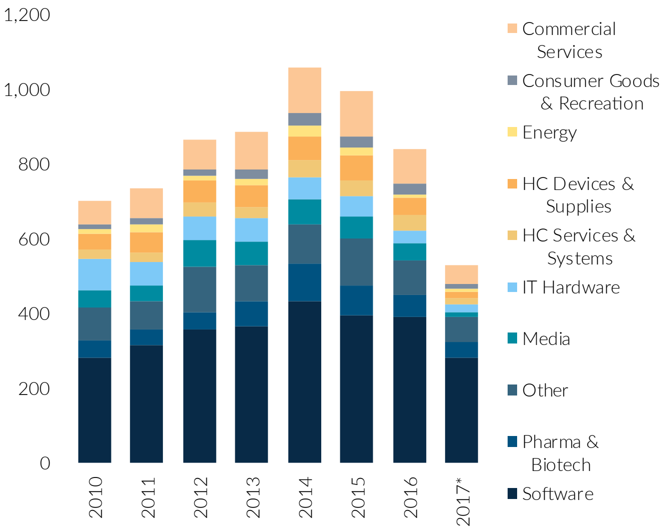
Median VC-backed exit post-valuation ($M) by type




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

## Software leading exits

US venture-backed exit activity (#) by sector




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

*Despite the decline in completed deals, the investment-to-exit ratio has reached a decade high*

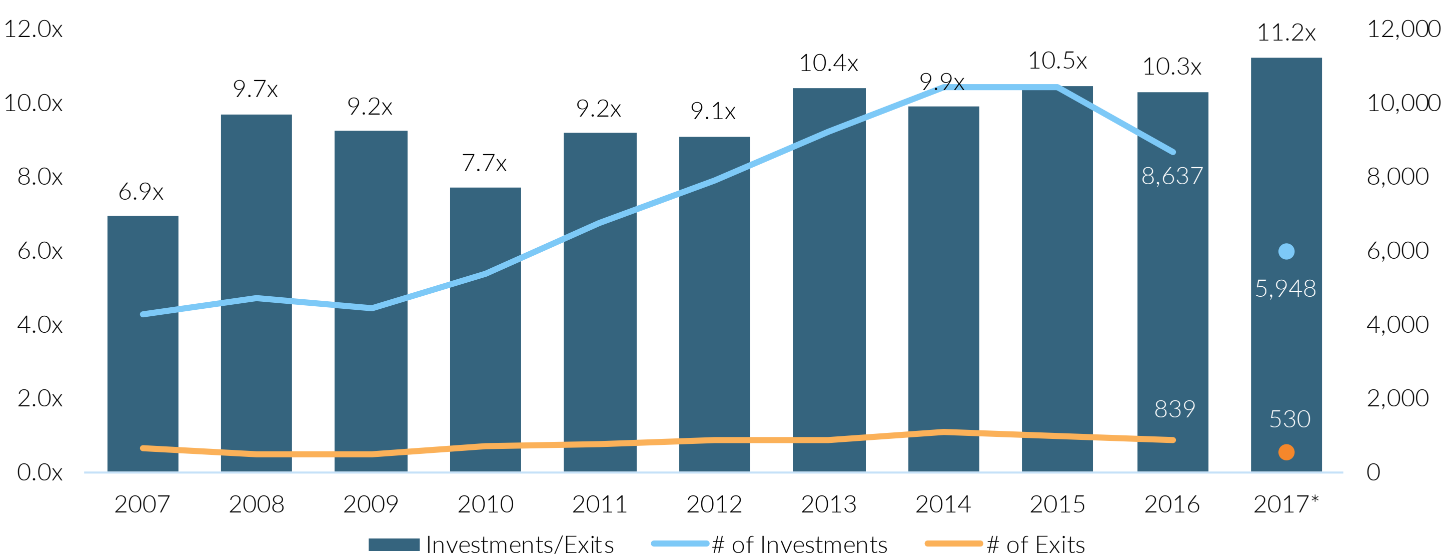
Top investors by number of exits in 2017

| Investor | Exits |
|---|---|
| New Enterprise Associates | 23 |
| SV Angel | 18 |
| Techstars | 15 |
| Kleiner Perkins Caufield & Byers | 15 |
| 500 Startups | 15 |
| Y Combinator | 14 |
| Intel Capital | 13 |
| GV | 13 |
| Andreessen Horowitz | 13 |
| Western Technology Investment | 12 |
| Accel | 12 |
| Greylock Partners | 11 |
| First Round Capital | 11 |
| CrunchFund | 10 |
| Great Oaks Venture Capital | 9 |
| General Catalyst Partners | 9 |
| Fidelity Investments | 9 |
| BoxGroup | 9 |

PitchBook-NVCA Venture Monitor
*As of 9/30/2017

## Exits slowing faster than deals

US VC investment-to-exit ratio




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

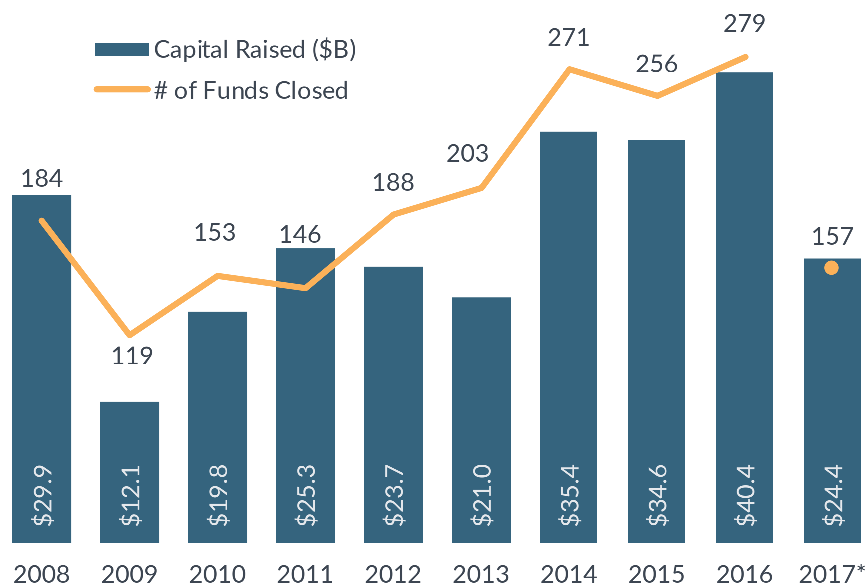
# Fundraising

The slowdown in completed VC fundraises in 3Q 2017 tempers previous speculation that the year would surpass 2016's $41 billion raised. However, we believe investors will continue to search for strategies with higher risk/return profiles in response to the current low-rate, low-growth environment that should propel 2017 to be the fourth consecutive year of at least $30 billion raised. LPs have also enjoyed several strong years of distributions from VC funds, which should further entice persistent commitments to the asset class. Accordingly, many metrics point toward an increasingly positive fundraising climate for GPs. Most notably, we have seen GPs' median time on the fundraising trail drop from 18 months in 2016 to 13 months so far in 2017.

GPs have responded to the recent broader industry trends of larger deal sizes and higher valuations by raising fewer follow-on micro-VC funds. Conversely, the upper end of the market has grown rapidly, and while 2017 has seen fewer funds over $500 million, 3Q saw an additional billion-dollar fund close, with IVP raising $1.5 billion in their IVP XVI vehicle. Although this change in fund make-up might point toward a drastic uptick in average fund sizes, we've actually found the opposite to be true. While median fund sizes in 2017 are 87% higher than recorded in 2015, they are still significantly below pre-crisis levels. This is an interesting development as almost every other area of VC has met or surpassed what we recorded during 2006 and 2007, including total capital raised. That being said, we expect median fund sizes to trend upward if valuations climb higher and the number of micro-VC funds continues to dwindle. The success of first-time fundraisers so far this year may play a role in this trend as well. Only 25% of 2017 first-time funds raised $25 million or less, a departure from historical levels in the 40%-50% range.

## Slow 3Q doesn't diminish total amount raised

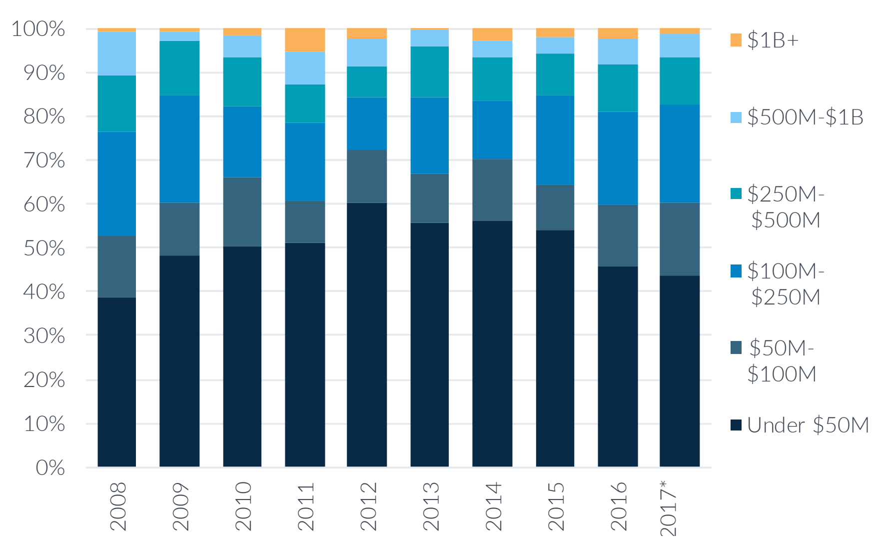
US VC fundraising activity




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

## More than 50% of funds closed on over $50M

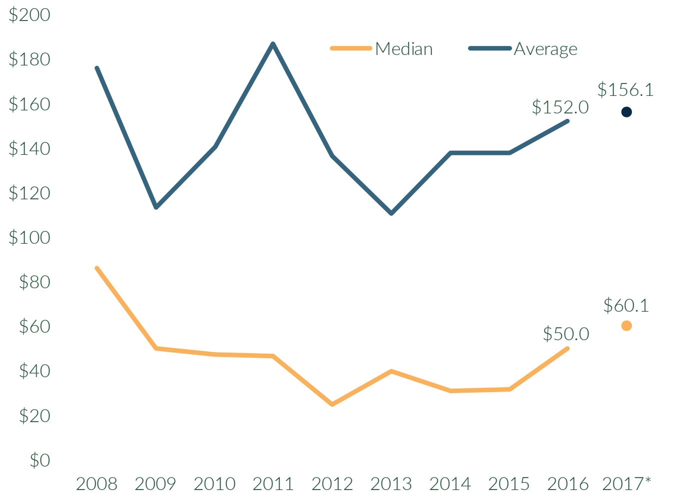
US VC fundraising (#) by size




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

## Fund sizes keep growing

Median and average US VC fund size ($M)



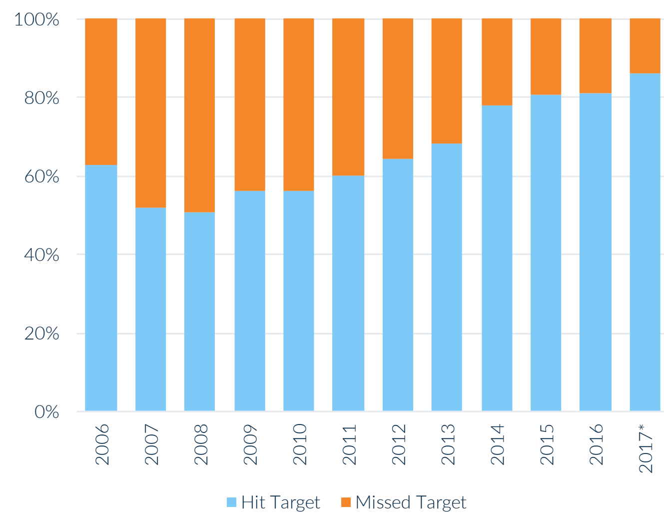

PitchBook-NVCA Venture Monitor
*As of 9/30/2017

*Fund sizes have continued to climb in recent years, despite the number of funds growing*

*First-time funds are likely to reach a decade high of commitments in 2017*

## Capital raised will keep investment high

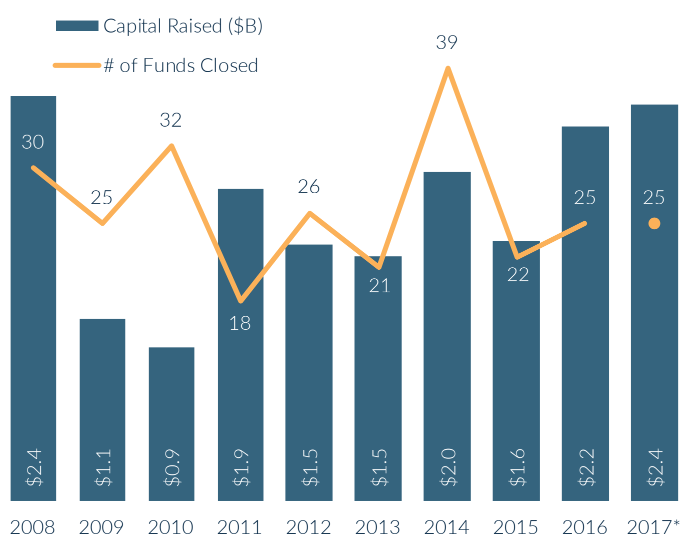
Percentage of funds (#) hitting target




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

## First-time funds on fast pace

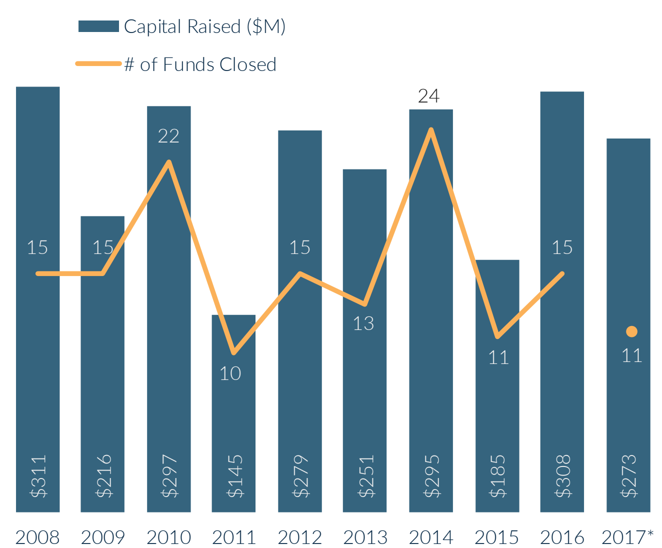
First-time US VC fundraising activity




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

## Micro funds set for record commitments

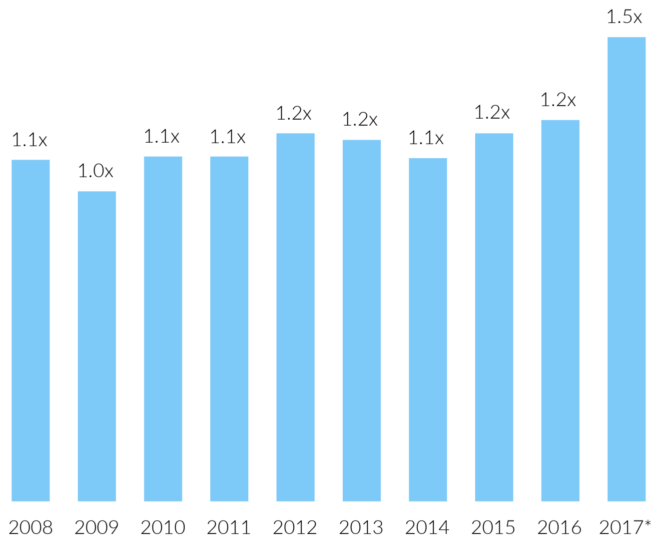
Sub-$50M US VC fundraising activity




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

## *Follow-up funds seeing huge increase*

Median size step-up from previous investor fund

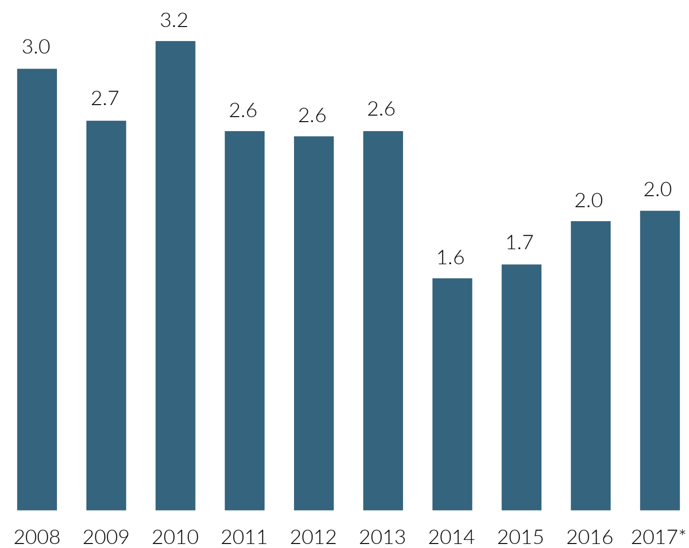



PitchBook-NVCA Venture Monitor
*As of 9/30/2017

*Investors are raising follow-on funds at sizes 1.5x the previous fund*

## *Time between funds relatively low*

Median time (years) between funds

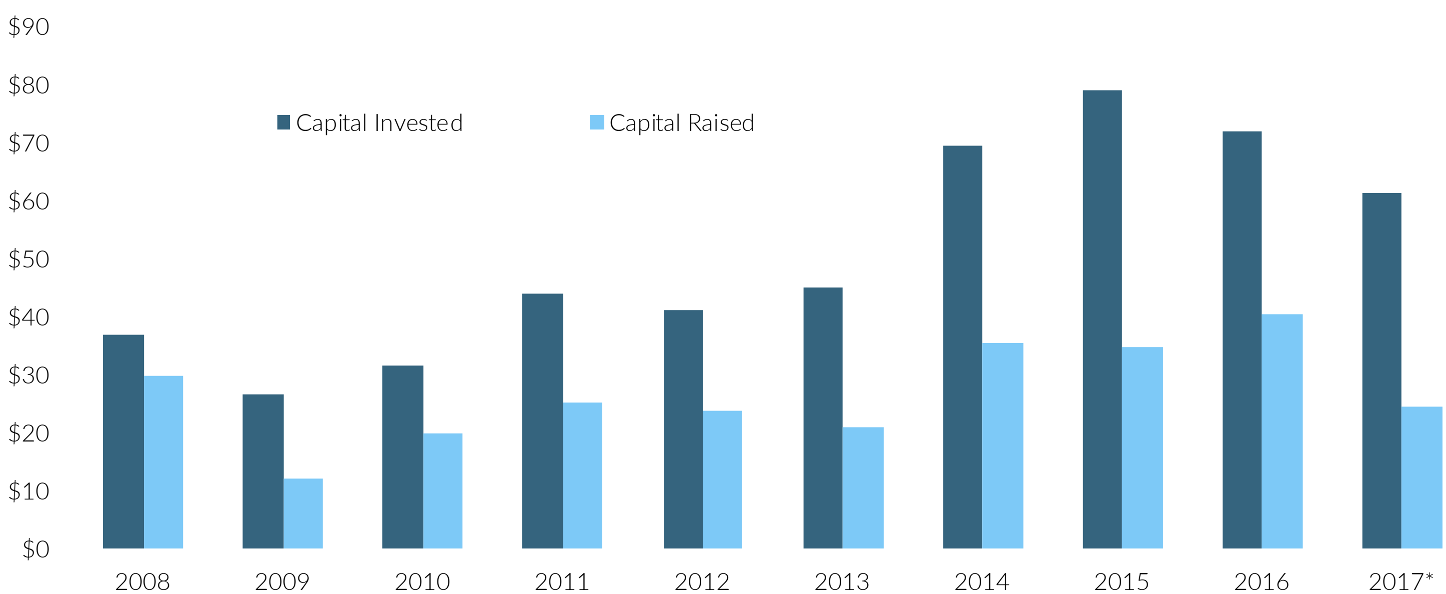



PitchBook-NVCA Venture Monitor
*As of 9/30/2017

*With $92 billion in US VC dry powder, investments should continue at current trends*

## *Capital raised will keep investment high*

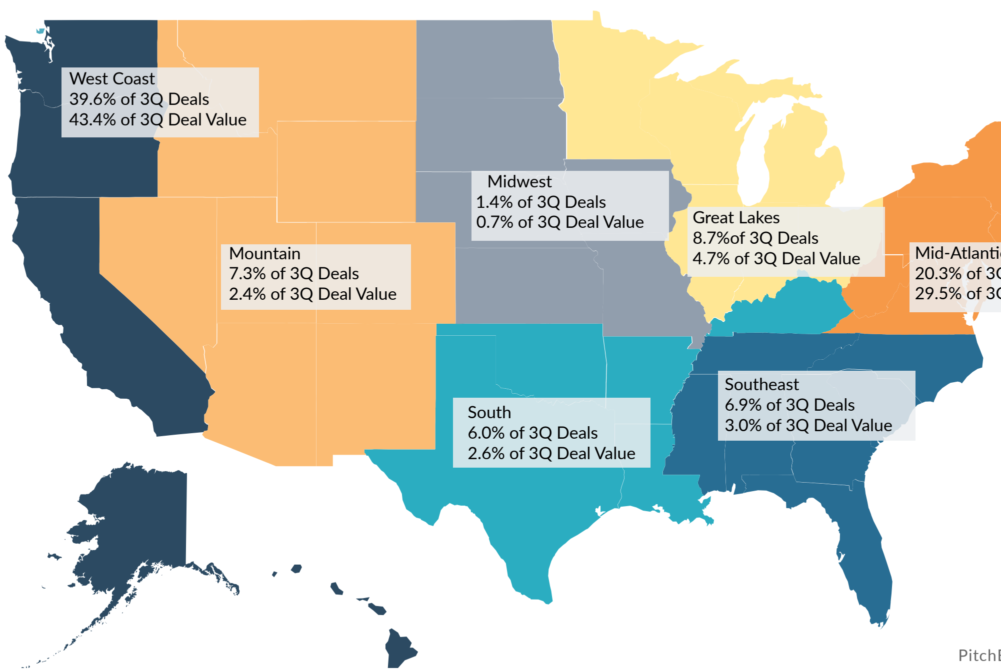
US capital invested ($B) versus capital raised ($B)




PitchBook-NVCA Venture Monitor
*As of 9/30/2017

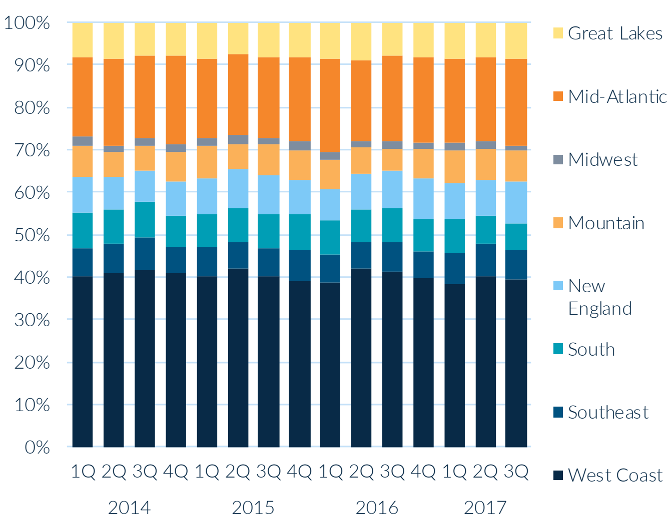
# Activity by region

3Q 2017 US VC deal activity by region



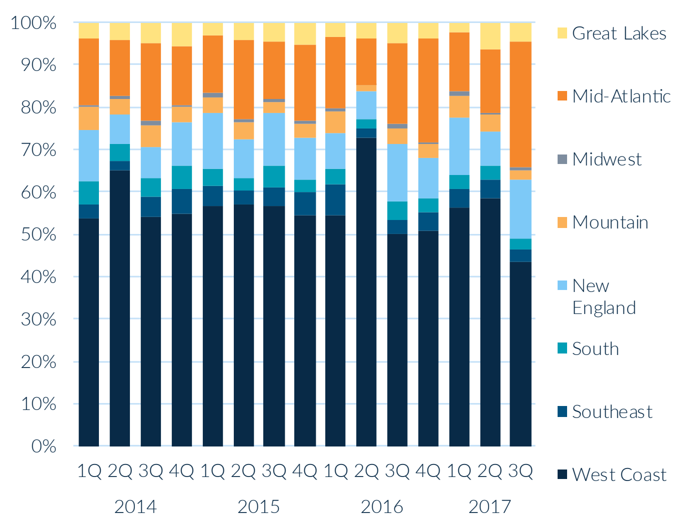

PitchBook-NVCA Venture Monitor

US VC deal activity (#) by region




PitchBook-NVCA Venture Monitor

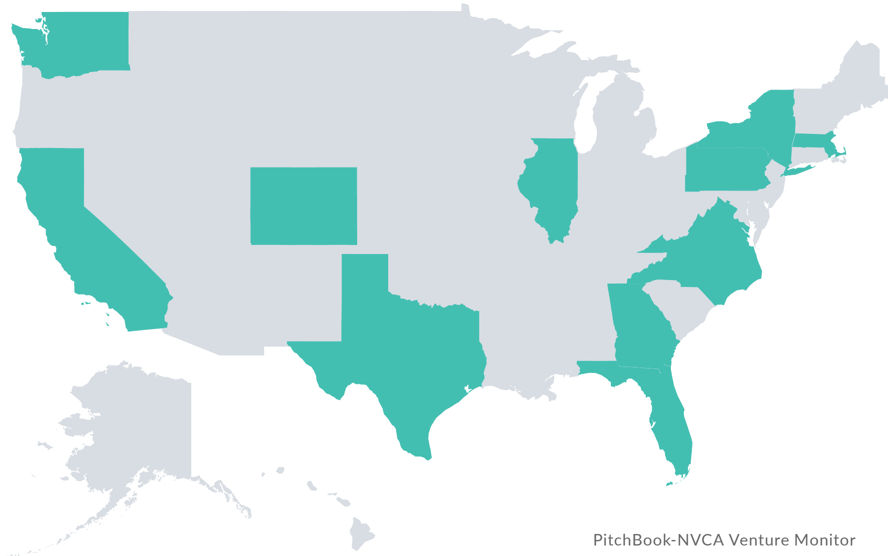
US VC activity ($) by region




PitchBook-NVCA Venture Monitor

## *California grabs more deals than next six states*

3Q 2017 US VC activity (#) by company count



PitchBook-NVCA Venture Monitor

### Top states by number of companies receiving VC investment in 3Q

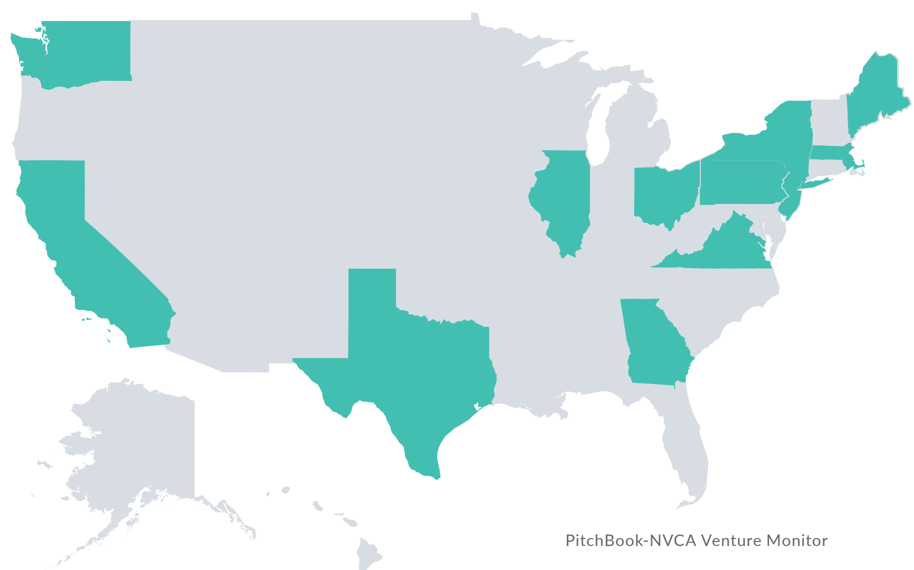
| State | 3Q Company Count (#) |
|---|---|
| California | 580 |
| New York | 188 |
| Massachusetts | 121 |
| Texas | 77 |
| Washington | 70 |
| Colorado | 60 |
| Illinois | 50 |
| Pennsylvania | 41 |
| Virginia | 39 |
| Florida | 37 |
| North Carolina | 37 |
| Georgia | 32 |
| Maryland | 32 |

### Top states by total capital invested in 3Q

| State | 3Q Deal Value ($M) |
|---|---|
| California | 8,713.3 |
| New York | 5,129.1 |
| Massachusetts | 2,569.2 |
| Washington | 558.7 |
| Illinois | 484.4 |
| Texas | 456.0 |
| New Jersey | 355.3 |
| Pennsylvania | 343.8 |
| Ohio | 299.7 |
| Georgia | 261.3 |
| Virginia | 234.8 |
| Maine | 226.6 |

## *New York reaches $5B total deal value in 3Q*

3Q 2017 US VC deal activity ($) by region



PitchBook-NVCA Venture Monitor

# 3Q 2017 League Tables

## Most active investors
## Angel & seed

| Investor | Deal count |
|---|---|
| SOSV | 10 |
| TEDCO | 9 |
| Y Combinator | 9 |
| Keiretsu Forum | 8 |
| 500 Startups | 6 |
| First Round Capital | 5 |
| Innovation Works | 5 |
| Keiretsu Capital | 5 |
| Liquid 2 Ventures | 5 |
| Slow Ventures | 5 |
| Techstars | 5 |
| University Ventures | 5 |
| Forerunner Ventures | 4 |
| Founders Fund | 4 |
| FundersClub | 4 |
| Lightspeed Venture Partners | 4 |
| Maveron | 4 |
| New Enterprise Associates | 4 |
| Precursor Ventures | 4 |
| Sterling VC | 4 |
| Tech Coast Angels | 4 |

PitchBook-NVCA Venture Monitor

## Most active investors
## Early stage

| Investor | Deal count |
|---|---|
| New Enterprise Associates | 17 |
| Data Collective | 11 |
| GV | 11 |
| Y combinator | 10 |
| Accel | 9 |
| Andreessen Horowitz | 9 |
| Khosla Ventures | 9 |
| Crosslink Capital | 8 |
| Bessemer Venture Partners | 7 |
| Founders Fund | 7 |
| Greycroft Partners | 7 |
| Madrona Venture Group | 7 |
| Salesforce Ventures | 7 |
| Sequoia Capital | 7 |
| SV Angel | 7 |
| First Round Capital | 6 |
| General Catalyst Partners | 6 |
| Lightspeed Venture Partners | 6 |
| Omidyar Network | 6 |
| StartX | 6 |

PitchBook-NVCA Venture Monitor

## Most active investors
## Late stage

| Investor | Deal count |
|---|---|
| New Enterprise Associates | 9 |
| Bain Capital Ventures | 7 |
| Battery Ventures | 7 |
| GV | 7 |
| SOSV | 7 |
| Bessemer Venture Partners | 6 |
| Insight Venture Partners | 6 |
| Accel | 5 |
| GE Ventures | 5 |
| Intel Capital | 5 |
| Madrona Venture Group | 5 |
| Comcast Ventures | 4 |
| Dell Technologies Capital | 4 |
| Draper Fisher Jurvetson | 4 |
| F-Prime Capital Partners | 4 |
| General Catalyst Partners | 4 |
| HBM Healthcare Investments | 4 |
| Keiretsu Forum | 4 |
| Meritech Capital Partners | 4 |
| Salesforce Ventures | 4 |
| Samsung Venture Investment | 4 |
| Scale Venture Partners | 4 |
| Sequoia Capital | 4 |
| Spark Capital | 4 |

PitchBook-NVCA Venture Monitor

Select largest US venture financings in 3Q 2017

| Company | Deal size ($M) | Series/stage | Date | HQ | State | Industry |
|---|---|---|---|---|---|---|
| WeWork | 3,000.00 | Series G | 8/24/2017 | New York | NY | Other |
| Intarcia Therapeutics | 615.00 | Series EE | 8/3/2017 | Boston | MA | Pharma & Biotech |
| SpaceX | 351.00 | Series H | 7/27/2017 | Hawthorne | CA | Other |
| Auris Surgical Robotics | 280.21 | Series D | 8/4/2017 | San Carlos | CA | HC Devices & Supplies |
| 23andMe | 250.00 | Series F | 9/12/2017 | Mountain View | CA | Pharma & Biotech |
| Slack | 250.00 | Series G | 9/18/2017 | San Francisco | CA | Software |
| Via (Carpooling) | 250.00 | Late Stage VC | 9/4/2017 | New York | NY | Software |
| WuXi NextCODE | 240.00 | Series B | 9/7/2017 | Cambridge | MA | HC Services & Systems |
| Vets First Choice | 223.55 | Series F | 7/21/2017 | Portland | ME | HC Services & Systems |
| Plenty | 200.00 | Series B | 7/19/2017 | South San Francisco | CA | Other |
| Reddit | 200.00 | Series C | 7/31/2017 | San Francisco | CA | Commercial Services |

PitchBook-NVCA Venture Monitor

Top 10 largest US venture funds closed in 3Q 2017

| Company | Investor | Fund Size | Date | HQ | State |
|---|---|---|---|---|---|
| Institutional Venture Partners XVI | IVP | $1,500.00 | 9/26/2017 | Menlo Park | CA |
| Clarus IV | Clarus Ventures | $910.00 | 7/18/2017 | Cambridge | MA |
| Canaan XI | Canaan Partners | $800.00 | 7/25/2017 | Menlo Park | CA |
| Leerink Transformation Fund I | Leerink Transformation Partners | $313.00 | 9/28/2017 | Boston | MA |
| Lightstone Ventures II | Lightstone Ventures | $250.00 | 9/20/2017 | Boston | MA |
| S2G Ventures Fund II | Seed 2 Growth Ventures | $180.00 | 9/22/2017 | Chicago | IL |
| Alpha Edison | Alpha Edison | $175.00 | 8/1/2017 | Los Angeles | CA |
| Costanoa Ventures III | Costanoa Venture Capital | $175.00 | 9/15/2017 | Palo Alto | CA |
| DEFY Partners I | Defy.vc | $151.00 | 9/27/2017 | San Francisco | CA |
| Initialized III | Initialized Capital Management | $125.00 | 7/7/2017 | San Francisco | CA |

PitchBook-NVCA Venture Monitor

Top five largest IPOs of US-based companies in 3Q 2017

| Company | Exit size ($M) | Exit post-val ($M) | Date | HQ | State | Industry |
|---|---|---|---|---|---|---|
| Roku | 219.35 | 1,326.48 | 9/28/2017 | Los Gatos | CA | IT Hardware |
| Redfin | 138.47 | 1,193.05 | 7/28/2017 | Seattle | WA | Media |
| Deciphera | 127.50 | 542.73 | 9/28/2017 | Waltham | MA | Pharma & Biotech |
| Kala Pharmaceuticals | 90.00 | 389.00 | 7/20/2017 | Waltham | MA | Pharma & Biotech |
| Sienna Biopharmaceuticals | 65.00 | 298.32 | 7/27/2017 | Westlake Village | CA | Pharma & Biotech |

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Top five largest acquisitions of US-based companies in 3Q 2017

| Company | Exit size ($M) | Exit post-val ($M) | Date | HQ | State | Industry |
|---|---|---|---|---|---|---|
| IFM Therapeutics | 2,320.00 | 2,320.00 | 9/7/2017 | Boston | MA | Pharma & Biotech |
| Altor BioScience | 1,080.00 | | 8/1/2017 | Miramar | FL | Pharma & Biotech |
| Intacct | 850.00 | 850.00 | 8/3/2017 | San Jose | CA | Software |
| Viptela | 610.00 | 610.00 | 8/1/2017 | San Jose | CA | Software |
| Best Doctors | 440.00 | 440.00 | 7/17/2017 | Boston | MA | HC Services & Systems |

PitchBook-NVCA Venture Monitor

States & territories by VC activity in 3Q 2017

| State | Deal count |
|---|---|
| California | 580 |
| New York | 188 |
| Massachusetts | 121 |
| Texas | 77 |
| Washington | 70 |
| Colorado | 60 |
| Illinois | 50 |
| Pennsylvania | 41 |
| Virginia | 39 |
| Florida | 37 |
| North Carolina | 37 |
| Georgia | 32 |
| Maryland | 32 |
| New Jersey | 30 |
| Ohio | 27 |
| Oregon | 23 |
| Michigan | 22 |
| Arizona | 21 |
| Minnesota | 20 |
| Utah | 19 |
| Indiana | 18 |
| Connecticut | 15 |
| Tennessee | 13 |
| Wisconsin | 11 |
| District of Columbia | 10 |
| Missouri | 10 |
| Rhode Island | 10 |
| Maine | 8 |
| New Hampshire | 8 |
| New Mexico | 8 |
| Iowa | 7 |

PitchBook-NVCA Venture Monitor

States & territories by VC activity in 3Q 2017, ctd.

| State | Deal count |
|---|---|
| Nevada | 7 |
| South Carolina | 7 |
| Delaware | 6 |
| Kentucky | 6 |
| Vermont | 6 |
| Alabama | 4 |
| Idaho | 4 |
| Nebraska | 4 |
| Oklahoma | 4 |
| Arkansas | 3 |
| Wyoming | 3 |
| Montana | 2 |
| South Dakota | 2 |
| Alaska | 1 |
| Hawaii | 1 |
| Kansas | 1 |

PitchBook-NVCA Venture Monitor

Top Metropolitan Statistical Area (MSA) activity in 3Q 2017

| MSA | Deal count |
|---|---|
| San Francisco-Oakland-Fremont, CA | 290 |
| New York-Northern New Jersey-Long Island, NY-NJ-PA | 200 |
| Los Angeles-Long Beach-Santa Ana, CA | 122 |
| Boston-Cambridge-Quincy, MA-NH | 119 |
| San Jose-Sunnyvale-Santa Clara, CA | 96 |
| Seattle-Tacoma-Bellevue, WA | 64 |
| Washington-Arlington-Alexandria, DC-VA-MD-WV | 51 |
| Chicago-Naperville-Joliet, IL-IN-WI | 46 |
| Austin-Round Rock, TX | 41 |
| San Diego-Carlsbad-San Marcos, CA | 39 |

PitchBook-NVCA Venture Monitor

Top Congressional districts by VC activity in 3Q 2017

| Stae | District | Deal Count |
|---|---|---|
| California | District 12 | 161 |
| New York | District 12 | 88 |
| California | District 18 | 73 |
| California | District 14 | 53 |
| New York | District 10 | 47 |
| Washington | District 7 | 44 |
| Massachusetts | District 7 | 39 |
| California | District 17 | 29 |
| California | District 33 | 27 |
| Massachusetts | District 8 | 24 |
| Illinois | District 7 | 23 |
| California | District 52 | 20 |
| Colorado | District 2 | 20 |
| Texas | District 21 | 20 |
| Massachusetts | District 5 | 18 |
| California | District 13 | 17 |
| California | District 28 | 16 |
| California | District 49 | 15 |
| Colorado | District 1 | 14 |
| Pennsylvania | District 14 | 13 |
| California | District 37 | 12 |
| California | District 45 | 12 |
| Virginia | District 8 | 12 |
| New York | District 7 | 11 |
| California | District 2 | 9 |
| District of Columbia | Delegate District (at Large) | 9 |
| North Carolina | District 6 | 9 |
| Ohio | District 11 | 9 |
| Pennsylvania | District 2 | 9 |

PitchBook-NVCA Venture Monitor

# Methodology

## Fundraising

We define venture capital funds as pools of capital raised for the purpose of investing in the equity of startup companies. In addition to funds raised by traditional venture capital firms, PitchBook also includes funds raised by any institution with the primary intent stated above. Funds identifying as growth-stage vehicles are classified as PE funds and are not included in this report. A fund's location is determined by the country in which the fund is domiciled; if that information is not explicitly known, the HQ country of the fund's general partner is used. Only funds based in the United States that have held their final close are included in the fundraising numbers. The entirety of a fund's committed capital is attributed to the year of the final close of the fund. Interim close amounts are not recorded in the year of the interim close.

## Deals

We include equity investments into startup companies from an outside source. Investment does not necessarily have to be taken from an institutional investor. This can include investment from individual angel investors, angel groups, seed funds, venture capital firms, corporate venture firms, and corporate investors. Investments received as part of an accelerator program are not included, however, if the accelerator continues to invest in follow-on rounds, those further financings are included. All financings are of companies headquartered in the US.

*Angel & seed*: We define financings as angel rounds if there are no PE or VC firms involved in the company to date and we cannot determine if any PE or VC firms are participating. In addition, if there is a press release that states the round is an angel round, it is classified as such. Finally, if a news story or press release only mentions individuals making investments in a financing, it is also classified as angel. As for seed, when the investors and/or press release state that a round is a seed financing, or it is for less than $500,000 and is the first round as reported by a government filing, it is classified as such. If angels are the only investors, then a round is only marked as seed if it is explicitly stated.

*Early-stage*: Rounds are generally classified as Series A or B (which we typically aggregate together as early stage) either by the series of stock issued in the financing or, if that information is unavailable, by a series of factors including: the age of the company, prior financing history, company status, participating investors, and more.

*Late-stage*: Rounds are generally classified as Series C or D or later (which we typically aggregate together as late stage) either by the series of stock issued in the financing or, if that information is unavailable, by a series of factors including: the age of the company, prior financing history, company status, participating investors, and more.

*Growth equity*: Rounds must include at least one investor tagged as growth/expansion, while deal size must either be $15 million or more (although rounds of undisclosed size that meet all other criteria are included). In addition, the deal must be classified as growth/expansion or later-stage VC in the PitchBook Platform. If the financing is tagged as late-stage VC it is included regardless of industry. Also, if a company is tagged with any PitchBook vertical, excepting manufacturing and infrastructure, it is kept. Otherwise, the following industries are excluded from growth equity financing calculations: buildings and property, thrifts and mortgage finance, real estate investment trusts, and oil & gas equipment, utilities, exploration, production and refining. Lastly, the company in question must not have had an M&A event, buyout, or IPO completed prior to the round in question.

*Corporate venture capital*: Financings classified as corporate venture capital include rounds that saw both firms investing via established CVC arms or corporations making equity investments off balance sheets or whatever other non-CVC method actually employed.

*Capital efficiency score:* Our capital efficiency score was calculated using companies that had completed an exit (IPO, M&A or PE Buyout) since 2006. The aggregate value of those exits, defined as the pre-money valuation of the exit, was then divided by the aggregate amount of VC that was invested into those companies during their time under VC backing to give a Multiple On Invested Capital (MOIC). After the average time to exit was calculated for each pool of companies, it was used to divide the MOIC figure and give us a capital efficiency score.

## Exits

We include the first majority liquidity event for holders of equity securities of venture-backed companies. This includes events where there is a public market for the shares (IPO) or the acquisition of majority of the equity by another entity (corporate or financial acquisition). This does not include secondary sales, further sales after the initial liquidity event, or bankruptcies. M&A value is based on reported or disclosed figures, with no estimation used to assess the value of transactions for which the actual deal size is unknown.

# The 411 on the PitchBook and National Venture Capital Association (NVCA) partnership

## Why we teamed up

NVCA is recognized as the go-to organization for venture capital advocacy, and the statistics we release are the industry standard. PitchBook is the leading data software provider for venture capital professionals, serving more than 1,800 clients across the private market. Our partnership with PitchBook empowers us to unlock more insights on the venture ecosystem and better advocate for an ever-evolving industry.

## Meet the PitchBook-NVCA Venture Monitor

A brand-new, quarterly report that details venture capital activity and delivers insights to inform your investment strategy. PitchBook's data will also bolster our year-in-review publication.


THE PERKS OF PARTNERSHIP


## The PitchBook Platform

As an NVCA member, your free access to the PitchBook Platform includes five advanced searches and five profile views per month.

**Fundraise faster** with targeted searches for limited partners who will likely be interested in your fund.

**Conduct better due diligence** by diving deep into a company's round-by-round financing history, executive team and market traction.

**Price deals with confidence** using pre- and post-money valuations, public and private comps, cap tables and series terms.

**Find promising investors quickly** by zeroing in on other firms or strategic acquirers whose investment preferences match your portfolio company.

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## Help us help you

We will email quarterly surveys to each member firm, which will give you the opportunity to report your activity to PitchBook. The data you provide will not only power PitchBook-NVCA reports, but also ensure your firm is represented accurately in the PitchBook Platform. If you'd like to send your quarterly activity report directly to PitchBook, email research@pitchbook.com.

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