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Venture Monitor

Q4 2019



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Silicon Valley Bank



Angel & seed deal value remains elevated in 2019 at \$9.1B

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Value of VC deals with nontraditional investor participation approaches \$100B for second consecutive year

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2019 marks record year for VC exit value despite tepid exit activity in Q4

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The definitive review of the US venture capital ecosystem



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Executive summary

The big question mark at the start of 2019 was how VC deal value would fare after a historic showing in the year prior. Some thought that 2018 was a peak and the VC industry would start slowing down, while others believed that this substantial level of investment presented the new normal. Now that we've closed the books on 2019, the latter seems increasingly possible due to a variety of structural changes within VC, with deal activity maintaining the record levels seen in 2018. Much of this was driven by persistent trends, most especially that larger deals have closed at every stage and in almost every sector. Indeed, mega-rounds (\$100 million+) and mega-funds (\$500 million+) have not been the temporary blip as some initially suspected but rather a lasting industry component.

Robust deal value was not the biggest story from 2019, however; instead it was the record-breaking VC exit value of over \$250 billion, nearly 80% of which came from VC-backed IPOs. Massive listings from unicorns were somewhat expected entering 2019 due to the favorable market environment. But while the sums have been large and certain listings have had success, the post-IPO waters have been choppy. The performance and valuations of many prominent companies have taken major hits since their 2019 listings, as questions from public market investors around path to profitability, corporate governance and long-term strategy have slashed trading prices.

The mixed results from the IPO market in 2019 might have reverberations into the new year. There are several large VC-backed companies in the IPO pipeline in 2020, some of which might reconsider listing and instead opt for additional late-stage financing. We could also see a pullback from some allocators to VC funds; however, the returns from 2019's sizable IPOs portends plenty of liquidity going back to LPs, which will likely be recycled back into VC funds.

Despite recent struggles from newly listed companies, it is improbable that VC dealmaking will be significantly affected; the enormous amount of dry powder in the industry and the long-time horizons inherent to VC investing mean that deal activity will likely continue at the same pace, although we could see a slightly more cautious approach.

2019 saw several other noteworthy trends shape the venture industry, including increasing influence from nontraditional VC investors such as sovereign wealth funds and PE funds. Emerging technologies in areas such as healthtech and cybersecurity are attracting unprecedented levels of VC dealmaking. Investment into female-founded companies increased slightly from 2018, and those gains made 2019 a record year on an absolute count and value basis for deals with female-founded companies.

While the VC asset class is defined by idiosyncratic situations, many investors are keenly aware of uncertainty in the global macroeconomic environment heading into 2020. Even with the long-term nature of venture investment, broader market forces could have an impact on dealmaking if larger economic challenges emerge.

NVCA policy highlights

NVCA empowers the venture industry by advocating for policies that encourage innovation and new company formation as well as delivering resources and programs to help VC firms succeed. We are committed to advancing policies that foster entrepreneurial activity and investment across the country. We are proud to represent an industry that is furthering solutions to tackle today's greatest challenges and advance the possibilities of tomorrow.

We had a busy 2019 at NVCA advocating on behalf of the VC industry and the entrepreneurial ecosystem. From new foreign investment restrictions, to expansive new tax policy proposals, to immigration policy, it was a year full of robust challenges and opportunities.

Below are a few notable policy highlights from 2019:

Foreign Investment (CFIUS/FIRRMA): NVCA worked diligently to influence the rules to implement the Foreign Investment Risk Review Modernization Act (FIRRMA), including recommending [key changes](#) to the final draft of CFIUS rules. As part of our efforts, NVCA hosted our second Emerging Technology Meets National Security conference. The event successfully brought together VCs and policymakers to learn from each other during a critical time for innovation and national security.

Potential NOL rule change: NVCA sent a [letter](#) to Treasury opposing a proposal that would unintentionally reduce many startups' exit values by further hindering the ability of startups to carry forward their net operating losses (NOLs). Treasury's proposal would force companies to use a less valuable formula for calculating their NOL limitations after an ownership change. As a result of our efforts, Treasury has already moved to create more favorable transition rules and has backed off its timing for the finalization of the rules. We will continue running this issue to the ground and hope to fully prevail in 2020.

Capital markets proposals: Several [proposals](#) from an NVCA coalition report to encourage

more U.S. public companies saw movement in 2019. This includes an SEC proposal that builds upon regulatory relief provided to Emerging Growth Companies (EGC) under the JOBS Act by extending EGC status from five years to 10 years as well as a separate proposal to provide greater oversight of proxy advisory firms.

More regulatory fights: NVCA has engaged on several new regulatory proposals, including an effort to require prospective disclosures of private company financing rounds and another effort to require small companies to report beneficial owner information on an annual basis to the government. We have made headway on the financing round disclosure effort by pointing out the ability for incumbents to exploit startups at particularly vulnerable times in their lifecycles, and we've also made progress on the beneficial ownership effort by reducing the burden on VC firms.

Immigration & Startup Visa: NVCA continued to advocate for proposals to facilitate immigrant entrepreneurship, including pushing a Startup Visa on Capitol Hill and with the Trump Administration. We also joined an important [legal brief](#) to enable VC-backed companies to hire top technical talent. The theory on immigration reform for quite some time has been that comprehensive immigration reform must occur (i.e. everything moves or nothing), but the door has cracked open recently as some discrete immigration bills have moved. That gives us hope that we may be able to propel forward legislation that facilitates the world's best entrepreneurs born outside the US to launch startups in the US.

This is merely a snapshot of what NVCA was up to in 2019 to advance the industry. All eyes will be on Washington as the 2020 US presidential election kicks into high gear. The election and the policies that emerge will have a significant impact on VC and startups. In fact, in addition to the current challenges we've seen from certain administration policies, we have also seen a great deal of dialogue coming from candidates on disruptive new tax proposals and regulation of private funds, big tech companies and drug



Bobby Franklin is the President & CEO of the National Venture Capital Association (NVCA), the venture community's trade association focused on empowering the next generation of transformative American companies. Based in Washington, D.C., with offices in Palo Alto and San Francisco, NVCA acts as the voice of the U.S. venture capital and startup community by advocating for public policy that supports the American entrepreneurial ecosystem.

prices. As we start 2020, we are working hard to position the industry for success no matter what administration changes the year may bring, and we will keep you informed on important developments coming from Washington and the campaign trail.

If you are interested in learning more about what we are doing on the ground in Washington and how the presidential election will impact VC, we encourage you to register to attend NVCA's [Politics & Priorities](#) on March 12, 2020 in San Francisco.

Overview

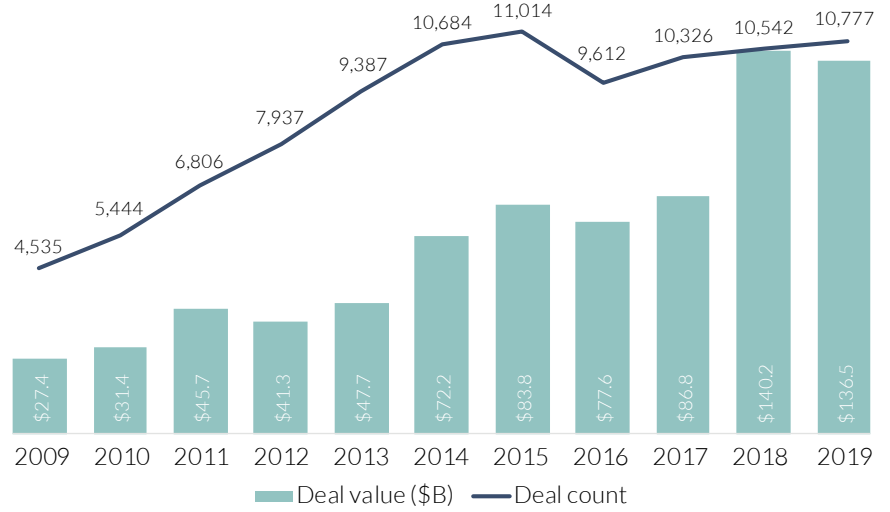
US VC deal count and value have continued their charge into record territory. The vast amount of available capital resources continues to drive growth in deal sizes and valuations across nearly all stages. 2019 recorded 237 mega-deals, an 11.8% gain on 2018. Nontraditional investors participated in more than 85.0% of those outsized deals.

VC-backed IPOs had a tepid end to an otherwise record year. Given the aftermarket price performance struggles from 2019's tech listings, healthcare IPOs dominated the Q4 roster instead; of the 13 companies that managed to list in Q4 2019, nine were in the healthcare sector, representing an impressive 69.2% of the total IPO count.

Capital raised by US venture funds reached \$46.3 billion in 2019. Positive net cash flows and increased fund sizes have contributed to the second-highest annual total in the past decade.

US VC deal value in 2019 rivals 2018's record

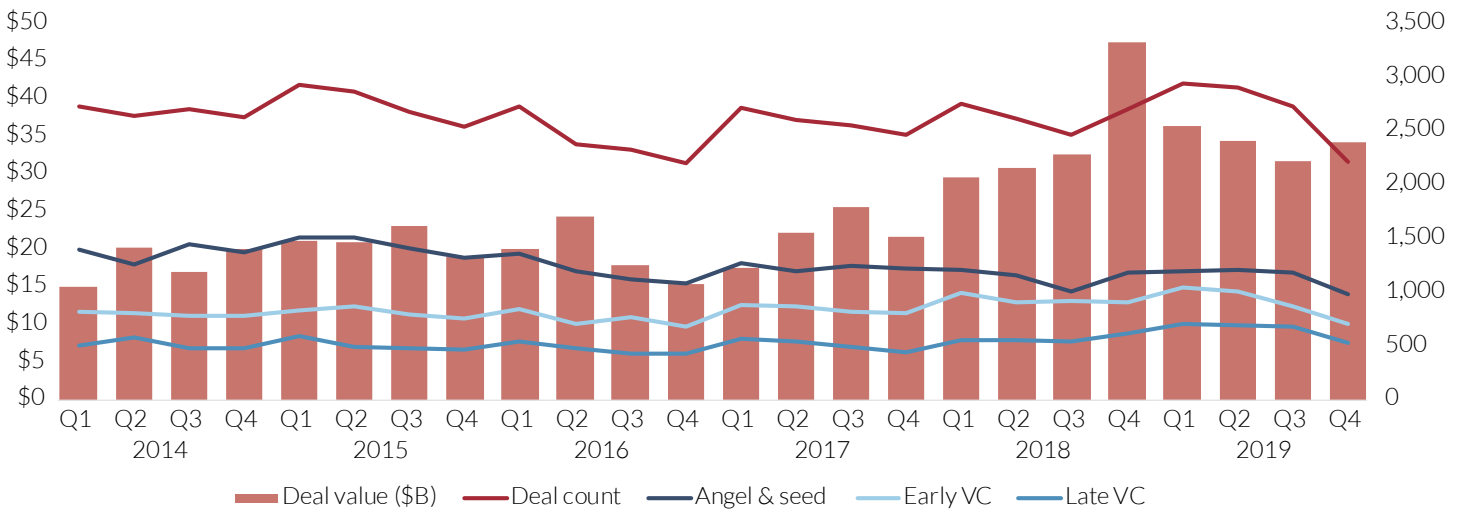
US VC deal activity



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Q4 shows further slowdown in deal count across all stages

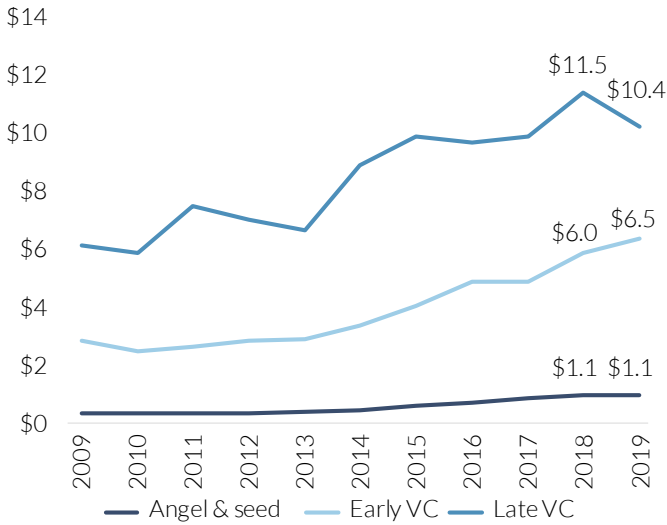
US VC deal activity by quarter



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Early-stage deal sizes hit unprecedented level

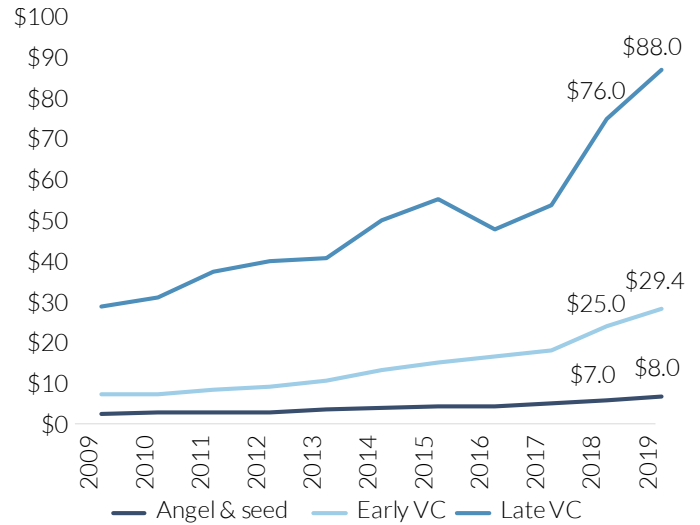
Median US VC deal sizes (\$M) by stage



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Valuations still rising

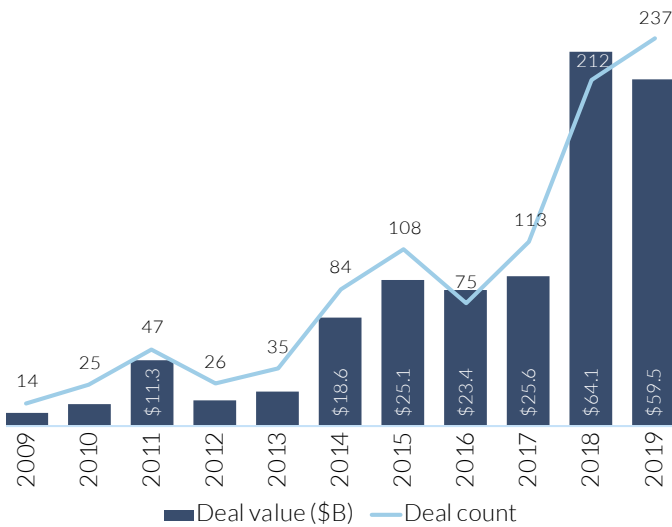
Median US VC pre-money valuations (\$M) by stage



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Mega-deals set new annual record by count

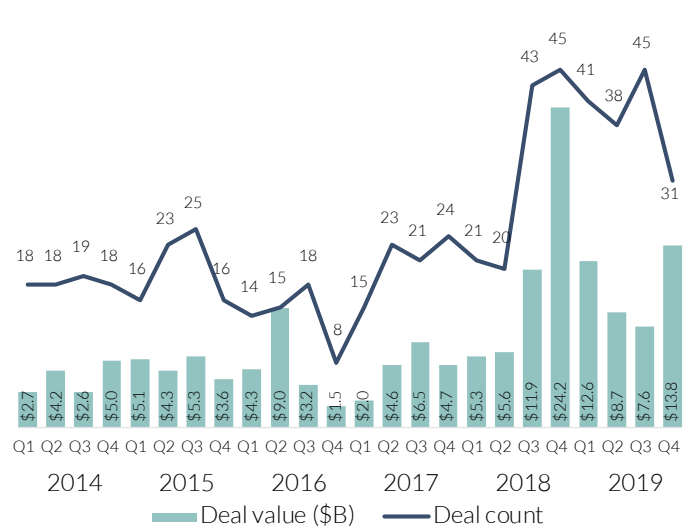
US VC mega-deal activity



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Capital continues flowing to unicorns

US unicorn deal activity



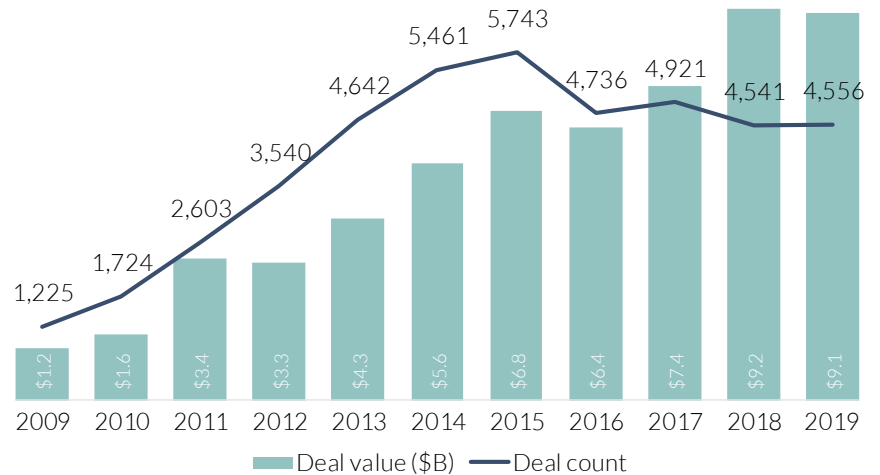
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Angel, seed & first financings

The angel & seed stage saw another strong quarter in 2019, logging \$2.1 billion across 981 deals in Q4. On an annual basis, it recorded \$9.1 billion in deal value, in line with the prior year's record; count, on the other hand, plateaued with 4,556 deals closed. Deal reporting at this stage tends to be delayed; we have marked roughly \$1.7 billion in additional 2018 angel & seed funding since the Q4 2018 PitchBook-NVCA Venture Monitor and would not be surprised to see a similar lift in 2019. This leads us to believe the year-end actual could surpass \$10 billion, which would be a record high for angel & seed deal value. Deal activity at this stage has been propelled by a maturing startup pool and increased investor competition, which have caused transaction sizes to escalate.

Angel & seed deal value in line with 2018's record

US angel & seed deal activity

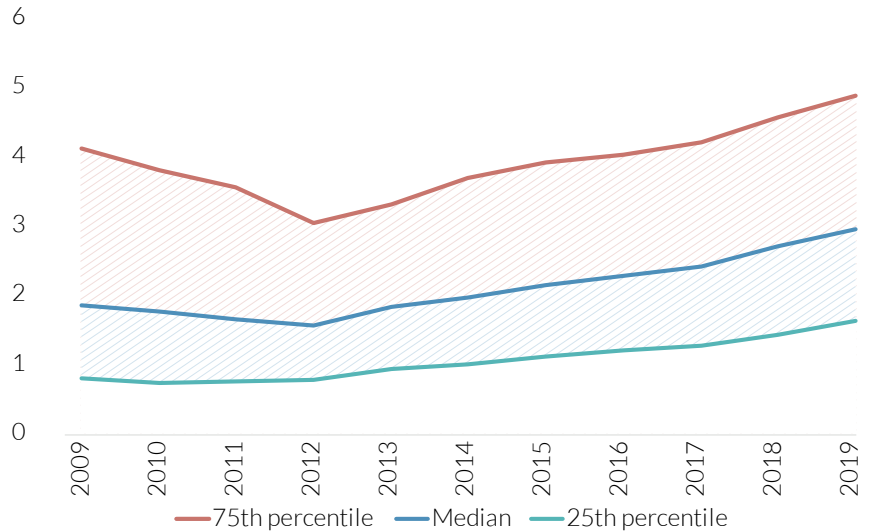


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Angel & seed deal sizes have climbed over the past seven years, landing at an annual median of \$1.1 million in 2019. This rise can primarily be attributed to the changing demographic of startups and investors as we discussed in our recent [note on serial entrepreneurs](#). Founders today have access to a wide range of both financial and strategic resources at the earliest stages, facilitating time for business advancement and prolonging the need for VC funding. When those startups decide to raise capital, they have been doing so at higher valuations. Additionally, [startups can be launched for \\$1,000](#) or less due to advancements in SaaS pricing models and cloud computing. These advancements have, in effect, extended the median age of companies receiving angel & seed funding to 2.9 years, up from 1.5 years in 2012. The average age of these startups is even higher. Notable examples of older companies raising seed funding in 2019 include 23-year-old Uno Healthcare, 20-year-old GlueTech and 20-year-old Jinx from Floodgate Fund, Quake Capital and Brand Foundry Ventures, respectively.

Startups waiting longer to raise angel & seed capital

Quartile distribution of age (years) of companies receiving angel & seed funding



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When these startups go to fundraise, they are more mature and able to command larger deal sizes and valuations. The median angel & seed pre-money valuation has grown 14.3% YoY, landing at \$8.0 million in

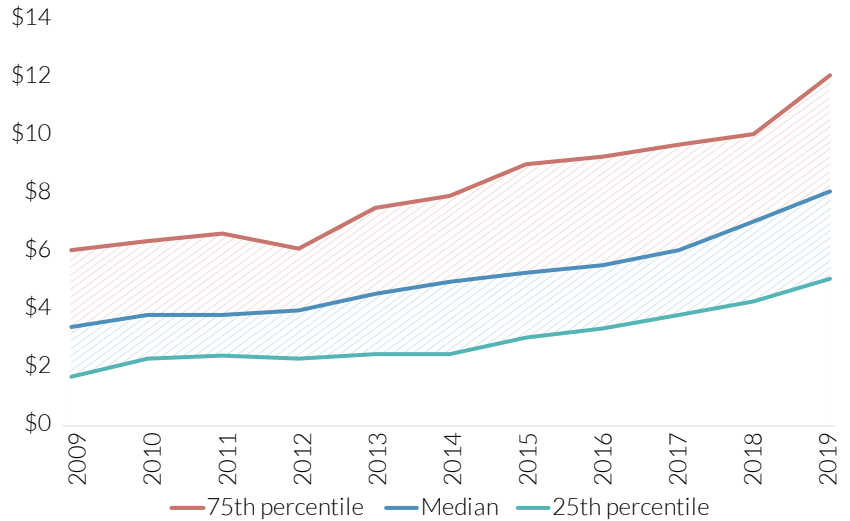
2019. In our [2020 Venture Capital Outlook](#), we predict this will rise to over \$8.5 million. Valuation growth has mostly occurred at the top quartile, which saw a 20.0% YoY jump to \$12.0 million. Top-quartile deals are buoyed by investors willing to pay a premium to own a piece of the most attractive businesses or those run by experienced serial entrepreneurs. The most dramatic example is 7-year-old task management platform Notion Labs, which raised a \$18.7 million round at a \$781.3 million pre-money valuation. These types of deals are rare but not unexpected in an environment where a homerun investment can yield 50x returns or greater, as was the case with Lowercase Capital's investment into Uber.

Although angel & seed deals were assumed to be too small to move the needle for the largest VCs and nontraditional investors, changing strategies and startup demographics have made investing at this stage more lucrative for these parties. Increased firm maturity, deal sizes and valuations have encouraged large firms to make sizable investments at this stage, such as Comcast Ventures' \$15.0 million investment into Neural Magic at a \$30.0 million pre-money valuation. We expect the seed stage will continue to be an area of focus for nontraditional investors and larger VCs for the foreseeable future, as valuations and opportunities continue to evolve.

First-financing deal value landed at \$10.9 billion in 2019, which falls short of 2018's record posting but is notably higher than figures of past years. This contrasts with first-financing deal count, which has settled at 2,766, down from 3,734 in 2014. As startups stay private longer and raise more rounds of capital, investors are directing a greater proportion of capital into follow-on financings as opposed to first financings. Additionally, alternative sources of capital such as crowdfunding and venture debt are allowing startups to delay VC funding or even avoid it altogether. We've observed this in the count of first financings for companies at the angel & seed stage, which has declined to 1,912 from a peak of 2,810 in 2014. Although we don't expect to see a massive drop in these deals, the variety of resources available will likely prevent activity from matching 2014's high for a while to come.

Range of early-stage deal sizes continues to widen

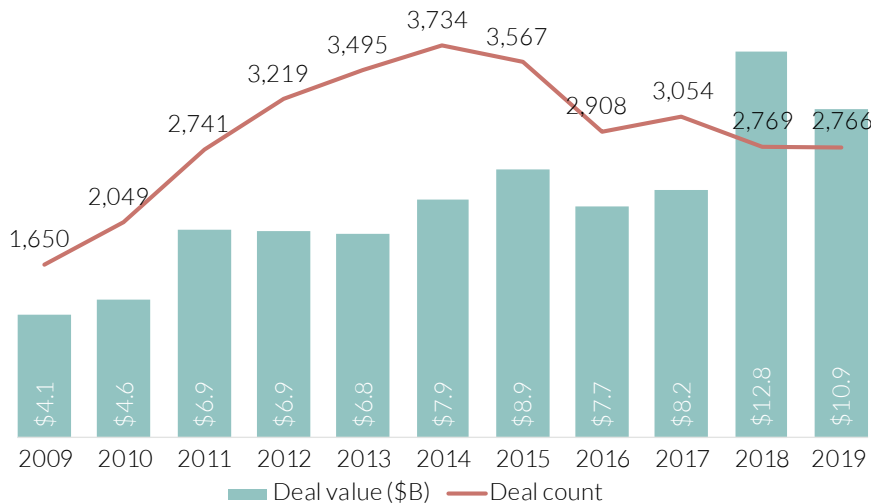
Quartile distribution of angel & seed pre-money valuations (\$M)



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First-financing deal count plateaus in 2019

US first-financing VC deal activity

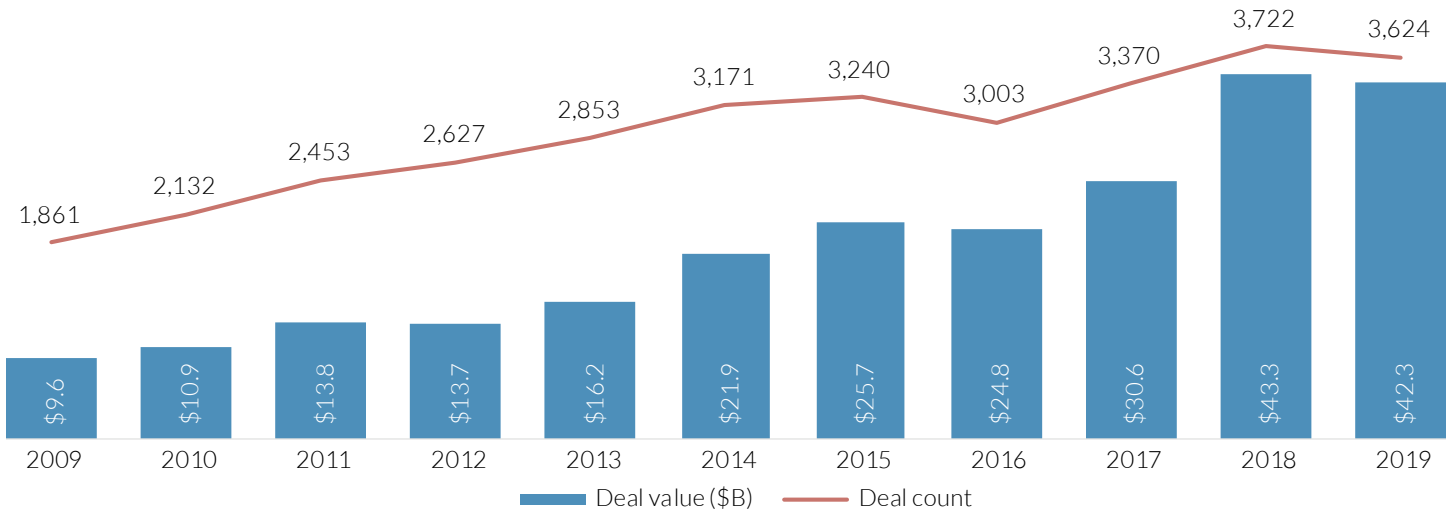


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Early-stage VC

Early-stage investment continues at elevated levels

US early-stage VC deal activity



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With more than \$42 billion invested across over 3,600 deals, 2019 neared 2018's record highs for US early-stage VC investment. Despite a decline in activity during Q4, the year overall showcased the strength of the early stage within the broader industry. More than \$10 billion was invested into the stage during each of the first three quarters of the year; deal count surpassed 1,000 in both Q1 and Q2 (the two highest quarterly figures we've tracked); and the median deal size has persistently trudged northward. Early-stage deal activity has continued to grow while angel & seed activity has plateaued, suggesting a healthy pipeline of targets is still moving through the venture cycle. In addition, the median age of companies raising early-stage capital has reached 3.5 years, the highest figure in our dataset. Subsequently, investors are able to make more informed investment decisions because early-stage companies seeking capital have had more established business models.

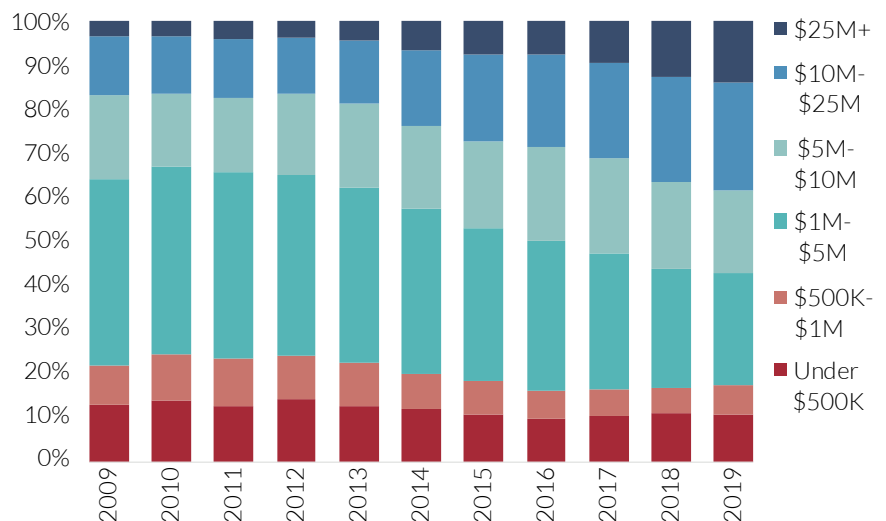
The rise of early-stage mega-deals has been a major factor in the record deal value realized in 2019—53 such transactions were completed at \$100 million or higher, which represents nearly a quarter of all VC mega-deals raised in the year. Mega-deals have accounted for almost 25% of early-stage deal

value in 2019, notching roughly \$10 billion for startups. "Blitzscaling" has become the term du jour for the industry, describing how companies position themselves for hyper growth without revenues advancing at the same proportion. This approach, aided by outsized rounds at all stages, has come under much scrutiny as of late from investors as

more companies are hit with layoffs and as coverage of WeWork's failings shows no signs of slowing. In a recent blog post, Fred Wilson of Union Square Ventures even went as far as to say that the "massive experiment in using capital as a moat to build startups into sustainable businesses has now played out and we can call it a failure for the most part."

Early-stage deal sizes still trending larger

US early-stage VC deals (#) by size



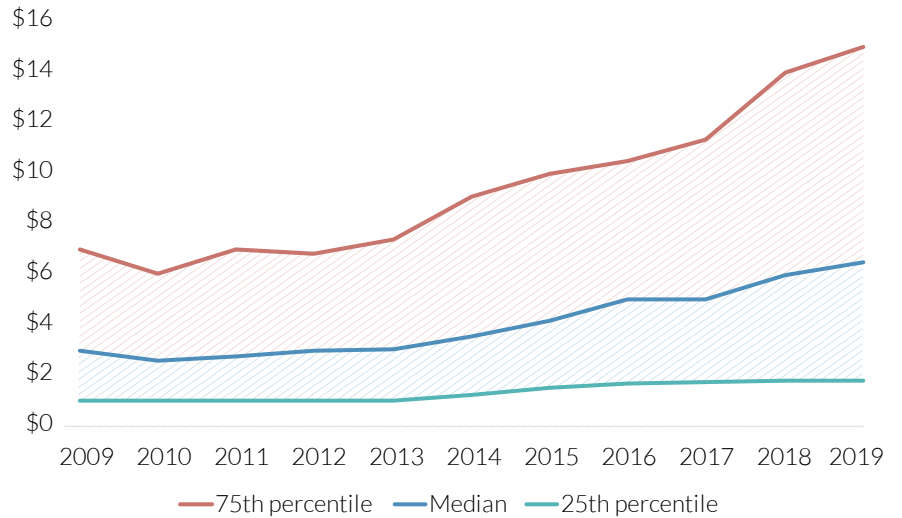
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Indeed, we have witnessed a slowdown with just four early-stage mega-deals completed during Q4, after no less than 14 were closed during every other quarter of the year. However, we believe this is a snap reaction to what many perceive as a shift in venture economics moving forward. In fact, more deals were completed in the \$50 million-\$100 million size bucket in Q4 than in any other quarter in 2019. Because of the positive momentum of returns over the past few years, along with high amounts of committed capital to the asset class, we believe that early-stage mega-deals will continue to prevail within the US VC industry. While they provide fodder for market bears, 19% of the companies raising early-stage funding of \$100 million or more between 2008 and 2015 completed an IPO—a much higher percentage than the wider industry—while another 14% exited by acquisition. These figures lend a bit of credence to the strategy, which could help continue the trend even as headwinds are established.

Traditional VC firms have long held the early stage as the core of venture, but we're now seeing nontraditional VCs creep down the company lifecycle and invest more heavily at this stage as well. Coatue Management closed a \$706.0 million fund in Q4 that will target the early stage. And after completing nearly 400 early-stage deals in 2018, PE firms provided an encore of nearly 330 in 2019; this includes participation in 23 of the year's early-stage mega-deals. While nontraditional investors are not the sole source of growing deal sizes and valuations at the early stage, their increased presence has heightened competition for deals and will likely have a substantial influence moving forward.

Early-stage quartile spreads increasing

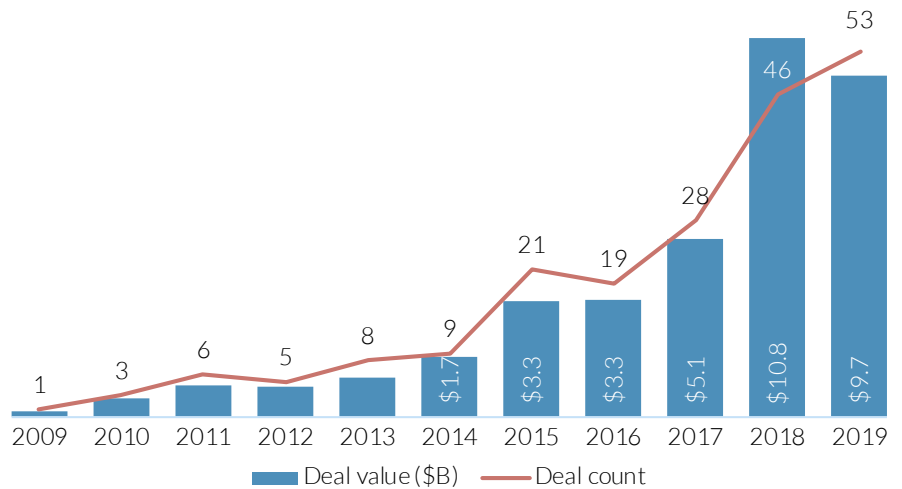
Quartile distribution of US early-stage VC deal sizes (\$M)



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Early-stage companies attracting more mega-deals

US early-stage VC mega-deal activity

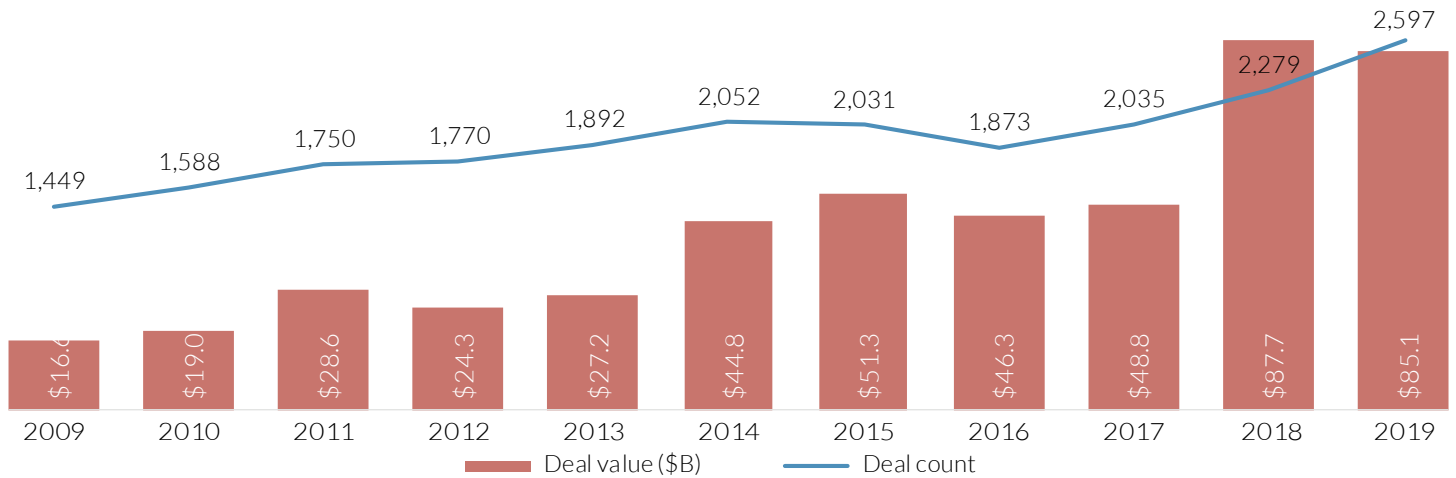


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Late-stage VC

Late stage sets new record for deal count

US late-stage VC deal activity



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Late-stage deal count surpassed 2,500 for the first time ever in 2019, finishing the year at nearly 2,600 deals totaling more than \$85 billion invested. The four quarters ending Q3 2019 account for the four most active quarters in our dataset, a testament to the amount of capital available to mature VC-backed companies, as well as to investor appetite for these deals. However, while Q4 2019 deal value reached the second-

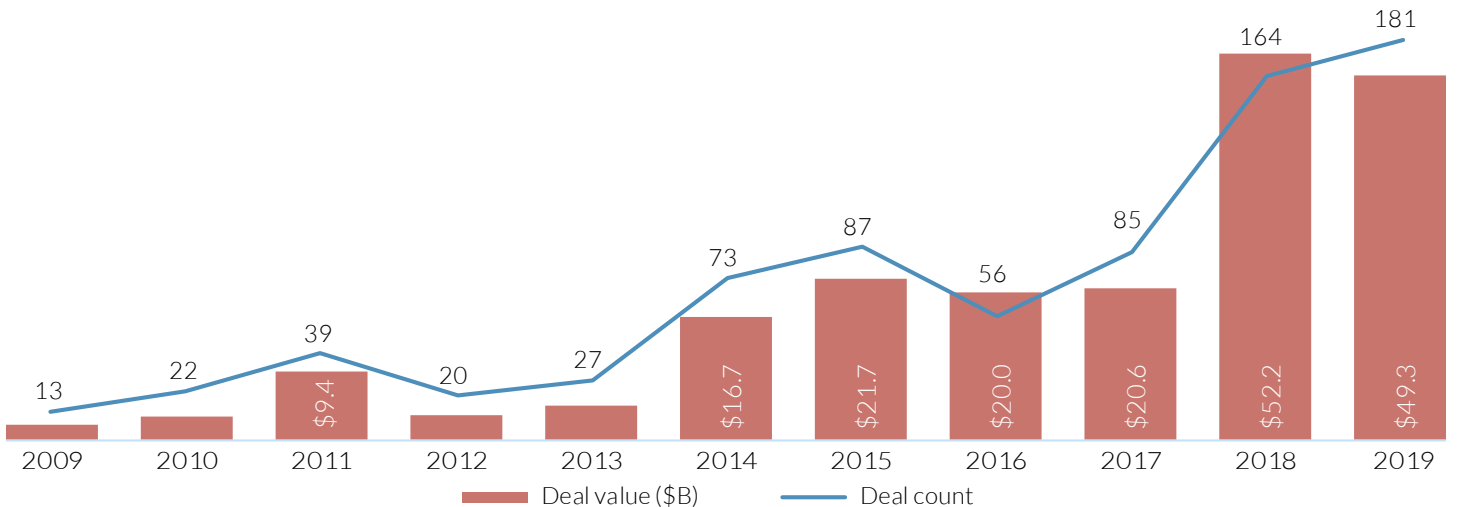
highest total in our dataset, quarterly deal count failed to reach 600, reverting to pre-2019 levels. Fallout from disappointing or completely eschewed IPOs may be causing a quick pause as investors scrutinize the prospects of profitability for late-stage companies, but investors still appear willing to deploy large sums when attractive opportunities are presented. It's also important to note that the fourth quarter

has historically shown to be the slowest for late-stage deal activity.

2019 also logged the new high for mega-deals at the late stage; 181 deals were completed of at least \$100 million for a YoY bump of roughly 10%. The persistently low interest-rate environment will continue to bring large non-VC investors into the VC industry, as the strategy has proven

Nearly \$50B raised through late-stage mega-deals in 2019

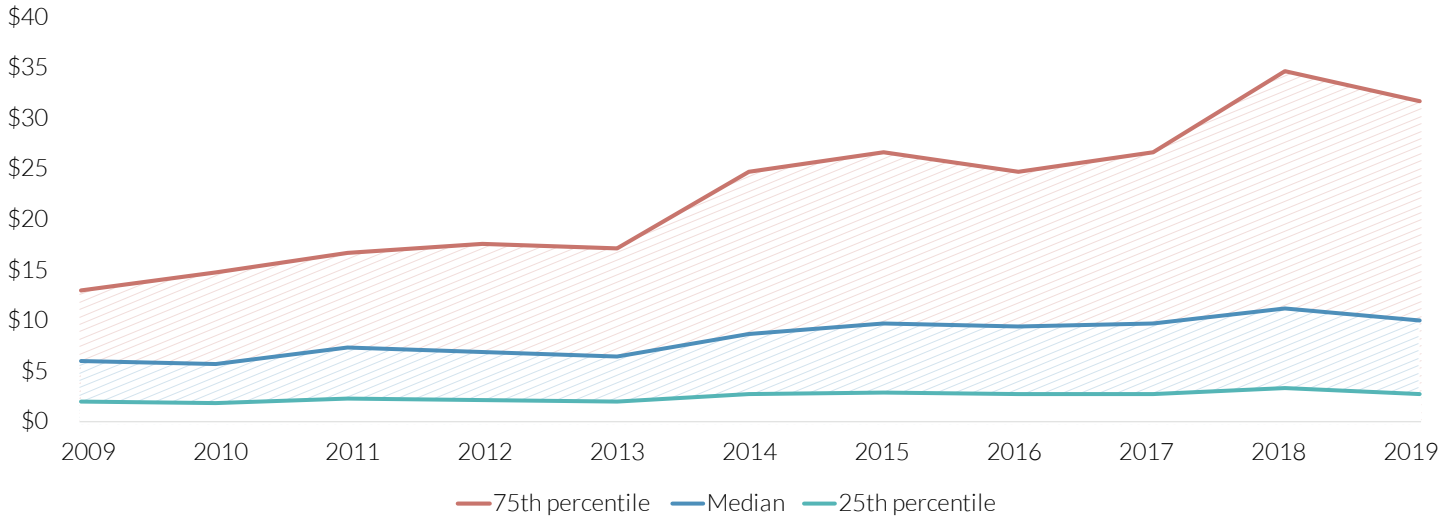
US late-stage VC mega-deal activity



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Late-stage deal sizes retract from 2018's highs

Quartile distribution of US late-stage VC deal sizes (\$M)



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to be fruitful on an absolute basis. Capital from nontraditional investors is necessary for venture mega-deals to remain at the level seen over the past two years. In fact, nontraditional investors have participated in more than 85% of completed mega-deals across all stages in 2019.

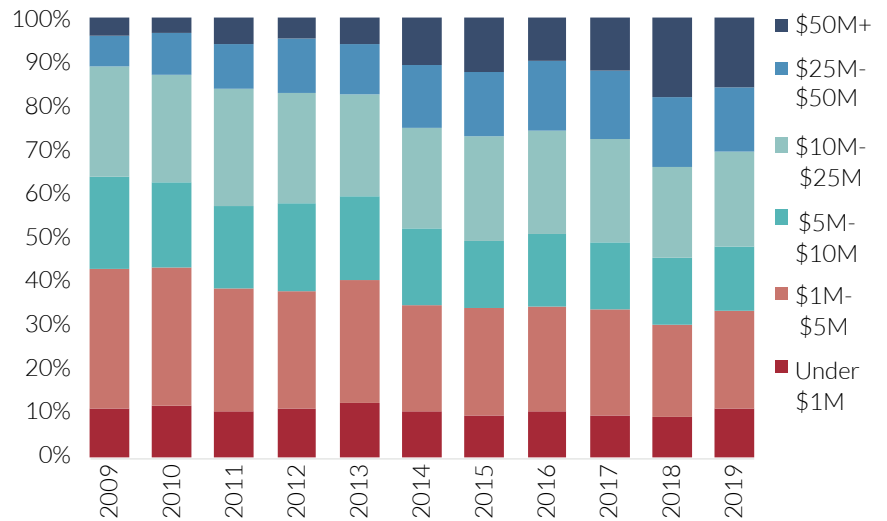
Interestingly, late-stage deal sizes contracted YoY, with the annual median falling by roughly \$1.1 million to \$10.4 million and the 75th percentile falling from \$35 million to \$32 million. The median size had jumped by 15.0% from 2017 to 2018, so a slight pullback in 2019 was plausible. At the same time, however, late-stage pre-money valuations continue to rise unabated, with the median growing 16.0% YoY to \$88 million in 2019. This bifurcation would insinuate that investors are taking smaller stakes in late-stage deals, assuming debt levels and secondary components of announced deal sizes have not shifted YoY. Some companies that have raised large rounds in the past have also had trouble spending the money sensibly. Beyond the lavish spending of WeWork, SoftBank-backed Katerra and Wag have not been able to turn extra venture dollars into growth, and other highly valued startups such as Fair, Postmates and Zume have announced rounds of layoffs.

VC funds have returned more capital to investors than has been called down each year since 2012. Through Q1 2019, the industry has already distributed almost \$29.0 billion to LPs, setting the year on pace to reach record distributions, and that capital will likely be recycled back into the industry. Norwest Venture Partners and TCV, which have participated in a combined 34 US VC

mega-deals from 2009 to 2019, closed on \$5.2 billion across two funds between them during Q4; each fund represents the largest vehicle ever raised for each respective manager. We believe that this trend will sustain new commitments into VC funds for the near future and underpin late-stage deal activity for several years, even as exits lagged over the final quarter of 2019.

Share of \$50M+ deals falls for first time since 2016

US late-stage VC deals (#) by size



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SVB: Resiliency is the theme for 2020

Q&A: Greg Becker, President and CEO of SVB Financial Group and CEO of Silicon Valley Bank

How is the innovation economy shaping up for 2020?

Becker: We have an incredible opportunity in front of us. If a company or industry isn't innovating today, by almost any definition, it is dying. Every sector is turning to tech to compete and stay relevant. Whether you're a young startup, a scaling company or a forward-looking investor, this drive to innovate provides sustainable opportunities. In the big picture, this leads to entirely new market opportunities that in turn make the ecosystem more resilient. We can't ignore the challenges: Massive change will always create winners and losers—and we all need to do a better job of demonstrating how innovation can close, not widen, the divide between haves and have-nots. Disruption, applied thoughtfully, can make people's lives better.

Do you see any signs of innovation decelerating?

Becker: No, for a number of reasons.

First, it's cheaper. The cost of enabling technologies—including AI, data analytics and storage capacity—continues to drop. The first whole human genome sequencing cost \$2.7 billion 15 years ago. Today, the cost is less than \$1,000.

Additionally, it's more inclusive. Knowledge and idea pools are growing with the involvement of nontraditional entrepreneurs, founders and investors. Their diverse backgrounds, experiences and geographies are expanding what's possible. But there is still much work to be done to open tech opportunities to all.

Lastly, innovation makes a positive difference. The tech industry employs more than 11.5 million Americans and contributes \$1.6 trillion to the economy. In 2018, it accounted for 261,000 new jobs, and here's the even better news: Tech jobs grew in 43 states.

How will 2019 record fundraising have an impact on valuations?

Becker: In 2019, US VC deal value nearly matched 2018's record highs, continuing the trend of mega-rounds for large, late-stage companies. US-based venture funds focused on the healthcare sector raised \$10.7 billion in 2019, setting a record for the third-consecutive year, according to Silicon Valley Bank's analysis of PitchBook data. Strong M&A and IPO performances of healthcare companies have also led to greater returns for LPs, which should in turn drive fundraising and investment levels going into 2020.

Everyone wants a piece of the innovation growth story, from traditional VCs to corporates, emerging managers to mega-funds, sovereign wealth funds to family offices. Aileen Lee coined the term unicorn just six years ago. Historically, the average venture-backed tech company would raise \$100 million in total private funding ahead of a \$100 million public offering. Today, more than 90% of unicorns have already raised at least \$100 million in a single private financing. With all the fundraising and late-stage capital available, we see no signs of things slowing down much, excepting major macroeconomic shifts.

That said, we'll be watching valuations to see if investors switch their sentiment to "fear." If so, many of these growth stories that have been priced for perfection will need to continue to rely on private capital—or even face down rounds. However, companies with the right combination of scale and durable performance will be able to attract public capital. Some of the best-known companies were launched in downturns.



Greg Becker has been a champion of the innovation economy since he joined Silicon Valley Bank in 1993 as a banker to fast-growing technology companies. Today, he serves as President and CEO of SVB Financial Group and CEO of Silicon Valley Bank, the bank of the world's most innovative companies and their investors.

What will happen to all the dry powder? When will it get deployed and how?

Becker: The good news is the amount of dry powder from VC and PE firms is at a record level to support companies, and there is more interest from nontraditional investors. Looking ahead, we expect VCs to be selective with their investments, completing fewer but larger rounds.

What will investors want to see in companies going public?

Becker: The public markets are increasingly more discerning about the fundamental health of unicorns. Still, for recent IPOs, top-line growth remains highly correlated to a company's valuation. In fact, the public markets have continued to be receptive to high-growth companies with operating losses. Out of 39 US VC-backed tech IPOs in 2019, four exited at a \$10 billion or more post-money valuation, compared to just one in the previous three years combined. Post-IPO performance has been mixed (57% of companies are trading above their IPO price.)

Of course, share prices have tumbled for some of these IPOs, which serves as an important reminder to those seeking to go public that they shouldn't ignore the importance of demonstrating a clear path to profitability. But I don't think there will be a complete shift from growth to profitability. At least not yet.

You said there is a need to show how innovation can close the divide between haves and have-nots. Can you elaborate?

Becker: Leading with purpose is good for business. It helps us attract and retain great people, clients and partners. Research shows that companies that stand for something larger than their own profits increase shareholder returns. As CEO of a rapidly growing public company that seeks to live its values, I can tell you it's critical for success and the right thing to do.

We are working with industry organizations, non-profit partners, our clients and our internal teams to find ways to expand opportunity for those who are underrepresented in innovation, including in VC firms, at startups, on company boards, in the executive suite and in entry-level positions. It takes a concerted effort involving the entire ecosystem. Initiatives include looking for startups in untraditional places, changing attitudes and stereotypes and finding new pipelines for talent. As an example, when our clients told us they were having trouble finding employees with the skills they needed to grow, we joined an initiative to create a community-college-based certification program in business analytics, one of the most popular entry-level needs. We're just at the start, but the early results are encouraging.

How are trade and foreign investment tensions affecting startups?

Becker: Technology companies tend to be global from day one. They source from and sell into

international markets and increasingly seek foreign investment, so it's important that we find ways for innovative technology companies to operate and be successful internationally.

We hear from some of our smaller manufacturing clients that tariffs have added to the cost of raw materials, which has an impact on their margins since they often can't pass the cost on to consumers. Some of our clients have identified silver linings, including one company that is seeing an uptick in its US-based prototyping business as more US-based companies favor a domestic source during uncertainty.

The stricter investment rules handed down by the Committee on Foreign Investment in the US (CFIUS) have had an impact on foreign investment into US-based companies. We are seeing a decline in China's involvement in US tech venture, but there is still healthy investment in the life sciences and healthcare sectors.

At this point in time, it goes without saying that growing tensions between the US and several Middle Eastern countries could create complications for the global economy.

Where do you see new global opportunities?

Becker: Just about anywhere you look. In the past two years, Silicon Valley Bank has launched operations in Canada and expanded our presence in Europe beyond the UK and Ireland to include Germany and, most recently, Denmark. Certainly, we are seeing increased interest by US investors in European companies.

We see major US VC firms setting up posts in places such as Singapore and Mexico City so they can be closer to the markets that interest them. VC investors such as Andreessen Horowitz, Accel and Foundation Capital are collaborating with local VC firms to finance Mexico-based tech

companies. In 2019, our global investment team and SVB Capital leaders spent time in Mexico, Brazil and Australia, among other places, to link investors with opportunities in those countries.

As in the US, the infusion of new capital and the declining cost to launch a company are driving local entrepreneurship. Increasingly, entrepreneurs in developing markets are moving back home to start businesses after completing their studies at universities and work stints in the US and Europe. More and more, these individuals gain access to mentorship and information through global accelerators and thriving startup communities.



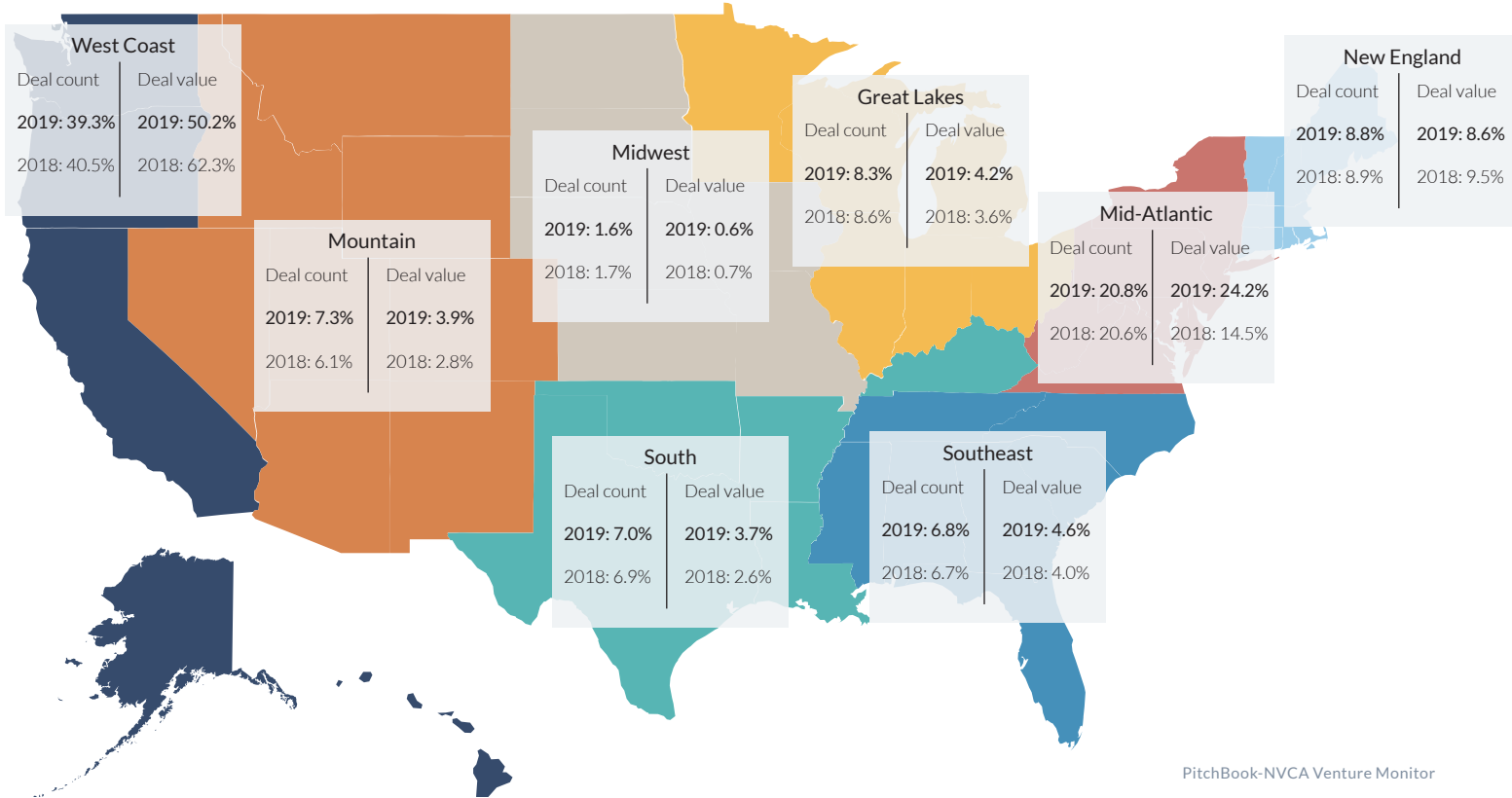
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Deals by region

West Coast proportion of deal value falls, as share of deal count plateaus

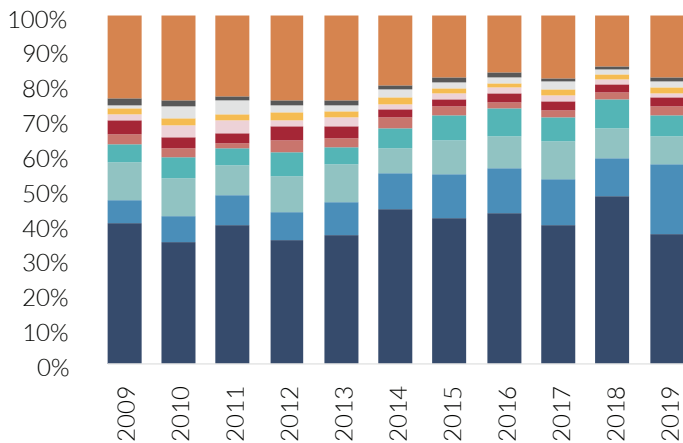
US VC deal activity by region



PitchBook-NVCA Venture Monitor

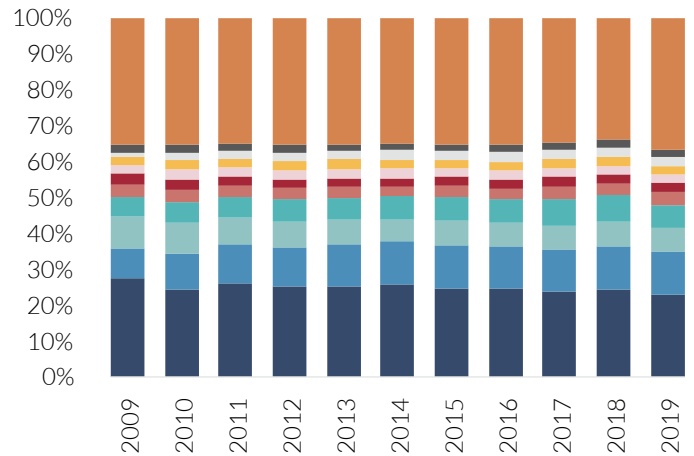
Bay Area's proportion of overall US VC investment slips to lowest since 2013

US VC deals (\$) by metro



Seattle and San Diego metros experience growth YoY

US VC deals (#) by metro



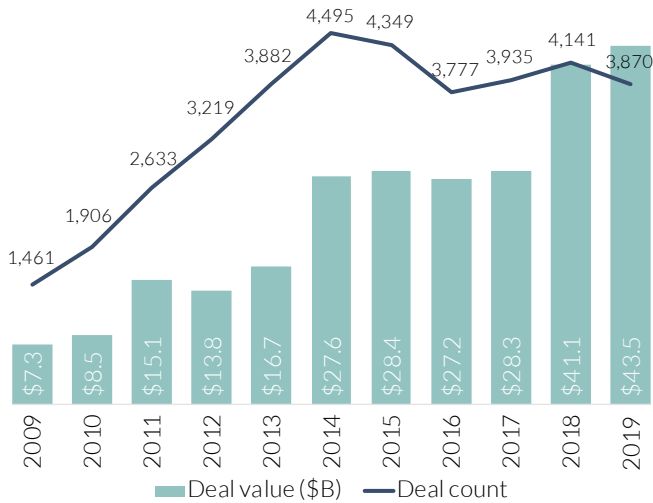
- Other
- Philadelphia
- Chicago
- Austin
- Washington, DC
- San Diego
- Seattle
- Los Angeles
- Boston
- New York
- Bay Area

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Deals by sector: Software

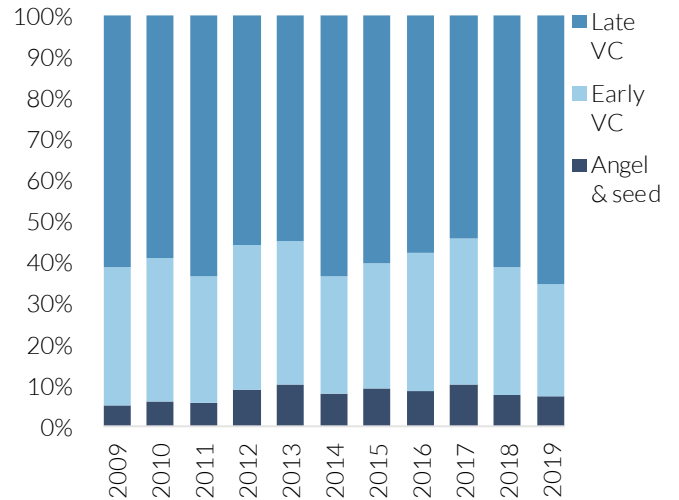
Annual deal value grows 6x over last decade
US software VC deal activity



PitchBook-NVCA Venture Monitor

Late stage captures largest proportion of deal value in past decade

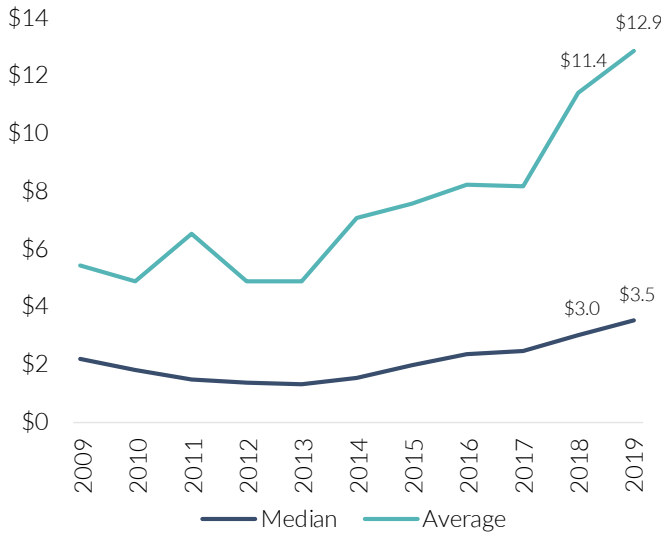
US software VC deals (\$) by stage



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Deal sizes reach new highs in 2019

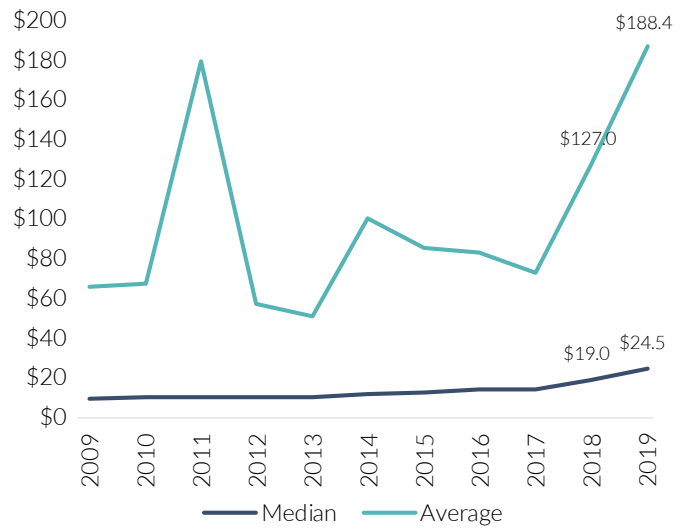
Median and average US software VC deal sizes (\$M)



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Average valuation soars 48% YoY

Median and average US software VC pre-money valuations (\$M)

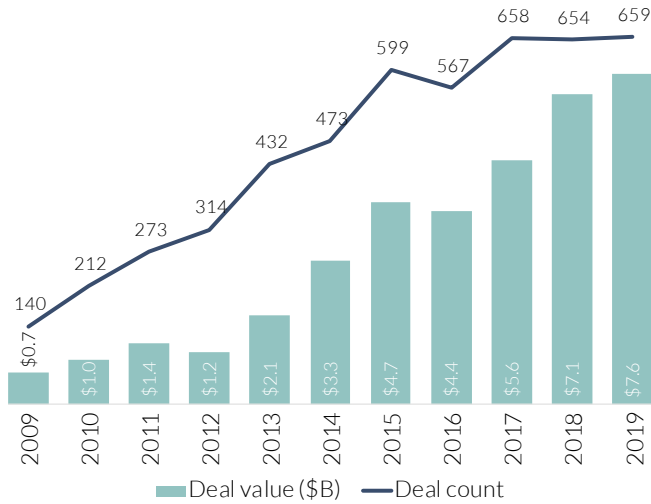


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Deals by sector: Healthtech

Healthtech deal volume and value set new high-water marks

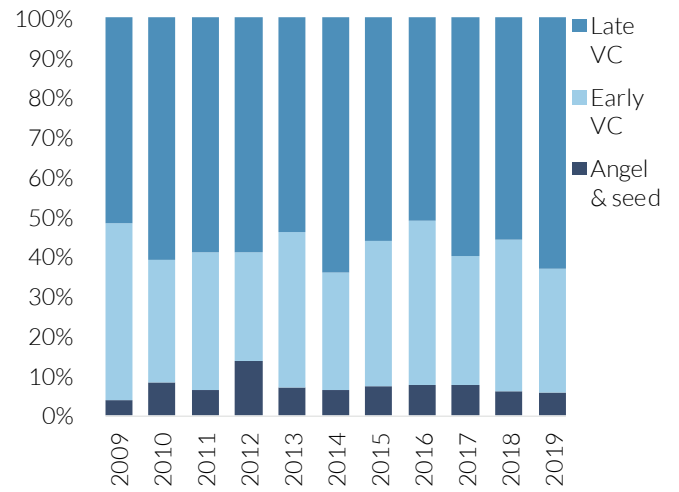
US healthtech VC deal activity



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Late stage takes a greater share of all capital invested into healthtech YoY

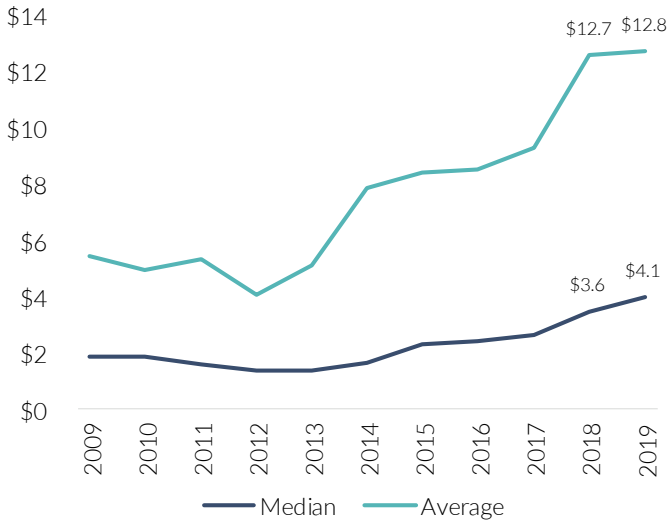
US healthtech VC deals (\$) by stage



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Growth of deal sizes begins to decelerate

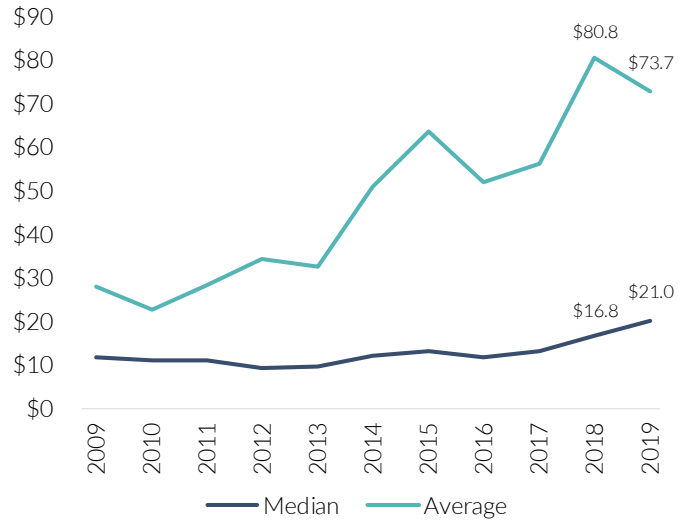
Median and average US healthtech VC deal sizes (\$M)



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Healthtech valuations temper slightly YoY

Median and average US healthtech VC pre-money valuations (\$M)

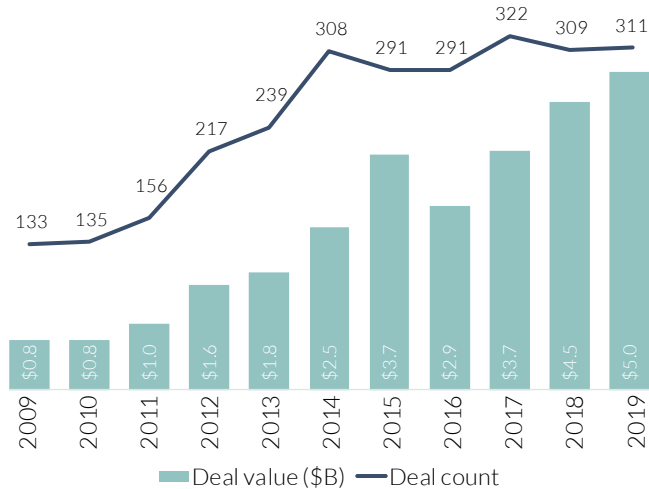


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Deals by sector: Cybersecurity

Cybersecurity capital investment hits new record in 2019

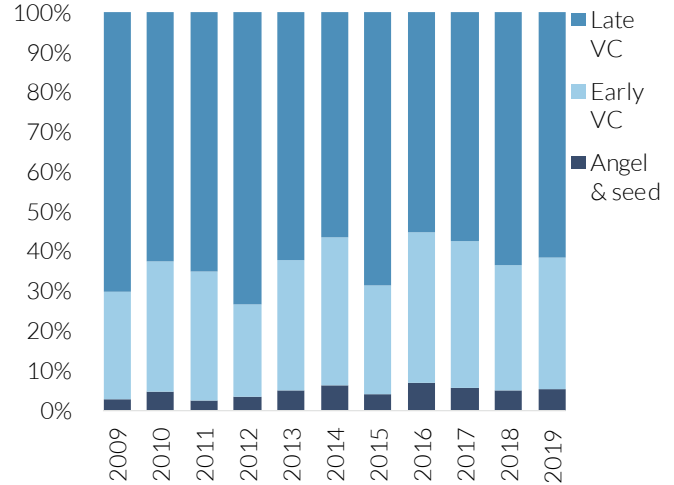
US cybersecurity VC deal activity



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Late-stage share falls slightly due to strong activity at early stages

US cybersecurity VC deals (\$) by stage



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Deal sizes sustain upward trend

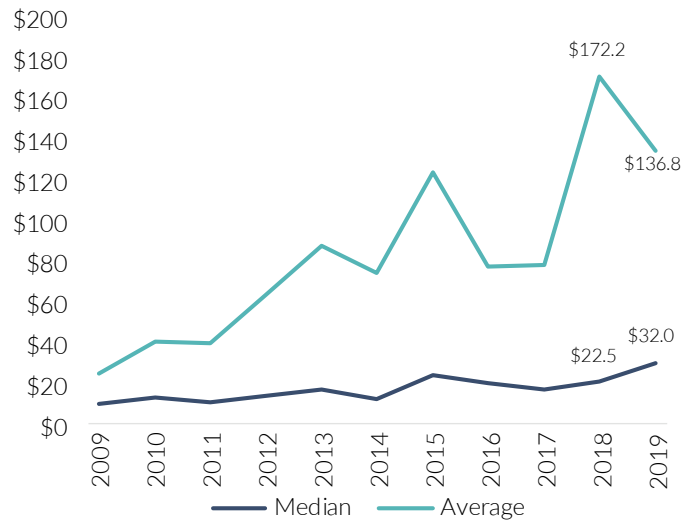
Median and average US cybersecurity VC deal sizes (\$M)



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Average cybersecurity valuations see some reversion after massive uptick

Median and average US cybersecurity VC pre-money valuations (\$M)

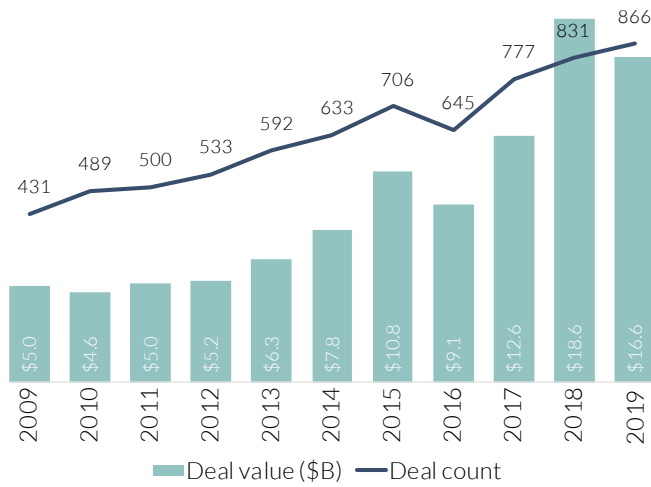


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Deals by sector: Pharma & biotech

Deal count reaches decade high

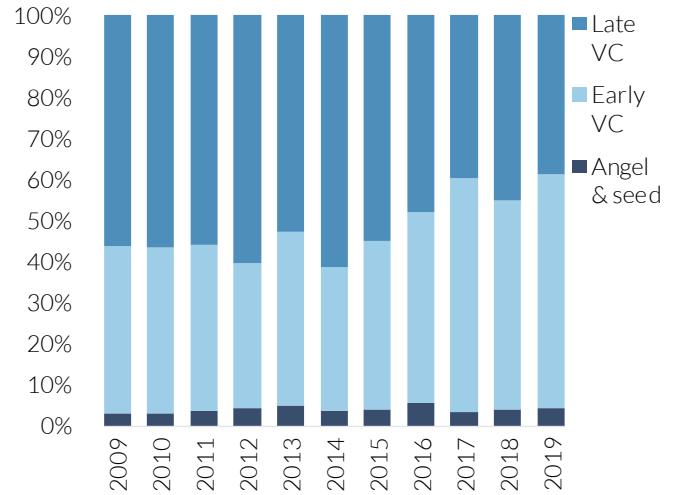
US pharma & biotech VC deal activity



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Investor capital refocuses on the early stage

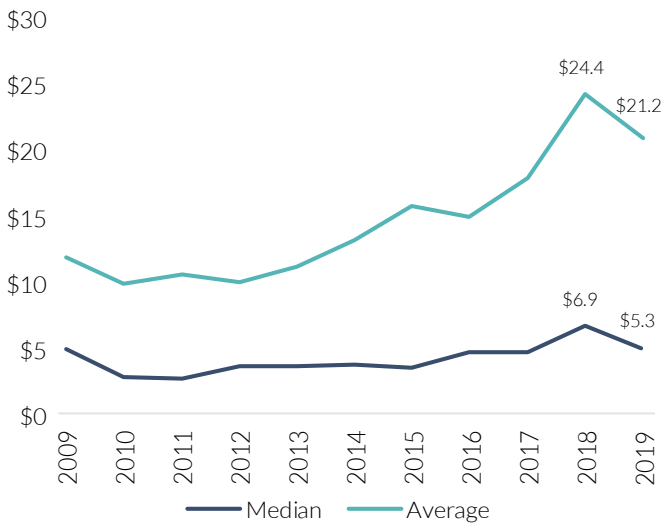
US pharma & biotech VC deals (\$) by stage



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Average pharma & biotech deal sizes retreat in 2019

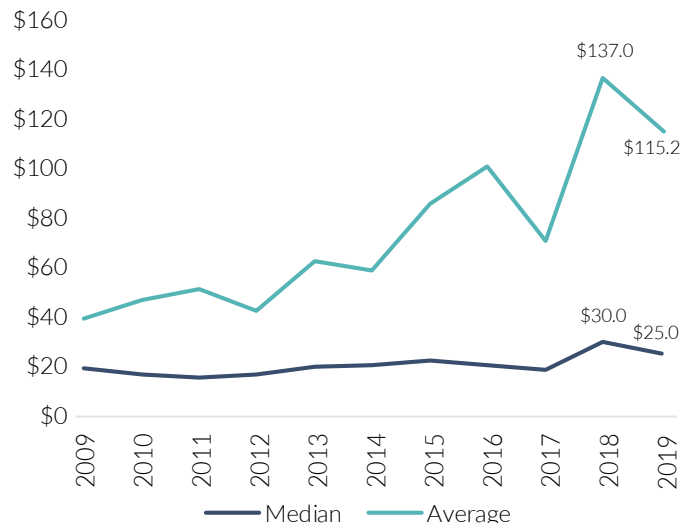
Median and average US pharma & biotech VC deal sizes (\$M)



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Median pharma & biotech pre-money valuations cool off

Median and average US pharma & biotech VC pre-money valuations (\$M)



PitchBook-NVCA Venture Monitor

SVB: Global trade tensions create stress—and opportunity

It's hard to find a successful company of any size that doesn't have at least some global exposure and is affected by today's trade tensions.

The trade wars, tariffs and stricter US government standards for foreign investors in US-based companies are adding new layers of complexity, prompting tech, life sciences and healthcare companies to consider different strategies.

Some startups are simply baking in the higher costs of doing business, squeezing margins or raising prices. Others have found silver linings in volatility and are innovating on the manufacturing process itself to make US-based operations a competitive alternative.

Whatever the case, trade tensions are clearly on the mind of startups. Silicon Valley Bank surveyed startups in Q4 2019 as part of the bank's annual Startup Outlook report and found that half of US startups are somewhat or very concerned that trade policy between the US and China will have a negative impact on their businesses in 2020.¹ Anecdotally, they tell us they are devising new strategies to expand market share, meet supply chain or manufacturing needs and gain access to capital.

New CFIUS rules set to become permanent in February

Stricter rules handed down by the Committee on Foreign Investment in the US (CFIUS) are prohibiting or delaying some foreign investment into US companies. At SVB, we are seeing a decline in China's involvement in US tech venture and a smaller impact on the healthcare sector. With CFIUS rules set to become permanent in mid-February, new questions are emerging about whether to solicit foreign investment from some countries. The February 2020 rules, which fill 319 pages, are considered by many to be the strictest

standards of any advanced economy. Since fall 2018, CFIUS has been given additional powers from Congress to review deals involving foreign buyers—and even minority investors and board members—in US-based companies that could give them access to technologies and data that might pose a national security risk. For example, a China-based owner of a US-based company that collects patient data was forced to sell the business, and high-profile semiconductor deals have been scuttled. AI is another example of an emerging technology that is receiving heightened scrutiny.

For smaller companies, even trying to figure out whether they could be subject to review can be time-consuming and expensive, hindering growth plans and putting pressure on fundraising and valuation dynamics. In one case, an SVB client spent \$40,000 alone to obtain a legal opinion that they could indeed accept investment from an Australia-based investor.

Finding opportunity amid uncertainty

Some of our clients are identifying opportunity in the evolving global trade and tariffs landscape: The increased focus on supply chain economics, for example, has led some startups to fine-tune strategies that in fact are saving them or their clients on manufacturing costs and time to market.

Tempo Automation—a San Francisco-based electronics manufacturer that builds prototype and low-volume quantities of printed circuit board assemblies—reports a growing preference among clients to switch to domestic manufacturing partners instead of contracting overseas. Reasons cited include the advantages of geographic proximity and certifications pertaining to information security and manufacturing standards, as well as guaranteeing the authenticity of all electronics components that are used.



Ben Stasiuk is a Vice President in Silicon Valley Bank's Frontier Technology group. Ben focuses on adding strategic value for entrepreneurs, investors, and influencers in the Bay Area's hardware and deep tech communities. Ben previously worked out of SVB's London office supporting EMEA tech and life science companies with working capital solutions.

Ben holds a bachelor's degree in Global and International Studies with a focus in Economics and Latin America from Middlebury College.

"So far, the gyrations in geopolitics are benefiting us. In addition, we are uniquely able to address the growing need among enterprises for accelerated product realization that traditional contract manufacturers simply can't accommodate," says Joy Weiss, president and CEO of Tempo Automation.

Using proprietary software to drive the user experience and smart factory, Tempo Automation addresses a wide range of industries, including the high precision needs of aerospace, medical, semiconductor and industrial technology companies. Speed to market and a "first time right" quality are critical for customers. "Look for a manufacturing partner who can handle rapid iteration and help you get from prototype to pilots and production while protecting your intellectual property," Weiss says.

1: "US Startup Outlook 2019: Survey," Silicon Valley Bank, Fall 2019

How planning pays off

Startups that source subcomponents overseas but manufacture their finished products in the US have seen a lighter financial impact from tariffs. Tariff rates on components tend to be lower than rates imposed on finished goods. This results in a lower “blended tariff” for companies leveraging US manufacturing. Nevertheless, the added cost from raw material tariffs can still be significant.

Density, a producer of proprietary workplace sensors, took a different approach and turned the notion that a Series B company can’t afford to handle its own manufacturing on its head.

Density CEO and co-founder Andrew Farah says the company had a choice of leaving most of the manufacturing in the hands of others but instead decided a few years ago to take the bold step of constructing a manufacturing site in upstate New York.

Density spent just \$68,000, taking it from a concrete shell to a fully functioning high-tech assembly site. The company added in-house manufacturing expertise to bring its operation online, incurring upfront risk and expense uncommon for startups.

The decision to manufacture in the US has paid off in spades. The company assembles its sensor, comprised of over 800 subcomponents, in Syracuse, New York. Clients include Fortune 50 companies that use Density for real-time, accurate and anonymous people count to improve efficiency and understand how people utilize space.

Not only can Density continuously improve its sensor by controlling the most critical parts of its supply chain, but it has also significantly reduced costs by iterating on the manufacturing process itself.

“We’ve reduced the time it takes to assemble, calibrate and test a unit from

an hour to under just eight minutes. And we’ve cut our cost by 51% along the way,” Farah says. “We’re manufacturing at a lower cost than if we were in China and we avoid traditional finished goods, contract manufacturing mark-ups.” Density has paid 25% more for its aluminum enclosure as a result of recent tariffs, but because the final assembly is being done domestically, he reports the tariffs have added only 3% to total the company’s total product costs, “and that is remarkable.”



For more than 35 years, Silicon Valley Bank has helped innovators, enterprises and their investors move bold ideas forward, fast.

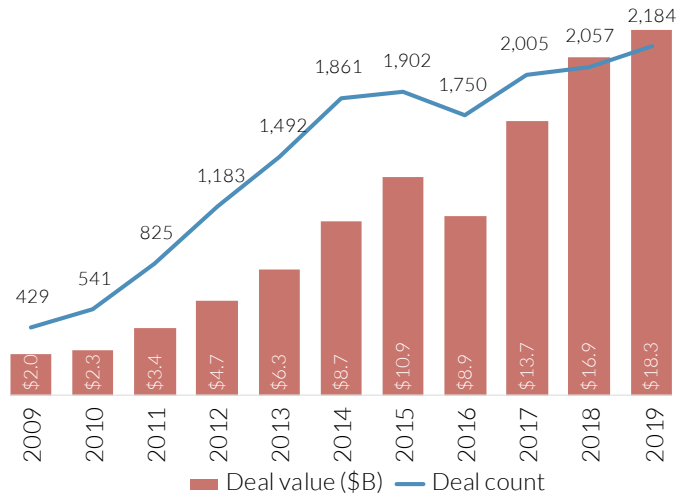
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Female founders

New record activity on a value and count basis for female-founded companies

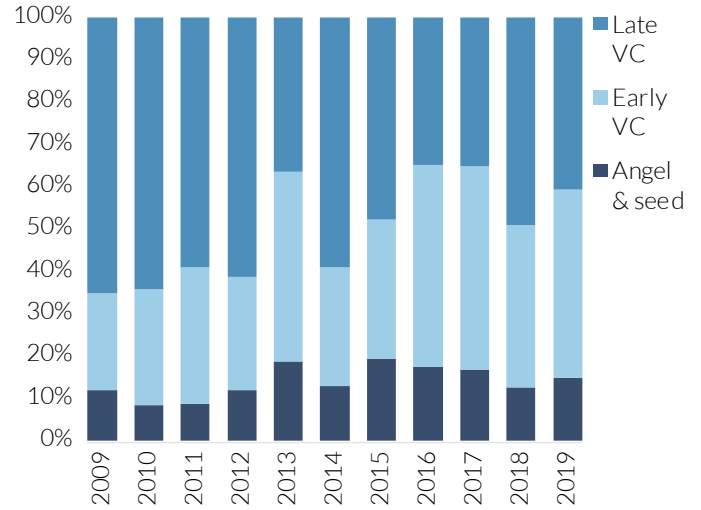
US VC deal activity for female-founded companies



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Early stage sees biggest increase for all female-founded companies

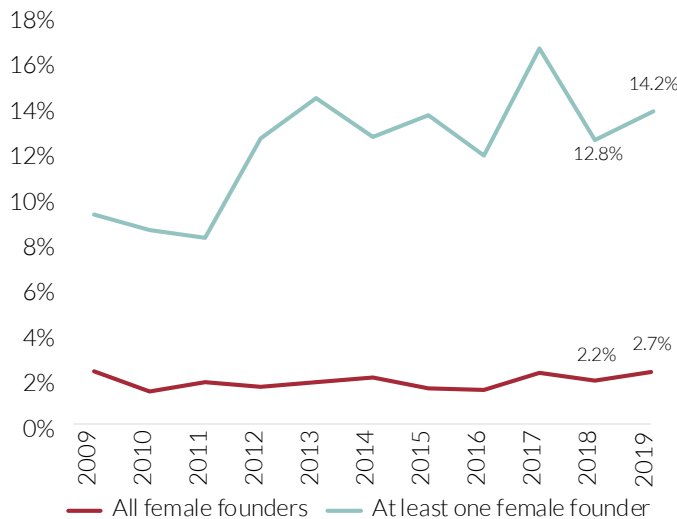
US VC deals (\$) for companies with all female founders by stage



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Share of deal value rises after slight dip in 2018

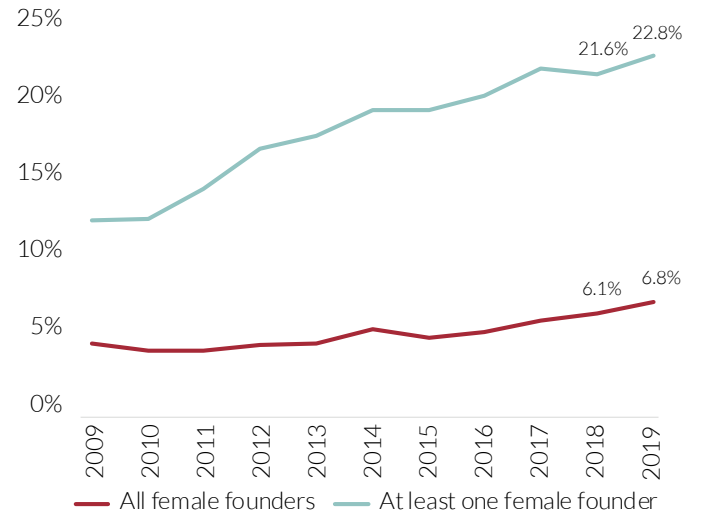
Female-founded companies as proportion of total US VC deals (\$)



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Female founders continue to grow share of VC dealmaking

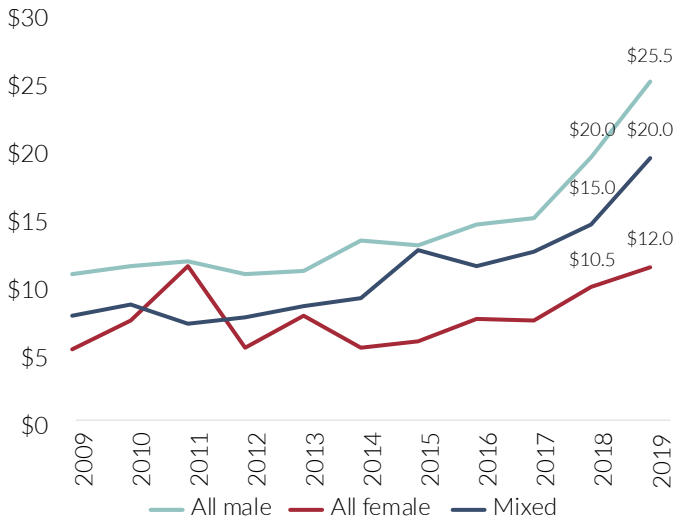
Female-founded companies as proportion of total US VC deals (#)



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Mixed-gender teams experience most rapid YoY growth

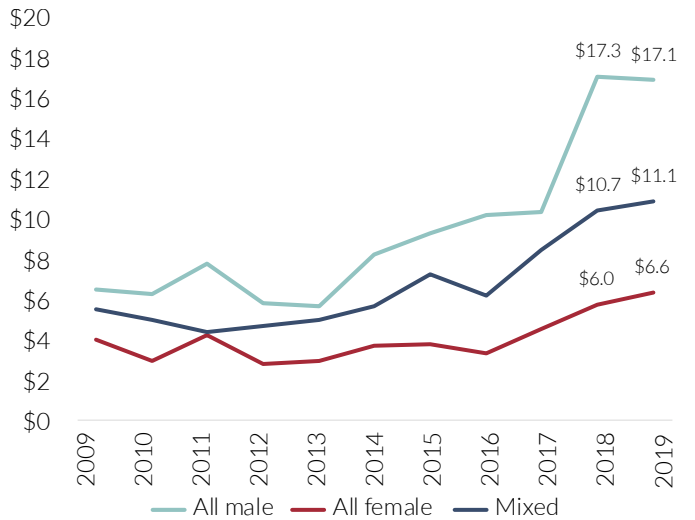
Median US VC pre-money valuation (\$M) by founder gender



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Deal sizes for companies with all-male founders plateau while others continue growth

Average US VC deal sizes (\$M) by founder gender



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Coastal cities drive VC investment in all female-founded startups

Top 5 US metros by capital raised (\$B) for companies with all female-founded startups (2006-2019)

MSA	Capital raised (\$B)
Bay Area	\$5.1
New York	\$3.9
Boston	\$1.5
Los Angeles	\$1.2
Seattle	\$0.5

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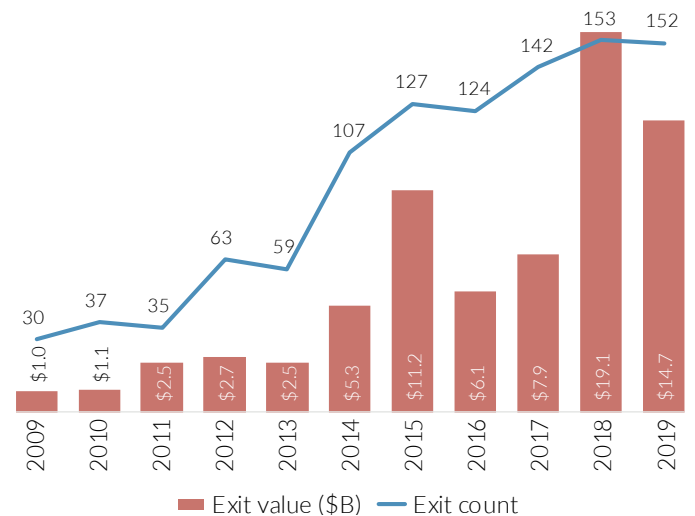
Top 5 US metros by deal count for companies with all female founders (2006-2019)

MSA	Deal count
Bay Area	887
New York	886
Los Angeles	376
Boston	279
Seattle	168

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New record mark for annual exit count

US VC exit activity for female-founded companies



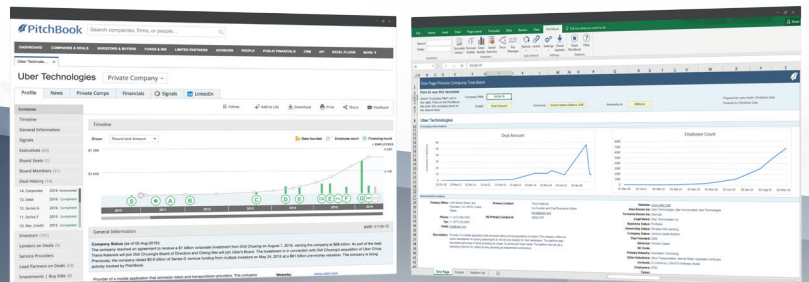
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Nontraditional investors

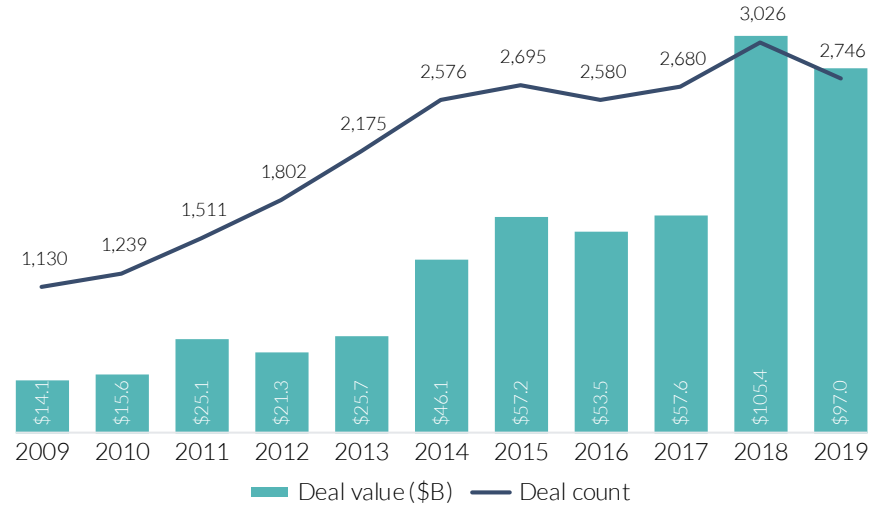
Nontraditional investors in VC are more entrenched than ever within the industry. The annual value of deals with at least one nontraditional investor participating nearly surpassed \$100 billion for the second consecutive year. The volume of these deals grew at a CAGR of 11.5% from 2009 through 2018, a faster pace than that of the wider VC industry. More than 2,100 unique nontraditional investors have participated in deals during each of the past four years, with fewer than 1,000 participants being the norm just a decade ago.

From a deal count perspective, much of the growth over the past few years has happened because of corporate VC. Deals with CVC participation account for roughly 25% of all US venture deals over the past four years, growing by more than 1,300 deals over the past decade. In 2019, CVCs participated in almost 1,700 transactions, highlighting how important corporations now consider startup investment to their overall growth strategy. The number of unique corporations participating in venture, either through a dedicated fund or by making balance sheet investments, has skyrocketed in recent years. The strategic implications of investing in new technologies have been a significant draw for incumbents as they compete not only with young startups but other massive corporations. Investment into startups provides the opportunity to learn about emerging spaces before plunging large capital outlays into organic development, providing returns beyond financial growth. Two examples of strategic investment from CVCs in Q4 include the Google Assistant Investment fund's financing of AI platform Satisfi Labs and Coinbase's financing of cash management platform Linen App.

We expect deal activity with CVC participation to continue its upward trajectory in 2020; 21 dedicated VC funds were closed by corporations in 2019, the highest total we have seen to date. Seven were closed on \$100 million or more, including Kaiser Permanente Ventures' Fund V (\$141.0 million), Providence Ventures Fund II (\$150.0 million) and Toyota AI Ventures Fund II (\$100.0 million).

Deal value participation reaches near \$100B again

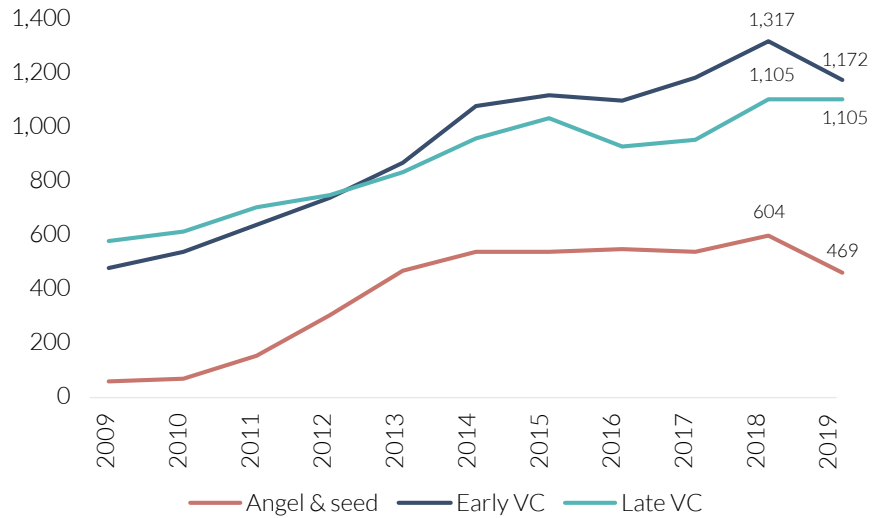
US VC deal activity with nontraditional investor participation



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Nontraditional investors participating across VC lifecycle

US VC deals (#) with nontraditional investor participation by stage



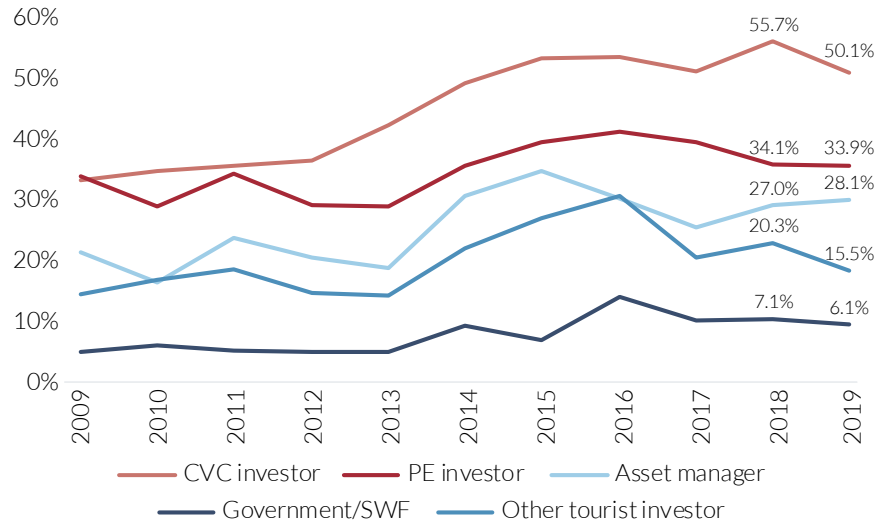
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Nontraditional investors outside of CVC have also kept pace with the growth in venture deal activity in recent years. Deals with mutual fund and hedge fund participation comprised a decade high of 7.9% of all completed US VC deals in 2019. As the most sizable fund managers active in the venture industry, this group has the ability to influence investment trends and finance the largest deals. DoorDash's \$700.0 million round that closed in November raised cash from T. Rowe Price and Coatue Management, among others; those same two investors were present in Databricks' \$400.0 million round in October. Tiger Global's \$3.7 billion fund closed in 2018 laid the foundation for the firm's most active year in US VC in 2019, during which it participated in nearly 40 financings, 16 of which were mega-deals.

PE funds have also continued to pour money into VC deals, which provides PE firms another way of putting capital to work in a style that is similar to traditional growth-equity rounds. EV/EBITDA multiples for traditional PE buyout transactions have eclipsed 12x in 2019, so even as venture valuations cause dealmaking to be more expensive than in the past, the upside potential of startups can still provide PE firms with relatively strong risk-adjusted returns.

CVCs now participating in over 50% of VC deal value

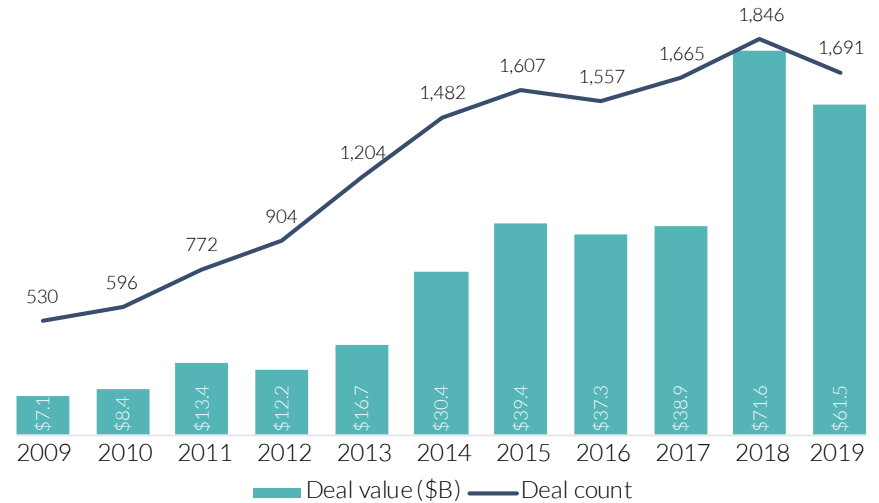
Proportion of US VC deals (\$) with nontraditional investor participation



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CVCs continue strong investment activity

US VC deal activity with CVC participation



PitchBook-NVCA Venture Monitor

Carta: How dual-class and single-class companies compare

“We created a monster.” That’s how SoftBank CEO Masayoshi Son, whose company had invested billions into WeWork, described the situation at the company in November. Over the last several months, various instances of questionable corporate governance on the part of the WeWork CEO Adam Neumann had emerged: from patenting the phrase “The We Company” and selling it back to WeWork for \$5.9 million to making extended family members top executives in the company. But the real monster, arguably, wasn’t Neumann. It was WeWork’s dual-class share structure.

A common arrangement among companies going public today, this structure gave the company’s regular shareholders one type of stock and its co-founder Adam Neumann another—one with 20 times the voting power. This gave him virtually complete control of the company’s direction.

The dual-class share structure was popularized by Google and has since been used by companies from Facebook to Dropbox to help founders maintain control of their companies. But not everyone is a fan. Some of the world’s most prominent asset managers and investor groups recommend restricting companies from using dual-class shares entirely.²

To better understand the relative merits of companies with dual- versus single-class stock, we reviewed the IPO valuations and market performance of the 50 highest-valued VC-funded companies to go public in the last decade, segmented by whether they have dual- or single-class stock. Of course, it’s impossible to show a causal link between a company’s share structure and its performance on the market or valuation. But the research we’ve looked at suggests the hype around founder control might not be all it’s cracked up to be.

Valuation at IPO

For all IPOs prior to 2019, dual-class companies tended to debut at higher post-money valuations

than single-class companies, with 10 achieving a range between \$2.7 billion to \$80 billion—Facebook, Snap, Groupon, Dropbox, Zynga, Workday, Fitbit, GoPro, Square and Pure Storage. Conversely, five single-class companies achieved post-money valuations of at least \$2.5 billion at the time they went public: Twitter, Lending Club, DocuSign, Palo Alto Networks and Arista Networks.

Average market capitalization

When we looked at the average performance of companies since IPO—across the entire company population—we found greater average growth among dual-class companies, but also a greater number of companies that have lost value since their IPO, with a third of dual-class companies performing below their offering price as of the end of 2019. Among single-class companies, we saw slightly fewer losses, but also fewer with substantial gains. Of the dual-class companies we examined, eight businesses have lost value since their IPO. Three have surpassed 100% growth: Okta, MongoDB, and Roku. One—Roku—has grown by nearly 200%.

Our findings here align with research showing that companies with more aggressive growth models and unstable profits can often be better served by dual-class stock structures.³ Of the single-class companies we examined, valuations for six have since dipped from their postings at IPO: Lending Club, NantHealth, Leaf Group, Gogo, Casa Systems and OnDeck Capital. Growth was more modest among single-class companies. Only one company surpassed 100% growth tax compliance software vendor Avalara.

Long-term market capitalization

To keep our focus on the long term and post-IPO fluctuations, we also decided to exclusively analyze companies that have been public for at least four years. We found that over this period, 13 single-class companies demonstrated gains, while just four lost value: Lending Club, Leaf



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Group, Gogo and OnDeck Capital. For dual-class companies, performance over a four-year period was much more hit or miss. Among the dual-class companies we reviewed, seven gained value since their IPO. Five lost value during that period: Groupon, Zynga, FitBit, GoPro and Castlight Health. These findings comport with those of the literature on dual-class stocks—researchers have found that they tend to underperform single-class stocks. An SEC study found that dual-class companies trade at a “perpetual discount.”⁴

Long-term vision vs. short-term accountability

Dual-class share structures, the thinking goes, protect innovative and forward-thinking founders from the short-term pressures of Wall Street. But they also create a power balance that diminishes the influence of shareholders. The Investor Stewardship Group, whose 50 members oversee \$22 trillion in assets, is one organization⁵ that has called for a ban on dual-class stock. State Street, the world’s third-biggest asset manager, is another.

Of course, if dual-class structures were inherently worse than single-class, investors wouldn’t buy into the companies that use them. Still, there is a

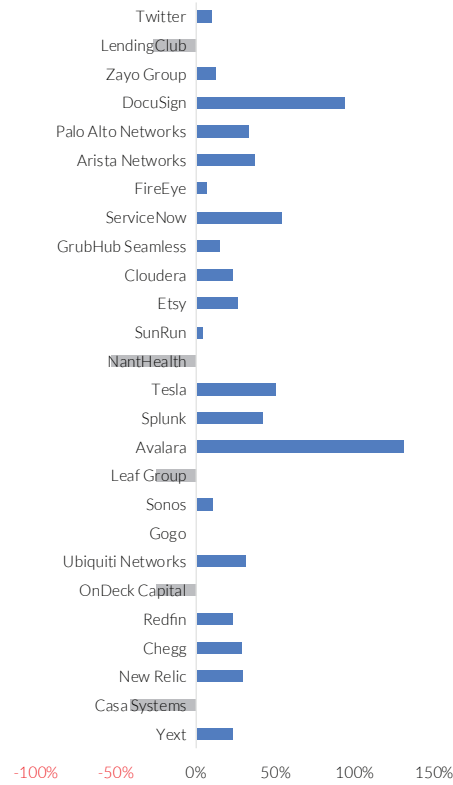
2. “State Street Asks SEC to Block Non-Voting Shares,” *Financial Times*, Madison Marriage, June 17, 2017

3. “The Structure of Corporate Ownership: Causes and Consequences,” *Journal of Political Economy*, Volume 93, Number 6, Harold Demsetz & Kenneth Lehn, December 1985

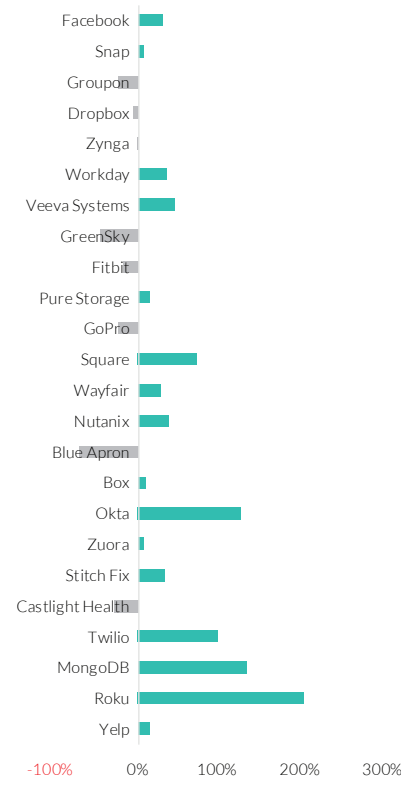
4. “Perpetual Dual-Class Stock: The Case Against Corporate Royalty,” SEC, Robert J. Jackson, February 15, 2018

5. “Should Dual-Class Shares Be Banned?” *Harvard Business Review*, Vijay Govindarajan, Shivaram Rajgopal, Anup Srivastava & Luminita Enache

Single-class market performance



Dual-class market performance



persistent myths around the idea of the dual-class structure, a line of thinking that founders need to maintain control at all costs.

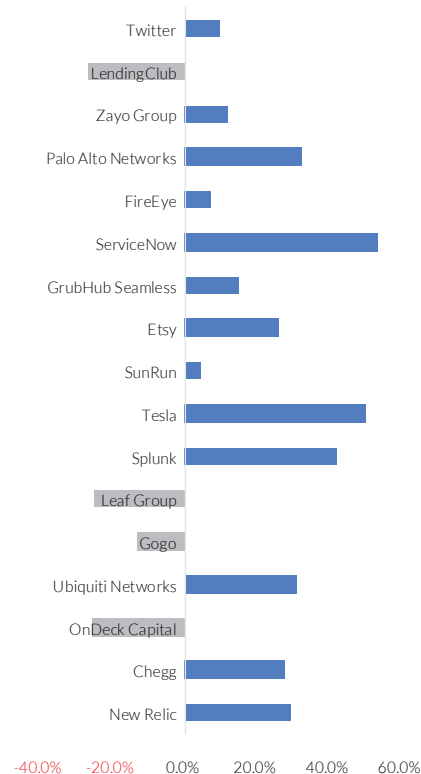
When it comes to performance in the public markets, we've seen some evidence that dual-class structures can be beneficial for some kinds of businesses. We've also seen evidence of single-class structures outperforming those companies in the long run. In the end, our conclusion is that founders weighing the decision to go single-class or dual-class should think about their unique business, its needs and its situation.

Note: Company selection was based on valuation at the time of IPO and includes only companies headquartered in the US that have been public for at least a year. Companies that did not accept venture funding were also excluded.

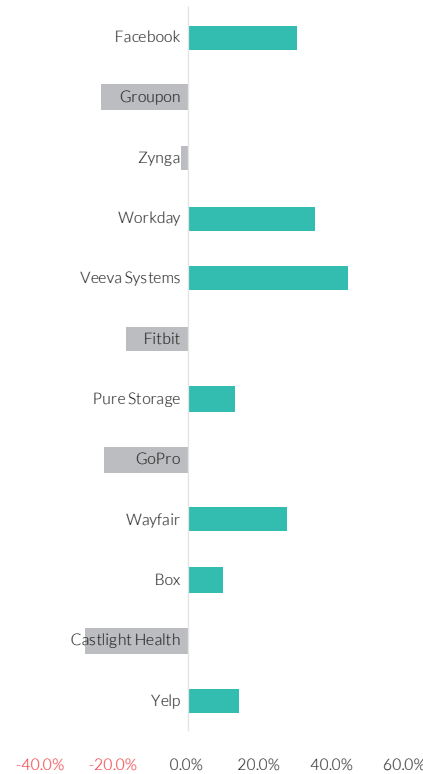
Data source: Morningstar and PitchBook

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Single-class 4+ year performance



Dual-class 4+ year performance



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\$15B+

Under administration

50+

Fund administrators

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Jeff Lee, Managing Director & CFO
Northern Light Venture Capital

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Fund admin services • Scenario modeling

G I G A F U N D



TRIBE CAPITAL

böldstart

BOLT

SILVERTON PARTNERS

BLUMBERG CAPITAL

FLYBRIDGE CAPITAL PARTNERS

Haystack

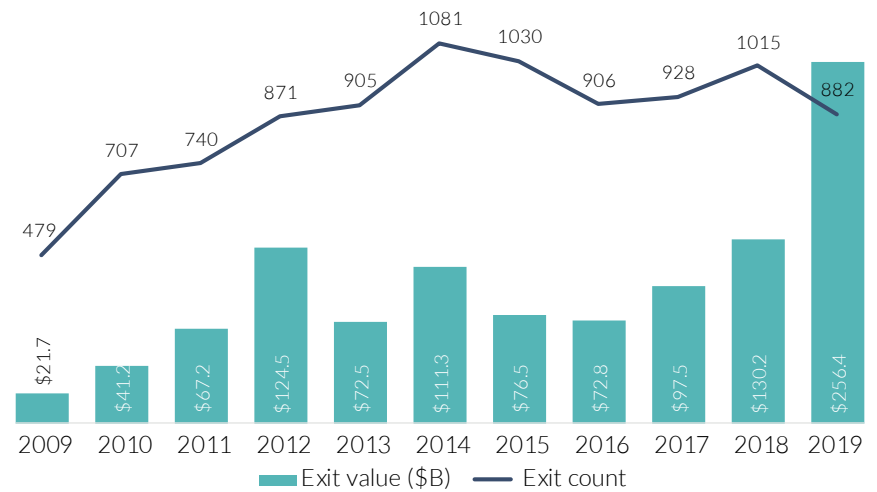
Exits

Exit activity in Q4 2019 posted QoQ declines for the second consecutive quarter on both a count and value basis, recording 174 exits representing \$18.8 billion. While exits over \$100 million still comprised most of the quarter's total exit value, a lack of true outlier exits, which the industry has come to expect, significantly contributed to the fall off. That VC exits over \$10 billion have become commonplace speaks volumes about the exit market and the state of VC as a whole. Exit value statistics have always depended significantly on timing, but in the current environment, the magnitude of an individual liquidity event can distort the trend, as we saw in Q2 2019 with Uber's IPO.

Exit activity may have slightly cooled off during the last half of the year, but it's important to contextualize 2019 as a whole given the year's likely lasting impact on the VC ecosystem. 2019 now stands as the annual record for US VC exit value at \$256.4 billion across 882 liquidity events. This unprecedented flow of capital back to GPs and LPs will likely drive impressive return metrics, which should encourage more fundraising and increase allocation to VC.

2019 sets huge new record year for VC exit value

US VC exit activity



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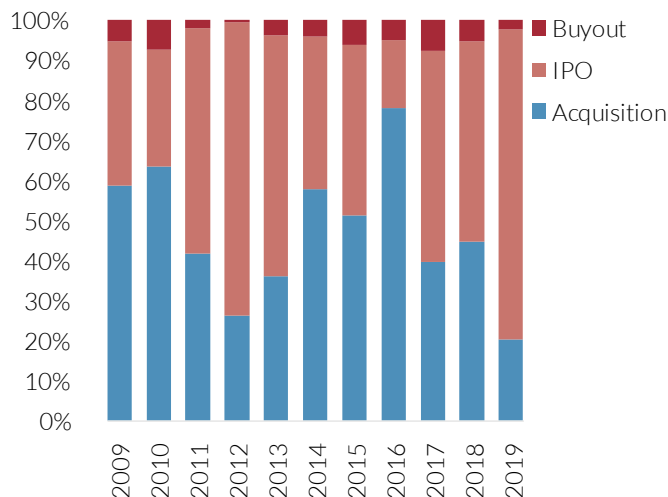
In a similar sense, dealmaking activity should see sustained support from these newly raised funds as well as non-fund sources of capital attracted by the substantial cash flows.

In a reversal from the rest of 2019 when IPOs dominated the exit landscape, the

largest exit in Q4 was PayPal's \$4.0 billion acquisition of Honey Science. Given that the online shopping coupon platform raised only \$37.7 million over five rounds, this undoubtedly was a successful exit for backers and insiders and a vote of confidence for the ecommerce industry. Barring any sustained

Massive IPOs drove banner year for VC exits

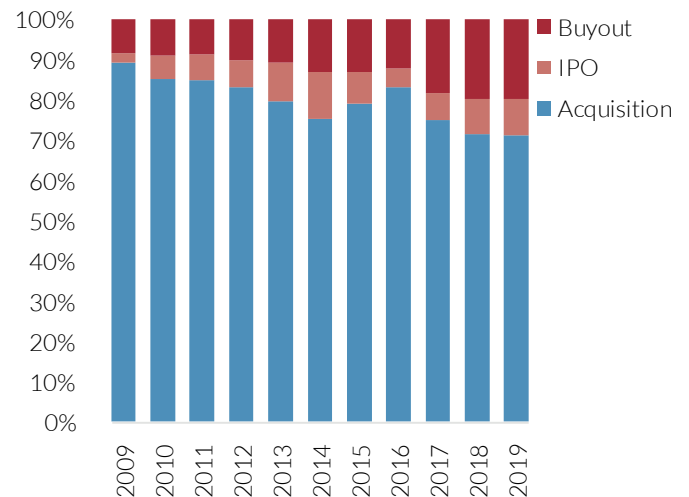
US VC exits (\$) by type



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Exit type distributions hold steady YoY

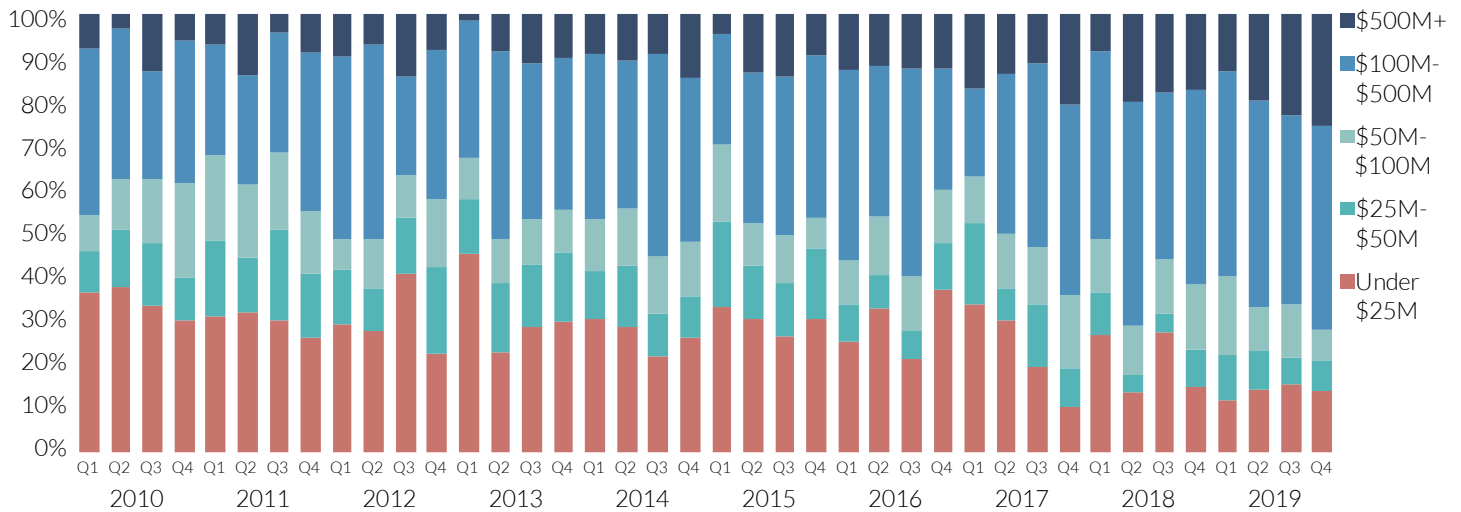
US VC exits (#) by type



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Share of exits over \$500M increases throughout 2019

US VC exits (#) by size



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economic downturn, we believe acquisitions and buyouts of VC-backed businesses will remain an increasingly core source of deals for corporations and PE firms which should relatively stabilize exit activity. With the elevated multiples in the market and rising competition for deals, buyers will continue to seek out growth and innovation from startups in the near term.

IPO activity has been the primary driver behind this record year of exit value, but this liquidity option has had an especially tepid Q4. This was notable given the quarter was characterized by significantly positive performance from the broader indices, which usually spurs IPO activity. However, post-IPO performance of many newly listed technology companies has been lackluster over the past six months, affecting expectations of potential debutantes. As companies transition to public markets, much of the concern has been about highly-valued startups backing up their private valuations

with operating metrics. Much of the valuation growth for VC-backed businesses earlier in this cycle was tied directly to companies scaling at an exceptionally rapid pace. Many companies in the second wave of unicorns reaching the public markets, however, have already achieved impressive scale, leading to less breakneck growth expectations. This maturity isn't an issue on its own, but for many newly listed companies, financial metrics such as net income and cash flow from operations have remained significantly negative with no clear path to achieving a breakeven. This potentially never-ending cash-burn period has been a sticking point in many of the most clear-cut examples of the unicorn struggles.

With the aftermarket price performance struggles from 2019 technology listings, healthcare IPOs dominated the Q4 roster; of the 13 VC-backed IPOs that managed to list in Q4, nine were healthcare IPOs, representing an impressive 69.2% of the total.

These healthcare listings tend to be slightly more consistent than their technology counterparts from a frequency perspective given the more standardized business model of biotech startups that a large swath of public market investors understand. Q4 included a diverse cohort of listings from clinical stage biotechnology companies, such as Vir, Viela Bio and Progyny. Bill.com was the one notable non-healthcare IPO of the quarter, marking the payment processing provider at a \$1.3 billion pre-money valuation. Software IPOs will remain a key piece of the market, especially when it comes to exit value, so it is encouraging to see activity even during a slow quarter.

Fundraising

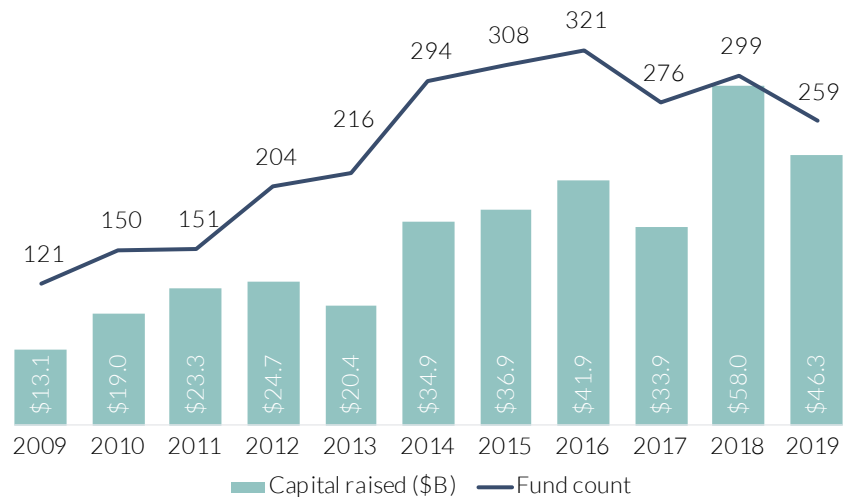
In 2019, capital raised for US venture funds reached \$46.3 billion, marking the second-highest annual total in the past decade, but posting well below the \$58 billion raised in 2018. Fund count saw a significant YoY decline as well, dropping 13.7% with just 259 funds closed, registering a six-year low. Strong distributions and lethargic contributions in the first quarter of 2019 resulted in elevated net cash flows, effectively pooling cash with LPs that is liable to be recommitted. Distributions and contributions may be asked due to the rise of nontraditional investors, which have supplied much of the capital raised for venture funds as of late. Regardless, we expect to see the positive net cash flow reinvested into new funds, which should push 2020 VC fundraising totals near 2018's historic showing.

Despite the drop from 2018, VC funds have grown larger than ever. The annual median fund size reached \$78.5 million in 2019 as LPs have crowded capital into funds managed by VCs with successful track records, and we expect it to exceed \$110 million in 2020 as detailed in the [2020 Venture Capital Outlook](#). We logged 21 mega-funds raised in 2019, which is short of 2018's total but represents strong activity nonetheless. The largest fund of the year was TCV's 10th Fund, a \$3.2 billion vehicle that aims to invest in IT infrastructure and consumer internet companies.

At the other end of the spectrum, micro-funds (funds under \$50 million) have declined to their lowest annual levels in terms of value and volume since 2011. First-time fundraising also fell short of its long-term trajectory with \$4.0 billion raised across 35 funds in 2019. In fact, the median size of first-time VC funds has crept up over the past four years, rising to \$57 million in 2018 before settling at \$41.4 million in 2019. We believe that with the changing investment environment, funds sized under \$50 million have become less desirable given the struggle to compete and maintain equity stakes in follow-on financings. Larger funds, on the other hand, allow GPs to write

Capital raised reaches second-highest annual total in past decade

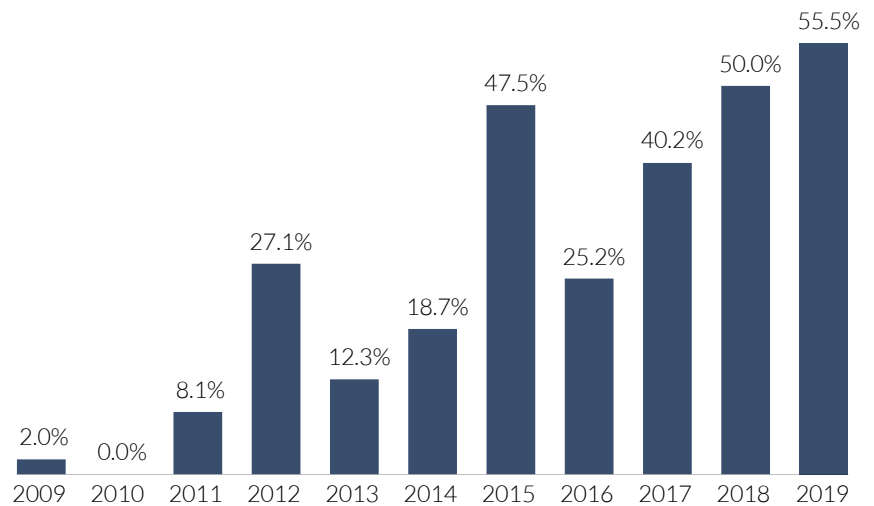
US VC fundraising activity



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Median fund size step-ups continue to grow

Median fund size step-ups for US VC funds



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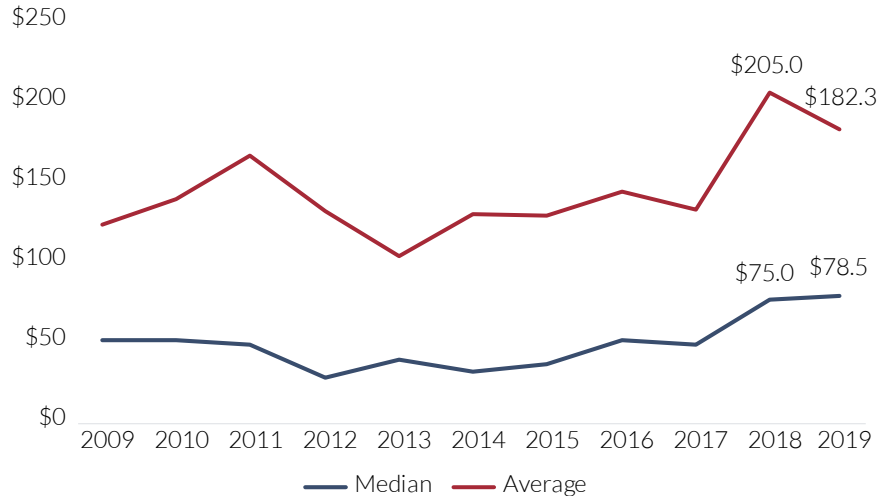
bigger checks, which has become essential as companies use a blitzscaling approach. As startups become more mature at each stage of funding, deal sizes and valuations have escalated considerably. At the early stage, the median deal size and pre-money valuation have increased 2.5x and 3.5x respectively over the past decade. Due to these dynamics, VCs have been forced to raise larger funds to maintain investment strategies, and LPs have been willing to direct additional capital into an asset class that has proved to achieve attractive returns.

As micro-funds have declined, we have observed a notable increase in the volume of funds sized between \$50 million and \$250 million, which commanded 43% of the overall fund count in 2019. The median fund size step-ups increased over time to 55% in 2019 as VCs seek to maintain equity in an overcrowded market. PowerPlant Ventures logged one of the larger fund-over-fund growth stories in 2019 with a 4x step-up from \$42 million to \$165 million. The VC is focused on investing in plant-based meat startups and has vaulted its fund size to target plant-based food startups that require Series A and B funding.

Startups are utilizing elevated levels of capital availability to stay private longer than ever. Instead of going public, they can pursue a "private IPO," raising IPO-sized funding from a variety of investor types while maintaining private backing. This strategy has created a dilution dilemma for early-stage investors that struggle to maintain equity stakes as startups continue to raise capital. Some early-stage-focused firms have reacted by raising larger funds and shifting their focus to later in the funding lifecycle, or by raising distinct funds to provide follow-on capital to growing portfolio companies. Peter Thiel's Founders Fund, which traditionally invests in seed- and early-stage technology startups, recently made the shift, raising a \$1.5 billion vehicle to invest in growth-stage startups. Although this in no way indicates a larger trend, the ability to stay private longer has created a unique problem for VCs that have liquidity obligations and equity targets. The dynamic of private IPOs and perpetual fundraises will likely force some VCs to rethink their investment strategies.

Median VC fund size nears \$80 million

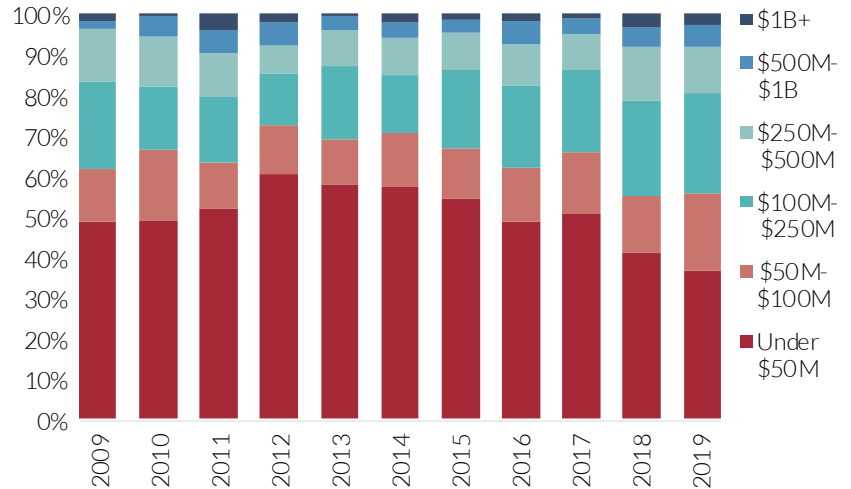
US VC median and average fund sizes (\$M)



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Micro-funds decline to their lowest annual levels in terms of value and volume since 2011

US VC funds (#) by size



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2019 league tables

Most active investors angel & seed

1	Plug and Play Tech Center	75
2	500 Startups	40
3	Y Combinator	36
3	Alumni Ventures Group	36
5	Techstars	32
6	SOSV	31
6	Social Starts	31
8	Hatcher Plus	30
9	Right Side Capital Management	29
10	Service Provider Capital	27
11	Quake Capital	25
11	Innovation Works	25
13	Ulu Ventures	22
13	BoxGroup	22
13	Founders Fund	22
16	Precursor Ventures	20
17	M25	19
17	Alliance of Angels	19
19	Global Founders Capital	18
19	First Round Capital	18
21	Greycroft	17
21	Liquid 2 Ventures	17
23	Village Global Management	16
23	Revolution	16
23	Initialized Capital Management	16
23	Jumpstart Foundry	16
23	Felicis Ventures	16
28	Connecticut Innovations	14
28	Canaan Partners	14

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Most active investors early stage

1	Keiretsu Forum	74
2	Alumni Ventures Group	65
3	Y Combinator	58
4	500 Startups	44
5	Andreessen Horowitz	43
6	New Enterprise Associates	41
7	Khosla Ventures	38
8	Kleiner Perkins	36
9	Plug and Play Tech Center	35
10	Social Starts	34
11	Founders Fund	33
12	Lightspeed Venture Partners	29
12	Elevate Ventures	29
14	GV	27
15	SOSV	25
15	8VC	25
17	Right Side Capital Management	24
17	Greycroft	24
17	Bain Capital Ventures	24
17	Connecticut Innovations	24
17	Accel	24
22	Revolution	23
23	Intel Capital	22
23	BoxGroup	22
25	Invest Detroit Ventures	21
26	Service Provider Capital	20
26	ARCH Venture Partners	20

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Most active investors late stage

1	Keiretsu Forum	60
2	New Enterprise Associates	43
3	GV	37
4	Norwest Venture Partners	36
5	Tiger Global Management	34
5	Sequoia Capital	34
5	Kleiner Perkins	34
8	Battery Ventures	31
8	Accel	31
10	Salesforce Ventures	30
10	Andreessen Horowitz	30
12	Insight Partners	28
12	Bessemer Venture Partners	28
14	Sapphire Ventures	24
15	Y Combinator	23
16	Spark Capital	22
16	Lightspeed Venture Partners	22
16	Alumni Ventures Group	22
19	Redpoint Ventures	21
19	Greenspring Associates	21
21	GGV Capital	20
21	Bain Capital Ventures	20
23	General Catalyst	19
24	The Goldman Sachs Group	18
24	Menlo Ventures	18
24	Khosla Ventures	18
24	Coatue Management	18

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Q4 2019 league tables

Most active investors angel & seed

1	Plug and Play Tech Center	16
2	Y Combinator	13
3	SOSV	12
4	Techstars	7
4	Founders Fund	7
6	Ulu Ventures	6
6	Keiretsu Forum	6
6	Upfront Ventures	6
9	Greycroft	5
9	First Round Capital	5
9	SV Angel	5
9	Elevate Ventures	5
9	8VC	5
14	Slow Ventures	4
14	Alliance of Angels	4
14	Connecticut Innovations	4
14	Felicis Ventures	4
14	Service Provider Capital	4
14	High Alpha	4
14	Social Starts	4
14	Initialized Capital Management	4
14	BoxGroup	4
14	Alumni Ventures Group	4

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Most active investors early stage

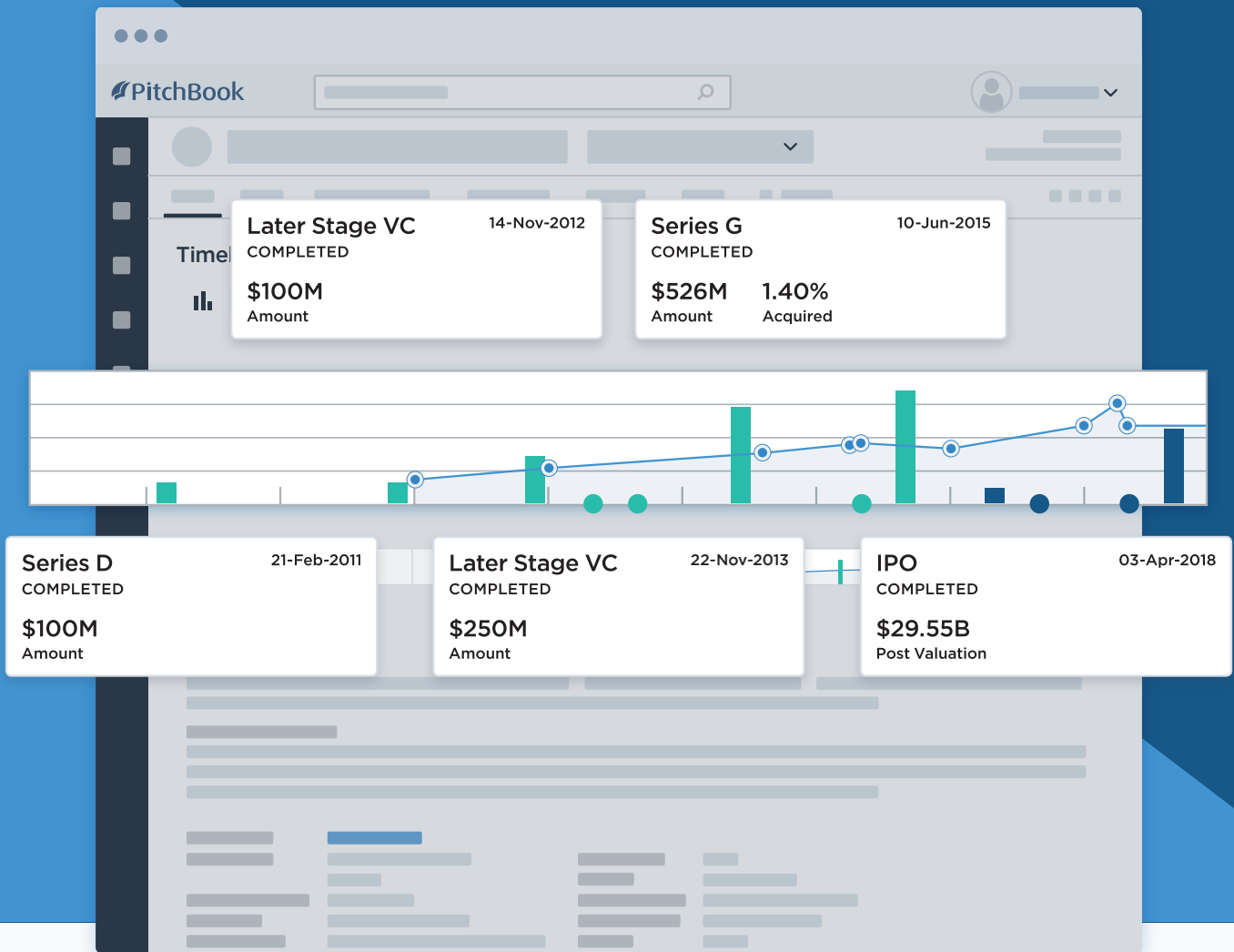
1	Keiretsu Forum	39
2	500 Startups	21
3	Alumni Ventures Group	18
4	Y Combinator	10
5	New Enterprise Associates	9
6	Social Starts	8
6	SOSV	8
6	Andreessen Horowitz	8
6	BoxGroup	8
10	Invest Nebraska	7
10	Kleiner Perkins	7
10	Keiretsu Capital	7
10	Greycroft	7
10	Initialized Capital Management	7
10	Founders Fund	7
16	Khosla Ventures	6
16	Elevate Ventures	6
18	Unusual Ventures	5
18	Index Ventures	5
18	Western Technology Investment	5
18	Toyota AI Ventures	5
18	Norwest Venture Partners	5
18	Service Provider Capital	5
18	Galaxy Digital Holdings	5
18	M25	5
18	Liquid 2 Ventures	5
18	Battery Ventures	5
18	Lightspeed Venture Partners	5

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Most active investors late stage

1	Keiretsu Forum	33
2	Salesforce Ventures	10
3	Tiger Global Management	9
3	Accel	9
5	Sequoia Capital	8
5	Bessemer Venture Partners	8
7	Insight Partners	7
7	Andreessen Horowitz	7
7	Sapphire Ventures	7
10	Silicon Valley Bank	6
10	SOSV	6
10	ICONIQ Capital	6
10	F-Prime Capital Partners	6
10	Connecticut Innovations	6
15	Y Combinator	5
15	The Goldman Sachs Group	5
15	Spark Capital	5
15	T. Rowe Price	5
15	Battery Ventures	5
15	Asset Management Ventures	5
15	General Catalyst	5
15	Keiretsu Capital	5
15	Founders Fund	5
15	Dragoneer Investment Group	5
15	Redpoint Ventures	5

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10 years. That's how long it took for Spotify to go public.

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Methodology

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, corporate investors and institutions, among others. 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, with any reference to “metro” defined as the metropolitan statistical area (MSA). We include deals that include partial debt and equity.

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.

Nontraditional investors: “CVC” includes rounds executed by established CVC arms as well as direct equity investments by corporations into VC-backed companies. “PE” includes VC deals by investors whose primary classification is PE/buyout, growth, mezzanine or other private equity.

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. IPO value is based on the pre-money valuation of the company at its IPO price.

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.

A perfect partnership: PitchBook and the National Venture Capital Association

Why we teamed up

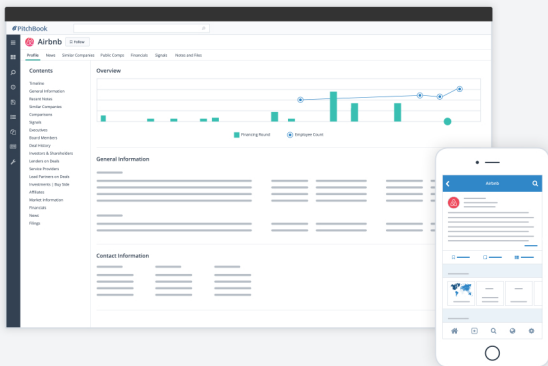
NVCA is recognized as the go-to organization for venture capital advocacy, and the statistics we release are the industry standard. PitchBook is the leading data software provider for professionals in venture capital, serving more than 4,000 customers across the private markets. Our partnership with PitchBook empowers us to unlock more insights on the VC ecosystem and better advocate for our evolving industry.

The PitchBook-NVCA Venture Monitor

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