

Venture Monitor

3Q 2019



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BY MORGAN STANLEY

2019 deal value approaches \$100B, propelled by mega-deals Page 4 Exit activity stabilizes despite six unicorn IPOs closing in 3Q Page 31 Mega-funds buoy fundraising, as fund count falls

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Executive summary

Trends shaping the US venture industry in 2019 are starting to solidify now that we've closed the books on the year's third quarter. Investment activity isn't quite on pace to reach the record deal value posted in 2018, but the environment remains robust. Deal value will almost assuredly top \$100 billion for the second year straight, and deal count is likely to exceed 10,000 for the third year straight. The overall climate of the VC ecosystem appears to have cooled slightly, but there remains ample capital in private markets for VCs to invest.

A surge of huge, VC-backed IPOs helped create over \$200 billion in exit value for VCs through 3Q, already making 2019 the most lucrative year for exits in over a decade—with one more quarter still to go. Top of mind for the industry, however, is the pricing of these high-profile IPOs and their subsequent performance after listing. These recent listings will likely affect the sentiment around the next wave of companies looking to go public in 4Q and into the upcoming election year. There are certainly other important areas to watch in the current IPO climate as well, as public markets continue to be volatile. Some VC-backed companies have seen their market caps as public companies fall below their last private market valuation, while others have had to deal with corporate governance challenges raised by public market investors. Taking notice are venture-backed companies that are eyeing a public listing and that might find themselves facing a similar financial or governance situation. That being said, public markets still appear to be a viable exit route for high-growth startups—both in tech and life sciences—and there continues to be demand for such companies among public market investors looking for significant growth opportunities, especially for companies featuring sustainable business models and strong unit economics.

VC fundraising efforts in 2019 likely won't top the record amount of capital raised in 2018, but investors remain flush with dry powder, and capital raised is still on pace to reach the lofty levels of recent years. Many in the industry anticipate an uptick in fundraising activity in the coming months as several VC firms try to close their vehicles before a possible recession hits the economy. Further adding to fundraising optimism are realized returns that will soon be flowing back to LPs from the many massive exits we've seen this year. This will enable LPs to allocate capital back into the numerous VC funds seeking it.

On the public policy front, NVCA believes the expanded authority of the Committee on Foreign Investment in the United States (CFIUS) continues to affect VC investment into startups, with delayed financings increasingly becoming an issue for companies. Many VCs are waiting on the final rules of the CFIUS expansion to be implemented in February 2020, which will have a major impact on capital flows from foreign investors into US-based startups.

NVCA also considers US immigration policy a persistent issue, as new efforts by the Trump Administration are making it even harder for talented scientists who study in the US to stay and become entrepreneurs and startup founders in the country. Tariffs and the trade war are having a limited impact on the ecosystem, with some startups affected by increased production costs. The new Opportunity Zone program put into place by the 2017 tax reform law initially showed a great deal of promise but has yet to be fully realized by the startup ecosystem. As the program has been implemented, early signs suggest it has been geared more toward real estate investment into Opportunity Zones than for VCs to invest into startups in these distressed communities. The program is still nascent though, so VCs may still find a way to make it work for investment into startups.

Now that the country is in the thick of election season, policy proposals brought forth by presidential candidates are increasingly being scrutinized for their potential effect on the startup ecosystem. Of particular note are proposals by some Democratic presidential candidates and legislators on taxing unrealized capital gains and on drug pricing, both of which could have unintended consequences for startup investing. With the 2020 election on the horizon, we should expect more proposals that could—intentionally or not—influence the venture landscape.











Overview

Deal value is set to surpass \$100 billion for the second year straight. 185 mega-deals (\$100 million+) have already closed so far this year, nearly reaching 2016's full-year total. These outsized transactions comprise 43% of total 2019 deal value, which has continued to climb unabated to a total of \$96.7 billion YTD.

Outsized liquidity events are a dominating trend, with exits over \$100 million making up 98.7% of value YTD. Multibillion-dollar IPOs continue to grab headlines in the VC exit market, and 3Q was no exception with six such deals closing in the quarter. This stacks up against only one acquisition of more than \$1 billion closing in 3Q 2019. IPOs have constituted 82% of overall exit value YTD, a decade record.

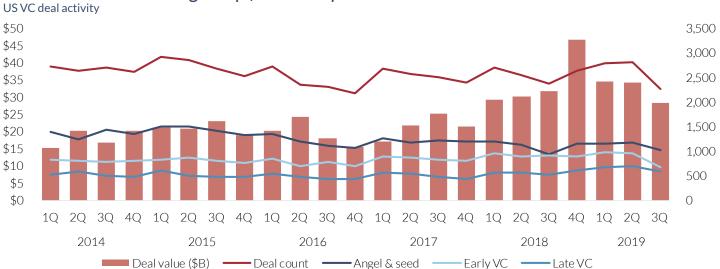
VC fundraising focus has shifted toward increasingly larger vehicles since 2012, with 15 mega-funds closed YTD. Nearly half of all funds were sized \$100 million or above, up from roughly 30% in 2014, and 9.3% of all funds were sized \$500 million or above, up from 5.2% in 2017. Conversely, micro-funds (sub-\$50 million) have dropped to 33.3% of the total fund count YTD, down from roughly 60% of all funds in 2012.

Deal value to surpass \$100B for second year straight US VC deal activity



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VC investment takes slight dip from last quarter



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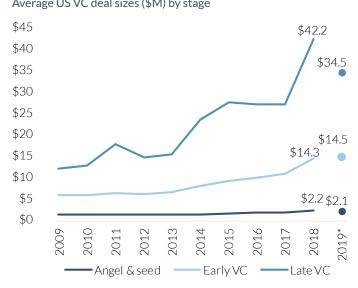








Average deal sizes remain elevated Average US VC deal sizes (\$M) by stage



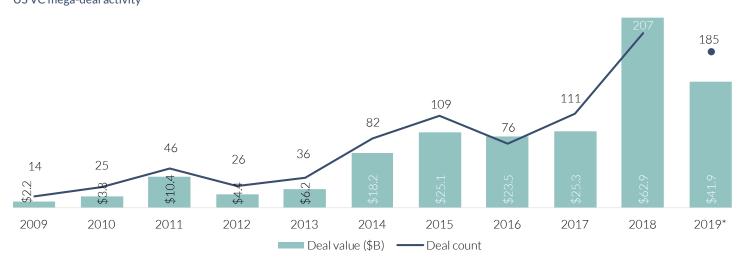
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Mega-deals maintain dominance US VC deals (\$) by size



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Mega-deals on pace to set a new record count in 2019 US VC mega-deal activity













Angel, seed & first financings

Although angel & seed dealmaking activity in 2019 may not reach historic levels, capital invested has remained strong and relatively stable with nearly \$2 billion invested across just more than 1,000 deals in 3Q. Steady deal flow through the stage is a healthy signal for the broader venture ecosystem, indicating that activity continues to percolate at the earliest stages as the industry matures and much of the focus has shifted to the massive amount of capital available today at the later stages. Investor appetite for angel & seed deals, which are relatively risky and richly priced, hasn't waned even as the average deal size has eclipsed \$2 million.

The venture industry has gone through many shifts in recent years; it can be argued that the angel & seed stage has seen the most drastic divergence from past investment theses, rendering the classic definition of "seed" outdated. Just five years ago, sub-\$1 million transactions comprised more than 60% of angel & seed deals. So far this year, they've constituted fewer than 50%, potentially marking the third consecutive year in which this bucket's portion has fallen below half of all deals. On top of that, more than 300 angel & seed deals in 2019 so far were \$5 million or larger; only 2018 has produced a higher number of such deals. One reason for climbing



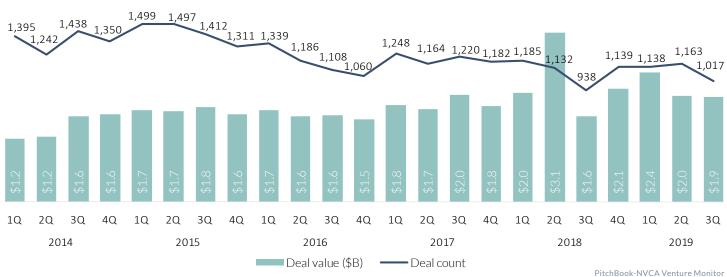


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transaction sizes is that many investors only require companies to have a minimum viable product before raising a seed round, allowing the startup to go to market much sooner in the VC lifecycle than in the past.

Due to the evolution of seed-stage deals, as we detail in a recent analyst note, the stage is becoming even more institutionalized beyond the growth of seed-focused funds. 49 firms with AUMs of \$1 billion or more completed seed transactions in 3Q, highlighting how large investors that commonly enter in later rounds are finding the opportunity to increase returns by investing earlier in company lifecycles. This includes nontraditional VC investors such as TPG Capital, MassMutual Financial Group and Viking Global. Angel- and seed-backed

Deal counts at the earliest stages continue along plateau US angel & seed deal activity by quarter





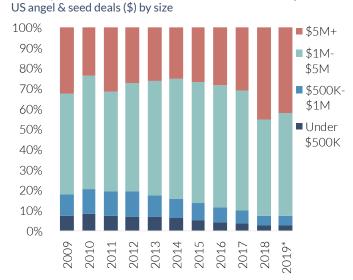








Sub-\$1M deals now less than 10% of value



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\$1M+ deals comprise nearly 55% of count



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companies are much older than they have been historically, with the median age rising above three years as of 3Q 2019. This has allowed companies to grow more before raising institutional capital, offering investors a fuller picture of their progress.

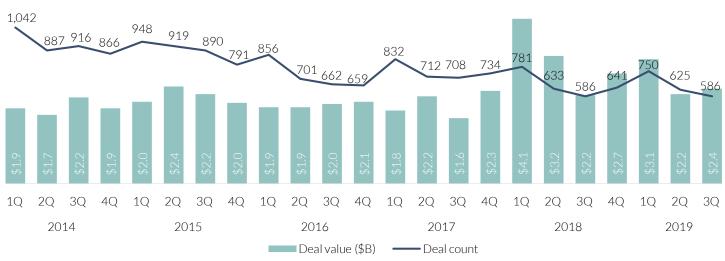
As of 3Q 2019, first financings are on pace to reach 2018's total of just more than 2,600 deals. This is well below the more than

3,700 completed in 2014, but a plateau has formed, similar to the broader angel & seed stage. While the overall drop in deals may look concerning, some of that decline can be attributed to alternative sources of funding that have materialized for startups. Many founders have appreciated that receiving institutional VC begins a perpetual cycle of raising capital until an exit can be achieved. As a result, some companies are looking to

delay initial rounds or finding other sources of funding, such as debt. While pre-seed has emerged to fulfill the more traditional definition of seed financing, revenue-based debt financing products and even startups providing credit solutions to other startups have become more accessible to companies as they build out their businesses further before needing capital infusions.

First financing value stays strong

US first-financing VC deal activity by quarter



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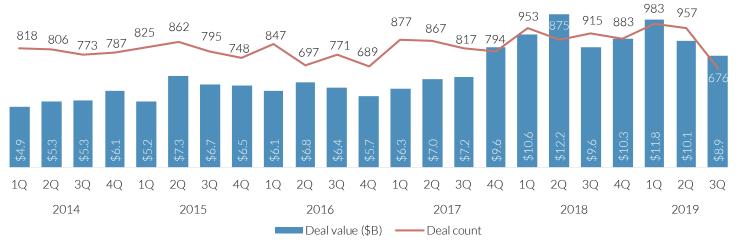






Early-stage VC

3Q dealmaking drops following heavy activity during 1H US early-stage VC deal activity



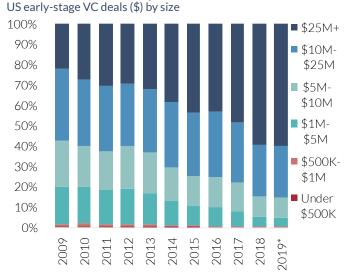
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Early-stage deal count dipped in 3Q, but this reflects some mean reversion following the fast pace set by investors over the past year rather than a cyclical slowdown. Regardless, 676 early-stage deals have been tallied for 3Q compared to over 900 closing in both 1Q and 2Q. While we expect this figure to increase as we collect more deal data (final numbers are expected to put the total above 750), this is currently the lowest quarterly total logged since 1Q 2013.

Conversely, the early stage is still receiving masses of capital. More than \$30 billion has funneled into the stage YTD, with more than 27% through \$100 million+ deals. The median and average early-stage deal sizes have grown in 2019, reaching \$6.3 million and \$14.5 million, respectively. Large-scale investors continue moving down the VC pipeline, driving competition for early-stage deals and providing capital needed to close such massive investments.

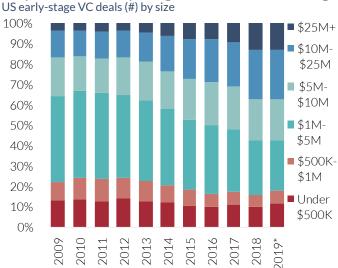
While capital excesses have become par for the course at the late stage, mega-deals (\$100 million+) have not been a major feature in early-stage financing until recently. 44 early-stage mega-deals have closed thus far in 2019, one short of the highest yearly total recorded in our dataset. It's important to note that although these rounds are technically classified as venture deals, debt comprises a significant portion of many of these headline figures. FlyHomes, a real

Sub-\$10M deals slip to 15% of value



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Dispersion of early-stage deal sizes stabilizing









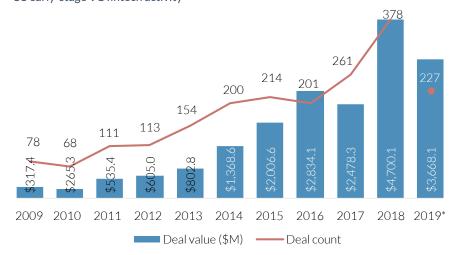




estate technology provider, raised a \$141 million Series B round, but just \$21 million of that was equity; the rest was supplied via a loan from Genesis Capital. Debt has become a burgeoning mechanism for growth throughout the venture lifecycle, especially for capital-intensive business models such as certain fintech, insurtech and real estate platforms. Consumer credit provider Mission Lane, for example, raised \$500 million in September in its first institutional financing; this included a \$300 million loan.

Primarily as a result of mega-deals, early-stage fintech deal value in 2019 is already the second-highest yearly total recorded for the sector. Although fintech has been on the rise, a lot of the underlying networks and infrastructures on which these financial services rely are legacy technologies, including ACH and credit card networks or core banking architectures. Due to this, we believe that some of the focus in fintech, especially at the early stage, will shift toward enterprise-facing back-end solutions.

Early-stage fintech activity sustains strength US early-stage VC fintech activity



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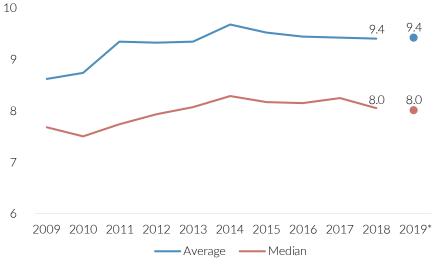
Late-stage VC

Late-stage dealmaking has continued its strong momentum from the past couple years, showing no signs of slowing down. 572 deals closed in 3Q, amassing more than \$17 billion. 83 deals sized \$50 million or more closed in 3Q, accounting for nearly 70% of the quarter's total late-stage deal value. More than \$41 billion has been invested into these larger deals YTD, already marking the second-highest yearly total behind only 2018. Large, ultralate-stage investments have also become more commonplace within the industry. These "private IPO" rounds may be used to delay IPO filings and to shore up balance sheet deficiencies before opening the company books to the public. To that end, Postmate's \$225 million financing in 3Q shows that even companies on the verge of going public can still raise additional capital in private markets; the company is rumored to be filing for its IPO in the near future.

Companies have continued to stay private longer to achieve more scale, drawing increased interest from nontraditional investors looking to capitalize on the growth they would have traditionally helped finance in the public market. The top 20 deals of the quarter combined for almost \$6 billion in total investment, and the average age of those companies was over seven years; almost all

Companies continue to tap VC for longer

Median and average ages (years) of US late-stage companies at time of fundraise



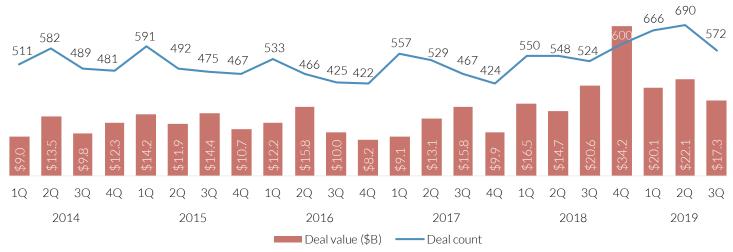
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these deals included investment from a large asset manager or other nontraditional VC investor. For comparison, the median age for a company raising late-stage capital in 2019 is just 8.0 years, and the median number of years to exit sits at 7.6, just slightly older than the companies raising these rounds. A hidden component of many transactions is secondary stock purchases or company stock repurchases

of existing shares. These provide early investors liquidity without further diluting the company's current equity holders. As an example, when Peloton Interactive raised \$550 million in its 2018 Series F, it used \$130 million of the proceeds to repurchase outstanding shares of its previously issued stock from investors and common stock holders. This also serves to make late-stage financings appear

Late-stage activity has consistently trended higher, despite recent dip

US late-stage VC deal activity by quarter



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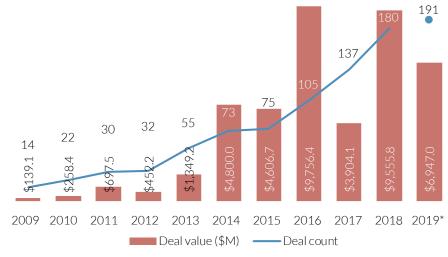
bigger than they actually are, similar to earlystage rounds with debt components.

3Q may be the only quarter in 2019 to miss the \$20 billion total investment mark, but the downtick should be considered a minor blip rather than a sea change, as the total raised is still larger than any quarter in our dataset prior to 3Q 2018. The quarter was also the first since 2Q 2018 to not record a \$1 billion+ late-stage deal. Until a couple years ago, deals of that nature were unheard of across the industry.

Our coverage of emerging technologies typically focuses on the earliest stages of VC investment, but AI has been gaining traction at the late stage as underlying technologies and the startups powering them mature and as the technology's uses have expanded. The past two quarters have registered the highest quarterly deal counts for late-stage AI-focused startups on record. They both saw nearly \$3 billion invested across almost 75 late-stage deals, bringing the late-stage YTD total to roughly \$7 billion.

In 2018, \$22 billion was raised for US-based VC funds with more than \$1 billion in

Activity in AI & ML has matured alongside the technology US late-stage VC AI & ML deal activity

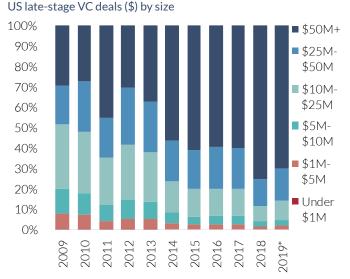


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commitments, which should manifest into continued high levels of investment at the late stage. The average late-stage deal size in 2019 is nearly \$35 million, double any year prior to 2013 in our dataset and second only to 2018's record of \$42 million. The median valuation

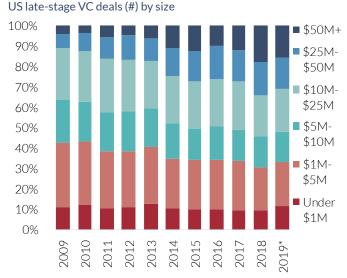
step-up for late-stage companies has also surpassed 1.5x for the first time, a figure all the more impressive when accounting for the overall valuation growth that has occurred at the late stage over the past several years.

\$50M+ deals drive more than 2/3 of value



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\$50M+ deals see light pullback in share





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SVB: Life sciences investors adjust to global challenges

Q&A: Katherine Andersen, head of life sciences and healthcare relationship banking at SVB

We saw life sciences and healthcare fundraising and investment set records in 2018. How is 2019 shaping up?

Over the past two-and-a-half years, \$25 billion was raised by US venture funds to deploy into new and existing life sciences companies. That \$25 billion does not count other investors, including non-US funds, crossovers, corporates, family offices and sovereign wealth funds. This is an incredible amount coming into the ecosystem to support new technologies and science.

Everything is cyclical, however, and the healthcare market will definitely have an off-cycle. Today, we're faced with slowing economies and continued geopolitical noise, including continued US scrutiny of foreign investors. While the healthcare industry is currently experiencing slower activity, 2019 is still on track to be the second-best in recent years for VC investment, after 2018.

Although the pace of US biopharma activity is down slightly in 2019, at the midyear we had already surpassed full-year deal value numbers for 2017. So, are we in a bubble?

No, but it's still frothy. With that said, there are two mitigants to a "bubble burst" downturn in biopharma. First, we've seen a number of big deals with two or more traditional VCs who tend to support companies through cycles. Second, M&A tends to pick up for private companies once IPOs slow down. In fact, our analysis illustrates that more than 50% of M&As and IPOs in the industry involve early-stage companies.

While we're working together to navigate what could be the new normal, it's clear that

the fundamentals for life sciences remain strong around the globe.

What are some of the impacts of global politics and economic slowdowns?

The Committee on Foreign Investment in the United States (CFIUS) is a federal organization tasked with reviewing deals (M&As and other foreign direct investment, including non-controlling interest) involving US companies that might pose a security threat. We have already seen a tangible effect on life sciences and technology companies, though life sciences and biopharma in particular may feel it somewhat less than tech. In September, the US Department of the Treasury proposed new regulations that expand the reach of CFIUS to other areas, including real estate located near sensitive government facilities and other investments in certain US companies that provide access to material nonpublic technical information.

If this continues, there is a good chance that innovation in the US healthcare industry will feel an even greater impact. In 2018, Asia's syndicated investments into biopharma across the US and Europe experienced an over 200% surge of capital compared with 2017, comprising almost half of all deal flow into the sector for the year.

On an annualized basis, we're predicting about a 35% decline from 2018 to 2019 in Asia's total syndicated investment into the US and Europe across all healthcare subsectors. That is partly due to more stringent CFIUS scrutiny and a slowdown in the Chinese economy. Looking ahead, the future impact of CFIUS depends on who is viewed as a national security threat.

While it is imperative that intellectual property is protected given that it drives the resources critical to fuel R&D advancements and drug discovery, fear of the unknown cannot inhibit global collaboration to advance human health. We



Katherine Andersen serves as head of life sciences & healthcare relationship banking at SVB. She also sits on the Board of Directors for SVB's joint venture in China, SPD Silicon Valley Bank. Prior to SVB, Katherine was a senior vice president for Wells Fargo Bank leading the life sciences business development and relationship management efforts for the New England region. Before that, she was a director at Wells Fargo Capital Finance focused on front-end business development and underwriting of structured loans.

might see smaller investments from China, but we expect that capital will continue to be put to work in the best companies around the globe, regardless of Chinese roots. There will likely continue to be a higher bar favoring quality companies, but the underlying fundamentals are expected to remain strong.

How do investors and companies operate with increased US government scrutiny?

Carefully. Earlier this year, CFIUS forced the China-based majority shareholder of Massachusetts-based PatientsLikeMe to divest its majority holding, and the company was acquired in June by insurance giant UnitedHealth Group. The company's platform enables patients to share their experiences and treatments and generate real-world patient data, which drew scrutiny.

These kinds of reviews can be triggered even by non-US minority shareholders, and not just investors from China. However,







because China is the second-largest healthcare market in the world, it is top of mind for the US. With China's growing middle class and aging population comes increased need for more innovative therapies. Need drives demand, and while we may see a slowdown in deal activity, that need is not going to change.

What strategies are US companies pursuing in China?

We are already seeing a shift in strategy and new, more innovative paths forward for US companies that are interested in China. Some are developing strategic relationships with Chinese research institutions. With that said, licensing is still probably the fastest way to address immense unmet medical needs in China. Licensing is a more clear-cut tech transfer because there is typically no equity stake involved. To be successful, companies must do their homework when looking for Chinese partners; this requires full-scale diligence, and your strategy must be crystal clear before you jump in. Go to China, build relationships and partnerships and see for yourself how business is done.

How are Chinese companies raising capital?

Chinese companies are hoping to capitalize on the debut of a new trading platform, a Nasdaq-like board in Shanghai called the STAR Market that launched this past summer. For the first time in mainland China, pre-profit companies may list and investors can short shares. This could prompt similar trading

reforms for other boards across mainland China, which would present additional alternatives for financing companies across the innovation economy. Still, it's far too early to know the long-term impact.

What I do know is that China's demand for more innovative therapies is only increasing. On the global stage for healthcare, China remains a strong contributor and value driver. With the establishment of the Hong Kong Exchange's new IPO rules and the STAR Market in Shanghai, China clearly hopes to continue as an attractive market for innovators.

What investor dynamics are shaping the US healthcare landscape?

SVB analysis showed that in 1H 2019, the top 15 crossovers backed 41% of US biopharma deals raising more than \$80 million. We also noticed an emerging trend in which many large, corporate-only equity rounds existed as part of collaborations or with options to buy.

Tech investors dominated diagnostics/tools companies for most active new investors in the past, but we saw a slowdown there in 1H 2019. Instead, tech investors' attention seems to be shifting away from diagnostics/ tools companies to AI-enabled biopharma companies with their own drug development pipelines. Biopharma has proven to unlock value early, so this isn't a surprise. We still expect tech companies to acquire diagnostics/tools companies across the AI, machine learning and Big Data landscape.

Which healthcare sectors are poised for the most game-changing advancements?

There is surging interest and advocacy around companies focused on tremendous unmet needs such as rare diseases. These areas typically allow for smaller patient trials. The FDA has seemingly been accepting more risk in this arena and moving ahead with accelerated approvals.

Interest in digital health also continues to ramp, particularly if companies can demonstrate improved patient outcomes and paths to lower healthcare costs. Insurance companies and those that focus on providing primary care, for example, have been raising large rounds.

The convergence of tech and healthcare continues. We are seeing only the tip of the iceberg in terms of the potential of technology, whether it's AI, data analytics or machine learning, to advance human health.

With the industry facing macroeconomic and political headwinds, the global demand for innovative solutions to solve healthcare challenges is only increasing. We expect that the US and European companies will remain interested in gaining access to Chinese investors, R&D capabilities and other collaboration opportunities. We also expect that Chinese investors will find new ways to support US companies. Cross-collaboration is critical for healthcare advancement, and investors and companies will adjust to the new normal.



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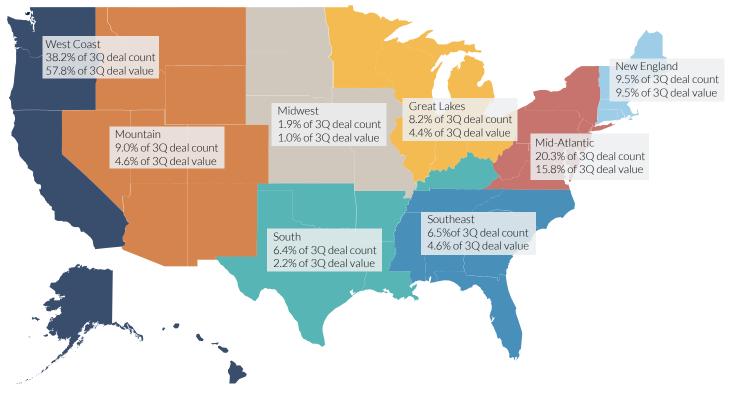




Deals by region

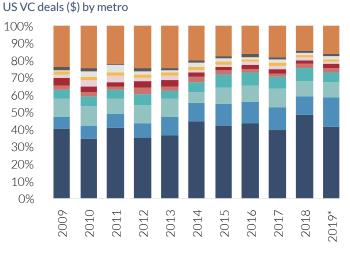
West Coast not loosening grip on VC activity

US VC deal activity by region

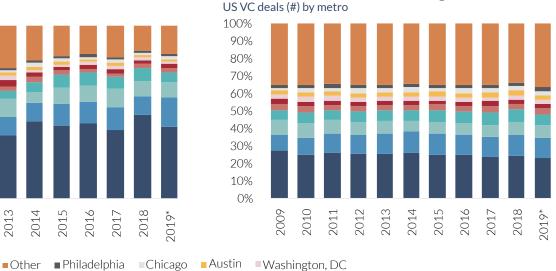


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NY has seen record 17% of deal value YTD



"Other" metros continue to gain deal share



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■San Diego ■Seattle ■Los Angeles ■Boston ■New York ■Bay area











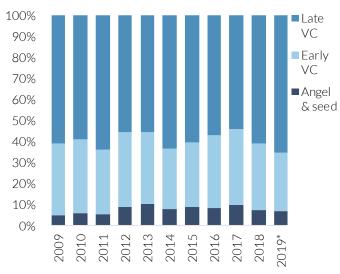
Deals by sector: Software

Deal value on pace to reach decade high US VC software deal activity



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Late-stage VC reaches 65% of total US VC software deals (\$) by stage



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Growth in deal sizes cools after spike in 2018

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



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Median pre-money valuation eclipses \$20M for the first time

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









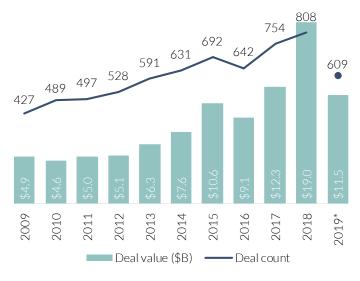




Deals by sector: Pharma & biotech

Pharma VC deal count on pace to match 2018 record

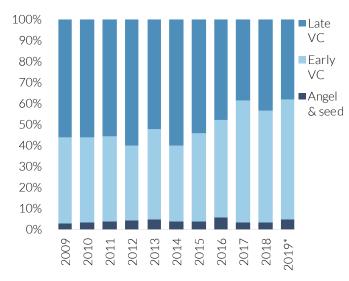
US VC pharma & biotech deal activity



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Dealmaking continues to concentrate in the early stage

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



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Pharma deal sizes fall from 2018 peak

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



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Valuations drop in tandem with deal sizes

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







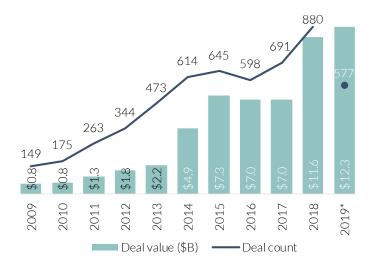






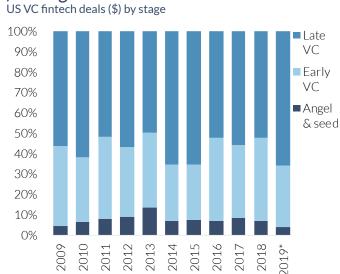
Deals by sector: Fintech

2019 fintech deal value sets new high US VC fintech deal activity



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Fintechs attract increasing late-stage funding



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Average deal sizes skyrocket as median hits a plateau

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



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Outlier mega-deals cause average fintech valuation to double

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













Deals by sector: Al

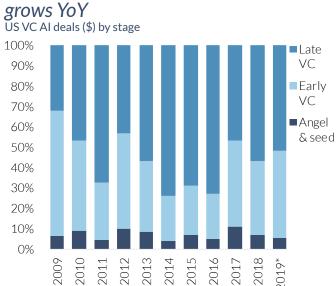
Al deal activity pacing for another record year

US VC AI deal activity



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Proportion of early-stage AI deal value grows YoY



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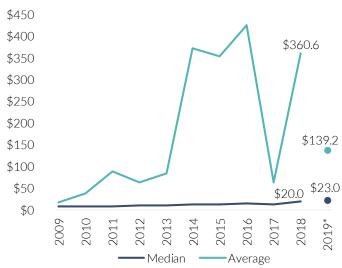
Average Al deal size continues to oscillate Median and average US VC Al deal sizes (\$M)



PitchBook-NVCA Venture Monitor *As of September 30, 2019

Average AI valuations remain volatile while median steadily climbs

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









Shareworks: Stock option lending is the fastest-growing market in the private company liquidity toolbox

At this point, it has been incredibly well documented how private companies are taking longer to make the leap and launch into the public arena. Despite the recent run of IPOs that resulted in many of the biggest names becoming public companies, the number of unicorn companies has grown to over 400 worldwide.

Even more impressive than the number of unicorn companies may be the amount of revenue they are generating. Things have evolved significantly from 1999-2001, when companies were going public with little to no revenue. Today, companies often don't even consider launching an IPO process before they have hit \$100 million in ARR. With plenty of capital available in the private market, they can afford to pick when they want to go public. With nine figure raises in the private market becoming a daily occurrence, the dynamic that led companies to IPO as a way to access capital has changed.

While staying private longer has a lot of advantages for companies, it is not always an ideal position for employees that have received equity as part of their compensation. When Facebook and Twitter delayed their IPO timelines after the recession, their employees found themselves wealthy on paper, but with no way to monetize it.

This dilemma gave rise to the first iteration of the secondary market, as cash poor shareholders in high-flying tech companies began to search out investors to buy their stock. With marketplaces proliferating to connect shareholders and interested investors, companies began to take control of the situation by offering certain shareholders—mainly employees—a chance

to sell their stock through companysponsored tender offers.

Although tender offers have now become a major release valve that private companies use to provide liquidity, they can be expensive and tend to have significant impacts on a company's 409A. While many employees will still seek out secondary markets, several companies discourage or outright block sales. Even if an employee can sell, they are often more focused on tax planning and would prefer to exercise and hold at least part of their option grant, assuming they had the cash to do so. Enter the option lending market.

Like the secondary market before it, option lending has evolved rapidly over the past several years. The market gained momentum from 2012 to 2016, with lenders providing capital to employees that were leaving their current company and who had a limited amount of time to exercise their options and pay any taxes associated with the exercise. These shareholders often didn't have any time to arrange a sale before their options expired, so taking out a loan to cover the costs of exercising their stock became an attractive alternative for shareholders that had no other viable way to capture the value of their equity.

As the lending market picked up steam on the back of these expiring option grants, ever increasing valuations opened up an opportunity for those same lenders to help shareholders that were getting high-priced options in these newly minted unicorns. While it was great for these employees to have options to buy stock that was worth \$250,000 or more on paper, many holders



Ryan Logue has been immersed in the private company market for the past eight years and is focused on driving new product offerings for Shareworks by Morgan Stanley's top private company clients. Prior to joining Shareworks, Ryan led efforts to help over 250 private companies access institutional capital and completed over \$20 billion in complex transactions as the Director of Operations at SecondMarket and the Head of the Private Company Market for Nasdaq Private Market. Ryan received his B.A. from the University of Rhode Island and his J.D. from Northeastern University School of Law.

were forced to just sit on those options because they weren't in a position to afford the \$100,000 or more it would cost to purchase the stock. As those holders began to look around for ways to exercise their stock and kick off the capital gains clock, the emerging lending market started to become an attractive option.

Unlike shareholders in public companies who can go to almost any bank and receive a loan for their stock, holders of private stock and options have far fewer opportunities. Currently, there are two distinct and growing groups of banks and funds that are willing to lend against your private company stock.







The first group of more traditional bank lenders typically charge a fixed interest rate on a loan and use your stock as collateral. While this is generally the cheapest choice in terms of cost, the loan is also secured by what is commonly known as "personal recourse." That means if your stock goes to zero, you and your remaining assets are still on the hook for the loan.

The second tranche of lenders are typically structured as funds, and they offer loans that combine fixed interest and upside. In these structures, you are required to pay back the interest and hand over a certain percentage of your stock (or proceeds from the stock) at the time you gain liquidity (e.g. M&A, IPO or tender offer.) These structures tend to vary and every fund has their own preferred methodology, but one similarity across all the funds is that they remove the personal recourse requirement. This usually means that the shareholder is only putting up their stock as collateral and not their other assets. Despite the relatively high sticker price of the "loan plus upside model," the ability to take advantage of tax planning strategies (e.g. achieving capital gains treatment) often helps to reduce the impact on the shareholder and increase the attractiveness of this option.

While the lending market continues to grow rapidly thanks to recent market conditions, shareholders should still be thoughtful about deciding to take out a loan against their stock. Most companies expressly prohibit taking a loan out against your shares, commonly referred to as "hypothecating," without board consent, so you should talk to your stock administration team about which methods they approve. Many companies are open to the

conversation and several have relationships with specific funds or banks to provide lending solutions to their employees, which will help ensure that you don't run afoul of your company's bylaws.

In addition to making sure to adhere to your company's preferred procedures, you should keep in mind that taking out a loan against your stock is not a simple endeavor. The terms of the loan can be complex, and if personal recourse is involved, you must be thoughtful about the size of the loan and what type of risk you are willing to bear if the stock declines. If you have questions, you should seek out legal advice and fully understand the risks before signing on the dotted line. This could be the largest financial transaction you have ever completed, so it pays to be thoughtful and weigh all the possible outcomes before diving in headfirst.

As the private market continues to evolve, more options will become available to help shareholders gain liquidity. Every private company shareholder should think through the implications of exercising, selling or lending against their stock to make sure they pick the best path for their personal success. For private companies that need help navigating the complex landscape of equity management, the Shareworks by Morgan Stanley team is excited to continue serving as a resource.

About Shareworks by Morgan Stanley:

Combining cutting-edge technology with outstanding client service and premier wealth management capabilities, Shareworks by Morgan Stanley is designed to simplify the complexities of equity plan management, while helping employees realize the full potential of their ownership.



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Female founders

2019 pacing to be record year for femalefounded funding

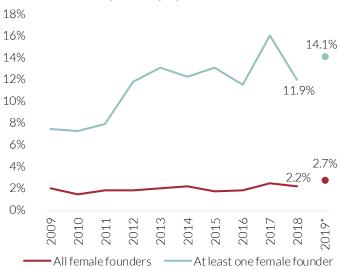
US VC deal activity for female-founded companies



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*As of September 30, 2019

Uptick in FF proportion of total VC through 3Q

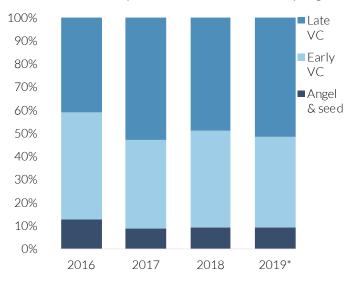
Female-founded companies as proportion of total US VC deals (\$)



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Capital into FF startups split evenly between early- and late-stage

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



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New York continues to be major scene for FF companies

Top 5 US metros by capital raised (\$B) for companies with all female founders (2006 through 3Q 2019)

MSA	Capital raised (\$B)
New York	\$3.78
San Francisco	\$3.69
Boston	\$1.40
San Jose	\$1.18
Los Angeles	\$10.54

Top 5 US metros by deal count for companies with all female founders (2006 through 3Q 2019)

MSA	Deal count
New York	834
San Francisco	677
Los Angeles	374
Boston	269
San Jose	169





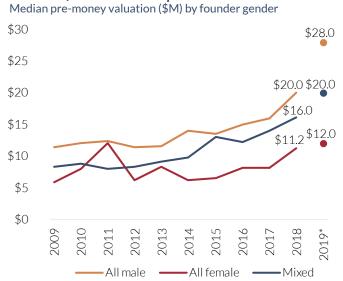






Female founders

Median valuation growth currently slower for FF startups



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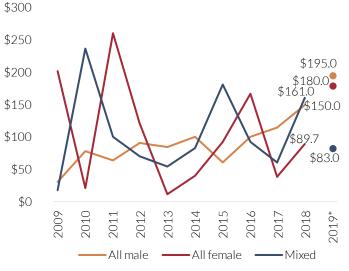
FF startups' deal size growth continues Median US VC deal sizes (\$M) by founder gender



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Median exit size for all-FF companies maintains elevated mark

 $Median\,US\,VC\,exit\,sizes\,(\$ M)\,by\,founder\,gender$



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Outsized biotech exits boost value to decade high

US VC exit activity for all-female-founded companies



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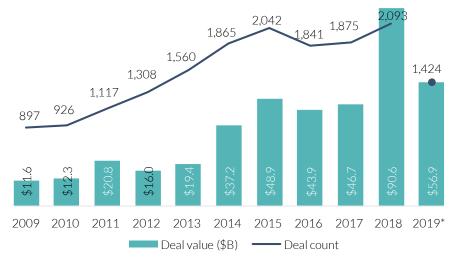
Alternative VC

Nontraditional investors have rapidly increased overall participation in venture in recent years. Transactions involving tourist investors have accounted for the largest proportion of deal value, reaching almost 60% of total VC deal value in 2019, which is up from around 40% a decade ago and highlights their influence on the industry. The extended period of low interest rates has forced these investors to hunt for returns in new territories, and VC fits the mold.

Over the past four years, an average of nearly 2,000 completed VC financings included at least one of these investors. The average size of deals with tourist investor participation has surpassed \$43 million during the past two years, a \$15 million jump over any year prior. SoftBank has been largely credited for pressuring deal sizes upward, not only because of the 50 mega-deals the firm has contributed to since 2015, but

Alternative VC's ability to deploy large amounts of capital is apparent

VC deal activity with tourist investor participation



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Proportion of outside participation growing

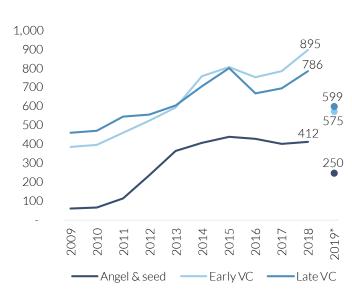
Deals with alternative VC investor participation (\$) as proportion of overall US VC deals



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*As of September 30, 2019

Late-stage is most active area in 2019

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



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*As of September 30, 2019

Alternative VC investors are an integral part of today's venture ecosystem, but their general investment these differ from traditional VC firms. Whether it is a corporation gaining competitive advantages from investing in emerging tech startups, or a hedge fund buying in early to company that plans to IPO in the near term, these investors' strategies allow for returns beyond the traditional definition in venture. For additional definitions of investors in this space, see the methodology page.











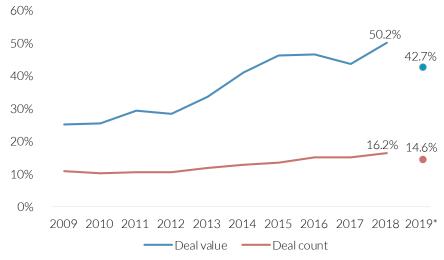
also because the competitors of its portfolio companies have been forced to cut larger checks in response. However, several other firms are not far behind, many closing at least 30 mega-deals. Fidelity and T. Rowe Price have each participated in at least 40 mega-deals during that same time frame. It should be noted, however, that reasons for these late-stage investments vary. SoftBank uses its size to influence the trajectory of sectors, while mutual funds such as Fidelity look to invest in late-stage companies to supplement their public equity holdings by capitalizing on the growth VC-backed companies are realizing in the private markets.

Suffice it to say, this investor cohort has an unprecedented amount of capital available to allocate to venture. Tourists participated in more than \$90 billion worth of deals last year (including the \$12.8 billion JUUL deal) and \$56.9 billion this year so far. 75.9% (\$43.2 billion) of this year's deal value derives from financings in the \$50 million+bucket, highlighting the magnitude of these investors and what many have pointed to as a driver of increasing venture deal sizes overall.

CVC has also seen a rather meteoric rise over the past decade, realizing a 37% CAGR in deal count since 2009. Venture is an important piece of R&D for many large corporations, offering them the ability to study different market dynamics and gain access to emerging technology. Through

Despite slip, CVCs in large proportion of activity

Deals with CVC participation as proportion of overall US VC deals



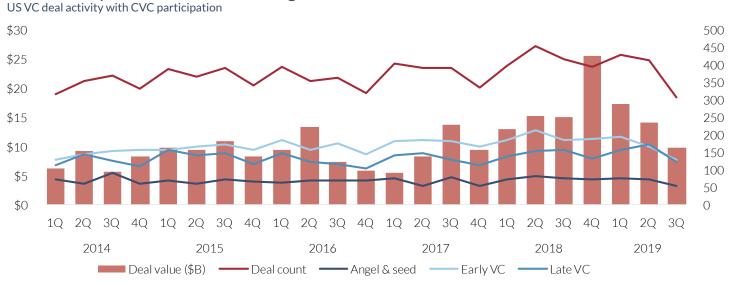
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3Q, CVCs participated in nearly 15% of all 2019 venture deals and contributed to 43% of overall deal value. Both figures come in well above the numbers seen a decade ago, bolstered by the increasing number of corporations participating in venture deals to either make balance sheet investments or allocate money to a specified investment fund.

1,176 corporations or CVCs completed at least one US VC deal last year, the highest total we

have seen. The bull stock market has continued to drive record company values, providing large corporations leeway to make investments in risky, early-stage startups. We have seen the number of completed deals with corporate participation temper over the past couple quarters, potentially as corporations assess their exposure to an economic downturn. If a recession manifests, we expect a pullback in dealmaking from these CVCs, especially those that have less experience investing in venture.

CVC activity has decelerated throughout 2019



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Perkins Coie: Key trends shaping the US venture landscape

What are the key trends defining the US venture market as we move into the back half of 2019, especially given the slew of prominent IPOs?

The ongoing gossip around WeWork is definitely going to dominate conversation, and some unicorns that have gone public may be underperforming, but frankly, it's been business as usual for us. Valuations aren't guite as dizzying. However, we haven't seen any significant retrenching just yet. Whatever is going on in public markets, private markets seem to continue performing as they have throughout the summer. More interesting companies are popping up at the pre-seed stage and successfully raising capital. Even the midstage—which is a segment that historically has not seen as significant of inflows of capitalhas more capital available to access, regardless of any existing hurdles. At the late stage, we haven't seen huge valuation compression yet.

Speaking of valuations, it seems that a plateau is occurring in some ecosystems, rather than the recent endless growth. What is your take on that?

I recently compared the perceived valuations at which Y Combinator companies in the most recent cohort were raising capital versus the penultimate cohort—August versus March and they were relatively similar. However, that March cohort raised at valuations materially higher than, say, August 2018. While that anecdotal data is biased toward the early stage, it is a potentially intriguing indicator. We joke about how \$10 million is the new \$4 million pre-money valuation for early-stage startups, but the reality is that at the midstage in particular, after the early stages of financing, valuations still range considerably based upon the domain, maturity, traction and growth rate of the business. Fewer valuations nowadays seem as novel or unexpectedly high as they did over the past few years. Valuations have come in on the rounds I work on more consistently over the last six to 12 months.

What is your take on sentiment in the marketplace?

Most of the conversations in which I'm involved include a note that we are at the top of the market, and fluctuations in the public market in general indicate that. Most people believe we are late in the cycle; from a historical standpoint, this is one of the longest cycles we've ever seen, so that perception is natural. The prevalence of these types of conversations definitely has an impact on behavior. With that said, there is so much VC that has been committed to funds over the last few years that has to be put to work that its ongoing deployment is still helping support valuations. Despite late-cycle talk and amid turbulent high-profile public exits, a handful of amazing companies have gone public or have been acquired in the past year or so that continue to trade at a high multiple and significant market cap.

Are you able to share any specific examples from the companies with which you are working or have recently worked?

A company that I worked with recently as an investor, not a lawyer, closed a Preferred financing that put the company's valuation at unicorn levels. There was plenty of precedent for that valuation, given the traditional market metrics such as revenue growth, gross and net margins, etc. I'd cite that as an example of how the market has adapted (i.e. some businesses earn their unicorn status based on traditional market metrics and have been able to develop very compelling unit economics and growth). More broadly, in the course of my practice, I personally closed seven financings in the last two weeks or so-all but one at the early stage (seed or Series A). The proceeds averaged around \$5 million-7 million, and the pre-money valuations averaged around \$14 million to \$16 million. My general takeaway was that there was significant consistency across these different rounds in terms of how they were valued and the actual financing terms, even though one business was in medical devices and the other in fintech. In short, there's a robust volume of activity,



Buddy Arnheim, co-chair of Perkins Coie's Emerging Companies & Venture Capital group, focuses his practice on representing emerging growth companies, VC funds and other earlystage investors.

and it is not frenzied or chaotic as one would expect to see in a bubble.

What are the hallmarks of those companies with which you've worked that enabled them to close financings? What stands out about those companies?

Interestingly enough, a client company of ours seeking to find a more cost-effective way to launch satellites into Low Earth orbit was fortunate enough to secure enough capital to extend its runway through 2021; however, a competitive company in the same sector just announced it was shutting down because it was unable to raise sufficient capital. Even in the current environment, it's critical that founders are careful about how they consume capital. When and if private capital markets dry up, as they have in the past, they dry up very quickly—it's almost binary. As for what more startups have an easier time of raising capital in this environment, the specific sector plays a role. As an example, we have some very compelling ad-tech startups and drug discovery startups, but those sectors are somewhat out of favor and companies in those sectors are finding capital raising quite challenging.

On top of that, the characteristics of the team seem to matter more now than ever. We have







a startup client that was formed by a very successful serial entrepreneur. That startup was able to raise its VC round with almost no effort, quickly and painlessly, from a top VC firm. The opportunity is compelling, and the entrepreneur/founding CEO is proven. Similarly, exciting startups with less founder pedigree are finding the fundraising process more challenging.

It's tough to stand out, so novelty and less competition seem to help. In addition, doing your research in advance about from whom you want to raise capital really matters. Entrepreneurs should educate themselves. Is the targeted fund late in the fund cycle, and thus unlikely to invest in a very early stage business? Does that targeted fund have any existing portfolio companies that could be competitive? Or has the targeted fund invested successfully or unsuccessfully in the same sector? If a fund lost money in a home automation business, they are unlikely to bet there again. There have been many times when a startup has shared presentation materials with us, and we find ourselves needing to interject and let them know that their story is not compelling or understandable. For better or worse, investors evaluate an investment opportunity on how clearly the entrepreneur tells the story.

Also, entrepreneurs often ask if they can or should meet with an investor "informally" well before they seek to raise the round. That may be fine, but we warn our entrepreneurs that every investor meeting should be buttoned down, as they only have one chance to make a first impression. And, no matter how informal the context, prospective investors are evaluating the entrepreneur.

Which sectors are becoming more popular?

It's difficult to say, but there are a couple of sectors that I am spending more time on relative to others. Three such sectors are robotics, aerospace and insurtech. In aerospace, one subsegment where I have a disproportionate amount of involvement is in drones and autonomy. In the drone market, DJI still has a massive head start and appears to be one of the last companies standing after there was a surge

of drone manufacturing businesses about four to five years ago. The classic J-Curve, though, seems to be running its course in the drone market. And now a handful of new drone-focused startups are starting to make some very interesting headway against DJI as they have developed new hardware solutions and are pairing those with attractive new software solutions. For example, a company I've worked with has a unique proprietary computer vision navigation system that enables a drone to truly fly autonomously. So, once again, we are seeing once-hot sectors blow cold and then revive with durable startups and strong value propositions.

Within the space category, we've seen an uptick of startups proposing newer, less-expensive methods to get satellites into space. If they work, these will enable the installations of satellite constellations that can provide ubiquitous global communication services, as well as novel positioning and imaging services.

Any last thoughts?

There seems to be an increasing effort by some of the larger venture funds to back opportunities that have the potential and expectation, that if they work, will completely redefine industries. And these companies are raising vast sums of capital. An example of this is residential real estate. A completely brand-new level of liquidity is being brought to the residential real estate market, obviating or redefining the role of real estate agents. There are startups that are bringing liquidity to the residential real estate market such as OpenDoor. There are startups that are redefining the traditional real estate broker such as Compass. There are companies that make it easier to find a new home. There are companies that are trying to democratize the ability to invest in residential rental real estate. Given the abundance of VC, more traditional industries are facing brand-new entrants looking to cause massive disruption. These investors are betting on longer-term trends and are willing to put enormous capital at risk. And my hunch is that this mutes some of the volatility that would otherwise be seen in the venture market. The capital has aligned with these protracted timelines.

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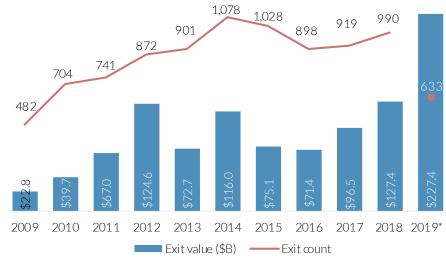
Exits

Exit activity in 3Q 2019 stabilized after the previous quarter's surge in exit value, as 189 deals closed for a total of \$35.4 billion. While not quite on the same scale as last quarter, 3Q's persistent flow of exits has pushed YTD exit value over \$200 billion for the first time, setting another milestone for this record year in VC exits.

Exit value tends to be lumpy, especially in the current environment, which is flush with massive unicorns that can single-handedly skew exit totals. To that end, 3Q exit totals fell short of prior quarters due in large part to a lack of any exits over \$10 billion. Outsized liquidity events continue to be a dominating trend across VC, with exits over \$100 million making up 67.2% of count and 98.7% of value YTD. Perhaps most notable is an exit missing from the dataset, with WeWork postponing its planned IPO amid negative feedback from potential investors.

Acquisition activity remains a constant factor within the VC exit environment, serving as a vitally important exit route for smaller and midsize exits. That said, massive exits still come via this route, an

Annual exit value tops \$200B for first time US VC exit activity

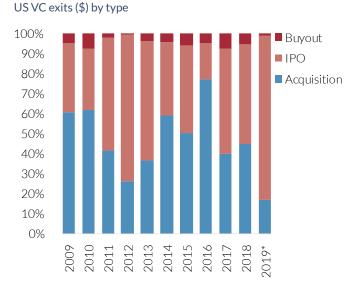


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example being Merck's recent purchase of Peloton Therapeutics for \$1.1 billion. Not only was it the largest acquisition to close in the quarter, but the timing of its announcement was also noteworthy given

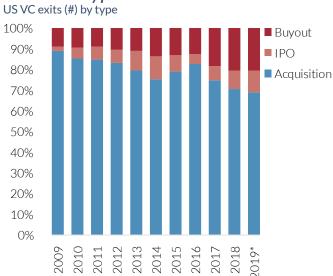
it came the day before the company's planned IPO. A similar acquisition was said to be on the table for Datadog, as Cisco reportedly offered around \$7 billion to have the company forgo a public

IPOs maintain decade-record proportion of exit value



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Acquisitions continue to cede ground to other exit types











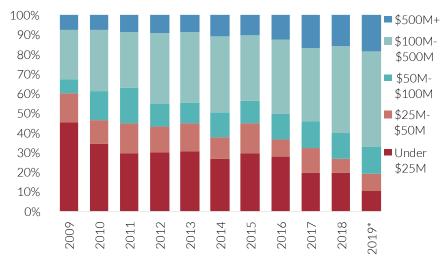


float. This essentially would have been a repeat of Cisco's previous acquisition of AppDynamics in 2017, especially given both businesses offer competing app monitoring software. However, Datadog rejected this proposed offer and went through with its IPO, which valued the company at a \$7.2 billion pre-money valuation, making it the largest exit of the quarter. It is now trading with a market cap above \$9 billion.

Further illustrating momentum in the IPO market, the strong relative position of the IPO as an exit path has persisted through the first three quarters of the year, sitting at 10.6% of total exits. Healthcare and biotech offerings have served as a buoy for public listings as a percentage of total exit count, while a consistent flow of billion-dollarplus debuts have dominated exit value. The historically slower pace of high-growth IPOs in the last couple of years has allowed demand for these companies to build. leading to an open IPO window over the past few quarters. 2019 currently holds the record for IPOs as a proportion of all exit value at 82.0%, sustained by a group of completed unicorn public debuts in 3Q that included Peloton Interactive, Cloudflare, 10X Genomics, Livongo and Medallia.

With the rush of IPOs and historically high valuations, the IPO market has been squarely in the spotlight, eliciting discussions on alternative means of entering the public markets such as direct listings and exposing exceedingly positive and negative datapoints alike. For instance, we hear success stories such as Zoom and its impressive valuation step-up at IPO juxtaposed with the lackluster early aftermarket performances of ridesharing giants Uber and Lyft. This also highlights a divide that is potentially developing between companies in the unicorn market: those that have achieved valuations over \$10 billion and those that have not. While we have only a few examples of the former cohort (Uber, Lyft and unofficially WeWork), the pricing issues seem to be confined to this small group rather than the full VC-backed IPO market or the smaller unicorns. The bifurcation can also be seen on technology lines, as the group of pure-

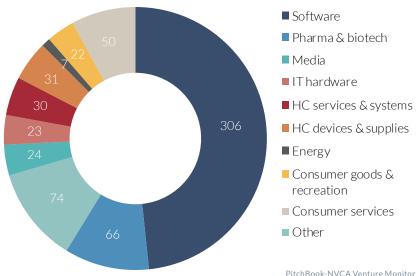
More than 65% of exits now sized over \$100M US VC exits (#) by size



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Over 40% of exits outside of software and pharma (YTD 2019)

US VC exits (#) by sector



*As of September 30, 2019

play SaaS businesses have priced more favorably than the tech-enabled startups predicated on traditional business models.

Longer-term public market performance for the current public group and future entrants into the market will be crucial to determining if this is a trend or just a function of idiosyncratic factors. For now, it's clear that public market investors remain relatively rational regarding valuations, but the IPO market remains healthy in our view. With 67 VC-backed IPOs completed so far in 2019 and despite high-profile hiccups, we're seeing broadly attractive trends around increasing the number of shares offered and upward revisions of the pricing range.











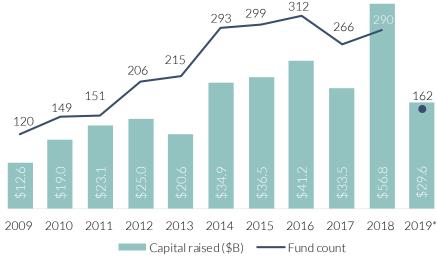
Fundraising

Investor confidence in VC continues to run hot as fundraising activity heads toward another strong year, laying the foundation for large masses of capital deployment to continue in the years ahead. With \$29.6 billion raised across 162 funds YTD, 2019 should easily achieve the \$30+ billion mark reached in each of the past five years, although we expect a dip from the \$56.8 billion raised in 2018. Megafunds (\$500 million+) have continued to close at lofty levels, with 15 funds in the books YTD and more on the way. Looking ahead, we've recorded around a dozen open funds having raised at least \$500 million and over 150 open funds having raised over \$50 million that are likely to close soon. Conversely, micro-funds (sized under \$50 million) have dropped to 33.3% of the total fund count YTD, down from roughly 60% of all funds in 2012.

At the end of 3Q, 2019 fundraising activity appears as robust as ever, with investors continuing to raise capital at elevated levels. VC net cash flows have been positive since 2012, meaning capital is returning to LPs faster than they can recycle it into new vehicles, which should fuel the next round of venture funds. Despite the continued abundance of capital raised, fund count has taken a dive with 162 closed YTD, and the final is likely to fall short of the 290 raised in 2018. The fundraising

Fundraising on track to surpass \$40B in 2019, with several large vehicles primed to close US VC fundraising activity



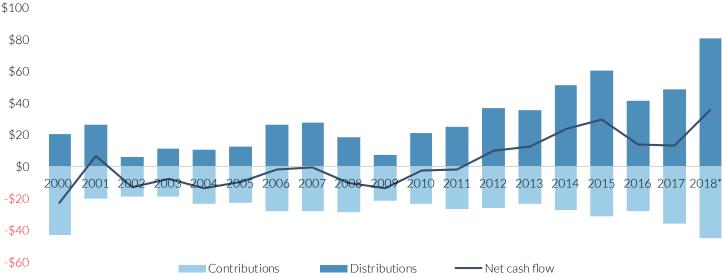


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timeline has also extended, meaning GPs have needed more time to garner enough LP commitments to meet targets. The average number of months to fund close has trended around 14 over the past decade. It sits at 16.9 YTD, which is a 3.2 increase over 2018's full-year average. Months to close depends

on economic conditions, LP confidence, shifts in fund sizes and a host of other factors. LPs' currently favorable sentiment will likely place a downward pressure on this statistic unless conditions sour.

VC net cash flows maintain positive status since 2012 US VC cash flows (\$B)













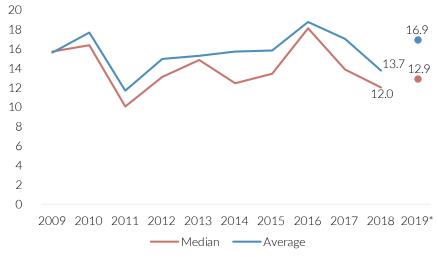
Although the majority of funds closed in 3Q were based near San Francisco, Boston or New York, the Salt Lake City area, also known as the "Silicon Slopes," had an exceptionally strong guarter with four closed funds. Six funds have already closed YTD, and many of the currently open funds are being raised by managers with track records spanning more than a decade, underscoring the maturation of the Utah venture ecosystem. VC funding is a critical element to the growth of any entrepreneurial hub, and although Peak Ventures is the only fund with an explicit local focus, all three Utahbased VC firms that raised funds this year have disproportionally invested in startups in the area. With five of six funds sized below \$100 million, the early-stage focus can be expected to spur growth in Salt Lake City's entrepreneurial ecosystem. However, a dearth of large funds raised in the past four years means that startups will need to seek out-ofstate capital when fundraising in later stages. With median US fund step-ups landing at 1.5x in 2019 YTD, future Utah funds could very well increase in size.

Broader VC fund sizes are continuing to scale, with nearly half of all funds sized \$100 million or above, up from roughly 30% in 2014, and 9.3% of all funds sized \$500 million or above, up from 5.2% in 2017. The heightened focus on larger funds can be attributed to increased LP interest in VC as an asset class, as well as the shift toward the growth strategy of blitzscaling, wherein startups raise massive amounts of VC in an attempt to spur rapid growth and achieve market domination. Mega-funds (\$500+ million) in 2019 have already exceeded 2017 activity in terms of count and capital raised, with 15 closed and \$14.4 billion raised, respectively. With 25 open funds targeting \$500+ million and three mega-funds expected to close in the near future, we could very well see a new annual record in capital raised over the next few years.

Much of the growth in fund sizes has also been attributed to VCs trying to keep pace with SoftBank. But as the beleaguered unicorn tech and/or real estate company WeWork threatens to slash returns from SoftBank's Vision Fund I, LPs are now hesitant around their commitments to the firm's follow-on fund (which is technically a hybrid PE growth-CVC fund rather than a purely venture vehicle).

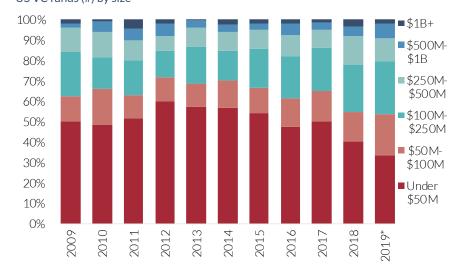
Average time to close ticks back up

Median and average time (months) to close for US VC funds



PitchBook-NVCA Venture Monitor
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15 VC mega-funds closed in 2019 YTD US VC funds (#) by size



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Some investors are calling into question the viability of the vehicle that started this arms race. As an anchor investor in WeWork (not to mention other struggling former unicorns such as Uber), SoftBank has come under scrutiny from LPs who are beginning to see write-downs of their holdings in Vision Fund I. Saudi Arabia's Public Investment Fund and Abu Dhabi's Mubadala Investment Company are just two of the LPs that are reportedly considering reducing or even eschewing their investments in Fund II entirely.

SoftBank's broader strategy of blitzscaling has been called into question by public investors' wariness of Uber and WeWork. Many of SoftBank's other investments, such as DoorDash and Olo, are predicated on a similar strategy. Although blitzscaling has grown in popularity, the model relies on rapid growth through VC-funded business spending at the expense of near-term profitability. The pattern of VC-backed unicorns filing for IPO with no clear path to profitability has compelled more attention from analysts.











3Q 2019 league tables

Most active investors angel & seed

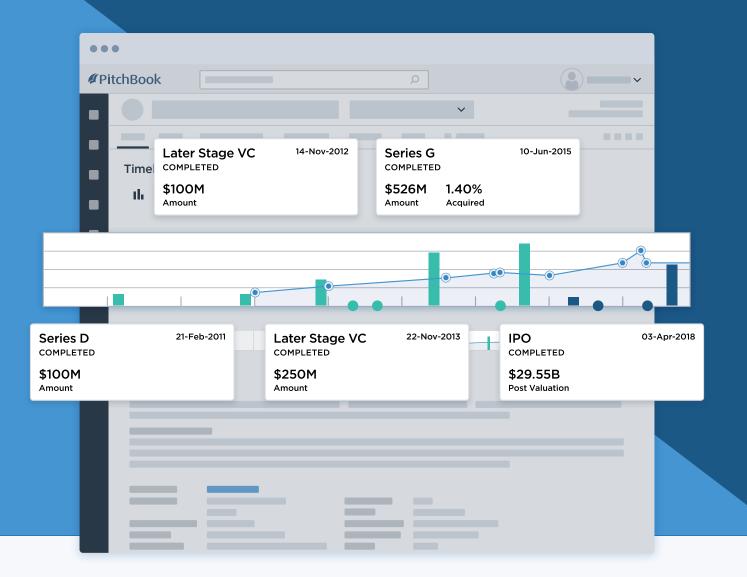
ang	gel & seed	
1	Plug and Play Tech Center	20
2	500 Startups	15
3	Hatcher Plus	10
4	Y Combinator	9
5	Greycroft	8
5	Alumni Ventures Group	8
7	Quake Capital	7
8	Collaborative Fund	6
9	SOSV	5
9	Techstars	5
9	Social Starts	5
9	True Ventures	5
9	Liquid 2 Ventures	5
9	Launch fund	5
9	Floodgate Fund	5
9	Right Side Capital Management	5
17	The Center for Innovative Technology	4
17	Ulu Ventures	4
17	Service Provider Capital	4
17	Supernode Ventures	4
17	Keiretsu Forum	4
17	Pioneer Square Labs	4
17	Matchstick Ventures	4
17	Day One Ventures	4
17	Precursor Ventures	4
17	Accel	4
17	Bessemer Venture Partners	4
17	Founders Fund	4
17	MetaProp NYC	4
17	Afore Capital	4
17	Pear	4
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Most active investors early stage

1	Keiretsu Forum	24	
2	Founders Fund	12	
2	Andreessen Horowitz	12	
4	Y Combinator	11	
4	Social Starts	11	
4	Khosla Ventures	11	
7	500 Startups	10	
8	Revolution	8	
8	Precursor Ventures	8	
8	Lightspeed Venture Partners	8	
8	Alumni Ventures Group	8	
12	Valor Equity Partners	7	
12	General Catalyst	7	
12	Intel Capital	7	
12	Accel	7	
16	CRV	6	
16	Lux Capital Management	6	
16	Pear	6	
16	Plug and Play Tech Center	6	
16	Kleiner Perkins	6	
16	Canaan Partners	6	
16	Connecticut Innovations	6	
16	Craft Ventures	6	
16	Andreessen Horowitz	6	
	PitchBook-NVCA Venture Monitor		

Most active investors late stage

1	Keiretsu Forum	18
2	Accel	11
3	Tiger Global Management	10
3	Kleiner Perkins	10
5	Y Combinator	9
5	New Enterprise Associates	9
7	True Ventures	8
7	Bessemer Venture Partners	8
7	Insight Partners	8
7	Andreessen Horowitz	8
11	General Catalyst	7
11	Coatue Management	7
13	T. Rowe Price	6
13	Sequoia Capital	6
13	Norwest Venture Partners	6
13	Revolution	6
13	Greenspring Associates	6
13	Alumni Ventures Group	6
13	GV	6
13	Benchmark (San Francisco)	6
13	Connecticut Innovations	6
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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, 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, 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. "Tourist" includes any investor type that is not VC, CVC, growth, accelerator/incubator, SBIC or angel.

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.

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A perfect partnership: PitchBook and the National Venture Capital Association

Why we teamed up

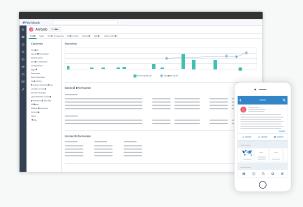
NVCA is recognized as the go-to organization for venture capital advocacy, and the statistics we release are the industry standard. PitchBook is the leading data software provider for professionals in venture capital, serving more than 4,000 customers across the private markets. Our partnership with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

The PitchBook-NVCA Venture Monitor

Informed by PitchBook data, our quarterly Venture Monitors dive deep into venture capital activity and deliver insights to inform your investment strategy. PitchBook data also bolsters our annual year-in-review publication.



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