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NATIONAL VENTURE CAPITAL ASSOCIATION

Venture Monitor

2Q 2018

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svb Silicon Valley Bank

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Solium

Massive $57.5B invested into US VC-backed companies through 1H
Page 4

IPOs riding back toward decade highs, as overall exit value remains elevated
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League tables for 2Q deals, investors, exits and more
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The definitive review of the US venture capital ecosystem

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Executive summary

At the halfway point of 2018, the US venture capital ecosystem continues to see the crystallization of a new normal where capital is concentrated into fewer, larger deals. At the same time, the improved access to the IPO market—particularly for enterprise tech companies—has been a welcome trend. The recently wider window of opportunity in the IPO market is certainly a positive development after several lackluster quarters in 2016 and early 2017, and many industry professionals have an optimistic outlook, although the longevity and level of openness remain to be seen.

2Q 2018 was the fifth consecutive quarter with 10+ venture-backed IPOs, which is good news despite not having reached the full potential predicted for well over a year. The strength of the venture-backed IPO market during this moderately successful run has been primarily driven by biotech companies, which continue to account for the majority of venture-backed IPOs. In comparison, the tech IPO market has remained relatively subdued, although enterprise tech IPOs have been strong in 2018 and have come to overshadow consumer tech IPOs in both number and post-IPO valuations.

The rising success of enterprise tech IPOs has fueled public market optimism, but masks the longer-term issue of fewer public companies in the US. Today, the US has about half the number of total listed companies compared to 20 years ago, despite GDP more than doubling over that time. This major reduction in both IPOs and the number of public companies in the US is now coinciding with highly-valued venture-backed companies, i.e. unicorns, staying private longer. These trends bring to light two concerns: 1) the long-term health of the US public markets, and 2) public market investors losing out on investment gains during the high-growth phase when companies are still private.

The decline in venture-backed IPOs and in the number of public companies in general can largely be traced to three major trends that have appeared since around 2000: 1) the increase in costs and complexity of being a public company; 2) the collapse of research coverage and liquidity for small capitalization companies; and 3) the market focus on short-termism that harms innovative companies with long-term time horizon projects.

To address these complex issues, NVCA and the venture industry remain engaged with policymakers and regulators, and together with the Chamber of Commerce and other organizations last April, released the report titled "Expanding the On-Ramp: Recommendations to Help More Companies Go and Stay Public." The report provides a blueprint for policymakers to address the challenges to both launching IPOs and remaining a public company, as well as policy recommendations for enhancements to the reforms put in place by the 2012 JOBS Act. Several of these proposals have already been passed out of the House Financial Services Committee.

While the short-term outlook remains positive for the IPO market, M&As, which have typically been the dominant liquidity path for venture-backed companies, have had a slow year through the first half. Some venture investors, however, anticipate seeing an acceleration of M&A activity in tandem with a more active IPO window.

Though the federal tax reform bill passed in late 2017 preserved key industry priorities and avoided other tax increase proposals, VCs in California have since been faced with a proposal to impose an additional 17% surtax on carried interest, which could do significant damage to the dominant hub of the world's entrepreneurial ecosystem.

Venture firms, NVCA and other groups jumped into a state advocacy campaign and fought against this surtax, including sending a VC sign-on letter with over 178 signatories opposing the proposed state legislation. While many states across the US and countries around the world try to emulate California's dominance in high-growth startup activity, if this surtax is put in place, the impact on the entrepreneurial ecosystem would be extremely disruptive to the California entrepreneurial economy. While the issue's momentum has been blunted in 2018, it will be back in 2019.

Looking ahead, two other public policy issues that could have a significant impact on VCs and startups are: 1) immigration, specifically the Department of Homeland Security's delay and intention to rescind the International Entrepreneur Rule (IER); and 2) the ongoing movement in Washington to scrutinize foreign investment into the US—particularly from China. In late June, NVCA and the venture community's defense of the IER continued through the filing of a comment letter and highlighting the impact that immigrant entrepreneurs and the companies they found have had on the US economy and innovation. Related to foreign investment, the proposed Foreign Investment Review Risk Modernization Act (FIRRMA) threatened to increase oversight over foreign LPs and co-investors by the Committee on Foreign Investment in the US. As FIRRMA was considered on Capitol Hill, NVCA improved the legislation through its advocacy efforts. The bill is highly likely to become law this year, and NVCA will continue to engage on this topic during the rulemaking process.

Setting aside public policy curveballs, the resilience of the venture ecosystem and the drive toward innovation and investment returns forges on. Total capital invested into high-growth startups and total capital raised by venture funds show no signs of slowing down in 2H 2018, with full-year capital invested on track to reach another record high and capital raised on track to hit at least $30 billion for the fifth consecutive year.

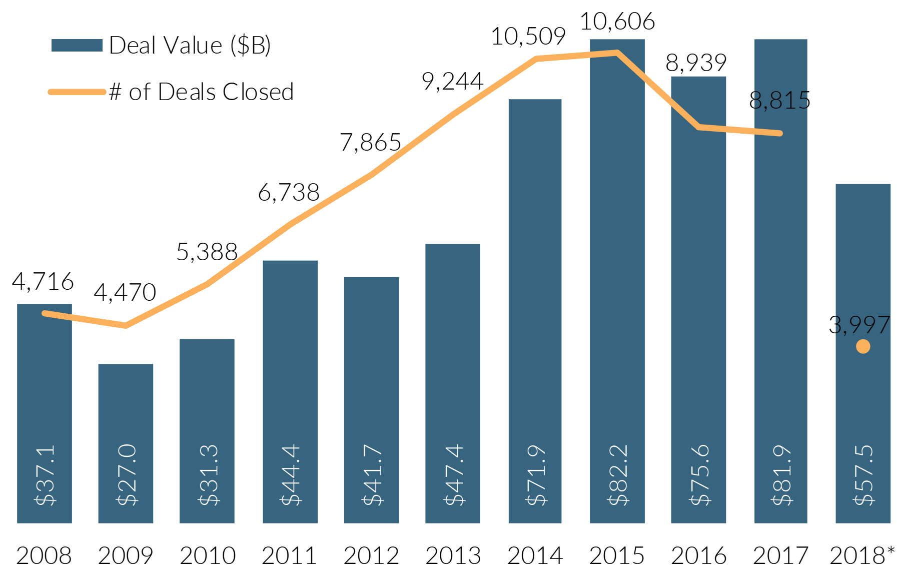
Overview

For an industry that has been characterized by capital availability over recent years, the first half of 2018 has only exacerbated feelings of excess with more capital invested in a six-month timeframe than any time in recent memory. Through 2Q, $57.5 billion has been invested in US VC-backed companies, exceeding the full-year total for six of the past 10 years. Beyond basic measures of VC investment, 1H has also seen 94 financings completed of at least $100 million, 42 unicorn financings—including seeing Bird reach unicorn status in just 12 months—and the first close of the largest US VC fund ever. To say capital availability is high would be putting the true state of the US VC industry lightly.

US VC deals have continued to grow in size, and not only at the top end of the market. Angel & seed deals this year have come in at a median size of $830,000 and $2.1 million, respectively, each a new decade-high figure for the time being. Together, those deals have come along with a median valuation of $7 million, which sits at roughly double the median valuation of the stage from 2012, and is $1 million higher than 2017's figure. The upward shift in deal sizes has now persisted for almost the past decade across all stages. And while mega-deals continue to add an increasing bulk to overall figures, smaller deal size buckets are also gaining steam. For example, early-stage deals between $10 million and $25 million are on pace to surpass $10 billion in aggregate deal value this year, the first time we have seen that happen. The reasons for this growth are plentiful, but the number of

2018 deal value has surpassed six of past 10 years

US VC activity



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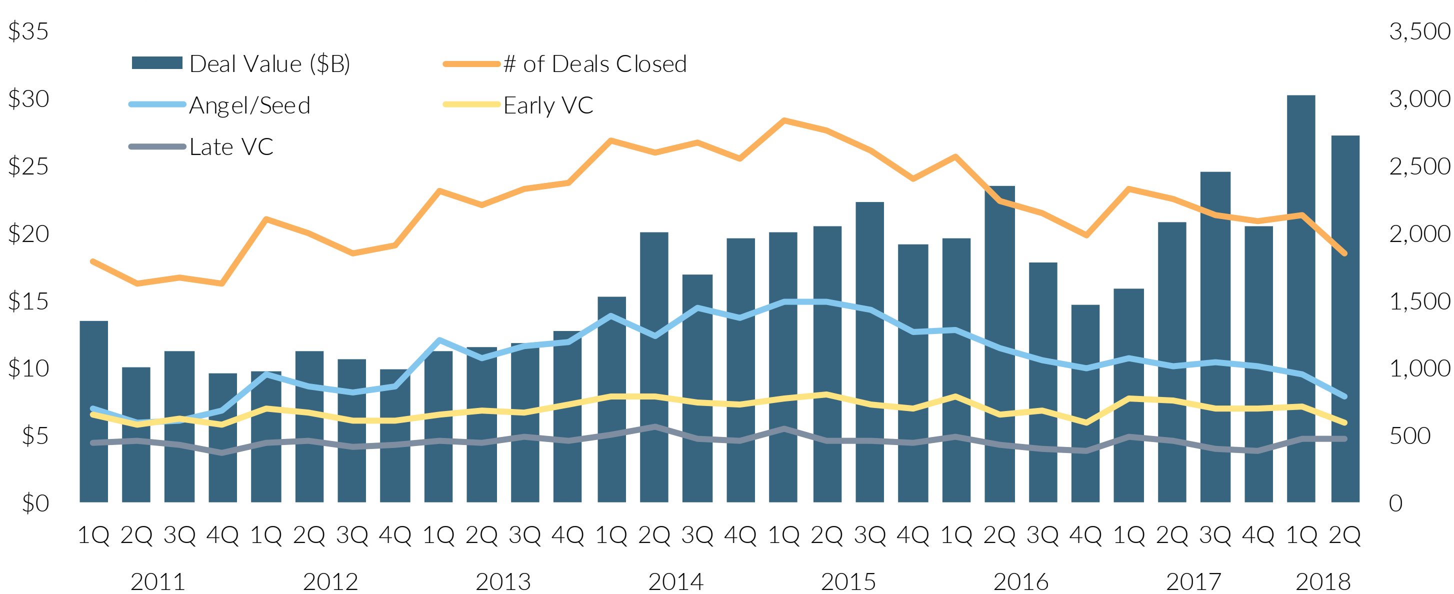
Past two quarters result in highest quarterly deal values in past decade

US VC activity



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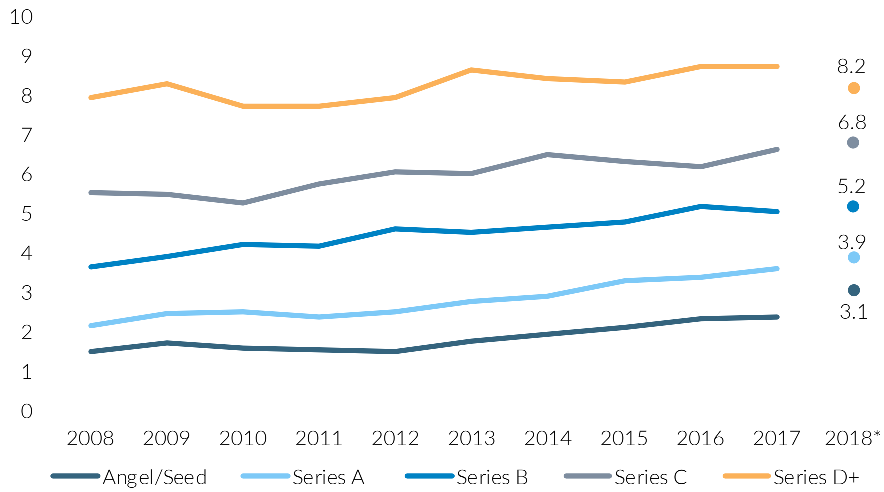
investors active within the US VC industry continues to be a major reason. That 2018 is pacing to see more than 300 new funds close this year only adds to the growing opportunities for founders to raise.

Nontraditional investors continue to move into the market as well, with 2018 currently pacing to be the fifth consecutive year that more than 1,500 deals were completed with participation from these investors—PE firms alone have been involved in 368 VC deals already. These deals have combined for over $36 billion of invested capital, roughly 63% of the total capital invested in 1H. Nontraditional investors are both a partial cause—VC funds themselves have had more dry powder with which to work over the past few years than ever before—and a result of companies staying private longer. The likelihood is high that these firms continue to stay active within VC, given that companies continue to stay private longer while also needing capital infusions to continue growth. The average time to exit in 2018 is 6.1 years from the first VC financing the company has raised. This figure has risen nearly each year over the past decade, and, coupled with the high capital availability from VCs, is a reason for the high increase in unicorns and other high valuations.

Unicorns themselves have had an active year in both dealmaking and exits. 42 companies have closed deals with a valuation of at least $1 billion, pacing the year to reach the previous high from 2015. Bird, an electric scooter transportation company, became the fastest company to reach the coveted unicorn valuation after it raised its fourth round in less than 12 months—the company has since raised another round at a valuation of $2 billion. As the number of unicorns continues to grow, so do the paper gains and the unrealized value still illiquid from investors and LPs. For unicorn rounds raised in 2018, the average time between the new funding and the company's first VC round has stayed above six years, nearly as long as the average time to exit. Though six US unicorns have completed an exit this year, and several others are waiting in IPO registration, the extended risk profiles will likely claim several victims. Domo, once valued at $2.3 billion, has seen its value

Companies aren't entering VC lifecycle until later

Median age (years) of companies by series



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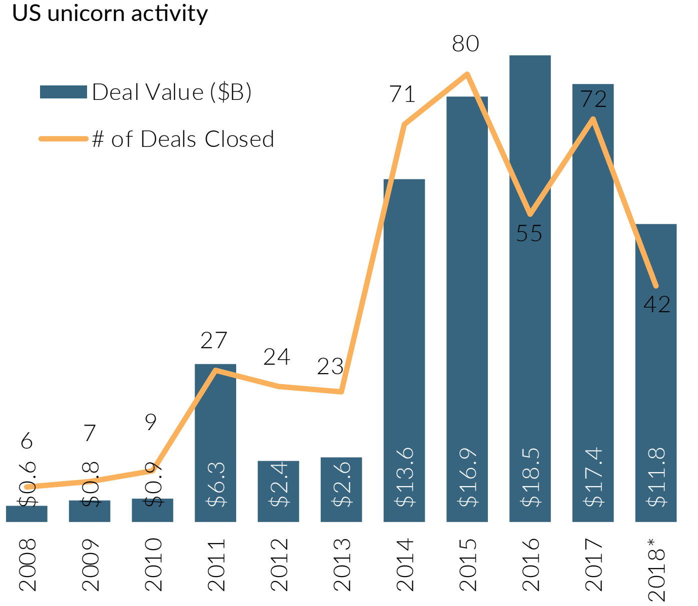
Unicorns set for record year

US unicorn activity



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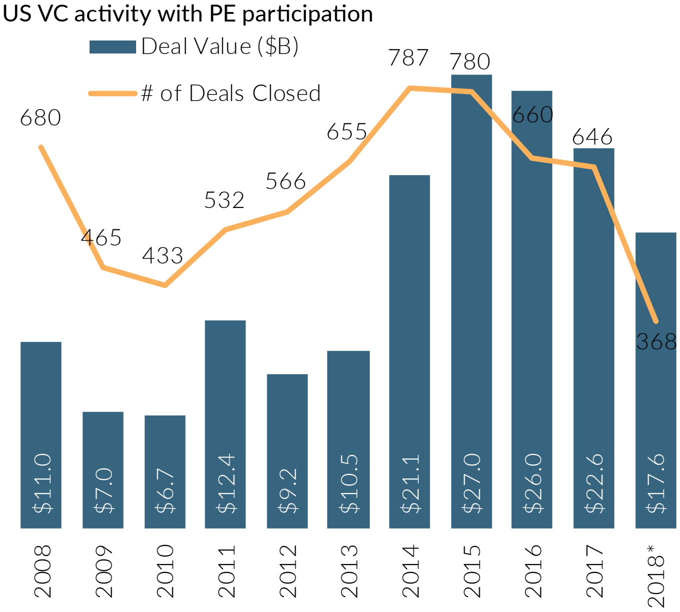
PE investors continue to join large rounds

US VC activity with PE participation



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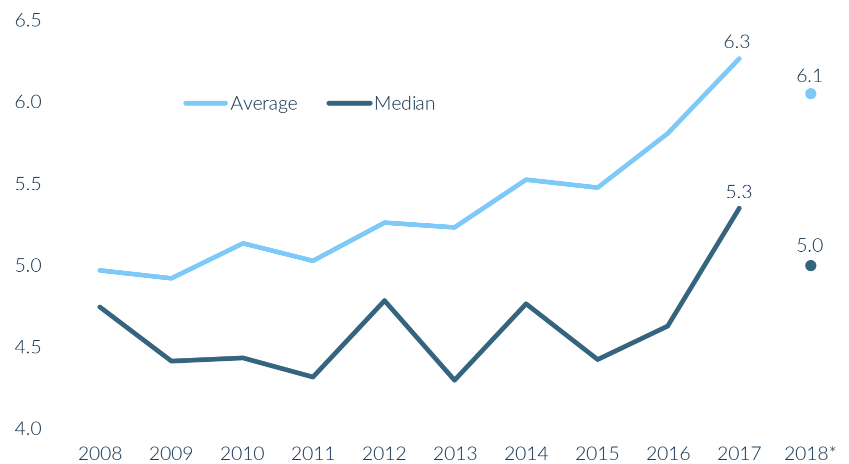
drop below $600 million after completing its IPO. This is something that we have expected to happen, especially as unicorns have continued to raise further rounds and grow in the private market.

Though exits overall have stayed low relative to the 2014 and 2015 highs, more exits have been completed this year than had been at the same time period last year. The median exit size has reached $105 million, and the average has surpassed $225 million, each representing the highest exit value figure we have tracked. The average post-valuation of 2018 exits sits at $581 million after 1H, more than double the value seen in full-year 2016, and more than $150 million higher than even 2017's average value. Despite a lower number of completed exits than has been seen in the past, it's undeniable that capital is being returned to investors, even if it may be taking longer.

The fundraising environment, which has stayed hot, may indicate that exit timelines will continue to lengthen and companies will continue growth in the private market. Eight funds have been closed on at least $500 million, including two larger than $1.3 billion. But still in the market is Sequoia's record-setting fund that has targeted a reported $8 billion in size—the firm has held a first close on $6 billion. The global fund is seemingly the first domino to fall as a result of SoftBank's activity, offering some companies an alternative investor when seeking massive late-stage financings, especially if the company isn't looking to raise the minimum $100 million the Vision Fund seeks to invest. Sequoia's fund is undoubtedly an outlier within the industry, but the median fund size continues to creep upward, hitting $65 million through 2Q. Though larger funds don't necessarily need a longer lifecycle, the flexibility that is available because of the extra capital allows these investors to stay with private companies and invest further into the lifecycle of winners. With the year pacing to see 320 new US VC funds entering the market this year, we don't believe that current trends will subside in the near term. This year will likely become the fifth straight year to record more than $30 billion in new commitments, adding dry powder to a market already awash with capital.

Exit times lower slightly in 2018

Median and average time (years) to exit



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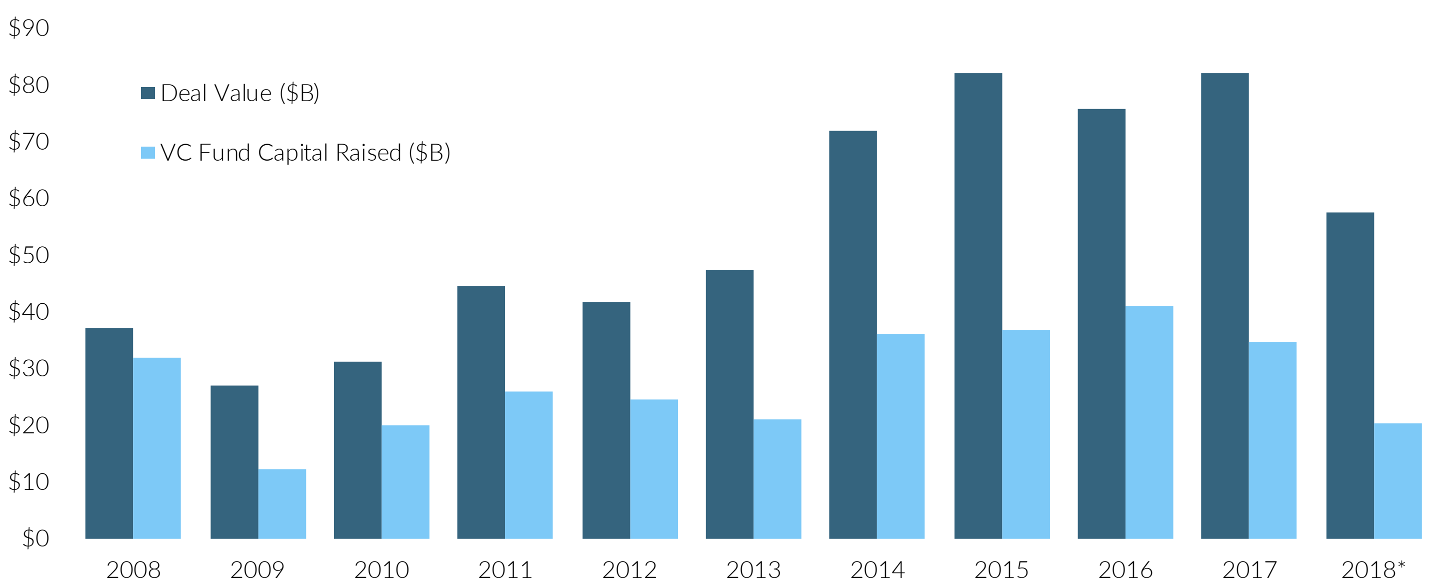
VC capital raised has tracked well with overall deal value

Capital raised vs. capital invested ($B)



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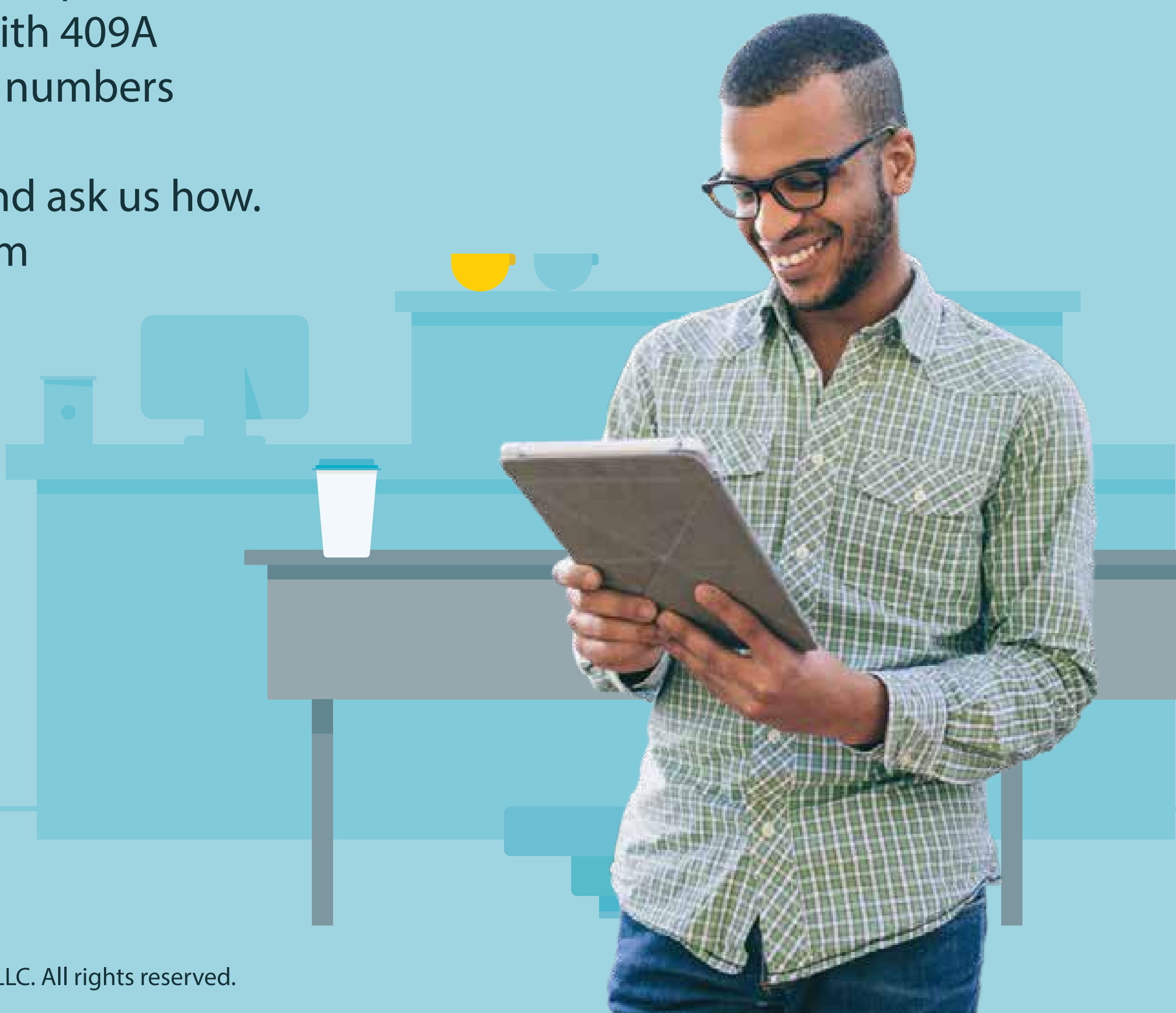

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Angel & seed

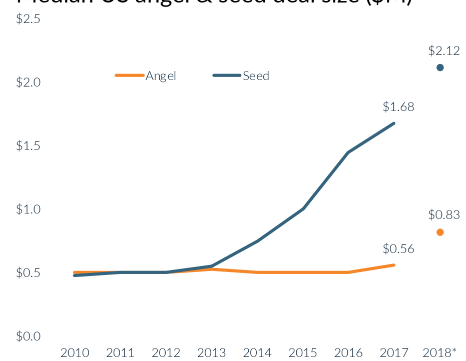
Despite predictions of a continuing decline, the angel & seed market has remained exceptionally steady in the first half of 2018, especially in terms of capital investment. While still on a downward trajectory, deal counts are falling at a slower rate than in 2015 and 2016. Capital invested has been more resilient, with angel & seed activity closely matching the broader VC market's trend of fewer but larger deals. In 2Q 2018, capital invested came in only slightly below the previous quarter with $1.8 billion invested across 792 deals.

While the angel & seed deal count has declined over the last three years, it is key to view the data over a longer time horizon. For instance, even after falling two consecutive years from a peak in 2015, the current average quarterly investment level is still four times higher than the most active quarter in 2008. The initial run-up in angel & seed activity that began in the early 2010s came on the back of a number of sizable VC exits (the largest of which was Facebook), which minted a large group of newly wealthy individuals who wanted to invest in the next generation of private technology firms. As competition increased at the earliest stages of investment, many of these entrepreneurs and high-net-worth individuals have been spurred to launch their own VC firm or join angel groups to access larger deals.

This increasing institutionalization of the angel & seed space is a huge driver of the shift we're seeing in the ecosystem. Deal sizes are expanding to unforeseen levels, but this has coincided with complementary step-ups in the median percentage acquired, which has crept up to 26.7% from 20% just five years ago. This shift has occurred as investors need to reconcile the need to offer more capital to nascent startups while reconciling the economics and overall risk/return characteristics of their fund, which calls for taking an increased percentage of ownership. Investors have also responded by becoming more selective in the companies they back, requiring companies to be more mature than they have been historically. Especially with the high failure rates in the initial stages of a company's life, investing in fewer companies goes against the traditional seed strategy and creates more concentration risk in the portfolio, necessitating increased scrutiny of investments.

Deal sizes continue to grow

Median US angel & seed deal size ($M)



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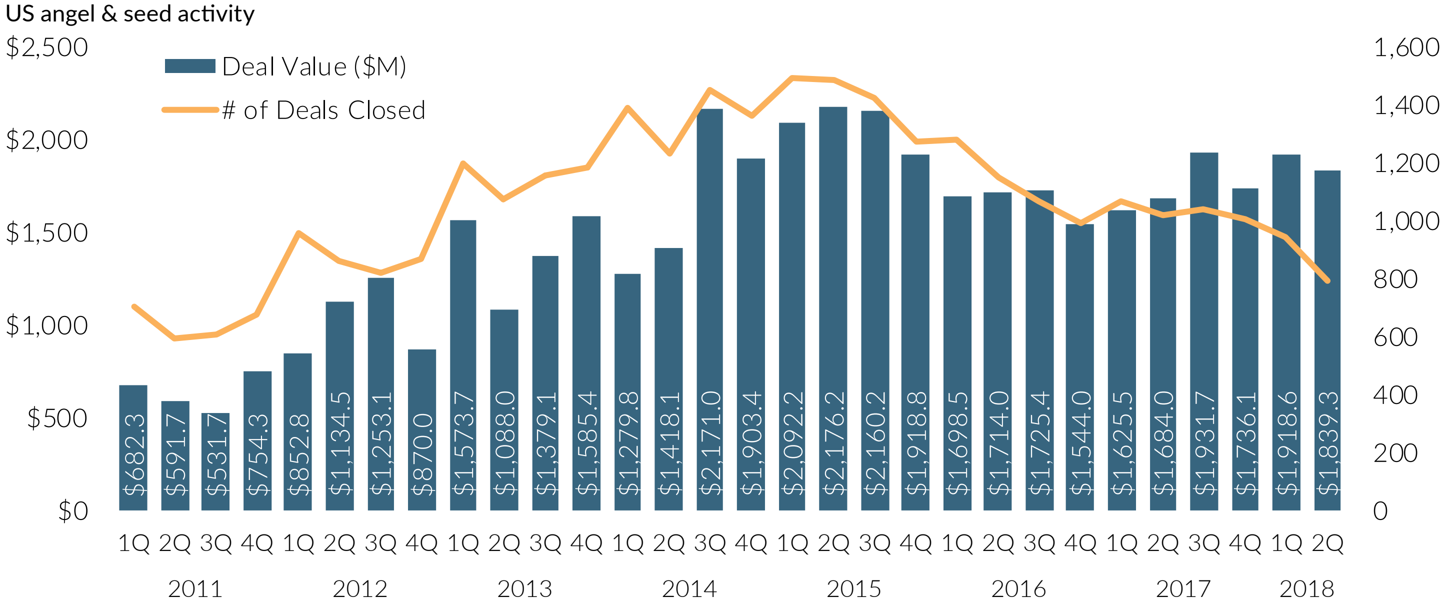
Angel & seed deal value has slowly crept back toward highs of 2015

US angel & seed activity



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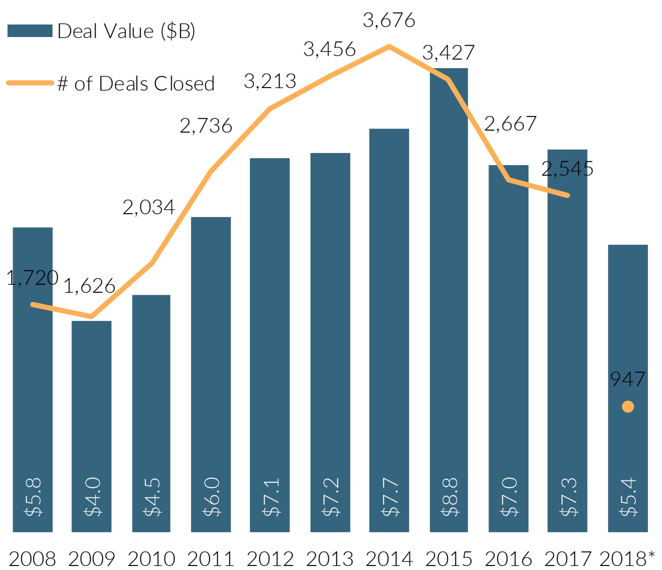
First financings

1H pacing year for new record

US first financing VC activity



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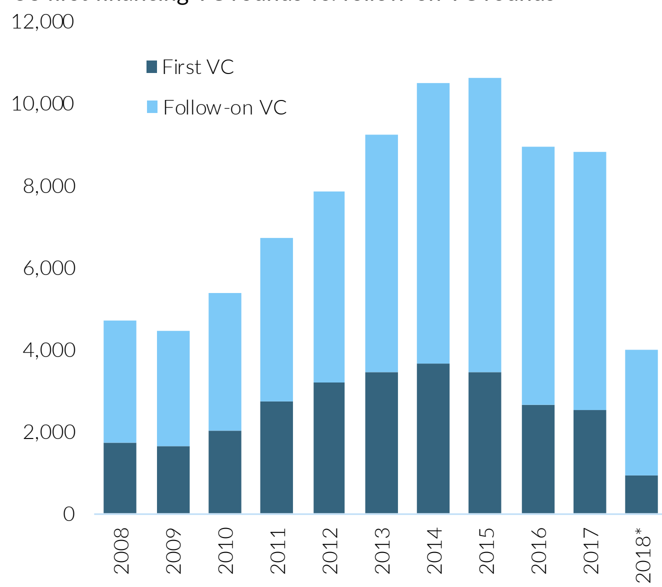
First-time deals pacing for down year

US first-financing VC rounds vs. follow-on VC rounds



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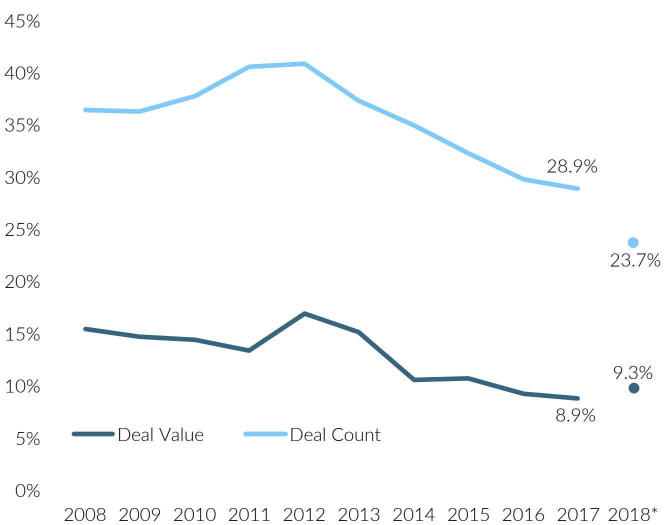
Slight uptick in first financing deal value

US first-financing as % of total US VC activity



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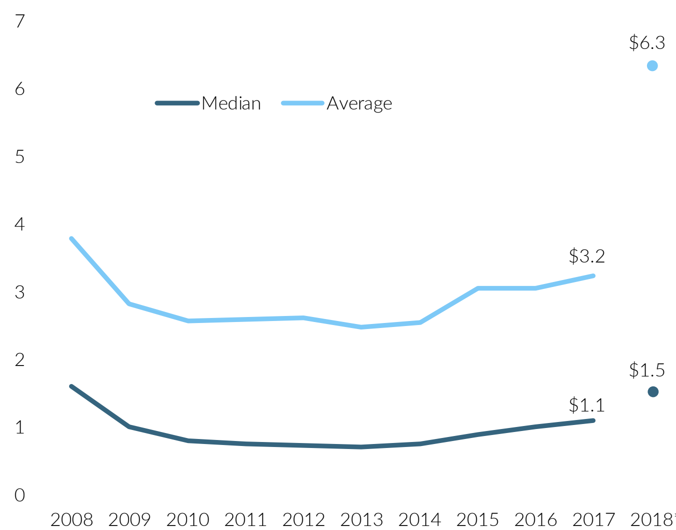
First financings sizes on upward swing

Median and average US VC first financing size ($M)



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Early-stage VC

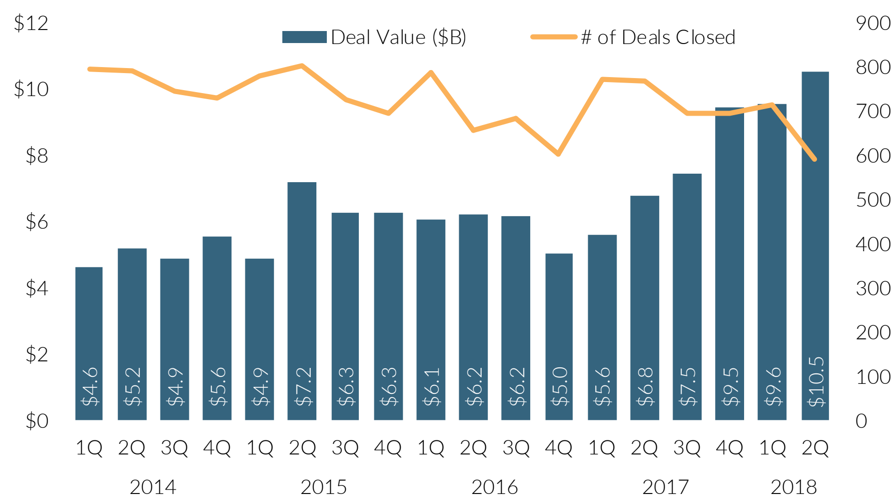
Early-stage investing continues to climb higher, recording a seventh straight quarterly increase in capital invested. In the second quarter, we recorded $11.5 billion invested into early-stage companies with the average deal size growing to a decade high of $18 million. Outlier deals drove the investment total even higher, as the capital availability for giant funding rounds moves into earlier stages of the market. This is manifested through 24 $100+ million funding rounds, including the $100 million Series A raised by machine-learning drug discovery company Insitro, led by Foresite Capital Management, Andreessen Horowitz and ARCH Venture Partners.

While these deals are obviously not representative of the entire early-stage market, they are indicative of the massive amount of capital being put to work in the asset class regardless of stage. Indeed, deals over $25 million now make up more than 50% of 2018 early-stage deal value. Furthermore, the median amount of capital raised by companies at the Series A and B level has shown a steady uptrend over the past decade. This has pushed the median at Series A to $11.3 million and Series B to $29.3 million, representing a greater than twofold increase from 10 years ago, further illustrating the extreme shifts even at the early stage.

At the sector level, fintech has received considerable attention from early-stage investors, representing 11% of deal count in 2Q 2018. Startups that utilize blockchain technology to innovate on financial processes have become more prevalent over the past quarter, with three of the five largest fintech rounds raised by companies boasting a blockchain focus. This list includes enterprise blockchain provider R3, settlement platform Paxos and home equity lender Figure. Financial services is one of the more clear applications for blockchain technology, as the transactional aspect meshes with blockchain's primary benefits such as immutability and security.

As large investors move in, early-stage capital grows

US early-stage VC activity



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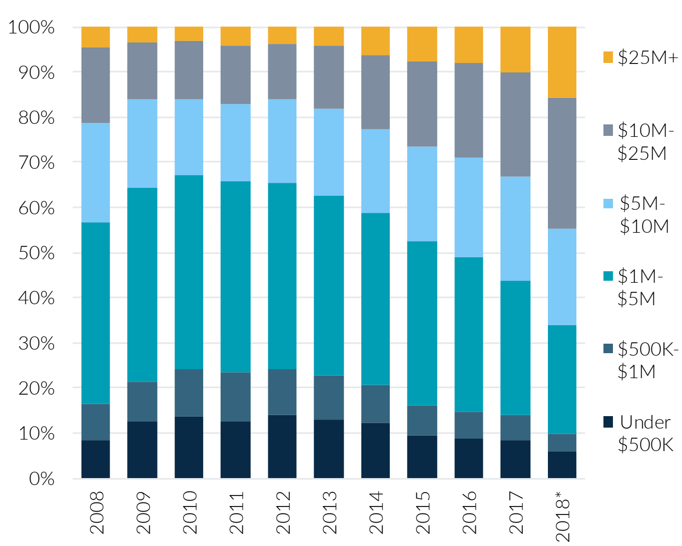
Companies raising more early

US early-stage activity (#) by size



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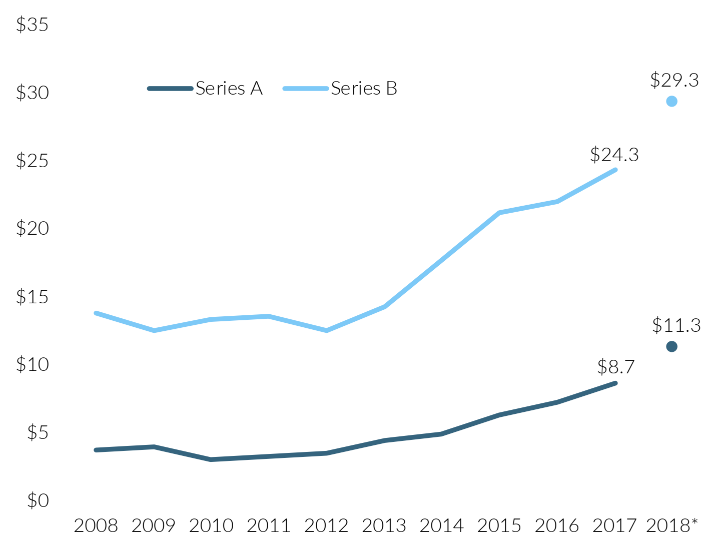
Deal sizes growing rapidly

Median amount raised ($M) at time of funding by series



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Late-stage VC

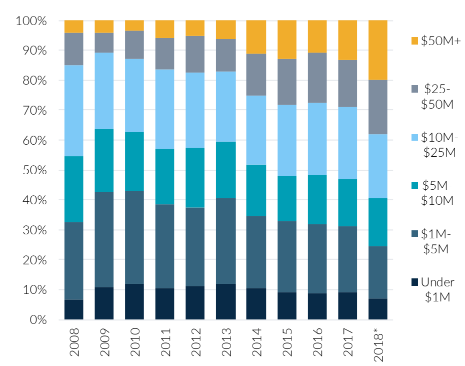
Investment into the late stage continues at a strong clip, as the definition of what constitutes as the "late stage" is stretched by a steady feed of new unicorns and aging decacorns that are delaying liquidity events. This past quarter, $15 billion was invested into 475 late-stage deals. With essentially no change in deal count from the first quarter, this represents a remarkably steady volume of deals at the late stage, as investors sustain their demand for developed businesses in the private markets.

This demand was evident in valuations at the late stage in 2Q 2018, which extended to $278 million—24% higher than 2017's already lofty valuations. Selling smaller ownership stakes for larger sums of capital is common as a company gains traction, but this has become a necessity to retain the performance incentive for founders and vested employees of VC-backed companies. As the age of companies seeking late-stage rounds has extended to unprecedented levels, though, a knock-on effect of raising more venture rounds is a lack of room on the cap table. With each subsequent round, the company must weigh the tradeoffs of diluting the employees' and founder's ownership stakes against fulfilling the company's increasing appetite for cash to sustain growth. Another impetus for raising additional rounds is that holding large current cash balances or having the ability to raise huge sums has become a key competitive advantage in many business models. For instance, Airbnb's extensive fundraising history and ability to raise billions of dollars represent huge barriers to entry for other firms in the short-term hospitality rental market.

On a similar note, secondary selling into late-stage financings has become more common as a means of providing liquidity to earlier investors or employees while making space on the cap table. The most extreme example was the $8 billion secondary sale of Uber in January, but these deals have been occurring with more frequency over the last few years. This is a logical progression as companies raise increasingly more capital and retain private status longer. It allows early investors to achieve some liquidity and close out their funds without forcing an exit, plus employees can realize some gains and take some risk off the table. Since the drivers of the "private for longer" trend don't seem to be going anywhere, we expect secondary sales to become an increasingly integral part of the VC environment.

60% of deals over $10M

US late-stage activity (#) by size



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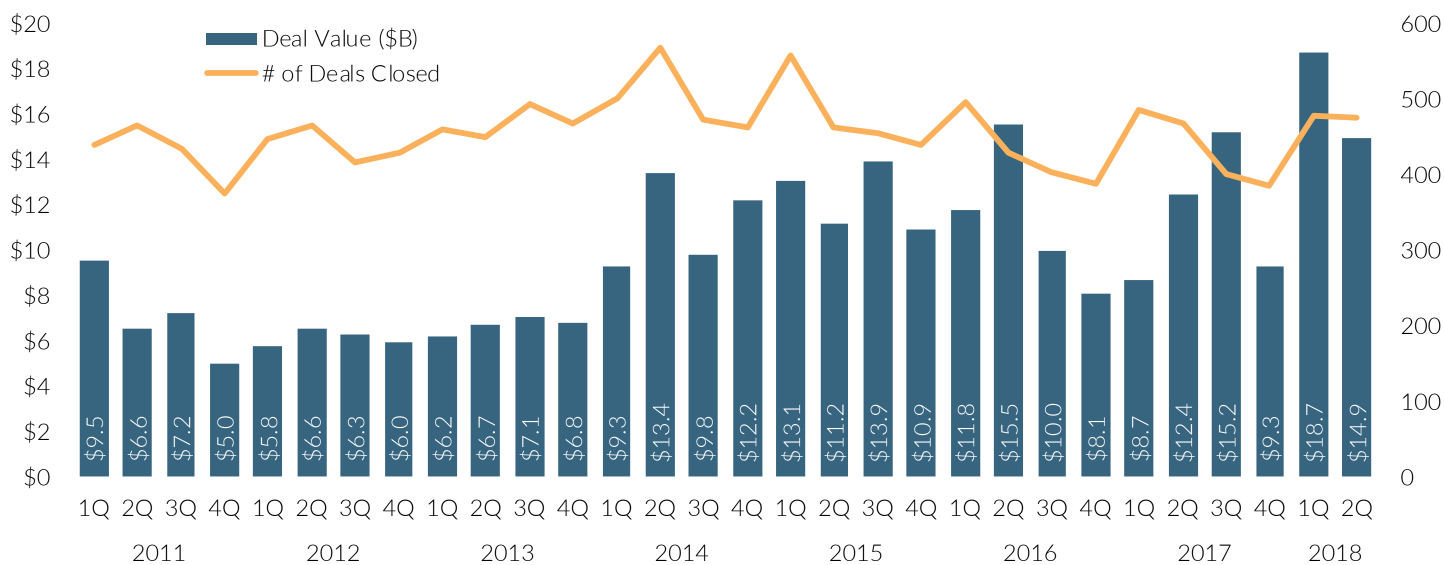
Quarterly late-stage deal values rising

US late-stage activity



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Adapting to capital overload: Investors chart new paths

Steven Pipp, CFA, Research Manager, Silicon Valley Bank

Welcome to the era of mega-funds. Triggering a capital arms race never before seen, nontraditional investors are pushing private capital in the innovation economy to dizzying levels. Is this good for the VC ecosystem? It depends on where you operate in the innovation landscape.

We are beginning to see indications of how these super-sized funds, with capital sourced from across the globe, are impacting companies—from the seed and early stages to the late stage, and even public assets.

Private markets dominate led by SoftBank

Mega-rounds of $100 million+—aka PIPOs—have outpaced US tech IPOs in every quarter over the past four years. Under the surface, the source of those private investments has changed dramatically. Mutual funds and hedge funds have scaled back their fervor since 2013–2015, and PE seemingly awaits more favorable valuations. Still, in 1H 2018, we saw 93 PIPOs—nearly matching previous annual totals (see chart).

This is partly due to SoftBank's insatiable appetite for innovative tech assets, which appears to only be growing. In 1H 2018, SoftBank led five $100 million+ rounds in the US. And in May, Masayoshi Son announced that he is planning a second mega-fund in the near future.

Even as more companies seek IPOs in 2018, it appears the PIPO will continue to dominate, allowing today's best performers to stay private much longer than their predecessors. With this pattern established, how are investors reacting?

Extended horizons at the early stage

Venture firms are not ceding their territory. In fact, the immense global investor interest in innovation has allowed the upper echelon of VCs to restock their war chests with significant capital to ensure continued participation, even as their portfolio companies raise multiple late-stage rounds. Such abundant capital will result in upward pricing pressure across the ecosystem, impacting classic VC models. Elevated valuations make it harder for investors to obtain the returns expected from an alternative asset class. Indeed, the behemoths have created a bifurcated market, with the perceived "better" companies getting significant attention and the rest struggling to raise meaningful capital. This environment is leading some market observers to speculate that the "growth at all cost" mantra of 2014–2015 could return if top-tier companies accept bigger cash infusions than may be necessary.

Competition across the late stage

It's likely competition for late-stage deals will intensify. The size and scale of these funds often limit their ability to invest in early-stage companies, which could drive even more capital to chase existing or near-unicorns.

The money is flowing from many sources: Venture-backed companies raised 2.5x the amount that their venture firm counterparts received in commitments in 2017. The threat of disruption and mounting piles of cash are driving corporate venture activity. Despite rate hikes, mutual fund and hedge fund managers are reaching for growth once again. And now even sovereign wealth funds, some of which are doing direct investments, see the potential for extended time horizon.

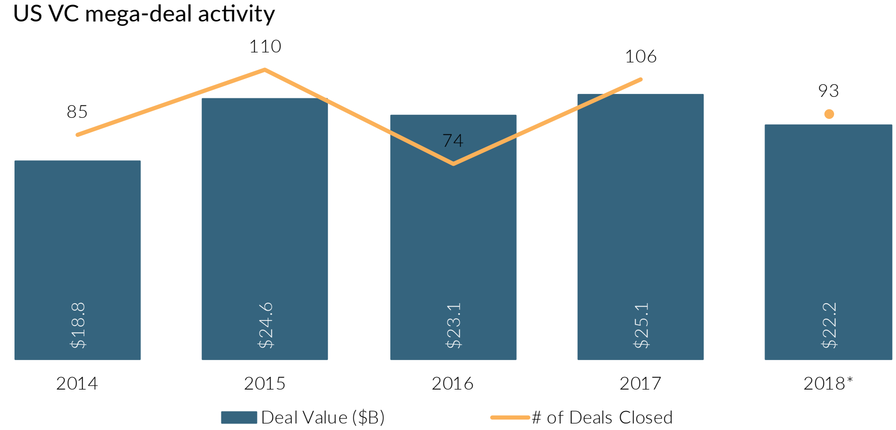
Impact on the public markets

These mega-rounds often arrive at the stage when a company would consider an IPO to raise cash—but now they can delay it. Many of these mega-rounds provide secondary liquidity in addition to primary growth capital. The companies that are eyeing the public markets in most cases are more mature. Public asset managers should even be mindful of an adverse selection for companies choosing public capital in an environment of abundant private cash.

In the long run, it is challenging for public investors when private markets capture the majority of company value. Between 2013 and 2015, we saw funds reach for growth with mixed results and longer-than-anticipated holding periods. Perhaps this time we'll see patience on the part of these investors.

We live in interesting times, and it is still unclear how significantly the mega-funds will impact traditional investment patterns. Investors who have been investing in disruption may be disrupted themselves.

US VC mega-deal activity



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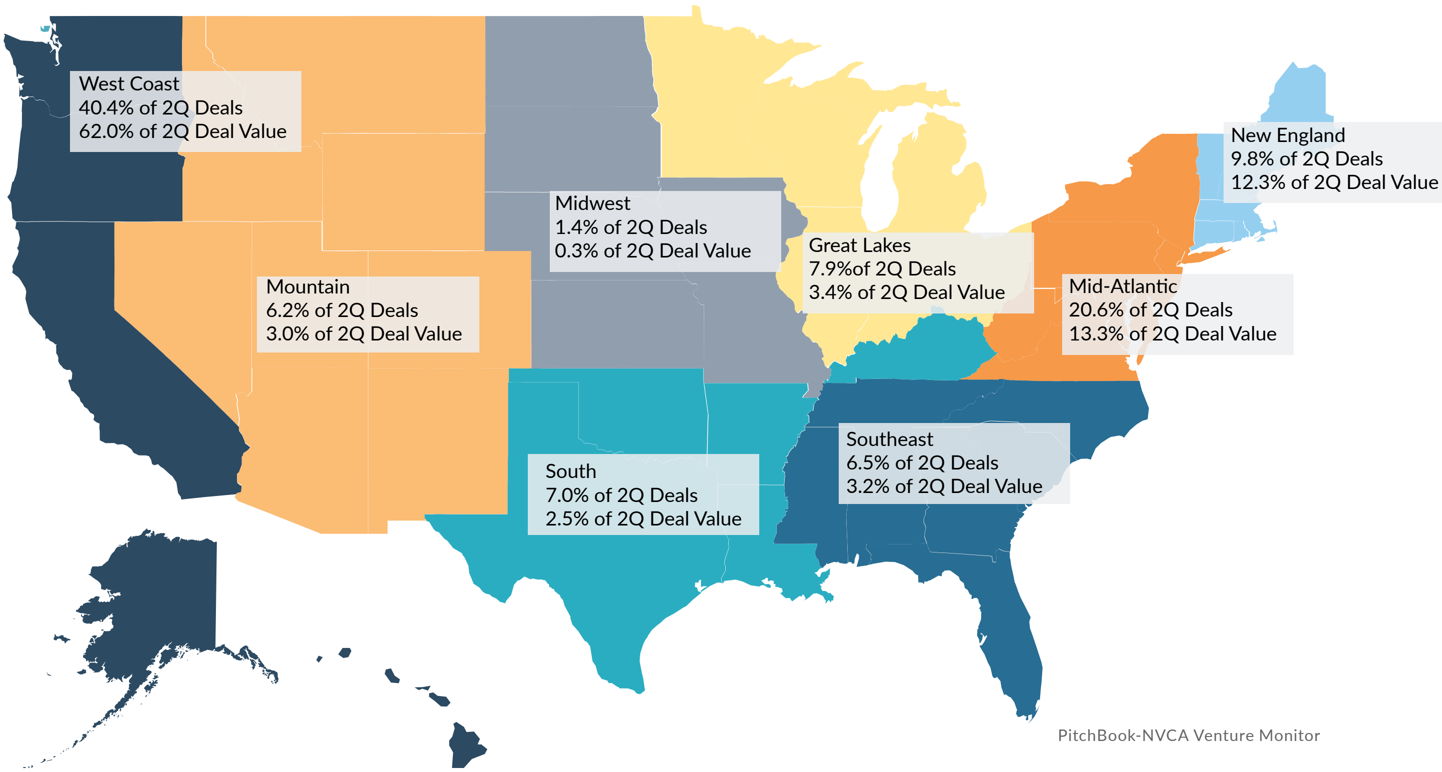
Activity by region

Deal value remains concentrated on coasts

2Q 2018 US VC deal activity by region



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West Coast nears $17B in 2Q value

2Q US VC deal activity by region

Region	Deal Count	Deal Value ($M)
Great Lakes	146	918.2
Mid-Atlantic	383	3,617.5
Midwest	26	72.7
Mountain	116	807.5
New England	182	3,361.3
South	130	694.3
Southeast	121	886.5
West Coast	751	16,912.8

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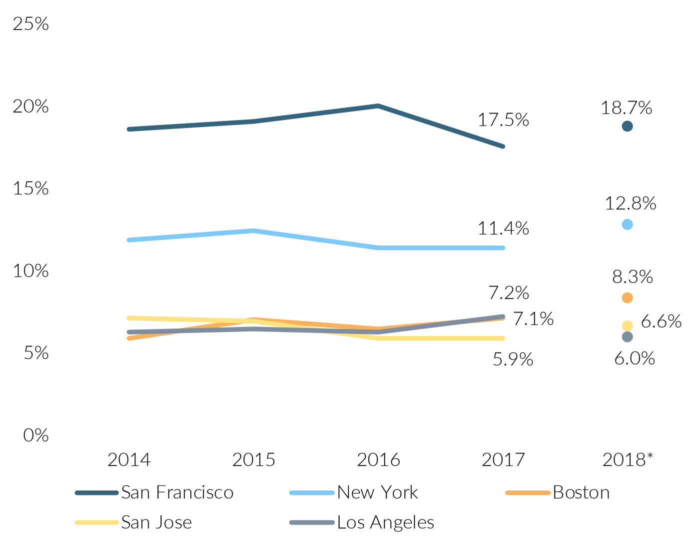
New York sees growing share of deals

Percentage of total US VC deal count for select MSAs



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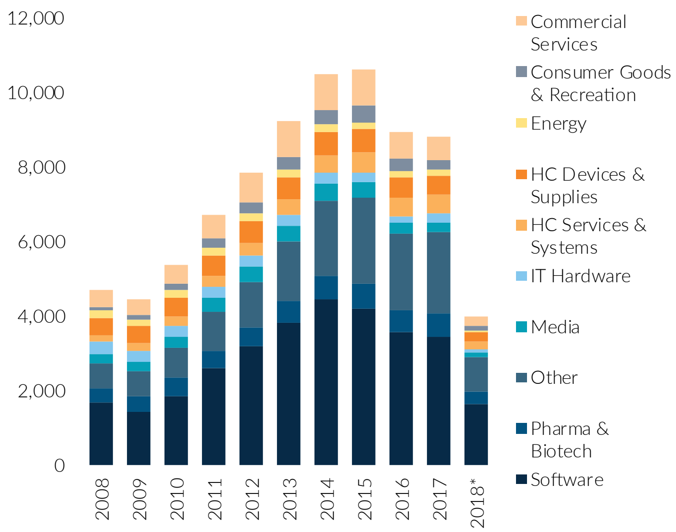
Activity by sector

Software has dominated deal count

US VC activity (#) by sector



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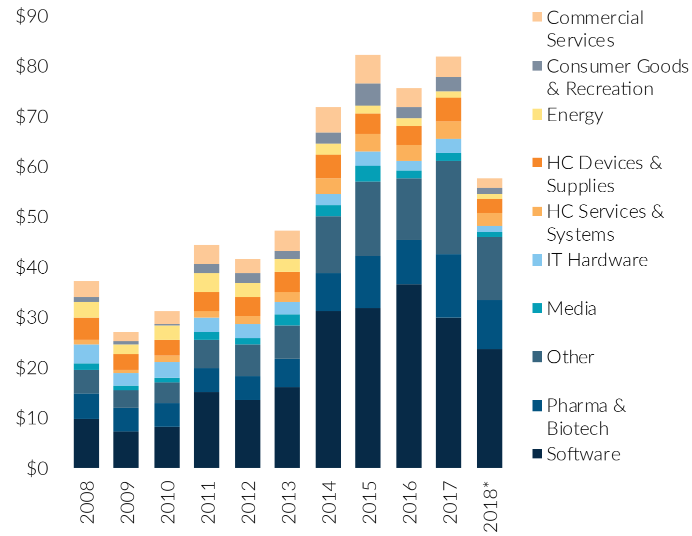
Pharma & biotech seeing growth in value

US VC activity ($B) by sector



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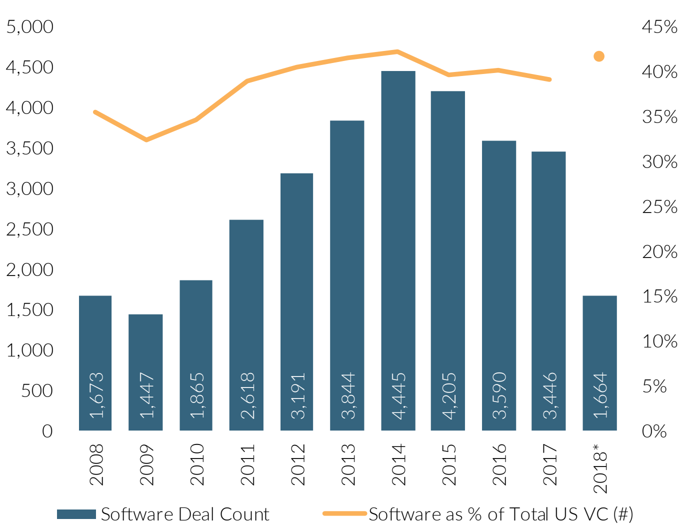
Software mirrors overall VC trends

Software as % of total VC (#)



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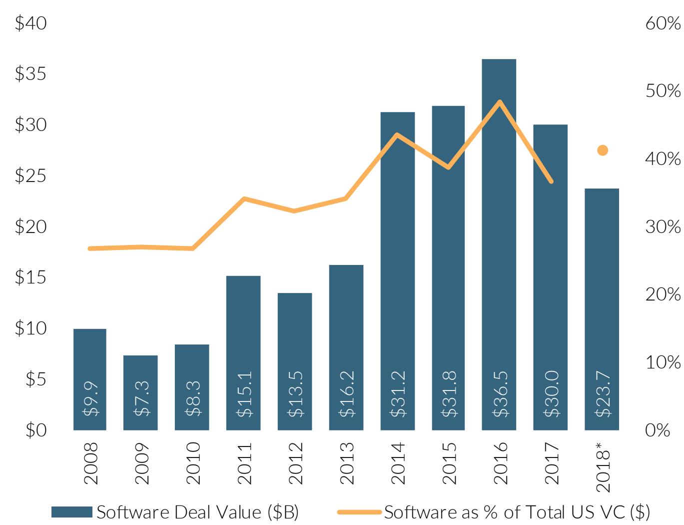
Over 40% of deal value goes to software

Software as % of total VC ($)



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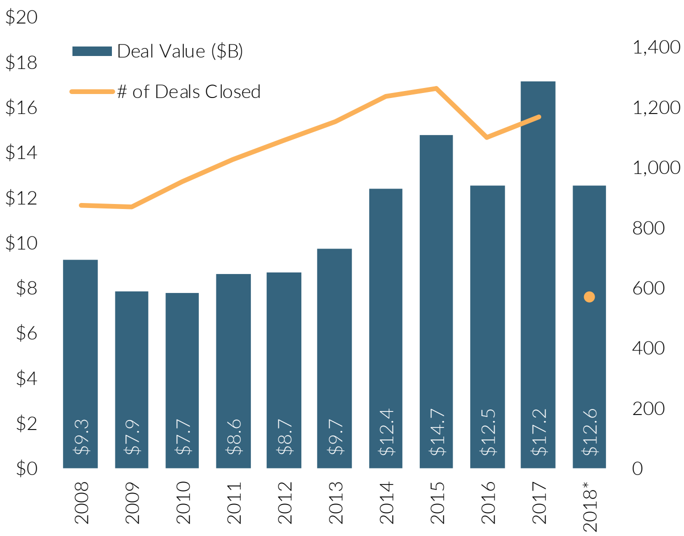
Life sciences

Activity in life sciences sees strong growth

US VC activity in life sciences



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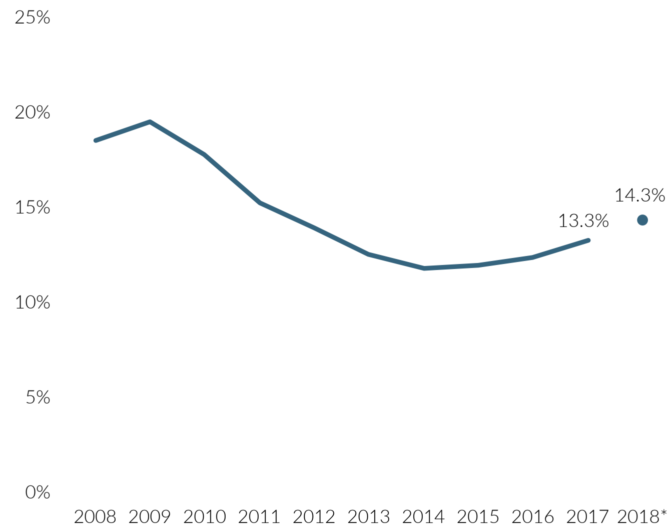
Sector capturing larger share of deals

US VC activity (#) in life sciences as percent of total VC



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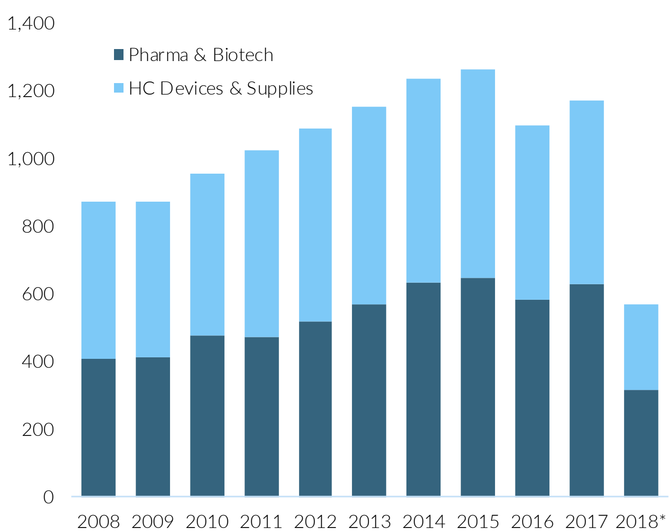
Deal count split between the two sectors

US VC activity in life sciences (#) by sector



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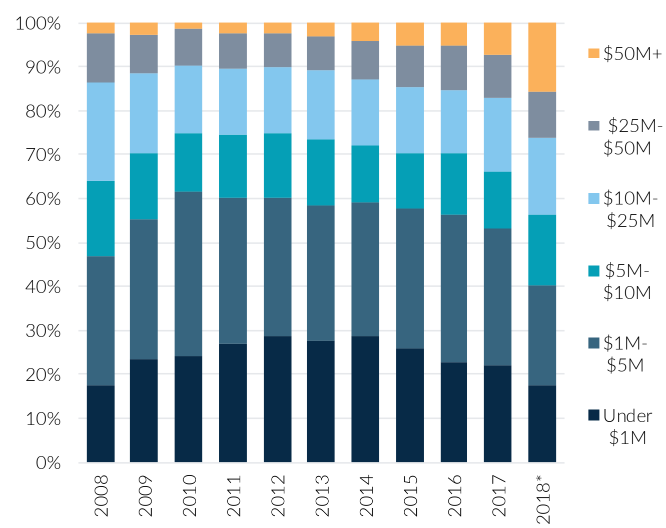
Following trend, deal sizes getting larger

US VC activity in life sciences (#) by size



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Research boom in life sciences benefiting patients and investors alike

Q&A with David M. Sabow, Group Head of Life Sciences, Client Funds and Bank Products, Silicon Valley Bank

The life sciences sector has grown immensely in the US, with deal value topping $17 billion during 2017, with more than $12.5 billion invested already this year (21.4% of total US VC deal value). Not only has this investment helped these companies reach private valuations never before seen in this industry, but research capabilities have been greatly increased. New technologies, especially those common among other VC-heavy industries (artificial intelligence, machine learning, etc.) are helping researchers and academics make ground-breaking discoveries at breakneck speed. In this edition, we talked to David M. Sabow, Group Head of Life Sciences, Client Funds and Bank Products at Silicon Valley Bank about how he sees investment in life sciences playing out, and what's next for the industry.

Life science investing is through the stratosphere. Why now?

We have the privilege of living through a renaissance in the life science sector—a time where the word "cure" will increasingly replace the word "treatment" in a number of indications. There is no single factor driving the current momentum, and what is often forgotten is that some of the most transformative innovations (whether CRISPR or CAR-T) leveraged decades of advances across the landscape and relied on largely uncelebrated research quietly conducted in both academia and industry. What is unique today is that we increasingly have new research tools and analytical capabilities, including the nascent entry of artificial intelligence (AI) and machine learning (ML) to help us understand the true biology behind disease. Sequencing has certainly played a big role, as the cost per gigabyte of data has plummeted over the past decade. But sequencing is not the whole story—it may tell us where to go, but other innovations are giving us something to do once we get there.

Clinical breakthroughs are benefiting patients and investors alike, leading to increased capital in the sector and more entrepreneurs willing to challenge the realm of the possible. The torrid pace of investing and company formation in 2017 resulted in $9.1 billion raised by venture capitalists and $17.3 billion in VC investment across the healthcare sector. Healthcare venture fundraising in 2018 is on pace to closely match 2017, and investments likely will surpass last year's total. This activity combined with a collaborative FDA environment (2017 marked a 21-year high for novel drug approvals at 46, and another 16 have won approval in the first half of 2018) is making for a very favorable climate for innovation and continuing to draw capital into the sector.

What is driving the wave of biopharma IPOs?

Beginning in 2014, we saw a pronounced increase in buy-side institutional appetite for life science companies in the public markets, with the number of venture-backed biopharma IPOs more than doubling. A number of life science and healthcare venture firms realized portfolio returns, helping establish the foundation for strong fundraising in the years that followed. Drawn to healthy returns, crossover investors (public investors investing in the last private round before an IPO) have played an increasingly dominant role in the public market story. Already, 30 biopharma IPOs have priced in the first half of 2018.

How long will it last?

Without question, the economy will have its ups and downs, IPO windows will open and close, and there will be no shortage of factors that could lead to exogenous shocks to the market. If you step back, though, you realize that the innovations taking place today go well beyond short-term markets; they are going to change how disease is treated for generations to come. In the history of humanity, we are the first generation to understand the structure of DNA. Just 15 years ago, we sequenced the genome; and just five years ago, we learned how to rewrite it. We are living through the first generation of gene/cell therapy drugs (Biogen's Spinraza, Sarepta's Exondys 51, Novartis' and Gilead's CAR-T therapies and Spark's Luxturna, to name a few). These new therapeutic platforms may bring with them a resilience that over the longer term will be less susceptible to yield curves and market volatility.

Give us a preview of the most exciting advancements across the sector.

Areas like AI and ML are early in their healthcare journey. Their promise of amplifying the crowd's wisdom will have profound applications in drug discovery, in delivery of care and eventually in creating a more sustainable health economic model.

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On the biopharma side, we will see off-the-shelf cell therapies replace the current autologous first generation CAR-T. We will also see new treatments in the incredibly difficult neurodegenerative space—expanding our understanding of these indications and using novel approaches that lead to synaptic regeneration. Profound advances in data analytics, biomarker discovery, remote patient monitoring, diagnostics for earlier intervention and the delivery of care are just a handful of the factors converging to drive the industry forward.

On the investing side, increasingly we will see novel corporate structures designed to build a portfolio of assets with low-correlation risk in early-stage drug development. With incredible advances in understanding the specific mechanisms behind disease, there is a higher probability of clinical success and by extension a more predictable return for investors. Imagine a time when each 401(k) had a portion allocated to early-stage drug development—that may be exactly where we are headed.

Which life science subsectors are getting a lot of interest, and which are underfunded?

Oncology is advancing faster than ever, driven by cellular therapies, immuno-oncology and a focus on the heterogeneity of disease, leading to more-effective personalized treatment. In 2016 and 2017, oncology received twice as much investment compared with the next closest indication. And this may not correct anytime soon, as these investors have been well-rewarded, with oncology providing a large share of life science big exits. A key opportunity for the industry is to apply the lessons and advances of the oncology revolution to other challenging areas such as neurodegenerative diseases.

Diagnostics and tools companies continue to see a flood of capital, notably from technology investors, with a plethora of private $100 million+ equity rounds since 2015. There are some exciting advancements, including new tools for synthetic biology, AI and ML for diagnostics and clinical decision-making and, of course, the promise of liquid biopsy for earlier intervention and better monitoring.

The device sector has been nearly absent from the IPO bonanza and is receiving significantly less than half of the venture investment we are seeing in biopharma. Despite this, the sector has experienced a stable M&A market over the past several years. Truly innovative device companies (De Novo 510(k) and premarket approval pathways) have realized upfront M&A returns on par with biopharma and three neuro-focused companies went public in the first half of 2018. Longer term, the device subsector will benefit from the convergence of technology, leveraging microelectronics, digital health platforms and patient engagement tools to eliminate the use of drugs in a number of chronic conditions.

SVB co-hosts a China healthcare summit each September in Shanghai. Tell us how the life science climate is changing there.

Healthcare executives on both sides of the Pacific now recognize that being conversant in the Sino/US opportunity is a strategic imperative rather than merely good cocktail fodder. There are several drivers behind this trend. At the highest level, the vastly different healthcare challenges facing the US and China pose a unique opportunity for collaboration. While the US is focused on reducing healthcare costs from the whopping 17.5% of gross domestic product, China is poised to significantly increase its healthcare spending from current levels of 6.2% of GDP. Getting the health economics model wrong would be magnified exponentially across China's huge population. By focusing on consumer engagement in wellness for disease prevention, investing in early disease detection and closely monitoring the cost of treatments and medical devices, the Chinese government seems determined not to follow the same path that led to the economic challenges of the US healthcare system.

China is also at the front end of a market transition, evolving from "Made in China" to "Created in China." Economic (a growing middle class) and demographic (a surge in aging population) drivers are fueling the demand for innovative healthcare products and solutions to address the increased incidence of disease, including cancer, hypertension, diabetes, and cardiovascular and respiratory diseases. Lastly, Chinese corporates are increasingly using innovation and deal-making to make up for the legacy innovation gap. Domestic Chinese pharma companies spend a mere approximate 2% to 4% of their total sales on research and development, compared with closer to 15% for multinational companies. This gap is poised to narrow as select corporates move from lower-margin generics in favor of higher-margin innovative therapies.

David Sabow serves as the head of Silicon Valley Bank's life science and healthcare practice, as well as the group head for the Bank's client funds and products businesses. David manages life science and healthcare deal teams across the country, is responsible for the Bank's on and off balance sheet deposit strategy and is the executive lead for the Bank's products. David frequently presents at global industry conferences, has been a guest lecturer at Northeastern University's Nanomedicine Graduate program, and has been published in Forbes for his insight on trends impacting China's life science and healthcare market.

Prior to joining SVB, David spent nine years in the life science investment banking practice at Canaccord Genuity, where he participated in public financings and M&A transactions. While at Canaccord, David worked on both domestic and international transactions across the spectrum of life science and healthcare. Outside of work David is the co-chair of the Kelly Brush Foundation's Inspire!Boston event, and is a member of the Board of Advisors for Beth Israel Deaconess Hospital—Needham. David completed the executive program at Dartmouth's Tuck School, focusing on Leadership and Strategic Impact. He graduated with distinction from Santa Clara University and lives in Needham, Massachusetts.

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Corporate VC

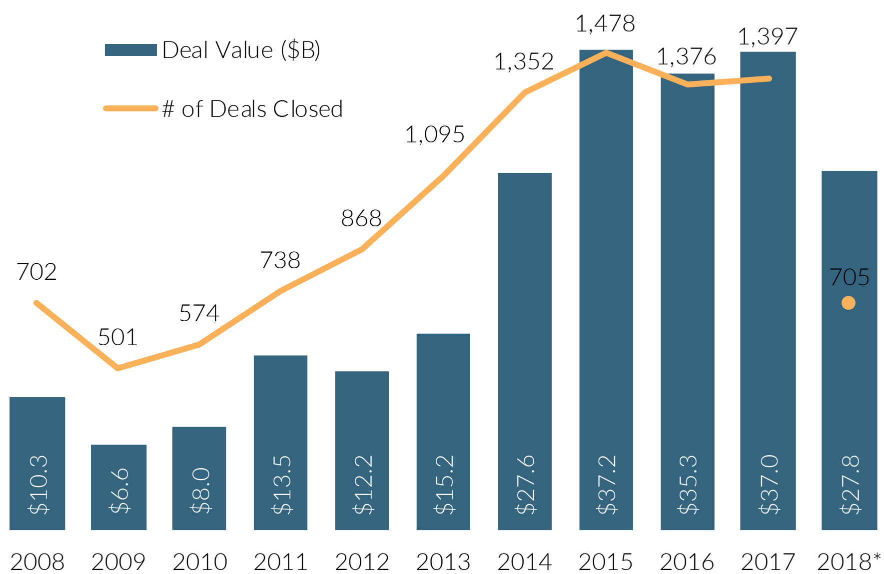
CVC participation in venture deals has continued at a brisk pace in 2Q, with total deal value topping $13.5 billion, only slowing slightly from the pace in 1Q. CVC activity is in line with the broader VC trend of capital concentration exhibited through declining deal count and increasing deal size. Although total deal value is up 104% YoY, deal count is down 4%.

For the past five years, CVCs have steadily invested in fewer deals smaller than $5 million and shifted toward larger check sizes, increasing participation in deals sized over $25 million. Additionally, nearly 20% of CVC deals (by count) are invested in rounds sized $50 million or greater. As corporations have adapted to increasing competition from agile startups, they have become more willing to engage with those startups directly, whether through partnerships, acquisitions or CVC investments. As corporations become more comfortable using VC as a tool to promote innovation and enhance competitive advantage, we expect to see continued participation by CVCs in large rounds.

The software and life sciences sectors continue to receive increased focus from CVCs. Together, software and life sciences have received 62% of CVC deal count YTD. These sectors have increased steadily from 46% of deal activity a decade ago. We expect this trend to continue as established healthcare and biotech firms see VC as a viable means of engendering innovation and new product development. VSP Global, a vision care health insurance company, recently invested in NeuroVision Imaging, a startup developing technology to detect Alzheimer's Disease. The investment furthers VSP's mission of highlighting "the critical role the eye doctor plays within an

CVC pacing for record year

US corporate VC participation activity



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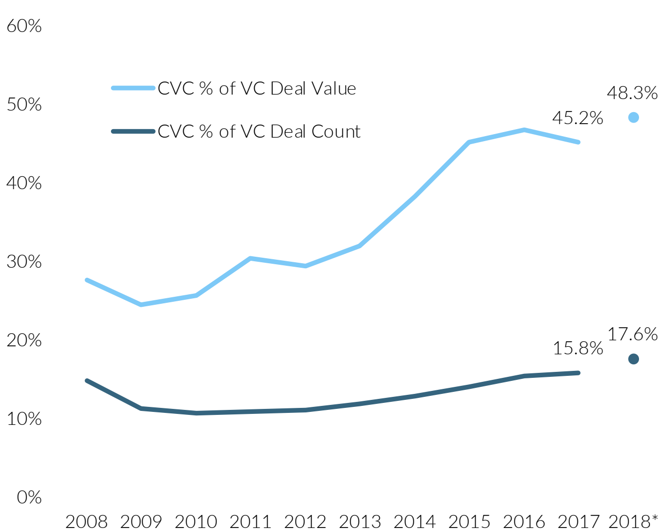
CVC participating in 50% of deal value

Percentage of activity that includes CVC participation



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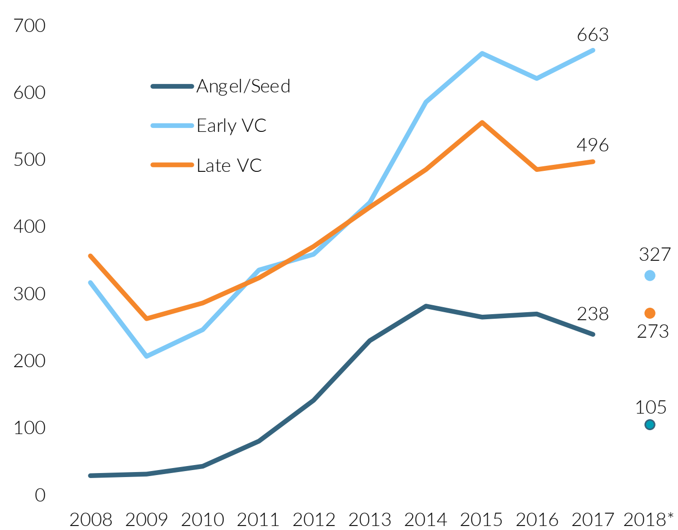
CVC activity balanced across stages

CVC investment activity (#) by stage



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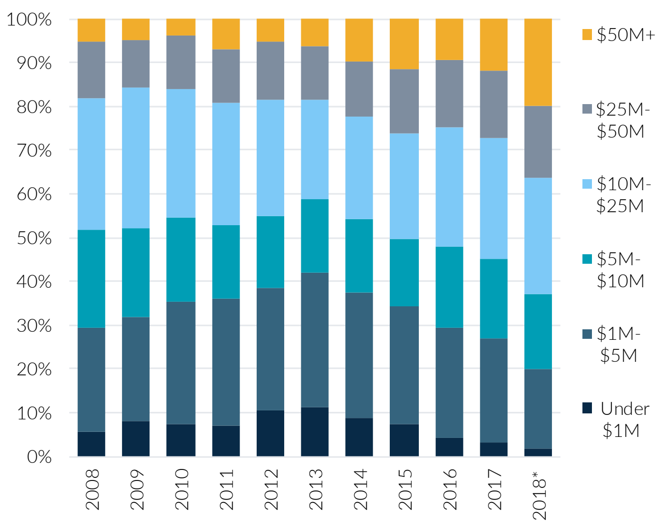
increasingly integrated healthcare system." An active CVC strategy allows healthcare and biotech firms to further innovation objectives and reduce R&D costs significantly by focusing time and capital on funding technologies that have shown positive medical results.

One important contributing factor that can help to sustain the rise in CVC is the passage of US tax reform in late December of 2017. The reform will impact companies in several ways. First, a reduction in the US corporate tax rate from 35% to 21% will be a boon for firms' free cash flow (FCF), providing corporations with additional capital to direct into CVC investments. Indeed, just six months after tax reform was enacted, we are now seeing firms such as Lockheed Martin publicly cite tax reform in press releases in regards to increased CVC activities. Lockheed responded to the tax reform by increasing dedicated CVC capital by $100 million. The firm's most recent investment was into Mythic, a local artificial intelligence platform. Cash repatriation presents an additional opportunity for CVC participation. New tax policies reduce penalties for repatriating earnings, freeing up cash to be invested in VC. Going forward, we expect corporate R&D spend and investment to accelerate in anticipation of future tax savings.

Large deals account for higher count

US corporate VC activity (#) by deal size



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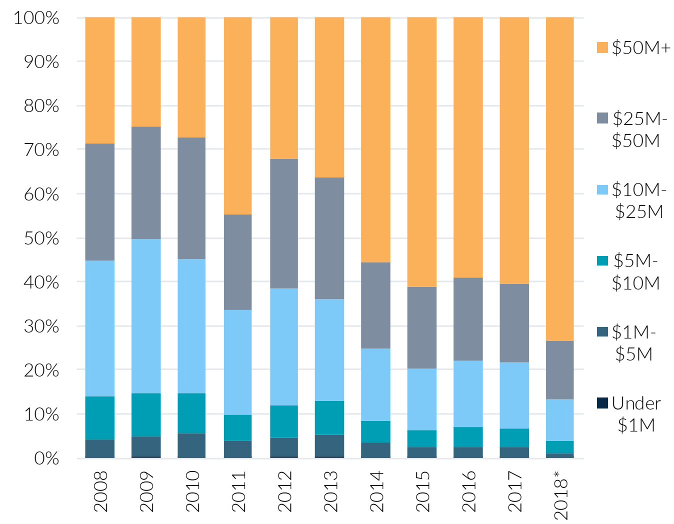
CVC present in many of largest deals

US corporate VC activity ($) by deal size



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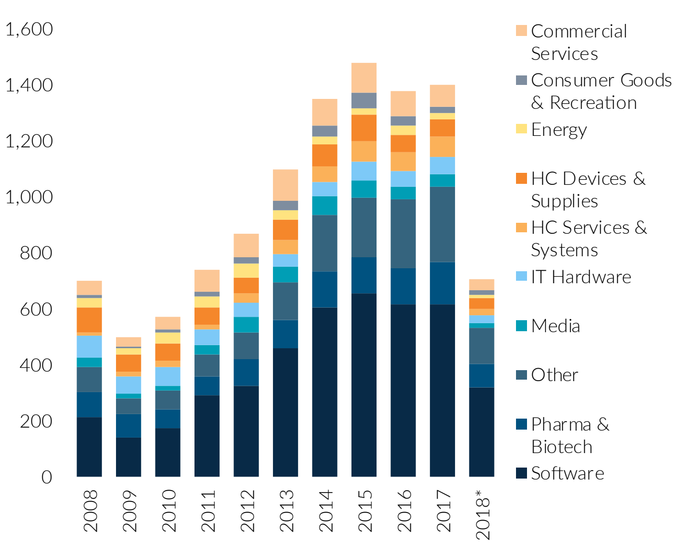
Software hits plateau over recent years

US corporate VC activity (#) by sector



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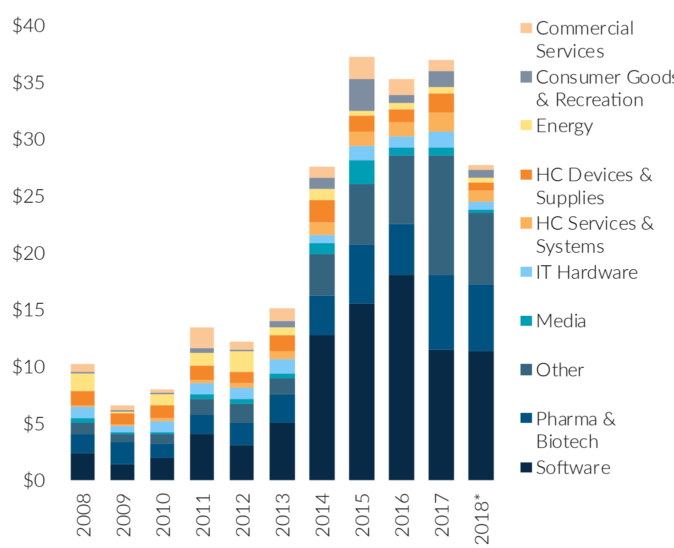
Software deal value has declined

US corporate VC activity ($B) by sector



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An evolving VC market needs evolving participants

Buddy Arnheim, Partner, Emerging Companies and Venture Capital, Perkins Coie

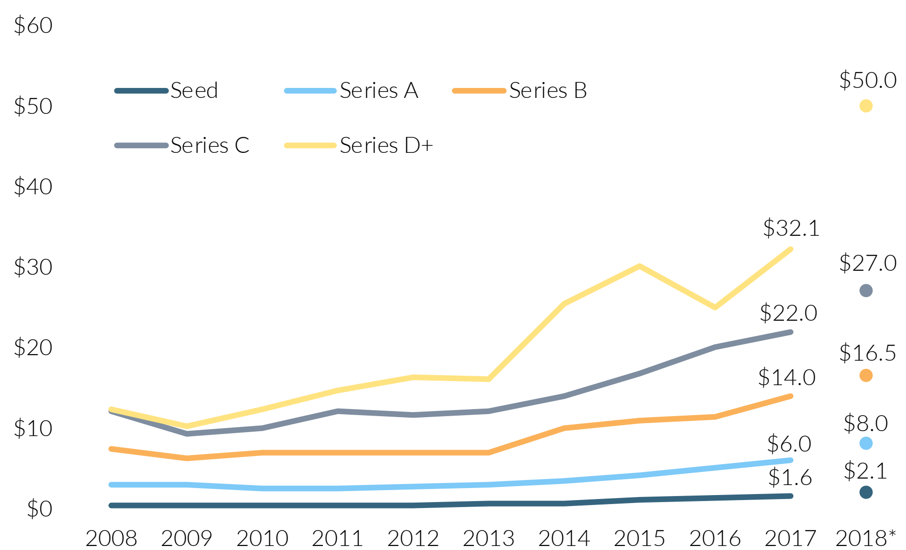
It's undeniable that the US venture industry has evolved, maybe more so in the past several years than during any time previously. In the past, a $100 billion investment fund providing late-stage capital was unthinkable, and capital was provided by fewer sources, limiting potential conflicts of interest between investor types. These days, however, there is more private capital available than ever, and companies are continuing growth much longer than before, postponing even the thought of an exit. These changes call for adaption from all sides, and, for those in a consultative relationship to the industry, an everchanging storyline of advice that can be modified to fit not only the shifting environment, but also the evolving role of companies and technologies within the market.

Consultative relationships should begin at the very earliest stages of venture when the near-term decisions have the greatest effect on long-term direction of the company. Cultivating this relationship with trusted service providers can be essential in helping navigate the current environment. Before the industry was as crowded with entrepreneurs and investors as it is today, raising initial capital was a less arduous task, with just three main sources of capital: friends and family, angels, and the more traditional early-stage venture investors. These sources offered entrepreneurs with plenty of opportunity to raise relatively simple capital, largely limiting complicated deal terms and offering entrepreneurs the chance to hold onto large amounts of their company. Today, there has been a trifurcation of the early stage leading to distinct phases—pre-seed, seed and Series A. Much of this is due to incoming investor types causing early capital raising to appear differently than in the past.

It is not uncommon now for companies entering seed or Series A to have already raised millions. To go along with the traditional capital sources, accelerators have exploded within the industry to fund nascent ideas and burgeoning startups. Family investment offices, too, have crept into earlier investments looking to maintain and grow their wealth while adding fuel to the fire of young startups. While each of these are great sources for capital and mentorship, the addition of more investors and larger amounts of capital so early in the company's lifecycle can complicate the structure of the cap table down the line, especially if protective terms or first rights provisions are included in deals early on in the company's lifecycle. The caution with adding several different types of investors is simply to make sure that all interests are aligned for the company. Conflicts can arise down the line, complicating an exit or adding difficulty to raising further capital.

Median deal sizes continue upward guidance

Median deal size ($M) by series



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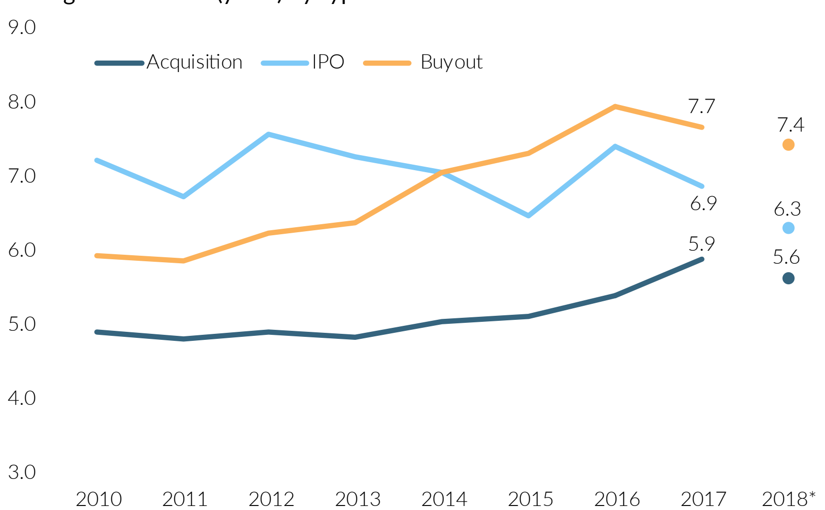
The growth of the early stage has sent a relative shockwave effect through the rest of the venture lifecycle. For one, more is expected of companies to receive investment. Many early-stage companies now have revenues to show investors and a more scalable business model, earlier on in their development than in the past. A correct pathway to success is now more important than ever, and early success can make or break even the best ideas and technologies.

Beyond capital financing, the lengthening time to exit poses more challenges for companies with venture backing. This, too, may be the most important area in which advice from outside providers in a close relationship should be sought. Though the IPO window is "open," tech companies are not turning toward an IPO until much later into their lifecycles. The illiquidity of compensation tied to employment has become a major hazard in retaining talent. Within major tech areas, a battle has begun against attrition, as employees move through mid-management at late-stage companies to more attractive option plans or seek a higher title at a younger tech startup. Liquidity is a growing struggle, with fewer companies than ever before completing an IPO at a valuation less than $500 million and, in turn, spending much more time growing privately. Finding liquidity for employees and early investors can take away from the longer-term vision of the company, straining already thinly spread time from c-level employees. But retaining top talent can be essential to bring the collective vision of leadership to fruition. The reason companies have been able to delay potential exits is simple. The amount of capital available for late-stage deals is higher than it has ever been. Public investors have helped to fill the needs of these growth companies at the top end of the market by simply getting into private deals at the time of the company's lifecycle during which companies would have more traditionally entered the public market.

Many early-stage companies now have revenues and a more scalable business model to show investors earlier on in their development than in the past. Consultative advice from service providers that have facilitated deals in the changing environment are an essential source for advice and strategic planning. Outside advice and consultation can relieve some of the pressures facing startups in this ever-changing industry. Piloting a young startup or even a seasoned late-stage company is difficult and shouldn't be burdened by a single executive or small team.

Exit timelines remain lengthened for all exit types

Average time to exit (years) by type



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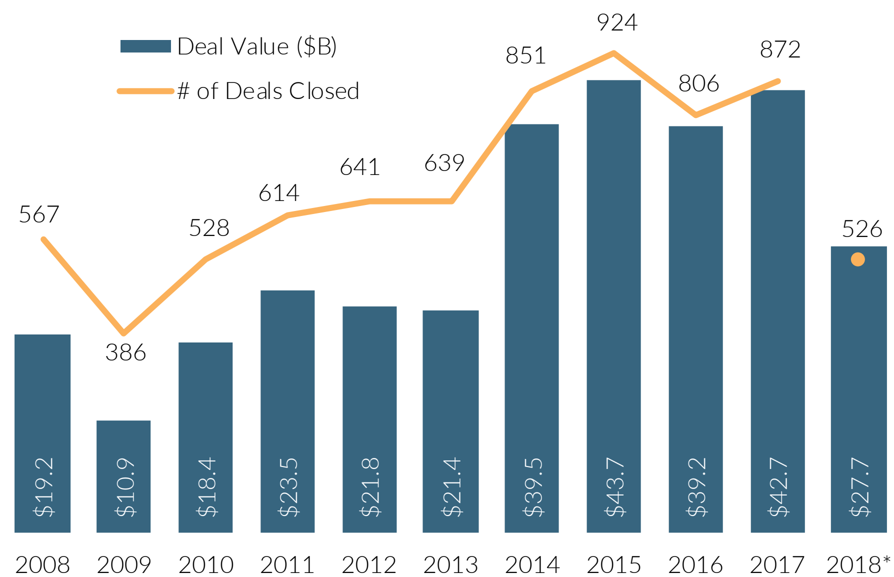
Growth equity

Growth equity, an interesting hybrid of PE and VC, has become a much more crowded space. With a steady stream of more mature companies flowing through the private markets, non-VCs like corporations, PE firms and other institutional investors are seeking to access the growth potential that these large private companies often promise. In the second quarter, growth equity participation represented $12.1 billion of capital invested, coming in higher than the five-year average for capital invested and continuing the strength from 1Q. This uptick in growth activity has paralleled increased buyout activity of VC-backed businesses, as PE firms look to source enough deals to deploy the mountains of dry powder that have built up over the past decade.

The ability of this stage to finance mega-rounds has blossomed in the last few years, and with fundraising sitting at historically high levels and the dry powder build-up, this trend will likely survive for years to come. This has also meant that private markets have become a viable alternative to the public markets' financing function. This can be seen by the amount of capital invested into the growth stage and by the amount of $100 million+ deals—the historic fundraising milestone at which point companies would've looked to public market investors. Through the first half of 2018, we have recorded 65 deals of this size, which represents 75% of the 2017 full-year total and exceeds 2016's total of 60 deals.

Capital available to companies at the latest stages

US growth equity activity



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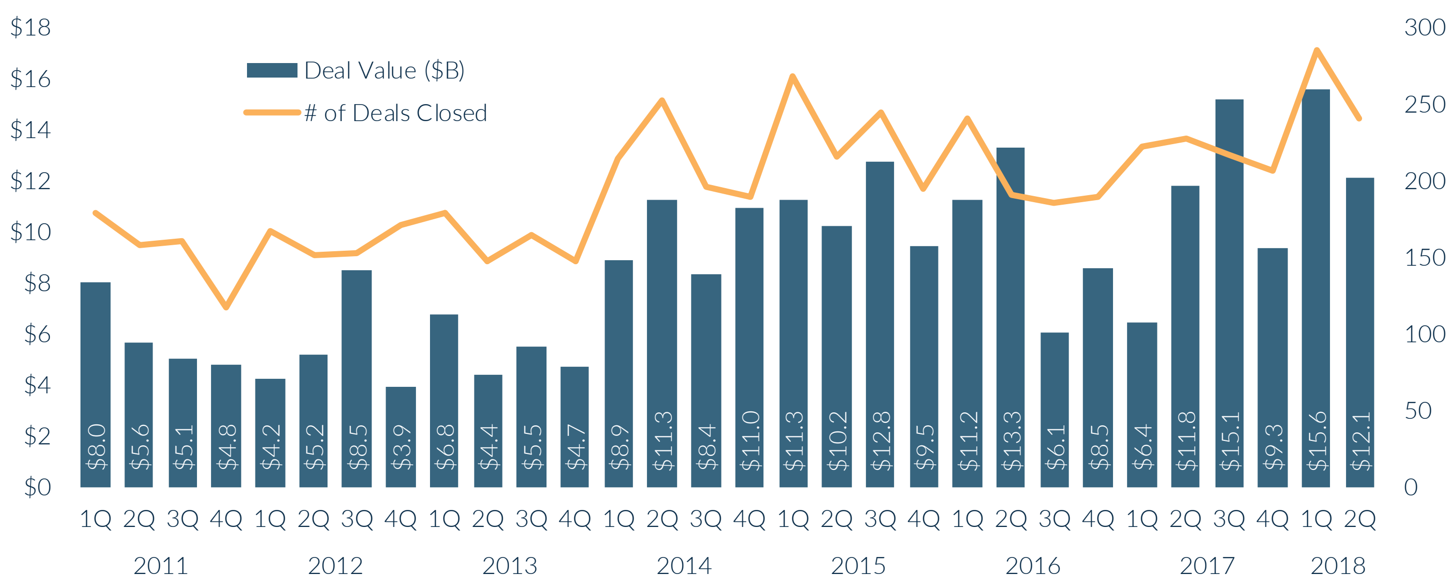
2018 set for record year after two large quarters

US growth equity activity



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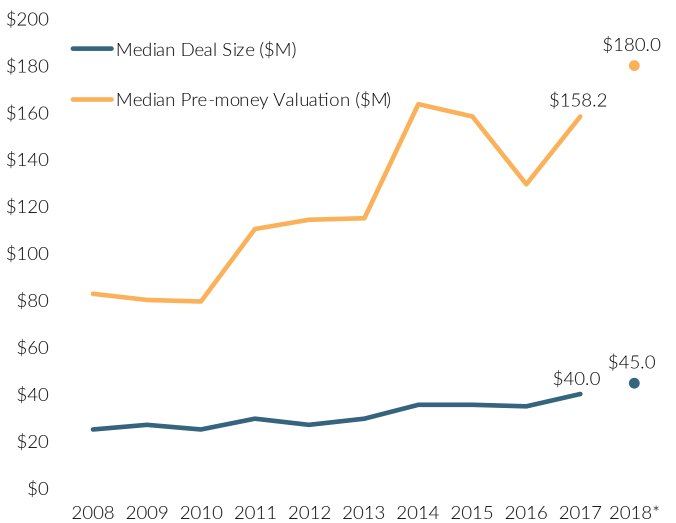
Not shying away from high valuations

Median growth equity deal size and pre-money valuation ($M)



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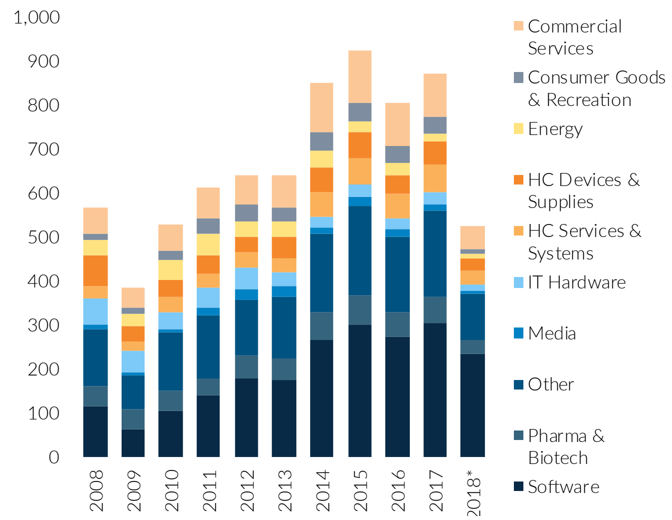
Growth equity pacing for record year in both deal count and deal value in the US

Sector trends remain stable

US growth equity activity ($) by sector



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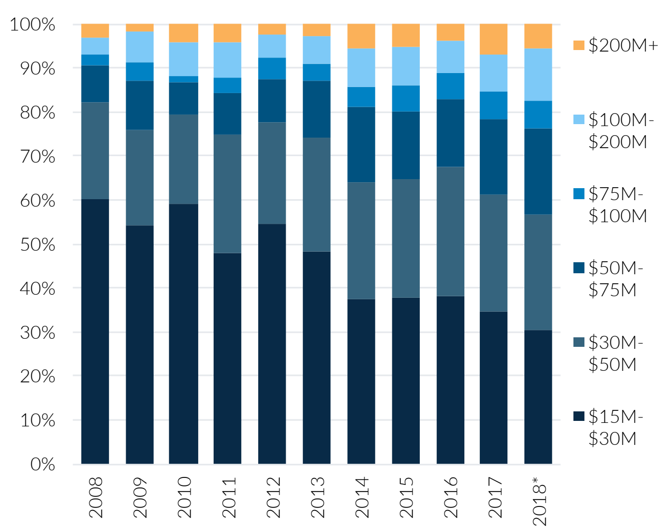
Growth equity investors have been a major reason that companies are able to stay private longer before an exit

22% of deals above $100M

US growth equity activity (#) by size



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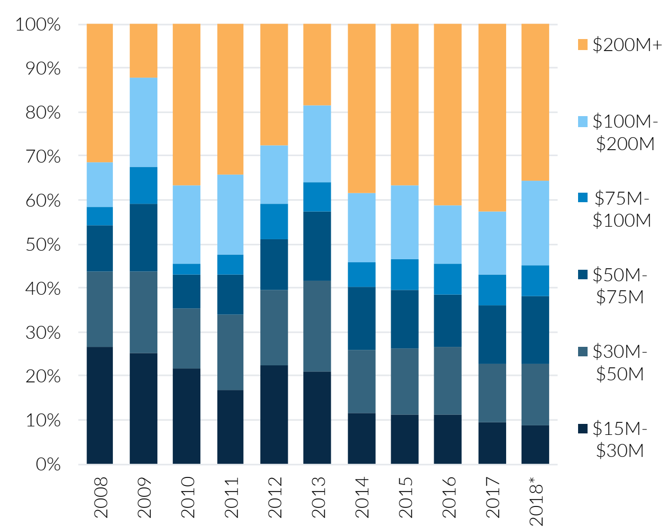
Deals of $200M+ represent 37% of value

US growth equity activity ($) by size



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Nontraditional investors, family offices seek earlier-stage deals

Jim Marshall, Head of Emerging Manager Practice, Silicon Valley Bank

The rush of nontraditional VCs into the innovation economy is creating new paradigms for earlier-stage investing. Since the financial crisis, we have seen enormous growth in invested capital by these investors, notably, family offices, sovereign wealth funds and mutual funds.

These nontraditional investors want not only access to the best companies but also a front row seat to innovation and the entrepreneurs who are shaping the future. The value-add from each group varies as well. For example, mutual funds are sophisticated investors that can help position a company for a potential IPO. Family offices often have entrepreneurial DNA and can provide patient capital that scales with founders and venture firms over the long-term. Sovereign funds often look to diversify their economies and hopefully bring innovation back to their home country.

Spurred by rising valuations and growing investor sophistication, nontraditional investors are investing at earlier stages. Many mutual funds, which typically invested post-IPO, now see that significant value can be realized when the company is still private.

Series D+ still captures the most activity in terms of capital and deal count by nontraditional investors, but Series B deal counts are seeing the fastest growth since 2016, increasing 35%. Interest in the seed stage has also grown, and now 16% of seed deals involve a nontraditional investor, a 15% increase since 2016. Angel & seed investments are larger than ever and have been buoyed by abundant capital as these investors are looking to invest in high-growth technology companies. The growth of nontraditional investments is helping to dramatically change the startup fundraising timeline.

The rise of the family office

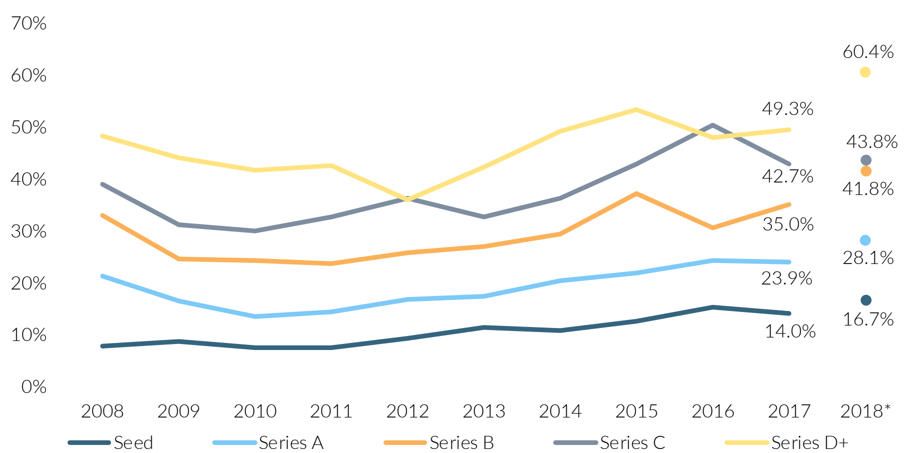
One type of investor making waves at the earlier end of the spectrum is the family office. Family offices are not new to venture. In fact, they backed some of Silicon Valley's early venture pioneers. Their impact on the early-stage ecosystem, though, has never been greater. Half of all the family offices in the world have been created in the past 15 years, and many of those families want access to innovation, technology and emerging managers. As their appetite for VC grows, family office managers are seeking new strategies, including both making direct investments and building relationships with emerging managers to gain insight and access to technology deals. These managers help family offices navigate the market and can introduce them to direct investment opportunities that have already been scrubbed by the VCs. Family offices are also starting to follow in the footsteps of large institutional investors, focusing on building long-term partnerships with managers and evaluating investment performance across multiple funds.

Direct VC/PE or co-investing makes up 13.2% of the typical family office portfolio, according to the Global Family Office Report 2017, and almost 70% of family offices engage in direct investing. A majority of family office money invested in recent years has been funneled toward IT, with more than 97% of this investment in the software space. Family offices also have been involved in notable late-stage VC deals in recent years, including Uber, Robinhood, Adyen and Instacart.

What does the future look like for family offices and other nontraditional investors? They are becoming increasingly institutionalized as they build better processes for evaluating companies and funds to leverage for their unique value-add. They are hiring connected people who have networks and experience in private company investing, and their continued growth and participation in the innovation economy is providing another source of capital to help tech and life science companies invent the future.

Over 60% of US Series D+ deals include nontraditionals

Percentage of overall US VC activity with nontraditional investor participation by series



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Exits

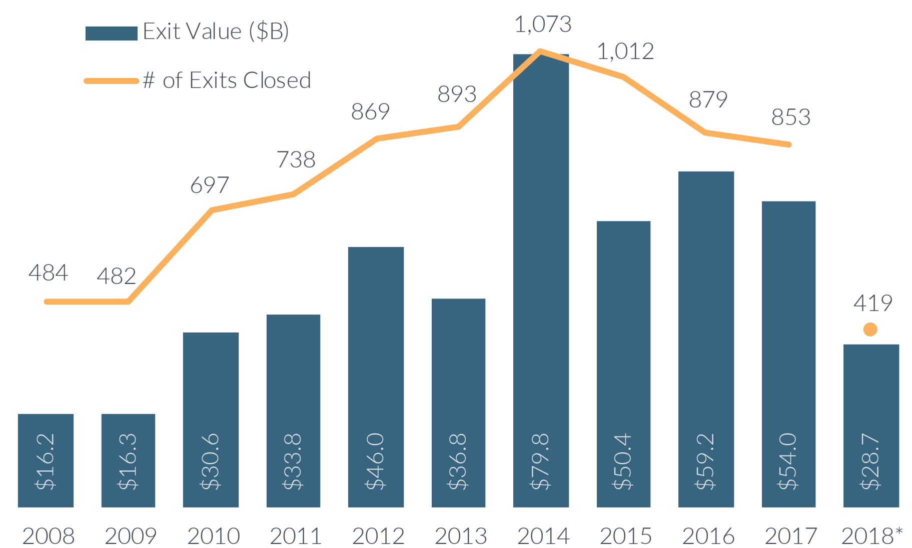
As hold times and valuations continue to extend across the board, the health of the exit market grows in importance. So far in 2018, we've seen some encouraging signs with a strong first half of exit value and steady valuation step-ups at exit. With $28.7 billion of exit value closed through the first six months, 2018 is pacing to top $50 billion for the fifth straight year.

IPOs have been a bright spot in the exit market, with activity primed to closely match last year's levels on both a count and value basis. This quarter was headlined by eight companies debuting at a valuation over $1 billion, with DocuSign and Pluralsight topping that list. At least one highly anticipated IPO was scrapped, with Adaptive Insights purchased by Workday for $1.55 billion—more than double the $627 million at which they were planning to price the IPO. This complemented some of the high-profile IPOs that capped off an exceptionally strong quarter for enterprise software exits, which we expect to, in turn, drive increased deal activity in the space as that capital is re-allocated.

While pharma & biotech IPO activity usually makes up a majority of the IPO count, the industry had an especially robust June with 15 companies pricing, including a record of 6 on a single day. Recent strength in the public markets and investor familiarity with the biotech business model has pushed the IPO window wide open, and VC-backed companies are taking advantage of the opportunity. In turn, this could spur more activity by corporate acquirers as they might look to pull the trigger and acquire a company before they have a chance for a public listing to avoid paying a premium on their public shares. Corporate acquirers also have tailwinds from the recent passage of tax reform legislation, which we expect to lead to an

Exit value strong as activity stabilizes

US VC-backed exit activity



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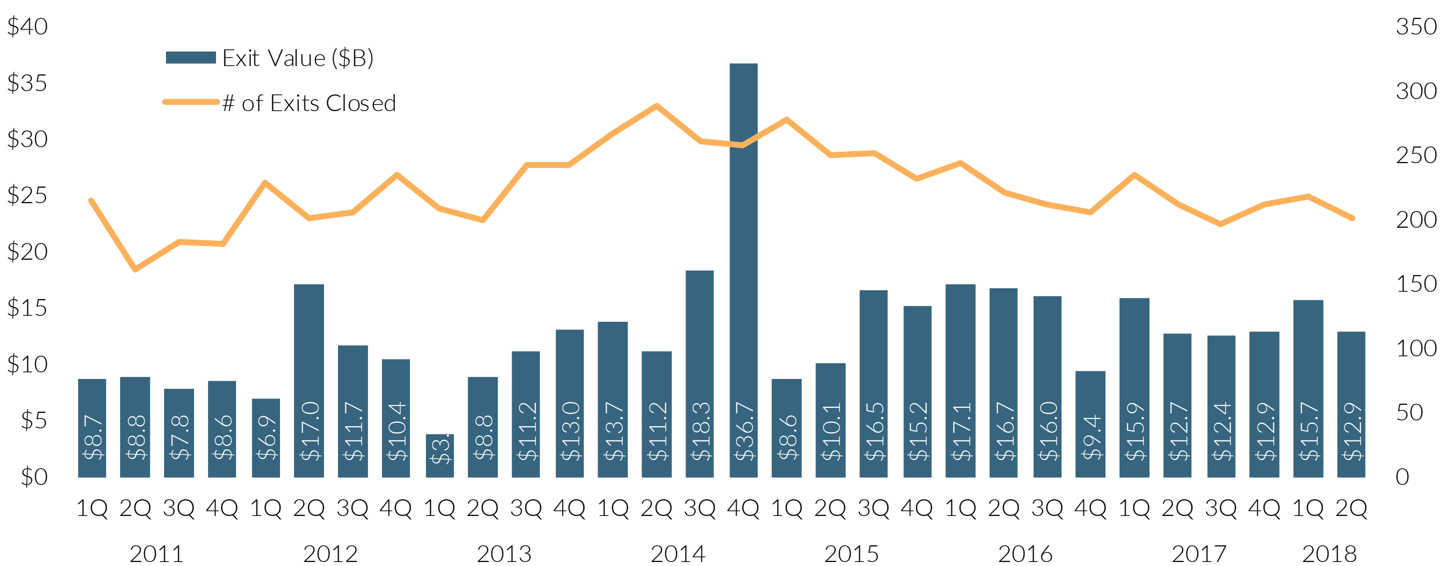
12 of past 13 quarters have realized over $10B in exit value

US VC-backed exit activity



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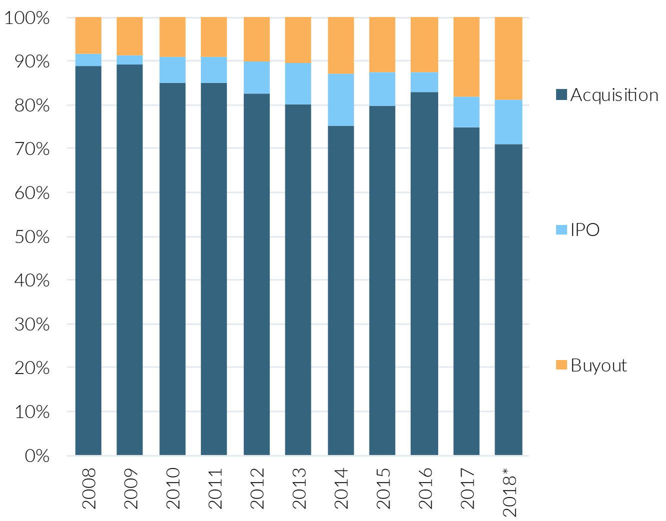
uptick in M&A transactions in the short-term.

Alternative exits, particularly direct secondary transactions and special purpose acquisition companies (SPACs), are areas we expected to see have increased activity throughout 2018 and beyond. In June, we saw TPG announce its new Tech Adjacencies Fund, which is seeking $1.5 billion to target direct secondary opportunities, expanding its growth stage strategy into new areas. This trend is predicated on the fact that companies are raising a larger number of VC financings and delaying exits, as VC capital availability allows rounds at virtually any amount. While there have been some encouraging signs from the IPO market, the costs of operating as a public company still loom as deterrents for many large VC-backed companies. The second quarter contained both Spotify's unorthodox public listing as well as a few more SPAC debuts, providing further evidence that alternatives are likely here to stay and even more likely to evolve over the coming years as the current market cycle plays out.

Buyouts still growing

US VC-backed exit (#) by type



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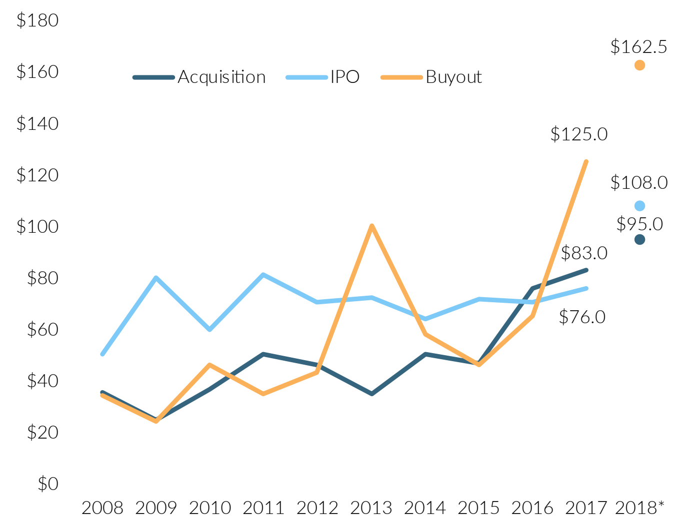
Exit sizes among all types grow

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



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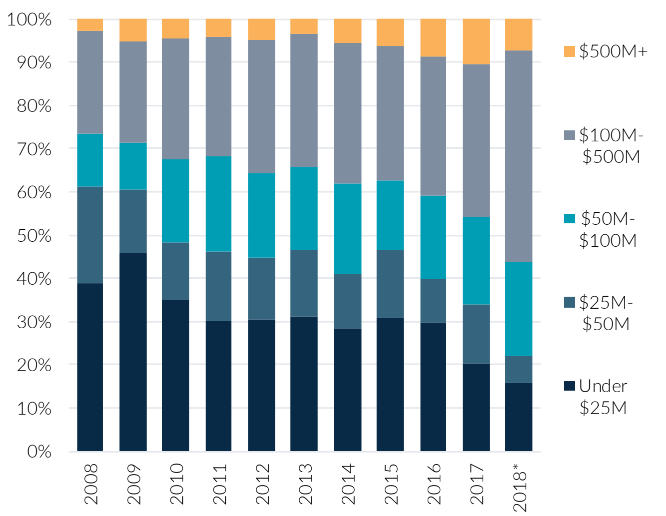
Over 50% of exits above $100M

US VC-backed exit activity (#) by size



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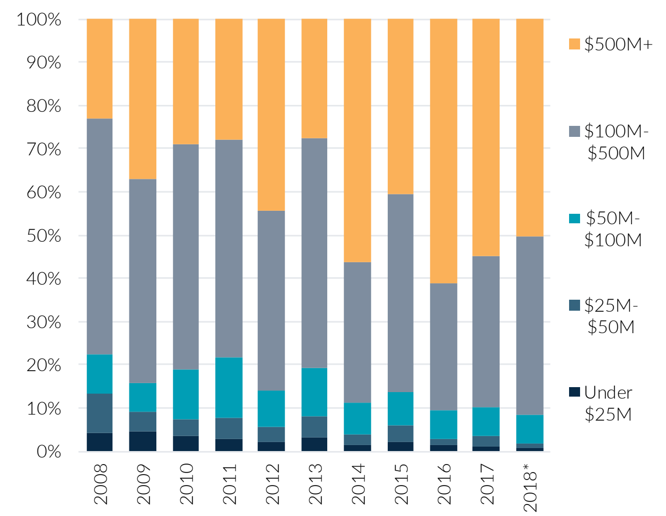
Exits under $50M represent <10% of value

US VC-backed exit activity ($) by size



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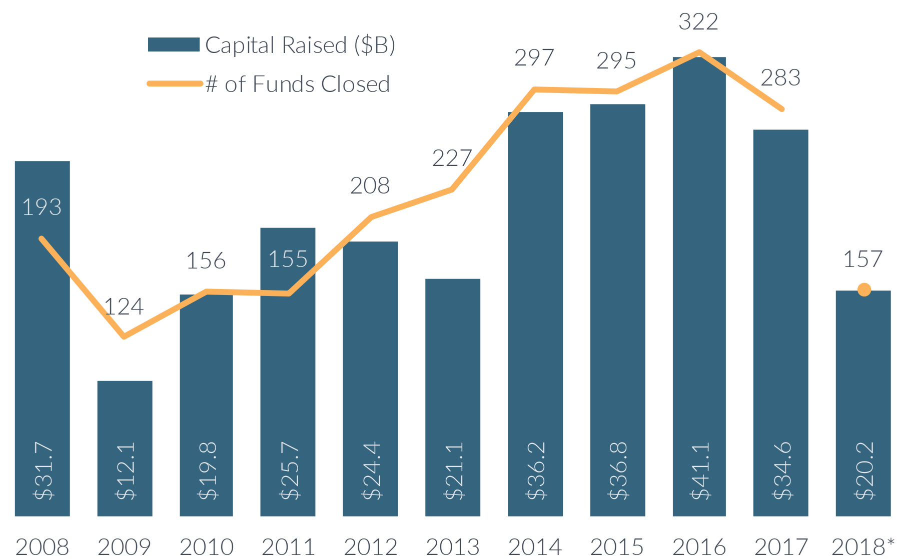
Fundraising

After a slow start to fundraising in 2018, 2Q saw an uptick in activity. VCs closed 72 funds with a total of $10.8 billion raised during the quarter. This brings both fund count and capital raised in 2018 on pace to surpass 2017 totals. The number of micro-funds (funds sized $50 million or smaller) has declined slightly in 2018, but we expect this category to rebound in the second half of the year as a number of open funds approach their target sizes. In the $100 million-$500 million range, capital raised has increased at a faster pace than other segments. Successful closings of funds in this bucket have increased from 40% of total capital raised in 2014 to 56% in 2018. This trend likely ties to elevated valuations of seed-stage startups, driving VCs to raise larger funds. According to recent PitchBook analysis, larger funds have proven to provide greater returns. These market factors, in addition to outsized returns, are providing sufficient incentive for LPs to continue to support VCs as they raise ever larger funds.

The seed-stage ecosystem has gone through significant transformations over the past several years. Whereas seed investments were initially made into startups at the earliest lifecycle stages, the "seed" label has evolved to include companies that have achieved impressive levels of traction and product development. The potential for high returns has attracted numerous new investors, including angels, CVCs and VC funds. With rising deal sizes and valuations, some seed-stage VCs have been faced with a dilemma: Do they raise larger funds to stay competitive, or do they exit the seed market entirely? LVRHealth,

Contrary to belief, fundraising shows no sign of slowing

US VC fundraising activity



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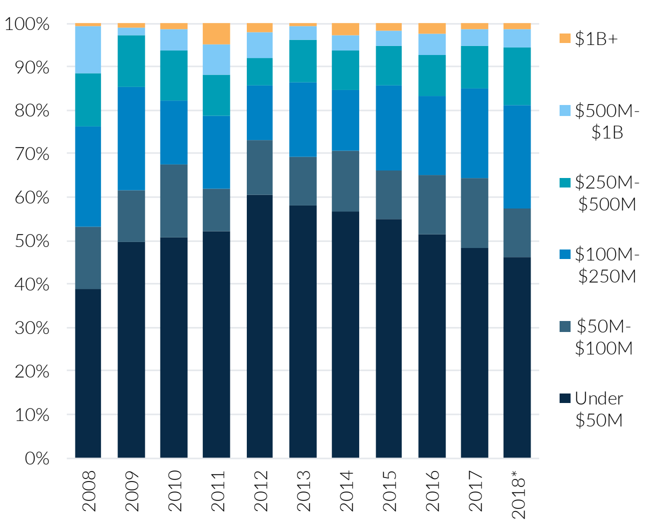
Fund sizes trending larger

US fundraising activity (#) by size



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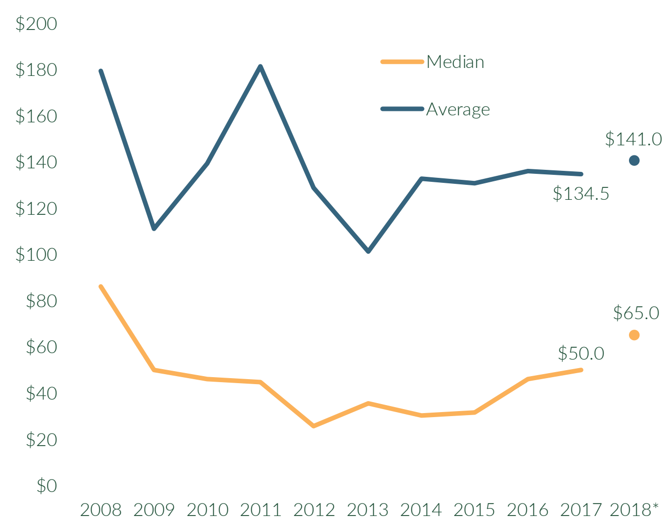
Median fund size reaches 10-year high

Median and average fund size ($M)



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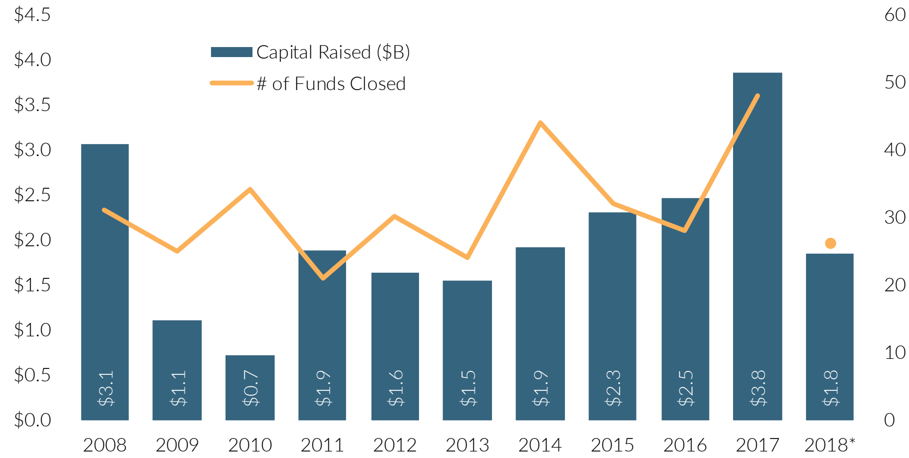
after raising four sub-$20 million funds, decided to raise a fifth fund at $100 million. Arena Ventures has chosen the latter option, pausing seed investing activities “until the seed market corrects.” We expect inflated valuations and larger seed funds to continue as greater amounts of capital continue to be directed into early-stage companies.

Another significant trend is the decrease in mega-funds ($1 billion+) raised. Total mega-fund funding has declined from $11.4 billion in 2014 to $6.8 billion in 2017. Thus far, 2018 appears to be in line with previous years; however, seven open mega-funds could reverse this trend. Serpent Venture Capital is raising the largest fund, with a minimum fund size of $7 billion. If all seven vehicles close this year, it would bring total mega-fund capital closed in 2018 to a new high of $23.28 billion. The rise in mega-funds is providing a much-needed destination for the plentiful LP capital available in the market. Elevated aggregate distributions to LPs and positive aggregate net cash flows are driving larger investments. The capacity to write large checks will exacerbate the trend of unicorns retaining private status for longer. Lastly, we believe many of these funds are taking an approach similar to SoftBank’s Vision Fund, adopting a meta-view and attempting to capitalize on mega-trends affecting entire industries.

First-time funds keep good times rolling in 1H

US first-time fundraising activity



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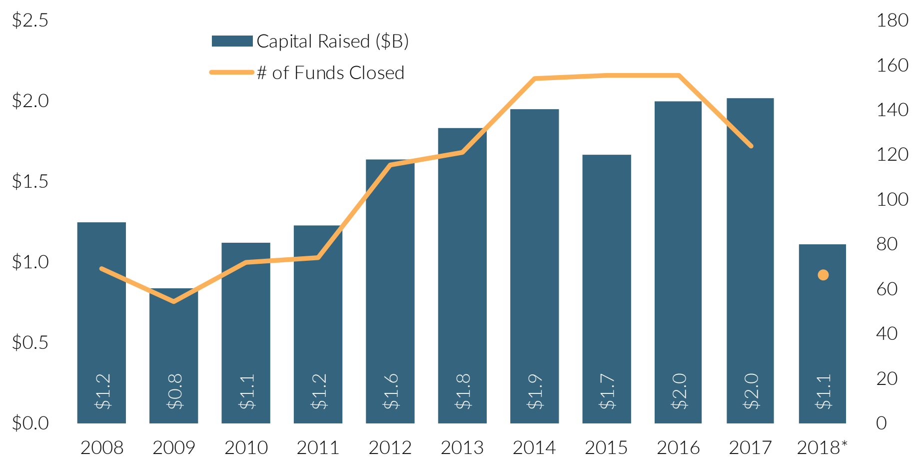
Micro-funds pacing for record value

US micro fundraising activity



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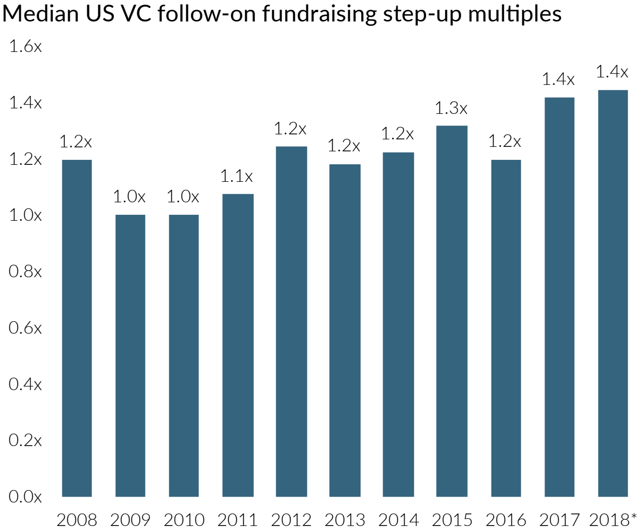
Firms raising larger follow-on funds

Median US VC follow-on fundraising step-up multiples



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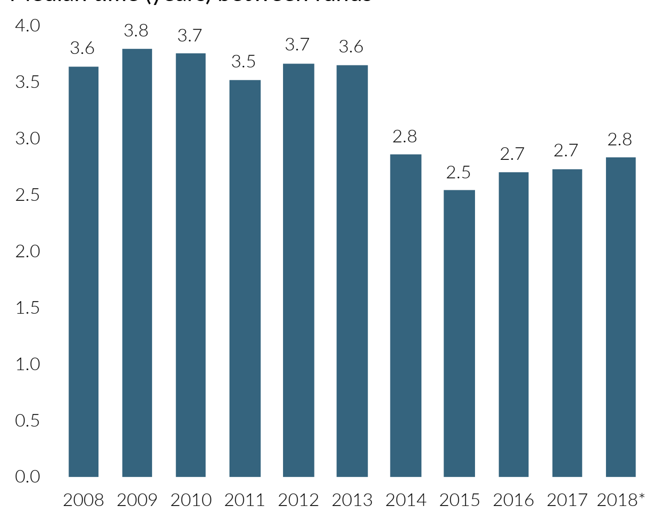
Follow-on fund pace slowing slightly

Median time (years) between funds



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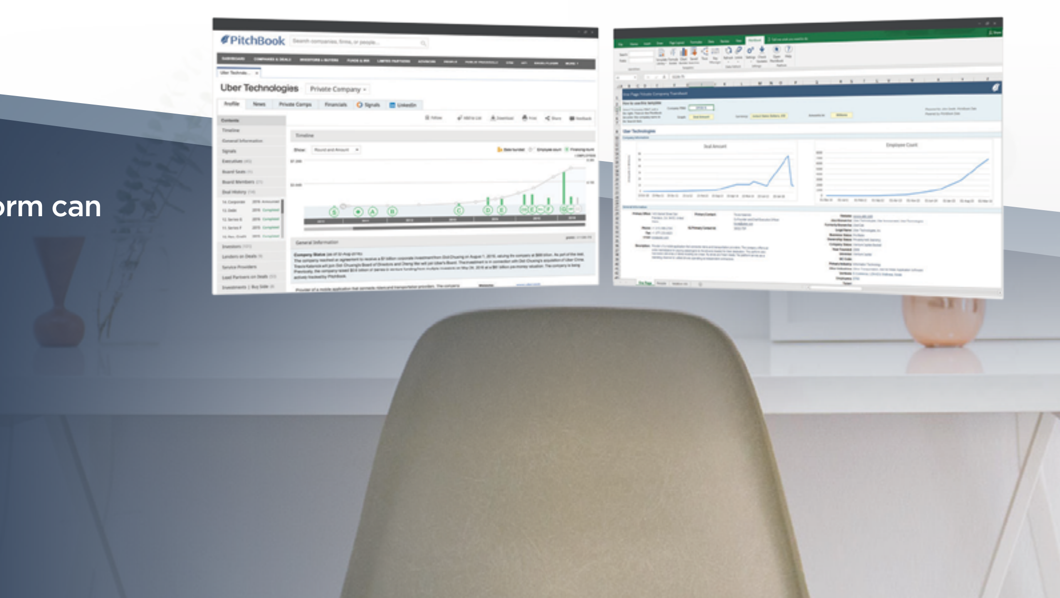

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2Q league tables

Most active investors angel/seed

Plug and Play Tech Center	25
SOSV	17
Alumni Ventures Group	12
Innovation Works	11
Founder Collective	7
Slow Ventures	7
Social Capital	7
True Ventures	7
Astia Angels	6
Founders Fund	6
Abstract Ventures	5
Right Side Capital Management	5
Sinai Ventures	5
Y Combinator	5
8VC	4
Capital Factory	4
ChinaRock Capital Management	4
Foundation Capital	4
Hyde Park Venture Partners	4
Keiretsu Capital	4
Kickstart Seed Fund	4
LaunchCapital	4
Liquid 2 Ventures	4
M25	4
Precursor Capital	4
Princeton Alumni Entrepreneurs Fund	4
Rockies Venture Club	4
Social Starts	4
SV Angel	4

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Most active investors early stage

SOSV	17
Plug and Play Tech Center	16
Kleiner Perkins Caufield & Byers	14
New Enterprise Associates	12
Alumni Ventures Group	11
Founders Fund	10
General Catalyst	10
Andreessen Horowitz	8
First Round Capital	8
GV	8
Intel Capital	8
Lux Capital	8
Y Combinator	8
Canaan Partners	7
Elevate Ventures	7
Greycroft	7
Keiretsu Forum	7
Khosla Ventures	7
RRE Ventures	7
ARCH Venture Partners	6
Invest Michigan	6
Lightspeed Venture Partners	6
Social Capital	6
SV Angel	6
True Ventures	6
Upfront Ventures	6

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Most active investors late stage

Kleiner Perkins Caufield & Byers	15
New Enterprise Associates	14
Alumni Ventures Group	12
Andreessen Horowitz	9
Bessemer Venture Partners	9
Accel	8
Menlo Ventures	8
F-Prime Capital Partners	7
General Catalyst	7
GV	7
Intel Capital	7
Sapphire Ventures	7
Venrock	7
Bain Capital Ventures	6
IVP	6
Khosla Ventures	6
Lightspeed Capital Partners	6
Sequoia Capital	6
Battery Ventures	5
Castor Ventures	5
Greylock Partners	5
Charles River Ventures	5
M12	5
Salesforce Ventures	5
Spark Capital	5
SV Health Investors	5
Thrive Capital	5
Upfront Ventures	5

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Select largest US VC deals in 2Q 2018

Company	Deal Size ($M)	Series/Stage	Date	HQ	State	Industry
Faraday Future	2,000.0	Corporate	4/20/2018	Los Angeles	CA	Transportation
Lyft	600.0	Series I	6/27/2018	San Francisco	CA	Software
Allogene Therapeutics	411.8	Series A	4/19/2018	South San Francisco	CA	Pharma & biotech
Robinhood	362.9	Series D	5/10/2018	Palo Alto	CA	Software
Instacart	350.0	Series E	4/5/2018	San Francisco	CA	Software
Opendoor	325.0	Series E	6/13/2018	San Francisco	CA	Software
Grail (Biotechnology)	300.0	Series C	5/21/2018	Menlo Park	CA	Pharma & biotech
Tradeshift	250.0	Series E	5/30/2018	San Francisco	CA	Software
Cohesity	250.0	Series D	6/11/2018	San Jose	CA	Other
Dataminr	$221.1	Series E	6/4/2018	New York	NY	Software

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Select largest US VC funds closed in 2Q 2018

Fund Name	Investor	Fund Size ($M)	Date	HQ	State
Foresite Capital Fund IV	Foresite Capital Management	668.0	5/3/2018	San Francisco	CA
8VC Fund II	8VC	640.0	4/24/2018	San Francisco	CA
Meritech Capital Partners VI	Meritech Capital Partners	630.0	6/1/2018	Palo Alto	CA
Charles River Partnership XVII	Charles River Ventures	600.0	5/11/2018	Cambridge	MA
WiL Fund II	WiL (World Innovation Lab)	521.0	6/20/2018	Palo Alto	CA
Matrix Partners XI	Matrix Partners	450.0	6/20/2018	San Francisco	CA
Emergence Capital Partners V	Emergence Capital Partners	435.0	5/21/2018	San Mateo	CA
Redpoint Ventures VII	Redpoint Ventures	400.0	6/19/2018	Menlo Park	CA
Venrock Healthcare Capital Partners III	Venrock	400.0	4/20/2018	New York	NY
Sprout Endurance Partners	SVB Capital	392.0	5/18/2018	Santa Clara	CA

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Select largest US VC-backed IPOs in 2Q 2018

Company	Exit Size ($M)	Exit Post-val ($M)	Date	HQ	State	Industry
DocuSign	465.7	4,411.2	4/27/2018	San Francisco	CA	Software
Mercari	496.6	3,701.0	6/19/2018	San Francisco	CA	Software
Pluralsight	310.5	1,979.6	5/17/2018	Farmington	UT	Software
Avalara	180.0	1,559.6	6/15/2018	Seattle	WA	Software
Smartsheet	174.0	1,483.4	4/27/2018	Bellevue	WA	Software

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Select largest US VC-backed acquisitions in 2Q 2018

Company	Exit Size ($M)	Acquirer(s)	Date	HQ	State	Industry
Flatiron	1,900.0	Roche (SWX: ROG):	4/6/2018	New York	NY	Healthcare technology systems
Ring	1,200.0	Amazon (NASDAQ: AMZN)	4/12/2018	Santa Monica	CA	Consumer Products
Glassdoor	1,200.0	Recruit Holdings (TKS: 6098)	6/21/2018	Mill Valley	CA	Media
Kensho	550.0	S&P Global (NYSE: SPGI)	4/9/2018	Cambridge	MA	Software
NxThera	406.0	Boston Scientific (NYSE: BSX)	4/27/2018	Maple Grove	MN	Healthcare devices & supplies

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2Q US VC activity by state & territory

State	Deal Count	Deal Value ($M)
California	648	15,604.5
New York	232	2,881.3
Massachusetts	160	3,270.1
Texas	95	617.0
Washington	78	1,814.5
Colorado	57	466.6
Pennsylvania	53	242.3
Florida	45	108.3
Illinois	38	253.4
North Carolina	38	411.3
Virginia	29	90.9
Georgia	27	339.8
Michigan	27	129.3
Minnesota	27	131.4
Maryland	26	241.1
Oregon	23	392.9
Utah	23	185.6
Wisconsin	22	101.8
Ohio	21	274.2
Tennessee	19	66.9
New Jersey	18	81.1
District of Columbia	15	75.4
Arizona	13	82.2
Indiana	11	28.1
Missouri	11	21.6
Connecticut	10	57.1
Delaware	10	5.4
Nevada	10	40.3
Arkansas	7	3.9
South Carolina	7	13.0
Idaho	6	6.7
Kentucky	6	6.3
New Hampshire	6	20.5
New Mexico	6	25.2
North Dakota	6	21.0
Alabama	4	14.2
Iowa	4	8.7
Kansas	3	11.3
Rhode Island	3	11.1
Hawaii	2	0.9
Oklahoma	2	0.3
Puerto Rico	2	1.8
Vermont	2	2.2
Louisiana	1	–
Maine	1	0.3
Nebraska	1	9.0
South Dakota	1	1.2
Wyoming	1	1.1

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2Q US VC activity by top metropolitan statistical areas

MSA	Deal Count
San Francisco-Oakland-Fremont, CA	348
New York-Northern New Jersey-Long Island, NY-NJ-PA	238
Boston-Cambridge-Quincy, MA-NH	155
San Jose-Sunnyvale-Santa Clara, CA	123
Los Angeles-Long Beach-Santa Ana, CA	111
Seattle-Tacoma-Bellevue, WA	72
Washington-Arlington-Alexandria, DC-VA-MD-WV	50
Austin-Round Rock, TX	48
San Diego-Carlsbad-San Marcos, CA	48
Chicago-Naperville-Joliet, IL-IN-WI	36
Denver-Aurora, CO	36
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	34

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2Q US VC activity by top congressional districts

State	District	Deal Count
California	12	217
New York	12	102
California	18	83
New York	10	83
Massachusetts	7	75
California	17	48
California	14	43
Washington	7	41
California	33	31
California	13	30
California	52	26
Massachusetts	5	25
Illinois	7	22
Massachusetts	8	22
California	49	20
Colorado	1	20
California	45	18
Texas	21	18
Colorado	2	16
District of Columbia		15
Washington	9	15
California	19	14
Massachusetts	4	14
Georgia	5	13
North Carolina	1	13
Pennsylvania	14	13
California	15	12
New York	7	12
Texas	10	12
California	37	11
Oregon	3	11
Wisconsin	2	11

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Methodology

Fundraising

We define VC funds as pools of capital raised for the purpose of investing in the equity of startup companies. In addition to funds raised by traditional VC 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, VC 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 VC: Financings classified as corporate VC 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. Rounds in VC-backed companies previously tagged as just corporate investments have been added into the dataset.

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.

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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.

More data. Less dough.

Our members get 10% off a new subscription to the PitchBook Platform (up to a $10,000 value) or one free, additional seat. If your firm was a PitchBook client prior to September 14, 2016, you're eligible for one of these discounts the next time you renew your contract.

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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