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NATIONAL VENTURE CAPITAL ASSOCIATION

Venture Monitor

3Q 2018

In partnership with

svb Silicon Valley Bank

PERKINSCOIE COUNSEL TO GREAT COMPANIES

Solium

2018 VC invested primed to top $100 billion
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The definitive review of the US venture capital ecosystem

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Executive summary

The trend of high concentration of capital into fewer, larger investments has solidified into the status quo for the US VC ecosystem. Perhaps nothing represents this new normal better than the number of $50 million+ deals closed in 2018 through 3Q, reaching 378 rounds and already surpassing the 292 closed in full-year 2017. Non-traditional VC investors and tech investors are primarily driving this increase. At the same time, several traditional VCs have raised larger funds to compete in the mega-rounds with the SoftBanks of the world, seeing larger amounts of capital as a competitive advantage and opportunity to invest in the best companies. A healthy fundraising environment is also playing a part, as 2018 is on track for a fifth consecutive year of $30 billion+ closed by VC funds. To round out the venture cycle, a healthier IPO market is providing much-needed returns to LPs and capital for reinvestment in VC.

This phenomenon hasn't been limited to just the large late- and growth-stage deals—it's been at every investment stage and across most sectors. The result has been rising pre-money valuations, most notably for Series A financings, which have typically been less affected by frothy funding markets, but are now experiencing an unusually dramatic increase in valuations.

With the recent metamorphosis of the industry, seed-stage financings are also witnessing a transformation since peaking in 2015. The number of seed-stage investments has moderated, as the wave of new angel & seed investors that emerged earlier in the decade and drove up activity for several years has reduced. A cohort of those seed firms has raised larger follow-on funds and more institutional capital, while several firms died off or were not able to raise later funds. This shift has led to many seed deals being completed today at levels that would have amounted to a Series A round just a few years ago.

Another ongoing shift in the venture industry is the attention to startups in non-coastal regions of the country. This trend hasn't quite surfaced in the data yet, but positive sentiment and interest are emerging. Part of the interest stems from the lower cost of startup operations, the demand for follow-on investments in a strong cohort of startups looking for larger pools of capital, and a strong talent pool. How quickly and pronounced this interest will translate in the investment data over the coming months remains to be seen, but coastal and non-coastal investors are showing signs of optimism.

A closely watched trend that has unfolded, perhaps more slowly than some anticipated a year ago, has been the opening of the IPO market for tech companies. Through three quarters in 2018, the number of venture-backed IPOs has already surpassed 2016 and 2017. Some investors have described the tech IPO market as in a Goldilocks stage—not too hot and not too cold—making it a prime time for companies to go public, especially as the public markets remain near all-time highs. Another positive signal for a healthy tech IPO window has been the strength and quality of companies once they float. Meanwhile, the life sciences sector, where IPOs have been strong for a number of years, continues its momentum.

Despite the welcome re-opening of the venture-backed IPO market, it is fair to say that it should in fact be much more robust. With the public and private markets at or near all-time highs, the number of venture-backed IPOs hasn't kept pace. The availability of late-stage capital is certainly part of the reason, but there are also a number of policies and economic conditions that are restraining the IPO market for VC-backed companies. NVCA and other organizations have continued to push for policy solutions to address the many issues startups face when going public. These efforts led to the passage of the JOBS and Investor Confidence Act of 2018 in the US House of Representatives in July by an overwhelming bipartisan vote of 406-4. The law, often dubbed "JOBS 3.0," includes several provisions that would encourage capital formation for US startups and seek to find solutions to some of the issues small capitalization companies face on the public markets.

Another notable policy area from 3Q included the August passage of the Foreign Investment Risk Review Modernization Act (FIRRMA), which will have significant effects on VCs with foreign LPs and startups with foreign co-investors. So far, the impact of the law has been limited, with some sectors that were seeing high Chinese investment—such as autonomous vehicles—experiencing a slowdown from foreign investors. There haven't been large-scale changes yet, but once the new law begins to be implemented in the coming months, expect a more significant impact on the US venture industry.

Overview

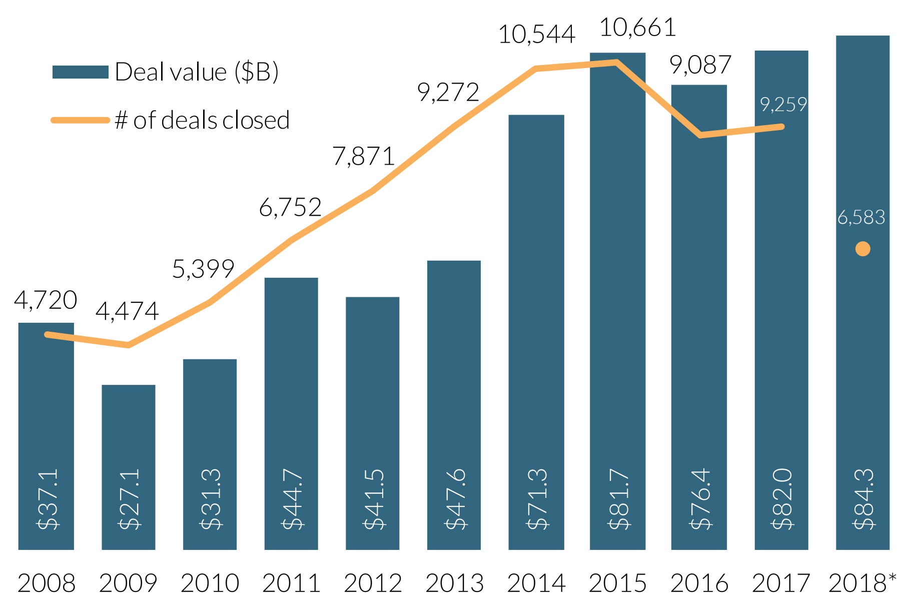
The US VC asset class saw another quarter of strong activity as capital invested trended toward a new high. 3Q capital investment topped $27.9 billion, pushing YTD 2018 deal value to $84.3 billion—a record amount of capital raised with a quarter remaining.

Regarding deal count, the early stage saw a double-digit percentage decline this quarter, but the slowdown was even more pronounced for angel & seed deals, where activity fell 26.5% from 2Q. Annually, deal count currently stands 28.9% shy of the 2017 EOY total, putting 2018 on pace to be about equal with last year.

As of 3Q, median VC deal sizes have experienced double-digit percentage growth over 2017. Early-stage deals have seen the greatest increase, rising 25.0% to a median deal size of $7 million. Median pre-money valuations are also climbing across stages. Series B deals saw the greatest growth compared to 2017 at 37.5%. The inflation of valuation figures can be attributed in part to the trend of increasing fund sizes, with investors now viewing large capital reserves as a competitive advantage. In some instances, investors have reportedly pressured firms to accept an investment by threatening to invest in rivals instead. Seeking to compete with large VCs and nontraditional investors, smaller VCs may see capital efficiency put under pressure with more expensive investments and larger absolute returns necessary to satisfy LPs.

2018 deal value has already reached a decade high

US VC deal activity



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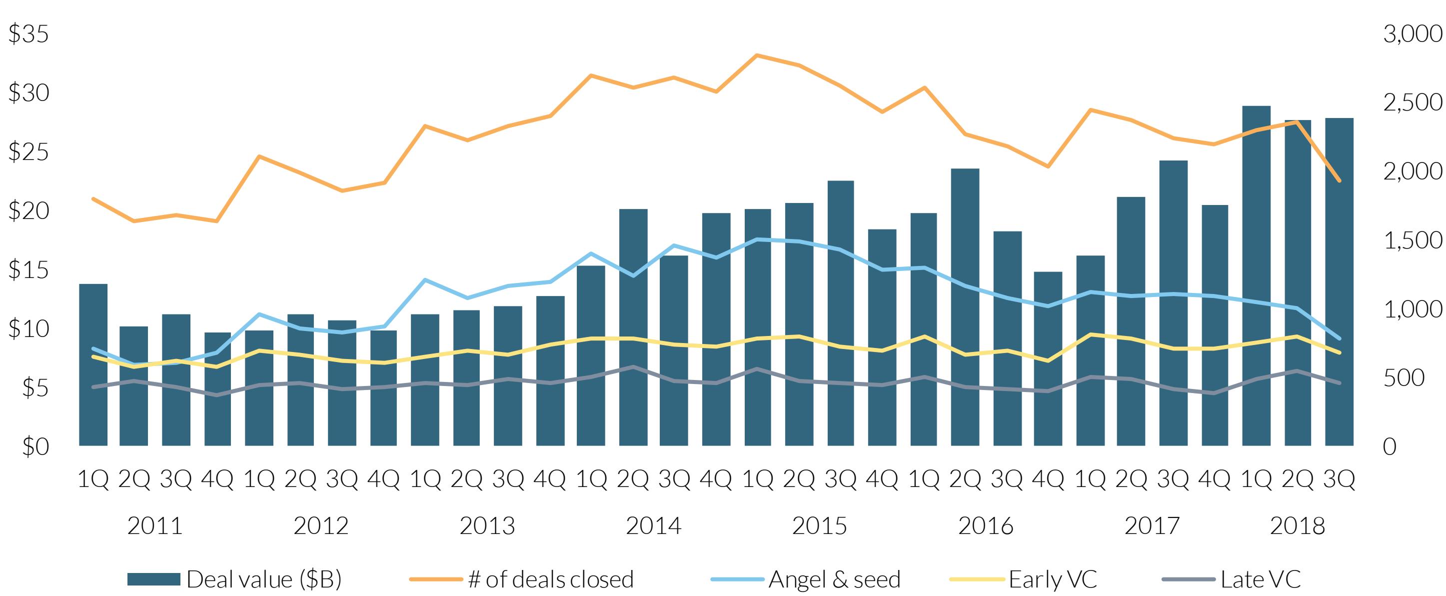
Deal value remains elevated

US VC deal activity by stage



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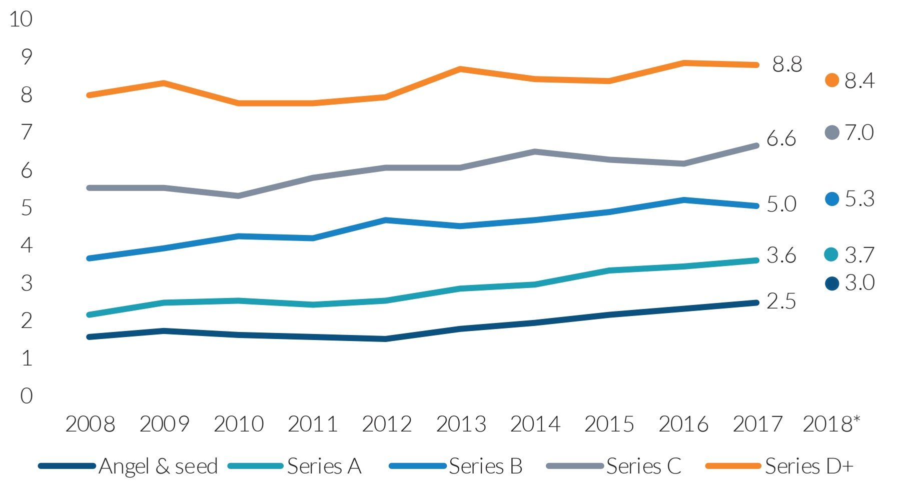
Nontraditional investors, such as hedge funds, mutual funds and sovereign wealth funds, made big moves in the first three quarters of 2018, investing in a total of 1,347 deals, on pace to match 2017. Although it's difficult to ascertain capital invested by a specific group, nontraditional investors participated in deals totaling $50.3 billion over the first three quarters of 2018, reaching a new annual high. Tourist investor participation in deals $50 million or greater increased 43.8% YTD compared to 2017, as these investors tend to back larger, more mature businesses. These deep-pocketed investors are helping to fuel the capital availability that is allowing firms to stay private longer. We expect these firms to continue playing an increasingly active role within VC as companies continue to delay exits and seek capital for further growth.

Average time to exit has climbed steadily over the past decade, settling at 6.4 years in 2018. This is due in part to the aforementioned rise in capital availability, especially at the late stage. Median company age has also risen in 2018 for companies raising angel through Series C rounds. Median age rose the most at the angel & seed stage (up 22.8% in 2018 versus last year) in part because investor composition is changing, and firms are investing in more mature companies with lower-risk profiles.

Another contributing factor is the rise of unicorns and the increased frequency with which those $1 billion+ valuation firms raise additional capital. At 39 deals and $7.96 billion raised by unicorn firms in 3Q, 2018 is pacing for a new high on both fronts. As the number of unicorns grows, so do the growth of paper gains and unrealized value held illiquid by investors. The unicorn phenomenon has been fueled by the upsurge in mega-rounds. These rounds of at least $100 million are becoming increasingly prevalent in venture deals. 2018 has already reached new records in terms of mega-fund deal count, a 38.8% increase over 2017 with 143 deals closed. Peloton, an at-home fitness equipment manufacturer, raised the largest deal in 3Q: $550.0 million at a $3.6 billion

Companies continue to delay raising capital

Median age (years) of companies by stage



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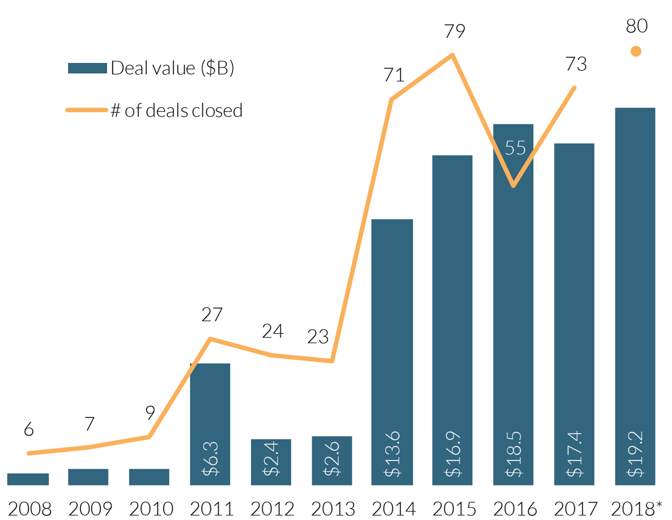
Unicorns raise record capital in 2018

US unicorn deal activity



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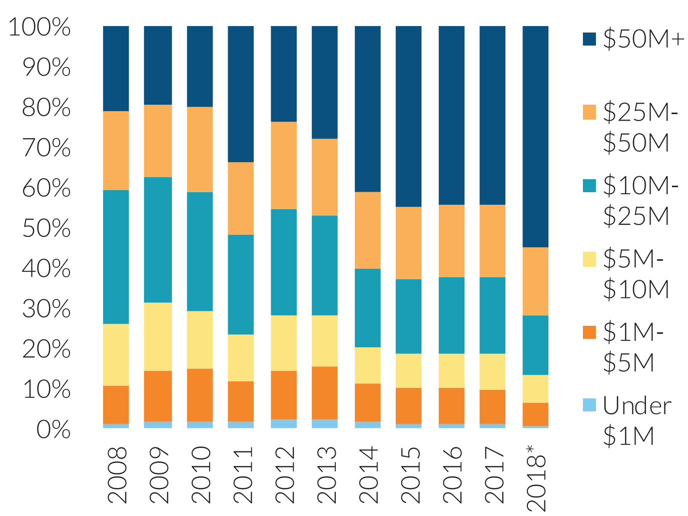
Majority of capital flowing into $50M+ deals

US VC deals ($B) by size



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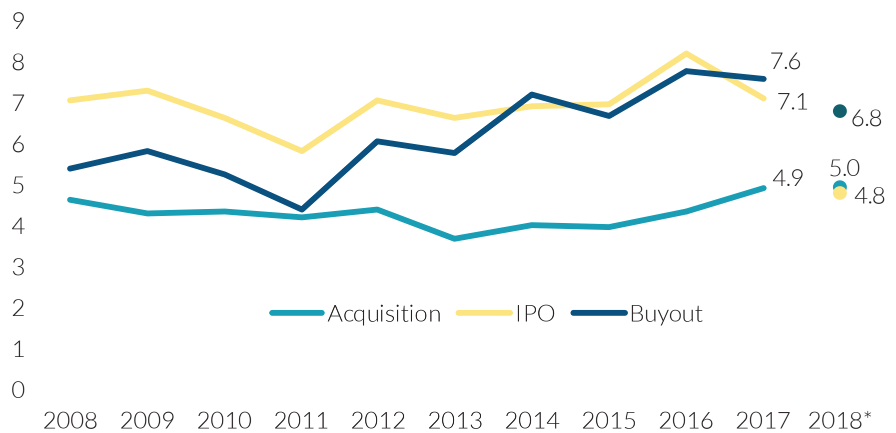
pre-money valuation. Investors have not been shy to invest in consumer businesses, as consumer-focused companies captured 21.7% of the mega-deal capital in 3Q.

While companies are taking longer to find the exit, the number of exits in 2018 is expected to meet or exceed 2017 totals. Capital exited is 13.0% shy of 2017 full-year activity, with $20.8 billion exited in 3Q. We expect capital exited to easily surpass 2017 by year end. This rise in capital exited is due, in part, to a greater percentage of companies being exited at larger sizes. 20.4% of exits were at least $100 million versus 16.3% of companies for the entirety of 2017. Median exit size sits at $100.0 million, and average exit has climbed to $244.2 million, a 7.9% increase over 2017 entire year activity. Average post-money valuation also continues to rise, currently settling at $474.16 million, a 43.0% increase on the post-money valuation two years prior. Even though the number of exited companies is flat, capital is being returned to investors at compelling levels.

Fundraising, which has been operating at elevated levels since 2014, has already exceeded $30 billion in commitments for the fifth consecutive year. 15 funds have closed on at least $500 million, five of which were over $1 billion. These larger fundraises provide a level of flexibility that allows for a longer fund lifecycle if necessary. This enables investors to commit to companies that may require more patient capital to achieve optimal financial outcomes. Investors are also increasingly raising larger funds to support existing portfolio companies. Lightspeed Venture Partners raised the second largest fund in 3Q, closing on $1.05 billion in commitments with a focus on late-stage VC follow-on rounds in existing Lightspeed portfolio firms. Overall fund count has been remarkably low, with only 57 US VC funds closed in the third quarter. 2018 is pacing to see the lowest fund count since 2014. The trend playing out in fundraising mirrors the overall asset class: Larger sums are being raised across fewer vehicles, and elevated levels of capital are available to startups.

Median time to exit slips across IPOs and buyouts

Median time to exit (years) by type



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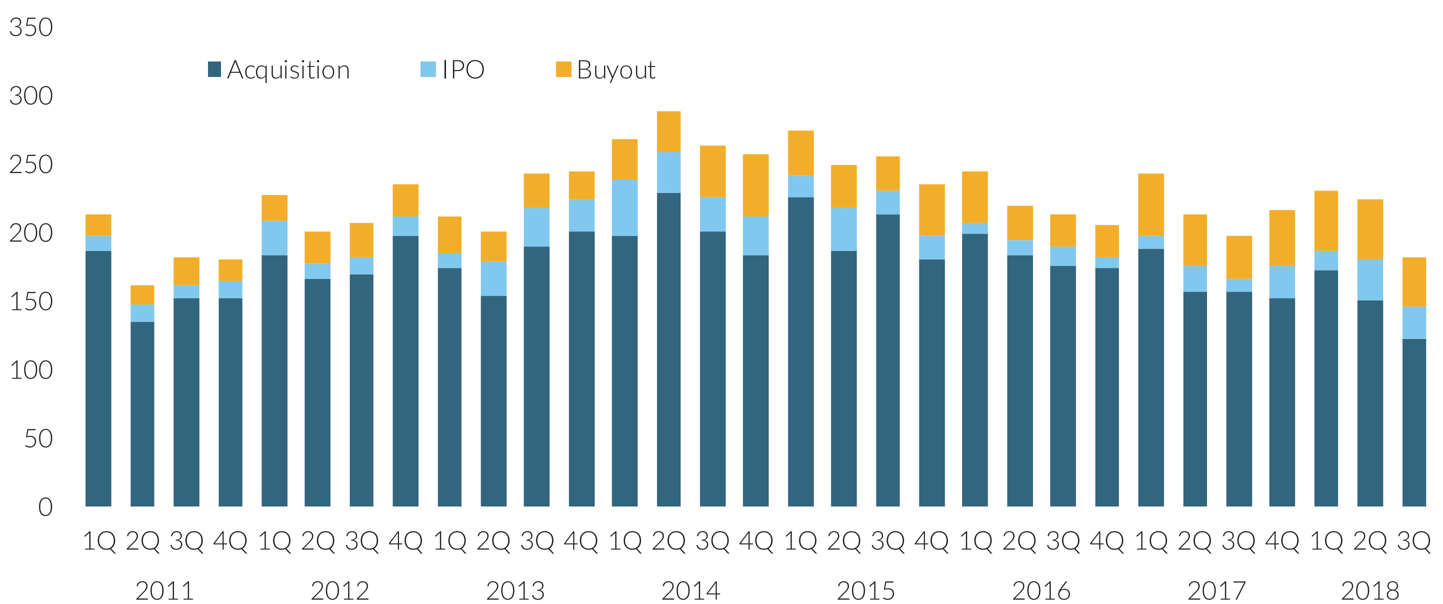
Buyouts are becoming an increasingly popular exit route

US VC exits (#) by type



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Angel & seed

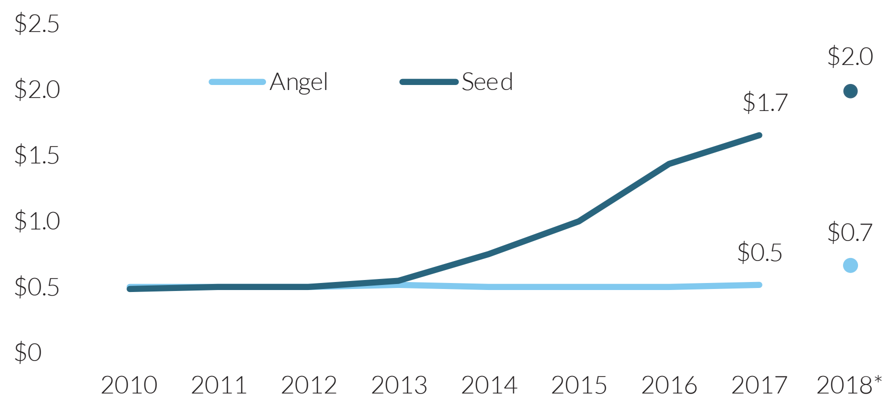
Angel & seed quarterly deal value slipped slightly in 3Q, ending down from 2Q but within range of a remarkably stable past 16 quarters that have seen US capital investment hover between $1.5 billion and $2.2 billion each quarter. Capital invested slipped from $2.1 billion to $1.6 billion. Deal count, which was already on a slow descent, tumbled from 1,005 to 785 deals closed, a 21.9% decline. The rise in valuations and median deal sizes has been tempered by a downturn in deal count. Despite the dip in capital invested over the past quarter, on an annual basis, 2018 remains on pace to match or exceed activity in 2017. $5.7 billion has been deployed over the first three quarters of 2018, just 21.2% shy of the $7.2 billion allocated last year.

Correlated with the phenomenon of dropping deal counts and rising capital investment is the ascent of deal sizes. The proportion of $1 million+ rounds has grown over the past six years and now makes up 56.1% of deals by count. Accordingly, median deal size has continued to climb upward. Median angel & seed deal size has increased 19.4% over the past year. Valuations of angel & seed deals also enlarged 16.7% over 2017, far less than the next biggest valuation increase, which is to say that pre-money valuations are up significantly across all venture stages. Surprisingly, angel valuations have exceeded seed for the first time since 2010. This suggests that angel investors may be joining angel syndicates to increase investment size, therefore taking greater equity stakes. Another option is that angel investors, typically entrepreneurs and high-net-worth individuals, may be artificially inflating pre-money valuation due to a lower level of experience with investment valuation compared to career VCs.

The slowdown in the angel & seed fund ecosystem is due primarily to two factors. First, angel & seed funds have institutionalized, attracting larger investors and investments. Second, many high-net-worth angels have formed venture funds to invest in later stage deals or have left angel & seed investing entirely as competition has risen. Falling deal counts notwithstanding, we expect capital invested to grow as median deal sizes continue to climb.

Deal sizes continue to grow

Median US angel & seed deal size ($M)



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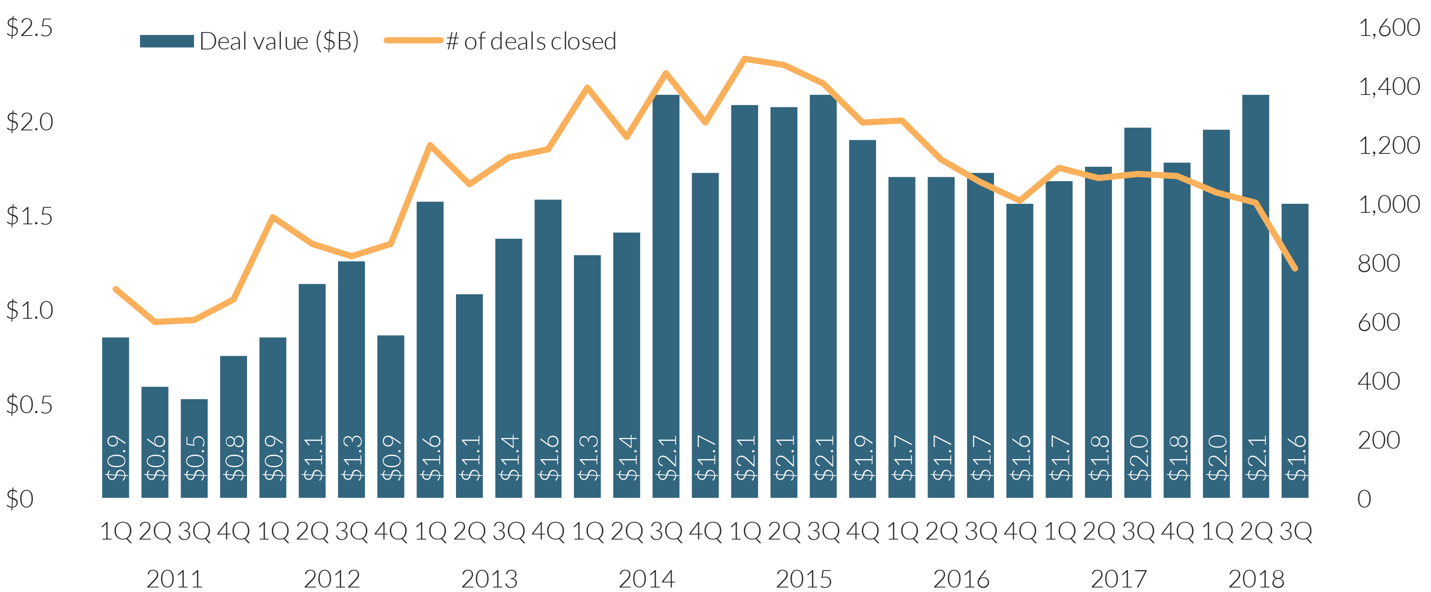
Angel & seed deal value slips in a trend reversal

US angel & seed deal activity



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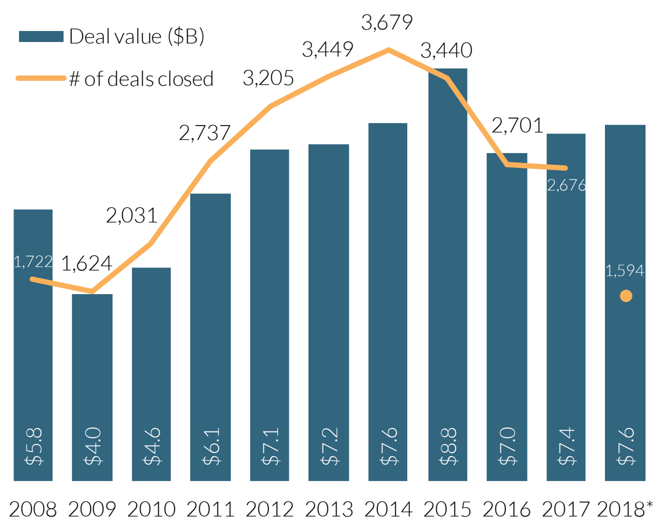
First financings

2018 pacing for all-time high in capital raised

US first-financing VC deal activity



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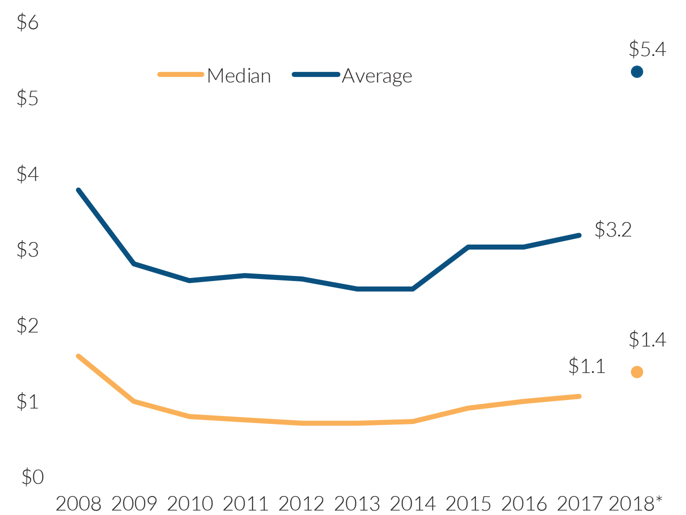
Median deal size trends upward

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



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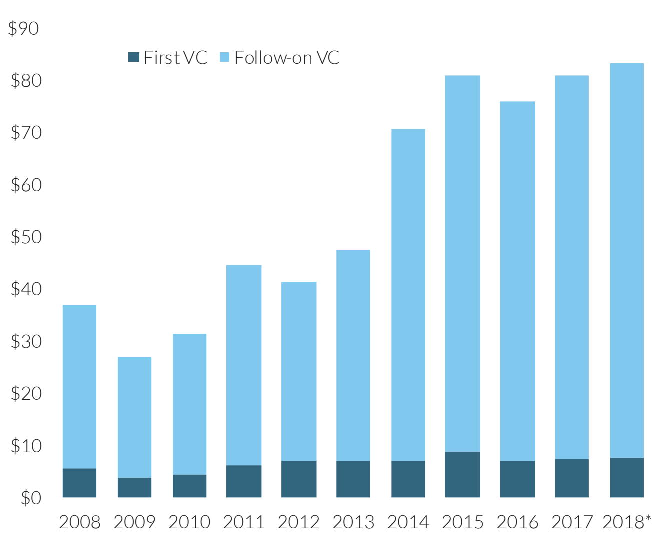
Capital raised climbs in proportion to follow-on funding

US first-financing VC rounds versus follow-on VC rounds ($B)



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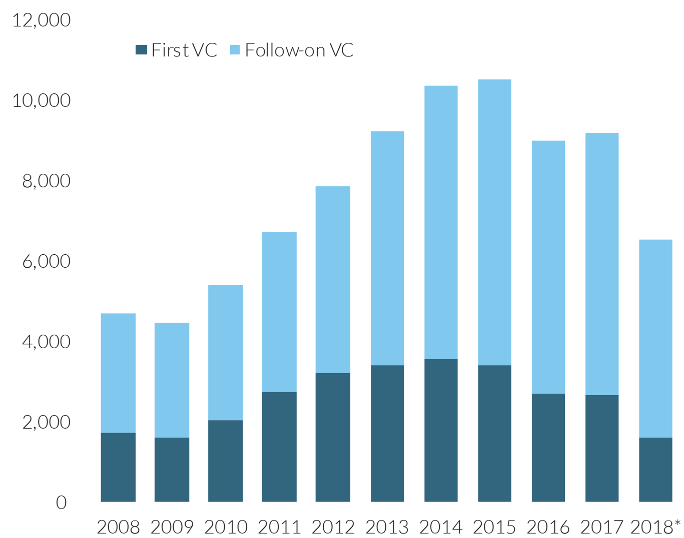
First-time deal count expected to fall in 2018

US first-financing VC rounds versus follow-on VC rounds (#)



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Early-stage VC

After a record-setting previous three quarters, 3Q provided strong yet curtailed deal value. 3Q saw $8.9 billion invested into early-stage firms with median deal size swelling 25.0% to a record $7.0 million.

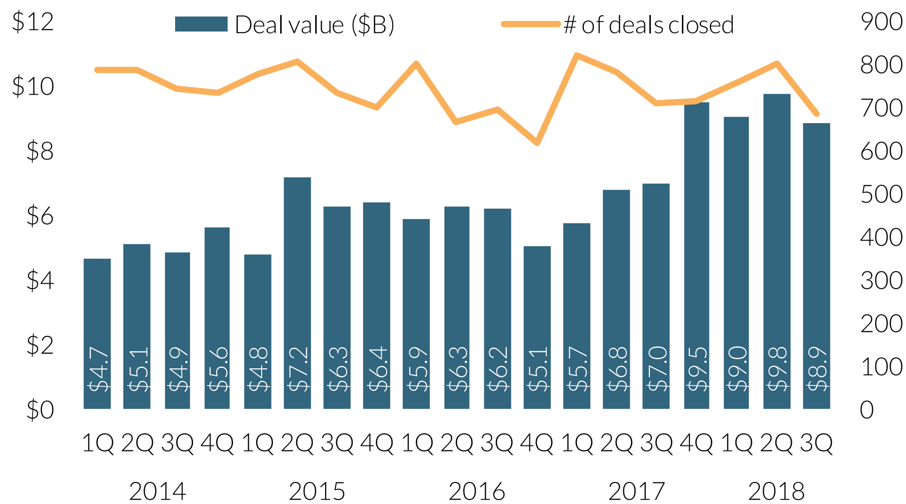
Two of the four largest deals of the quarter were in autonomous vehicle software firms. Zoox raised the most capital in a single early-stage round this quarter by closing on $500 million, and Pony.ai raised $102 million. Biotech firms comprised the other two greatest early-stage deals, with Gossamer Bio and Compass Therapeutics raising a combined $362 million.

Massive deal sizes continue to become more prevalent across rounds. In 3Q, 59.0% of early-stage capital flowed into $25 million+ deals, and 94.5% of capital flowed into $10 million+ deals. Median early-stage deal size has increased 100.8% since 2014, compared to a 33.3% increase for late-stage. Unlike the VC industry as a whole, early-stage deal count has been keeping pace with capital invested. 686 deals were closed in 3Q, placing 2018 on pace to exceed 2017. We attribute this strong activity to an increase in non-traditional investors, such as tourist investors and angels. The rise of mega-funds may also be encouraging investors with smaller funds to move earlier in the cycle.

Looking closer at VC verticals, emerging tech captured significant capital at the early stages. AI & machine learning companies attracted an impressive 92 early-stage rounds of capital in 3Q. In terms of capital raised, this vertical attracted $1.68 billion, up 42.4% from one quarter alone. One such company, Atrium, raised $64.5 million to utilize machine learning to provide legal services to startups. Life sciences firms drew fewer yet larger early-stage deals than AI, attracting 109 deals and $2.5 billion in aggregate. Despite impressive activity, capital raised in this vertical is down from a peak of $3.4 billion raised in 1Q 2018. Mammoth Biosciences stood out for closing on two investment rounds this quarter (three in 2018 total), raising over $30 million from investors to develop a disease detection platform that uses CRISPR technology.

Early-stage investment dips slightly in 3Q

US early-stage VC deal activity



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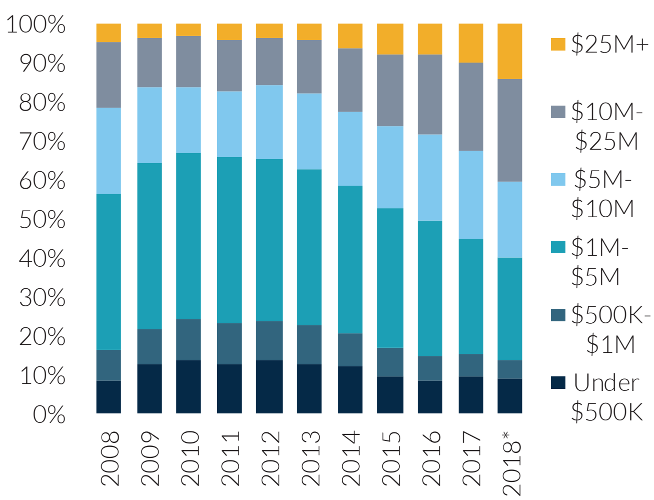
Companies raising more earlier

US early-stage VC deals (#) by size



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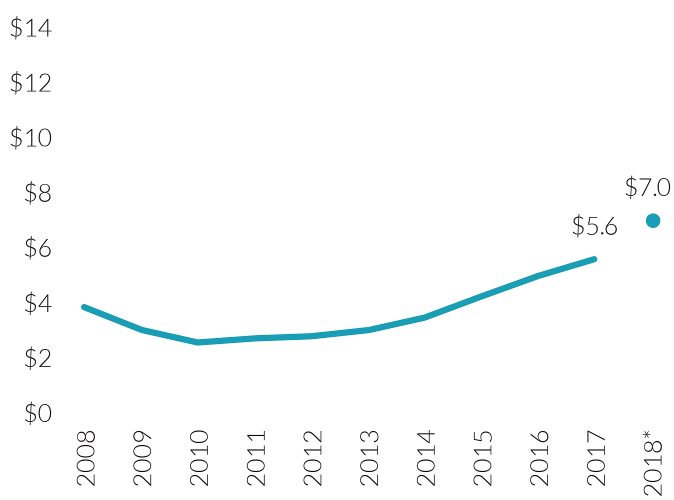
Median early-stage VC deal size continues to rise

Median US early-stage deal size ($M)



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Late-stage VC

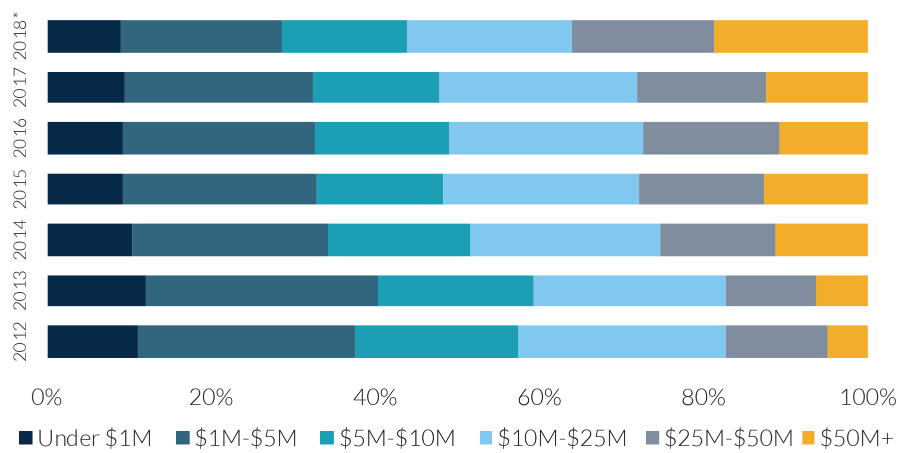
Late-stage venture financings recorded a third consecutive quarter of double-digit, billion-dollar deal value, coming in at $17.4 billion across 466 deals. The late stage has drawn increasing investor interest, as these deals moved to nearly 24% of VC deal count, the highest proportion since 2011. Interestingly, while the pervading trend in the industry since 2015 has been a smaller number of VC deals, 2018 data has shown increasingly robust deal counts in the late stage, with 1,506 deals YTD in 2018, representing 12.0% YoY growth.

While it is important to mention that late-stage deals didn't experience the steeper deal count decrease we saw with angel & seed, the uptick in late-stage volume is another positive signal for the ability of companies to progress through the VC market. Third-quarter data shows sustained activity rather than an extension of this current uptrend in deal counts; however, this count will expand as we continue to collect new deals over time.

The overall increase in late-stage activity has been a boon for mega-deals. Startups closed 51 deals larger than $100 million in 3Q 2018, representing $10.96 billion in value and over 63.9% of total late-stage capital invested. To be sure, the disproportionately small number of deals driving this much of total VC deal value at this stage bears consideration. With elevated levels of available capital, companies have more financing choices both inside and outside of traditional VC as they reach scale—a welcome development for growing startups. On the other hand, mega-deals can concentrate risk in fewer companies, and rampant capital availability enables overcapitalization and potentially reckless spending by companies in pursuit of growth.

Late-stage market increasingly supporting larger companies

US late-stage VC deals (#) by size



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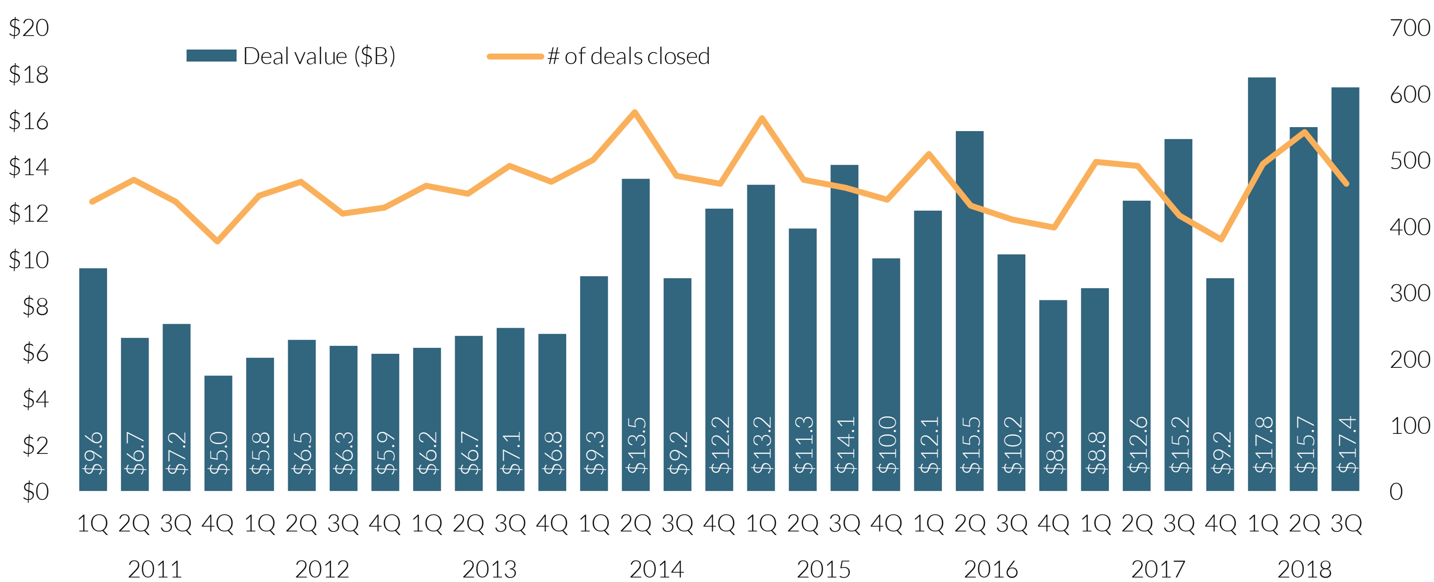
Dealmaking remains elevated in 3Q

US late-stage VC deal activity



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Q&A: SVB's view on the evolving PE market

By Jesse Hurley, Head of Global Fund Banking, Silicon Valley Bank

Silicon Valley Bank is well-known for its role in the venture ecosystem. Can you describe how SVB also works with PE firms?

We are in the business of financing innovation. This approach extends to our investor partners, and 20 years ago we pioneered creative financing solutions for our venture firm clients. Because of this experience, SVB has also developed unparalleled expertise in lending to and banking PE firms. Today, our Global Fund Banking business works with more than 1,900 venture firms and 700 PE firms globally.

SVB's deep industry experience and nimble approach to fund lending help firms address their financing needs. Our tailored liquidity and fund-level debt solutions include subscription/capital call facilities, fund-guaranteed loans to portfolio companies, and NAV-based facilities. For example, our Fund Banking team may provide financing to a fund's portfolio company that perhaps a more traditional bank would not be comfortable offering. The unsecured note is often lent to a holding company housing the fund's investment in the portfolio company, and the note is guaranteed by the fund. This fund guarantee allows SVB more flexibility in underwriting. As the company scales, it could look to refinance the guaranteed debt, removing the guarantee from the fund.

We know there is a lot of dry powder with more firms chasing deals. How is this impacting PE?

As of December 31, 2017, US PE dry powder was at $493.6 billion—that's an incredible amount. Globally, firms continue to raise larger funds, enabled by the robust business environment and an unprecedented pace of deployed capital flowing to larger deals. Also, LPs are flush with distributions from older vintages, with 752 PE–backed exits through September 2018. With the bull stock market of the past decade, LPs must increase capital allocated to PE to maintain internal PE target allocations. We've also seen strong returns in PE over the past five years, and GPs are not paid to try to time the market; so given the sheer amount of dry powder, there is a need to keep deploying capital, even if some think valuations are frothy. As a result, PE deal multiples are reaching historic highs.

We are also seeing PE firms deploy new strategies, including credit options to augment existing growth, buyout and real estate funds. Given these firms' robust deal-sourcing methods, they often find opportunities that may not fit their equity strategy but would be a good match for a debt investment. In other cases, they may supply credit exclusively to their existing portfolio companies in need. In both scenarios, PE funds are seeking to capture the value internally instead of sending it to a third-party debt fund.

Some of the larger PE firms are carving off smaller pieces of their growth funds to focus on seed or Series A deals. This strategy helps deal sourcing and identifies potential investment opportunities. As those younger companies mature, the PE fund may have a good vantage point from which to consider making a later investment from its larger growth fund. With such rich valuations in growth and middle-market companies, funds are chasing better returns and investing in earlier stages.

Looking ahead at the next 12-18 months, how do you see PE evolving?

Short term, I don't see the supply/demand equation of capital versus opportunities changing meaningfully anytime soon, so deal multiples will likely remain high. Even if we see an economic downturn or a material ramp in interest rates constraining borrowing capacity, there still will be historic amounts of dry powder (both direct and secondary) to fuel liquidity options.

Stating the obvious, it's definitely time to be harvesting; many firms already have. With fresh allocations from LPs on the horizon, I expect fundraising to continue unabated in 1H 2019.

Another trend we are monitoring is what I would call the blending of capital sources in PE and venture investing. PE and hedge funds continue to show more interest in venture and growth-type deals, as their deal flow remains limited and hyper-competitive. I've spoken with multiple Series A venture firms that say they now view PE as a top potential liquidity option for their portfolio companies. In general, it is a phenomenal time to be an entrepreneur and a founder.

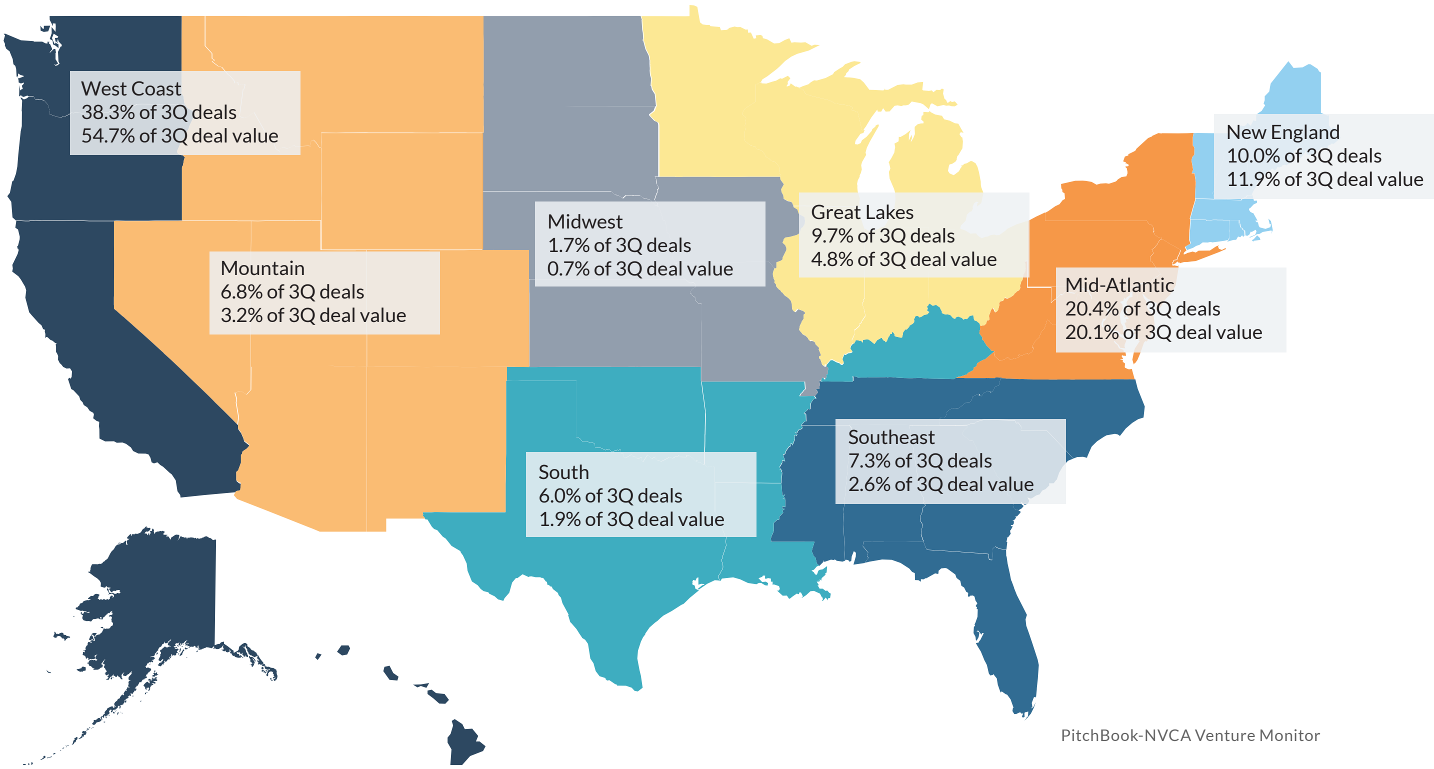
With such fierce competition for deals, what other nontraditional strategies are PE firms considering?

We have seen platform models being deployed with more regularity, a strategy in which firms are aiming to buy small companies at low multiples, build in a fragmented market and then sell the larger company at higher multiples. Other interesting trends we've seen lately include hardware-as-a-service, alternative-financing/fintech companies and their warehouse needs, and home-as-a-service. We've seen PE firms targeting the fragmented home-service market to roll up multiple companies and take on a market. As a dad of two young kids, this market particularly resonates with me: I go home at night and struggle to find time to cook or mow my lawn or clean the house or work on my HVAC system. So consumers may be willing to pay nearly whatever it takes to get these kinds of recurring services, which can carry attractive margins.

Activity by region

Traditional hubs still account for preponderance of activity

US VC deals by region (3Q 2018)



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Smaller markets have been proportionally resilient

US VC deals by region (3Q 2018)

Region	Deal count	Deal value ($M)
Great Lakes	187	$1,347
Mid-Atlantic	393	$5,606
Midwest	33	$195
Mountain	131	$903
New England	193	$3,322
South	115	$530
Southeast	140	$711
West Coast	739	$15,230

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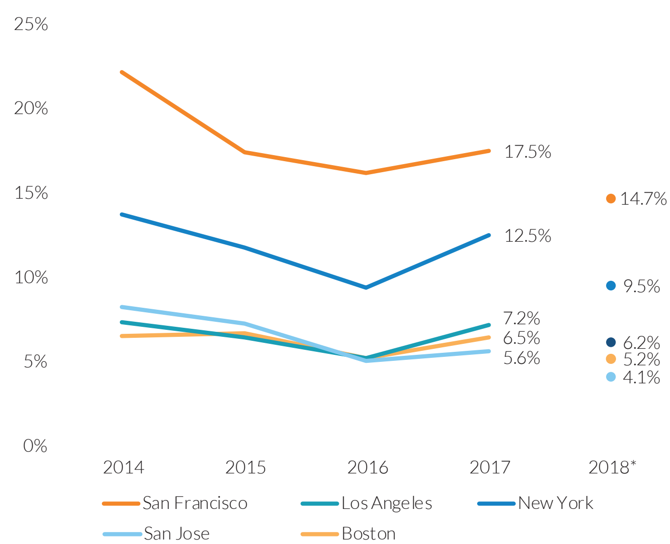
VC activity is starting to move away from traditional hubs

Select US MSAs as a proportion (#) of total VC



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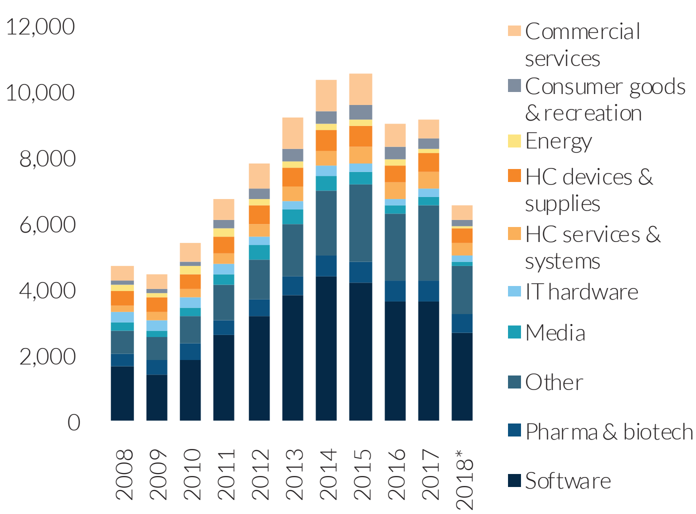
NATIONAL VENTURE CAPITAL ASSOCIATION
Funding innovation. Empowering entrepreneurs.

Activity by sector

Software evens out, as pharma & biotech grows most

US VC deals (#) by sector



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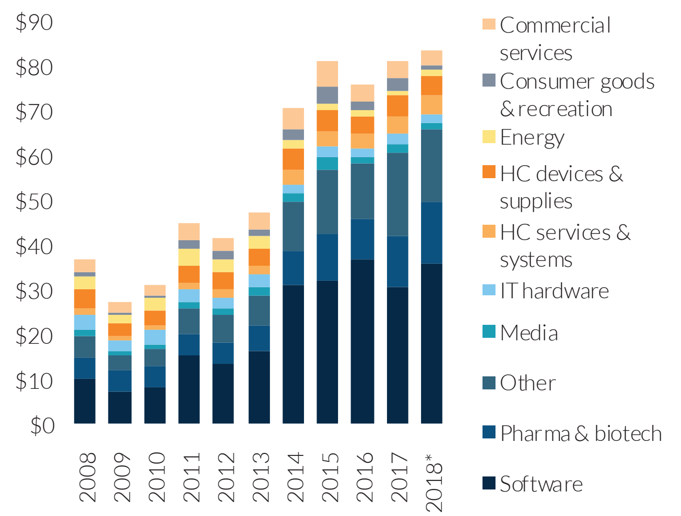
Pharma & biotech sets annual record high of $14B+

US VC deals ($B) by sector



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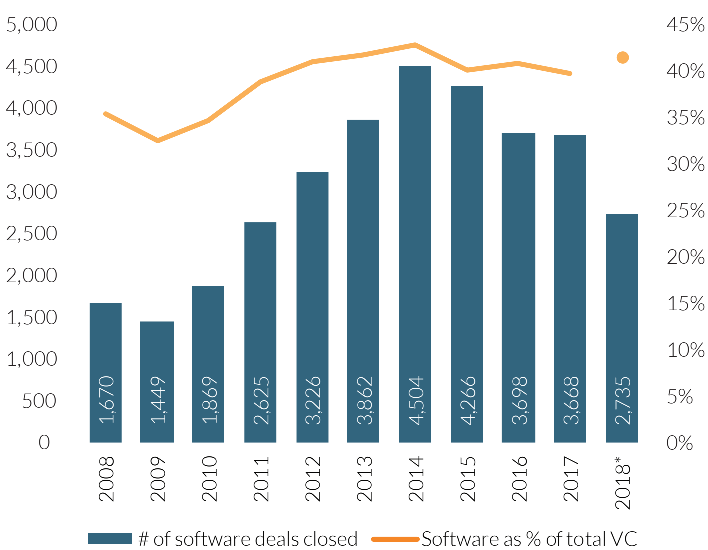
Maturing software companies continue to drive VC deal flow

US software deals (#) as proportion of total VC



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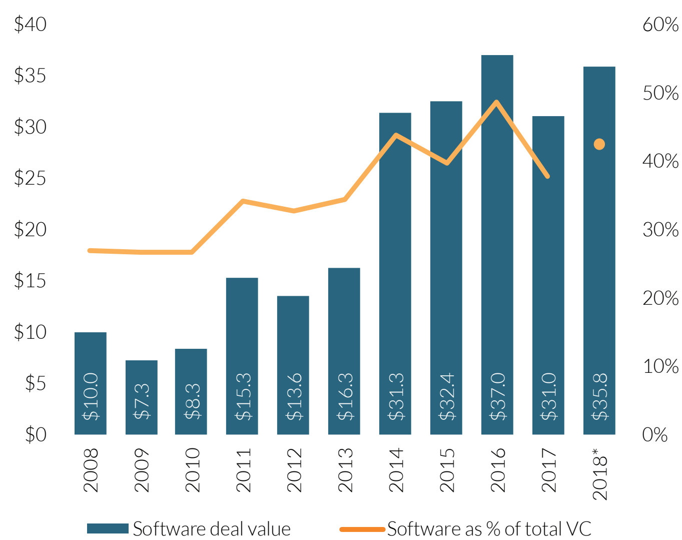
Relative activity evens out

US software deals ($B) as proportion of total VC



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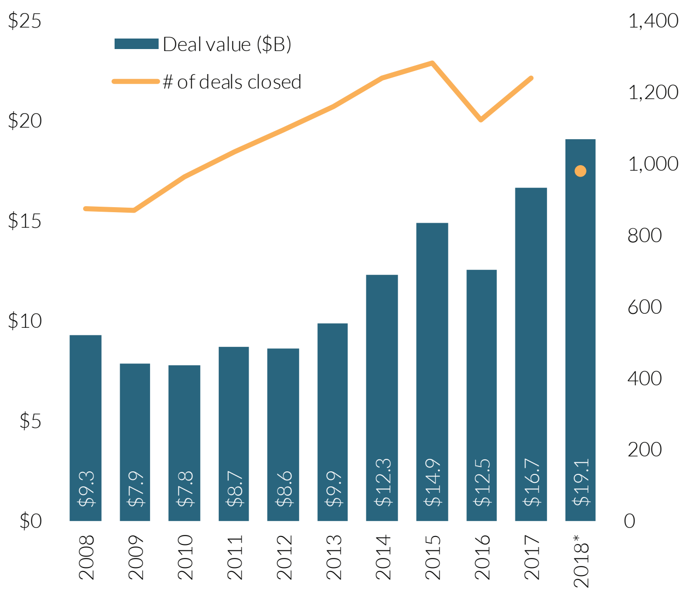
Life sciences

Venture inflation underpins life sciences' surge

US VC life sciences deal activity



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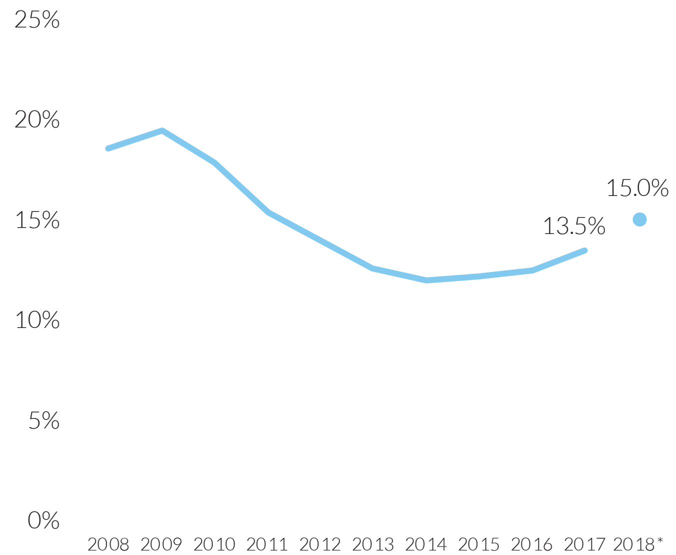
Proportionate activity continues to climb

US life sciences deals (#) as proportion of total VC



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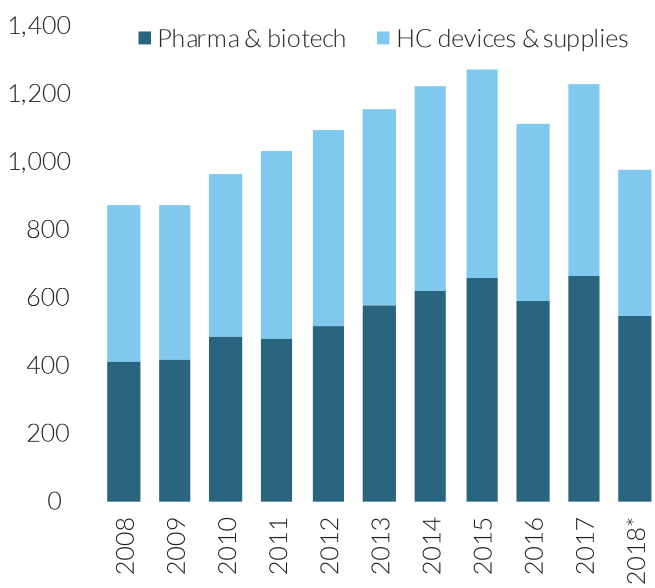
Life sciences pacing for another strong year

US VC life sciences deals (#) by sector



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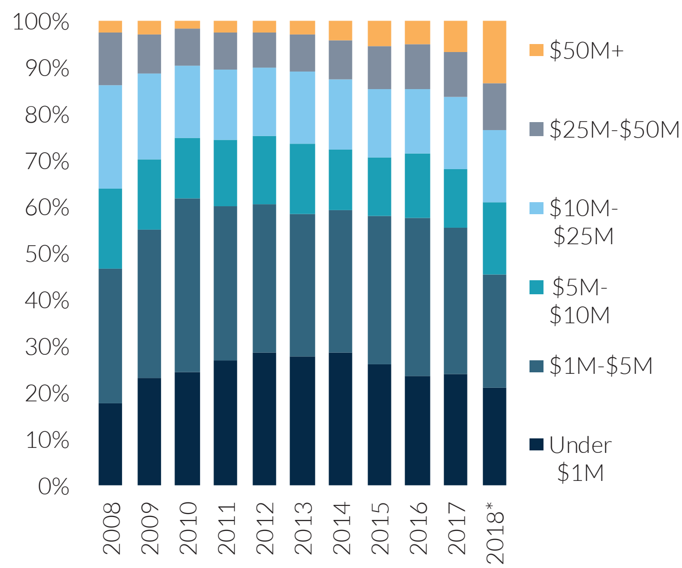
VCs gravitate toward larger deals

US VC life sciences deals (#) by size



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Venture debt in a booming tech market

By Shane Anderson, Senior Credit Officer, Silicon Valley Bank

Driven by increasingly larger deals, VC investment in 2018 is on pace to hit a decade-high level. In the first nine months of the year, the median size of US deals grew an impressive 23.8% over 2017. In the first three quarters of 2018, the number of $100 million+ financings increased 90.7% over the same period in 2017. But the total number of deals has declined, continuing the trend of more money chasing bigger transactions.

What role does venture debt play in this capital-rich environment? Consider that as round sizes drive up corresponding valuations, the pace of innovation and potential for global impact require even greater investment. For example, frontier tech—including robotics, autonomous vehicles, space and artificial intelligence—agtech and fintech are at a key inflection point, addressing monumental challenges and seeking global audiences. The cost of deploying these innovations in quickly evolving and massive marketplaces, with increased competition and growing regulations, drives companies to seek additional capital at pivotal times in their growth cycle.

Innovation requires immense capital

Over the years, Silicon Valley Bank has observed how scaling venture-backed companies use venture debt in boom times and downturns. Today, venture debt remains an important part of the fundraising cycle. A quick primer: Venture debt works best in tandem with a complementary equity capital raise. A significant benefit of venture debt is that it can provide an extension of runway, allowing companies to demonstrate to investors that they are making additional progress toward critical milestones ahead of the next round. Sometimes, if that runway gets a company to cash flow-positive operations, an additional round becomes unnecessary. We find that emerging growth companies are attracted to venture debt as a means of lowering the total cost of capital in an attempt to avoid the dilution that comes with an equity raise. Most venture debt structures include only a fraction of dilution compared with an equity event—a plus for management and employees.

The basic points of venture debt

Venture debt is intended to provide three to nine months of additional capital to support investing activities for whatever pivotal functions are needed to achieve milestones. It could be used to hire or bolster a sales team, improve marketing, invest in research and development or buy capital equipment to get to commercialization and begin scaling. Typically, the amount of venture debt is set to 20% to 35% of the most recent equity round. The amount of the debt is based on multiple factors, including company growth rates, the investor syndicate, sector, customer niche and other potential capitalization risks. SVB has observed that venture debt–to–valuation ratio, a common metric for evaluating debt worthiness, hovers consistently between 6% and 8% of the company's last post-money valuation. This ratio is not set in stone but is the average level that we are seeing across various company stages, business models and sectors.

Often, the cost of venture debt is small relative to additional runway acquired. There will typically be a draw period, which provides a window during which the company doesn't need to take the debt down immediately. The current cost of debt is typically around a 6% IRR (and may include an option to defer interest to the loan's maturity, thus preserving more cash). Warrants—typically expressed as warrant coverage or fully diluted ownership—also must be factored into the cost. It isn't uncommon to see draw availability or the interest-only period tied to milestones that align with investor expectations of when the next equity round may be raised. Sometimes, venture debt is not drawn at all, serving more as insurance for a rainy day, and it is commonly repaid with the next fundraising event—having done its intended job of extending runway to the next round.

Debt versus equity example

Say a company raises $10 million at a $50 million valuation, the equivalent of 20% of the company. The company still needs an additional $2 million to achieve key milestones and increase its prospective valuation ahead of raising the next round of capital. Comparing venture debt versus equity, the company can either take an additional $2 million from investors at the same valuation, giving up an additional 4% of ownership, or get $2 million in venture debt at 25 basis points, or one-quarter of 1% of ownership.

Timing venture debt

Raising debt when a company is flush with cash may seem counterintuitive, but in many cases, the debt can be structured with an extended draw period so that the loan need not be funded right away. Regardless of when a company may want to fund the loan, typically creditworthiness and bargaining leverage are highest immediately after closing on new equity.

Innovation takes ingenuity and sizable capital. Even in a time of abundant cash, venture debt is an attractive financing option for growing venture-backed companies seeking to extend runway, lower their cost of capital and keep innovation thriving.

Corporate VC

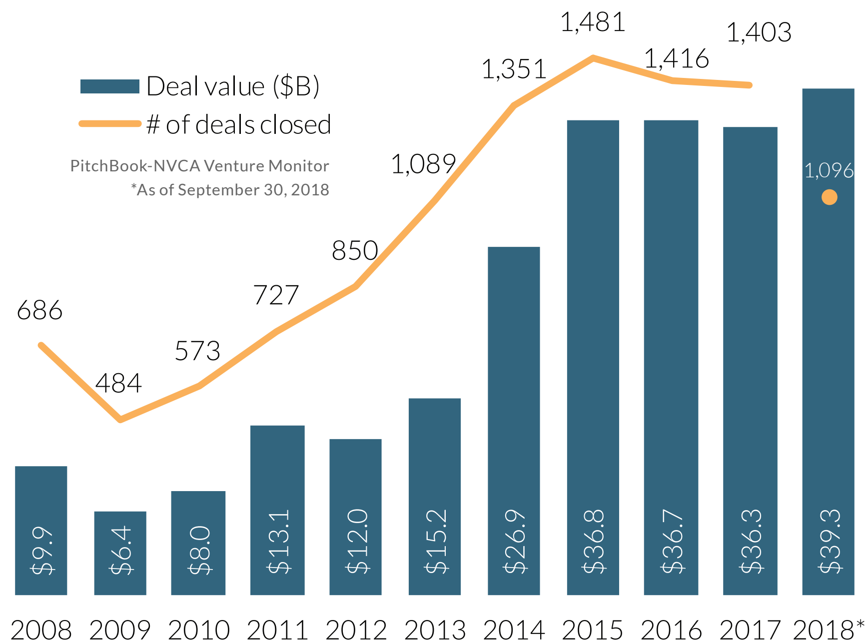
Corporate investment has continued to skyrocket in the third quarter of 2018. CVC participation in venture deals has already surpassed 2017's annual totals, with corporates participating in $39.3 billion worth of venture financings. Over the last five years, corporate investment has more than doubled from the $15.2 billion invested in 2013. While deal count in the third quarter trended downward year over year, the number of deals closed with CVC participation is still on pace to surpass 1,400 in 2018 for the fourth year in a row. Notably, deals with participation from corporate investors make up 46.7% of overall VC, a high point compared to just 32.0% five years ago.

This historically high investment activity and these larger deal sizes may relate to the greater capital availability from corporate tax cuts and capital repatriation, as well as strategic initiatives to fund innovative technologies. Corporate investment has become increasingly concentrated in larger late-stage rounds. Where deals $25 million or larger accounted for 22.4% and 24.8% of activity in 2016 and 2017, respectively, that proportion has risen to 34.5% this year. Strategic investments and partnerships continue to be a ripe avenue for corporate growth, potential new business lines and technological improvements. While CVC investments provide insight into potential acquisition targets, they also illustrate larger industry movements toward tech-based products and services.

Software and biotech continue to dominate CVC activity, especially among the quarter's largest deals. Late-stage companies integrating emerging technologies such as artificial intelligence into existing industries, particularly

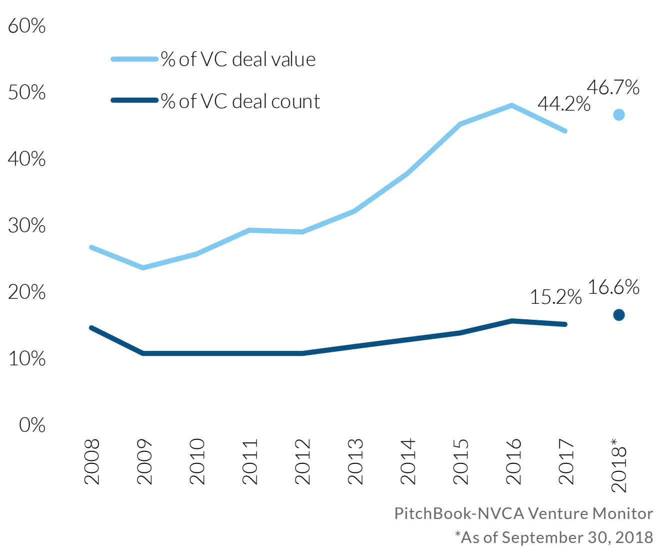
2018 CVC participation surpasses last year's total

US deal activity with CVC participation



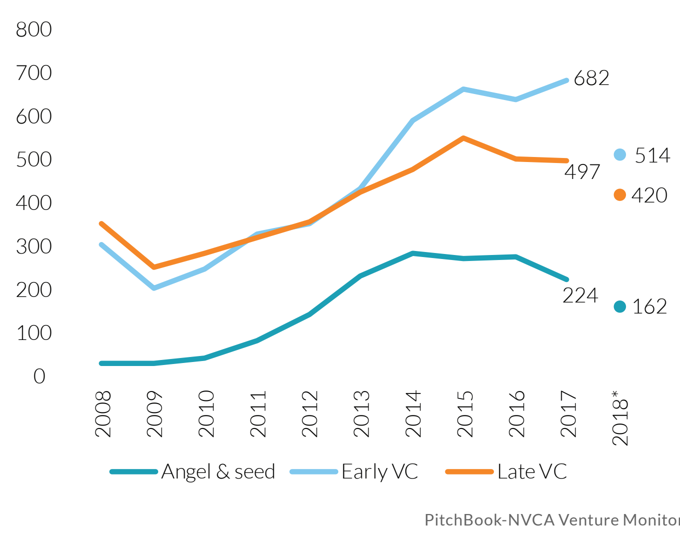
CVC continues to make up a larger share of overall investment

US deals with CVC participation as a proportion of total VC



CVC deal count pacing to match 2017

US VC deals (#) with CVC participation by stage

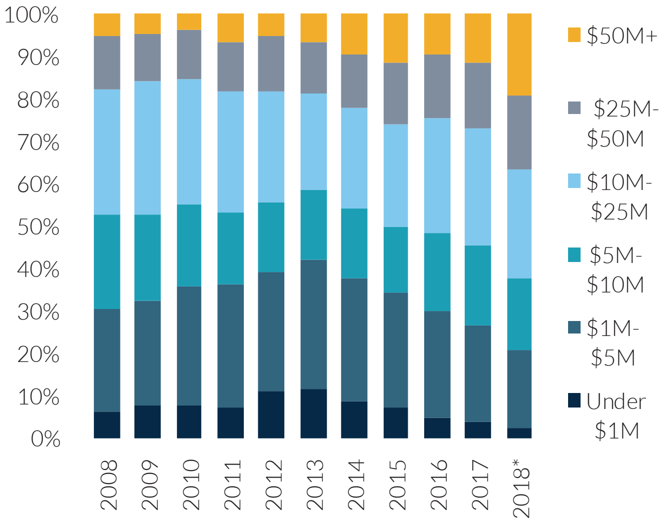


automobiles, continue to be popular with strategic investors. Toyota Motors led two of the quarter's largest deals, making a $500.0 million investment and strategic partnership with Uber, as well as co-investing with SoftBank in Getaround's $300.0 million Series D. Toyota's partnership with Uber made public its intent to deploy a fleet of mass-produced, self-driving cars on Uber's network. We've asserted previously that Uber would be wise to divest its autonomous vehicle unit due to its slow technological progress in comparison to competitors and the considerable costs of adding and maintaining physical assets in mass. With Toyota's responsibility for the fleet, however, Uber may overcome the latter issue of fleet maintenance. The partnership also marks Toyota's notable advances into autonomous vehicles, ridesharing and larger market growth.

Incumbents in the financial services sector are also tapping startups to update legacy technical infrastructure and consolidate operating processes via blockchain technology. The third quarter saw a $32.0 million investment by JP Morgan, Citigroup, Wells Fargo, Fintech Collective and other notable VCs into Axoni, an enterprise blockchain solution provider for capital market operations. Axoni focuses its services on enterprise software for post-trade processing (clearing & settlement), as well as workflow automation of back-office operations. With many banks well-aware of the technical debt they incur by failing to update and innovate their internal technology, this investment signals exploration and perhaps willingness by industry leaders to migrate to blockchain infrastructure.

CVC participating in more $25M+ deals

US VC deals (#) with CVC participation by size



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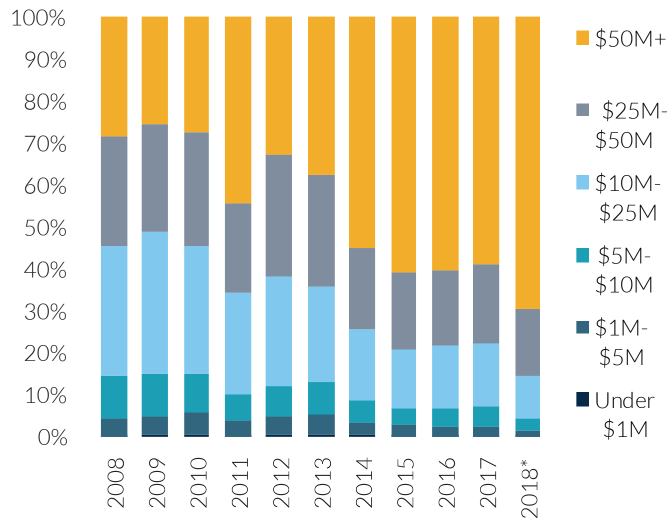
Largest financings dominate capital invested

US VC deals ($) with CVC participation by size



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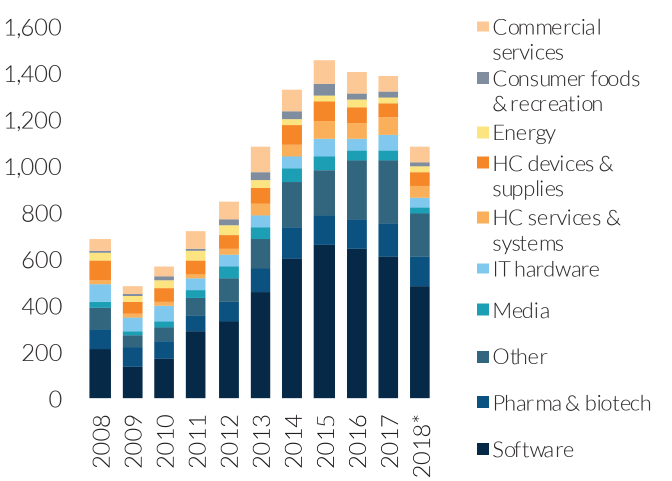
Software a popular avenue for innovation

US VC deals (#) with CVC participation by sector



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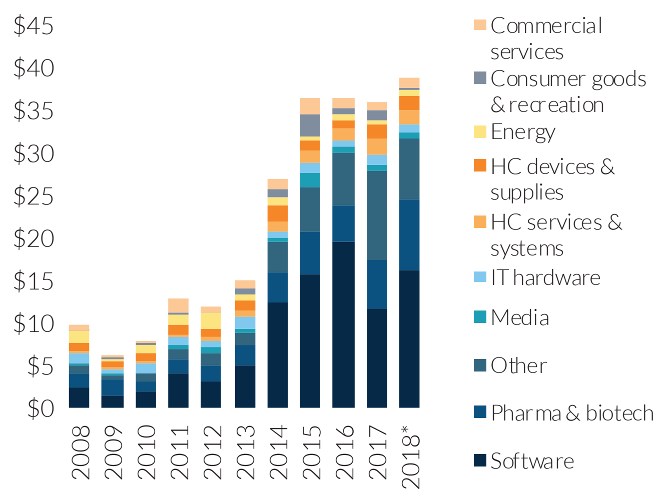
Biotechs secure outsized rounds

US VC deals ($B) with CVC participation by sector



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Q&A: How PE plays into VC-backed exits

By Fiona Brophy, Partner and ECVC Co-Chair, Perkins Coie

How has the mix of acquirers changed for VC-backed companies? Specifically, are you seeing more PE firms buying VC-backed companies than before? If so, what do you think is driving that?

Over the last several years, we've seen PE buyers showing up in more deals involving VC-backed tech companies. Those PE firms that were early in pursuing VC-backed tech firms have been very successful. A good example is Vista Equity Partners, which has seen very strong returns investing in and acquiring enterprise software companies, many of which are VC-backed. PE firms have lots of capital to deploy and are finding good opportunities in more mature VC-backed startups that have solid revenues but still room to create additional value. These targets align well with the PE model. As a result, we are seeing PE buyers in more deals and filling the gap created by the dip in strategic acquisitions over the last several years. While it is not totally clear why strategic acquisitions have been down, some point to weariness of strategic buyers over the high valuations being placed on VC-backed startups in recent years. Many of these late-stage VC-backed companies raised multiple series of venture money at robust valuations—and when it comes time to exit, they are finding that their expectations on valuation don't align with strategic buyers. In some cases, we are seeing PE firms, that have record amounts of capital to deploy, outbid strategic buyers. This is particularly true in enterprise software where late-stage VC-backed companies have solid recurring revenue. In certain industries where there are multiple VC-backed companies with complementary product offerings, PE firms can roll up several companies, sometimes leveraging an existing portfolio company to serve as the buyer. PE buyers are offering boards of VC-backed companies an additional option to explore when they consider a sale transaction, and many boards are proving to be receptive to that.

How do founders and VC firms view the difference between exiting via PE buyout and corporate acquisitions?

In my experience, many startup founders and their VC backers still believe exiting to a strategic buyer (as opposed to a PE buyer) is the best way to maximize deal value. That may change over time, especially as we see PE firms come in with the highest offer and as founders who have had good experiences selling to PE firms evangelize about those experiences. Although some PE firms have done a very good job of offering terms that are competitive with strategic investors, PE deals have a reputation of being more complicated structurally, carrying more deal risk and being less attractive on retention incentives, particularly for employees. In terms of structure, strategic acquisitions tend to be straightforward. PE deals, on the other hand, often involve more complicated structures, including earnouts that can be based on a myriad of milestones, multiple layers of debt financing, management rollovers of equity, the use of management fees, etc. Right or wrong, there is also a concern among the venture community that PE deals have a higher risk of value renegotiation after signing a LOI.

One area, however, where PE deals are often less complicated, is their utilization of representations and warranties insurance (RWI)—a trend we haven't seen as much on the strategic side. In competitive PE deals with RWI, we are increasingly seeing no-recourse transactions, or transactions in which the sellers' indemnity is capped at all or a portion of the retention amount under the RWI policy (which now typically is 1% of enterprise value). The cost of RWI has come down dramatically, making it a practical solution to an impasse over risk allocation. RWI has real benefits for both buyers and sellers, beyond the obvious benefit of limiting sellers' risk of a post-closing reduction in deal value. It can reduce deal friction and protracted negotiations over two of the most contentious terms in any deal—the scope of the representations and warranties and the indemnity provisions. This allows buyers to preserve goodwill and positive relationships with the founders (which helps with retention) and VC board members (who may bring future deal flow). Reducing tension over protracted

Fiona Brophy serves as the co-chair of Perkins Coie's Emerging Companies and Venture Capital practice and is based in San Francisco. Fiona works with technology startups, and has a robust M&A practice, primarily representing VC-backed sellers and strategic buyers.

negotiations is not only good for preserving relationships, but also reducing overall deal transaction costs which can offset the cost of the RWI. PE deals can also be attractive because PE buyers often show more flexibility around deal terms and structures and the ability to move nimbly to satisfy a seller's concerns. Strategic buyers often have more fidelity to their historical practice and way of doing things.

What is your outlook for VC-backed companies acquiring other VC-backed companies given the gigantic rounds that have been raised recently?

We've seen more and more of these deals. Given the increase in size of late-stage fundraising rounds, VC-backed companies can stay private longer and have plenty of excess cash to deploy when they find an attractive target. Deal values of these acquisitions are often not reported, and while historically these deals have been on the smaller side, there have been some large acquisitions, particularly in areas where the target provides an expansion into a new product line or service. Uber's acquisitions of Waymo and, more recently, Jump Bikes are good examples of this. The Jump acquisition was also unique because it represented a departure by Uber from its traditional role as a platform, to acquiring hard assets. With lots of cash at their disposal, it makes sense that these well-endowed companies will "buy it" rather than "build it," particularly when the first mover will get the advantage.

Which sectors or industry verticals are you keeping your eye on? Why?

I am keeping tabs on artificial intelligence and machine learning. I think we are just barely scratching the surface of how these new technologies will affect us. And I suspect we will see transformation on the scale of what we saw with the internet revolution when literally all aspects of our lives—how we work, communicate, educate our children, purchase goods and services and even get dates—went through a fundamental shift. It's also an area where the legal and ethical questions to be addressed are interesting and thorny.

Average time to exit has ticked downward in 2018; how are founders viewing the timeframe between first financing and eventual liquidity?

I think most founders start companies to build amazing products and robust businesses and expect to be in it for the long run. However, founders have told me that while building an awesome product is hard, what keeps them up at night is the transition from building the product to implementing a go-to-market and sales strategy. Many founders are engineers, so tackling the technical challenges of building great products is organic and within their comfort zone. However, as these companies mature and go to market, the founders must pivot their skill set to create a sales vision for the company, build out and motivate a sales team, and close deals. At the same time, these companies are often raising their next round, which can be harder to secure as late-stage VCs are expecting to see sales traction. Exit by acquisition can become very attractive at this stage because strategic buyers offer not only the prospect of liquidity, but also the ability to leverage their existing sales and marketing channels—and the more robust resources and talent that come along with those channels—to get a target's product to market. PE firms can make a similar pitch if they leverage an existing portfolio company and offer a seasoned management team to navigate getting a product to market.

Growth equity

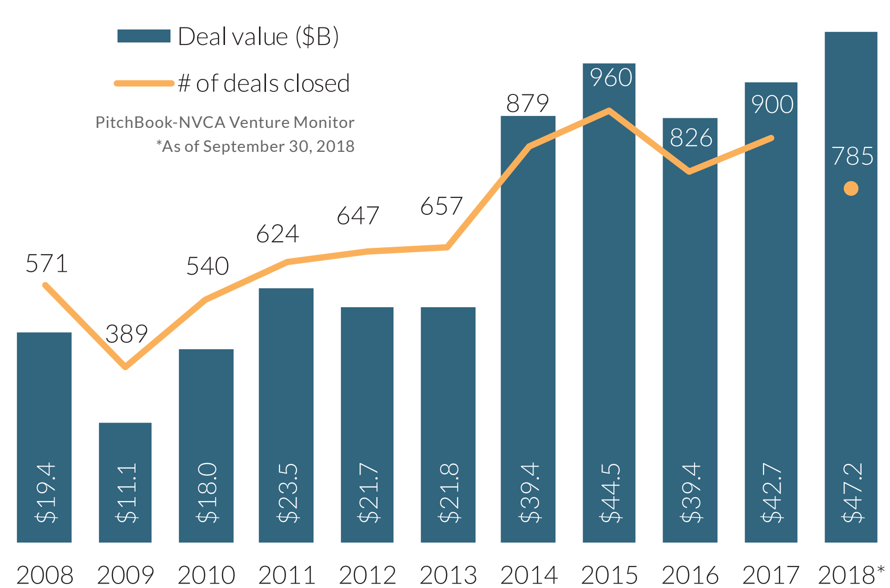
Growth equity deal value continues to climb, following the broader VC market's trend toward large investments. In 3Q, growth investors participated in 207 deals corresponding to $15.6 billion in deal value. The growth and maturation of the VC market over the last few years in supporting larger and more developed companies has facilitated further participation from growth investors.

In addition to large VC deals, there were two solely PE-growth rounds that topped $1 billion in 3Q: WndrCo and JUUL Labs. WndrCo is a consumer media holding company focused on a streaming service that provides short- to mid-form high-quality content, currently dubbed "New TV." The $1 billion raised by WndrCo, combined with $1 billion raised earlier in the year by New TV, has almost solely driven the significant uptick in media investment from growth equity. WndrCo has undoubtedly been successful in raising capital, but major execution risk remains since it hasn't yet announced any shows.

The largest 3Q deal was e-cigarette maker JUUL Labs, which raised $1.2 billion from Fidelity and Tiger Global. JUUL plans to use the capital to expand internationally on the heels of its extreme popularity in the US, which enabled this outsized funding round and a $15 billion valuation. The company will likely continue to face regulatory scrutiny based on its industry of operation, but the recurring nature of the business model combined with the current growth rate make it an attractive target for PE investors. Following the completion of the round, in an effort to curb e-cigarette use by teenagers, the FDA commissioner said he is considering pulling all flavored e-cigarettes off the US market, which would have a seriously material impact on JUUL's business.

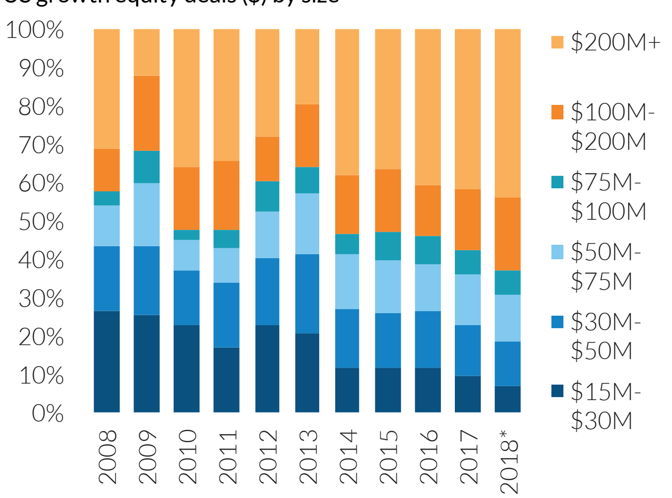
Growth deal value pushes to new high

US growth equity deal activity



Deals over $100 million make up more than 60% of deal value

US growth equity deals ($) by size



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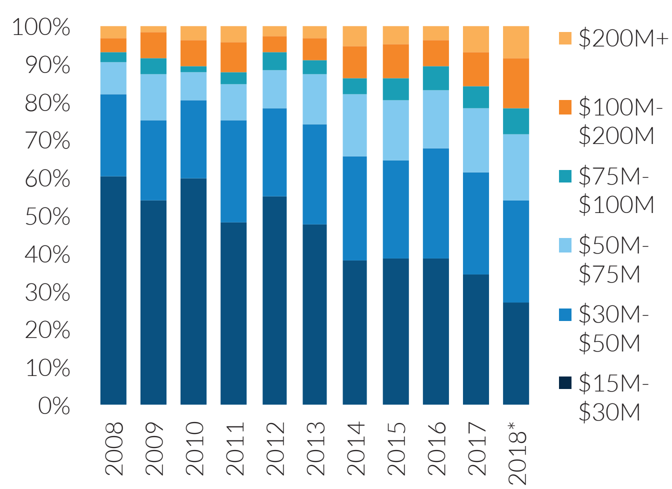
Maturing private businesses have led to larger deals

US growth equity deals (#) by size



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Liquid gold: The hidden benefits of tender offers

By Ryan Logue, Head of Business Development and Innovation, Private Market, Solium

Employee stock options and shares can attract, retain and reward the talent you need to grow your business, but they can also lead to challenges for private companies, particularly if an exit event is not around the corner.

The average time for a technology company to exit via IPO has gone from four years in 1999 to 10.6 in 2018. This trend has resulted in employees waiting longer than ever to experience any liquidity on their holdings. This predicament can result in more than just low morale. It can also induce some employees to seek alternative ways to convert their holdings into cash. Regardless of whether they choose to sell to an unknown investor or go through a secondary marketplace, these moves could lead to a loss of control of the cap table and the deterioration of the company's reputation in the eyes of investors, talent and customers. Many companies may be concerned about how the broader market and, in particular, their investors may interpret the pricing of these secondary sales.

Fortunately, there are ways to proactively address this compensatory challenge. One way is the use of a tender offer, a companywide, broad-based and controlled liquidity event open to all employees deemed eligible by the company. A tender offer can mitigate common risks by controlling how—and to whom—employees sell their options and shares. While there are different types of liquidity events, tender offers are historically the method selected by private companies offering a liquidity event.

Tender offers enable companies to retain control over their cap tables and provide a fair, transparent tool for rewarding employees and creating excitement. They can help improve productivity, engagement, retention and recruitment throughout the company. Many companies choose to extend this offer to former employees and early investors as well. Once the offer is presented, employees choose how much of their holdings (if any) to tender for sale, generally up to a predefined limit.

It's not uncommon for employees working at VC-backed companies to spend considerable time speculating about the timing of a future IPO or acquisition. For companies that aren't planning to have an exit event within the next year or two, a tender offer can help remove that distraction by giving employees some cash to meet their personal financial needs.

Rise in private market stock activity

	1H 2017	1H 2018
Third party	7	20
Buybacks	12	13
Total programs	19	33
Total program value	$733M	$10B

Nasdaq Private Market

Today, many companies are finding that a tender offer can actually enhance employee engagement. Experience at numerous companies shows that employees become more engaged because they're appreciative of the liquidity, and it makes their contributions to the company real. Additionally, gaining partial liquidity allows them to relieve personal financial pressures that might otherwise become distractions. A regular tender offer program can also bolster recruitment efforts, giving the company a competitive edge in the constant quest for top talent.

Tender offers have become an increasingly popular tool for today's leading private companies. To learn more, visit solium.com/liquidity_events.

Ryan Logue is passionate about creating technology solutions that enable private companies to provide liquidity for their shareholders. Over the past eight years, Ryan has assisted 200+ private companies in providing over $20B in liquidity to nearly 25,000 shareholders. Prior to joining Solium, he was COO of Nasdaq Private Market. He is a graduate of Northeastern University School of Law and is based in New York City.

Exits

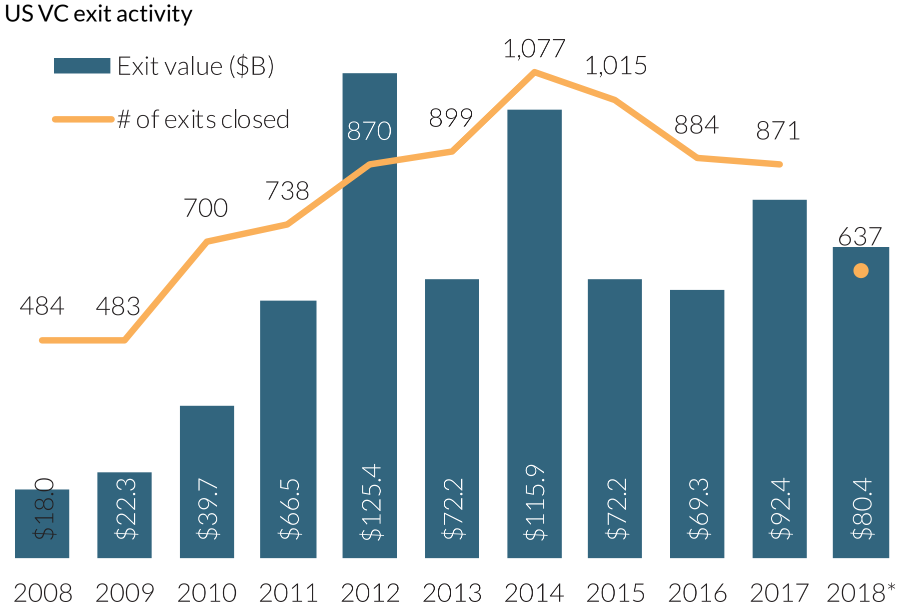
The exit environment continues to show signs of strength, as exit value YTD through 3Q sets the stage for the eclipse of full-year 2017 data. With $80.4 billion of value exited across 637 companies, activity this year illustrates the proliferation of large exits and VCs capitalizing on a strong late-cycle market. We see this as a significantly positive development for the overall health of the future of VC, as liquidity in the market has been a concern for investors in recent years. Since we haven't seen a propagation of valuation cuts at exit, the returns from these exits enable attractive distributions back to LPs that encourage reallocation to the VC asset class and continued investment in growing companies.

Capital exited in 3Q was supported by a few large exits, including the acquisition of AppNexus for about $2.0 billion and the announcement of a $7.5 billion deal for GitHub. The latter deal isn't yet included in our exit value data because it hasn't closed as of the end of the quarter, but it illustrates the transition of VC further into the later stages of the company's life, likely making the average VC exits larger for the duration of this market cycle. These two deals also broadcast positive signals about strategic interest in staying competitive in the shifting technology landscape. As Microsoft reversed its longstanding aversion to open-source software, and AT&T purchased more digital capabilities through AppNexus, the acquisition-for-innovation model still seems alive and well.

While the late-stage and growth financing abilities of the private markets have been

2018 on pace for robust exit activity

US VC exit activity



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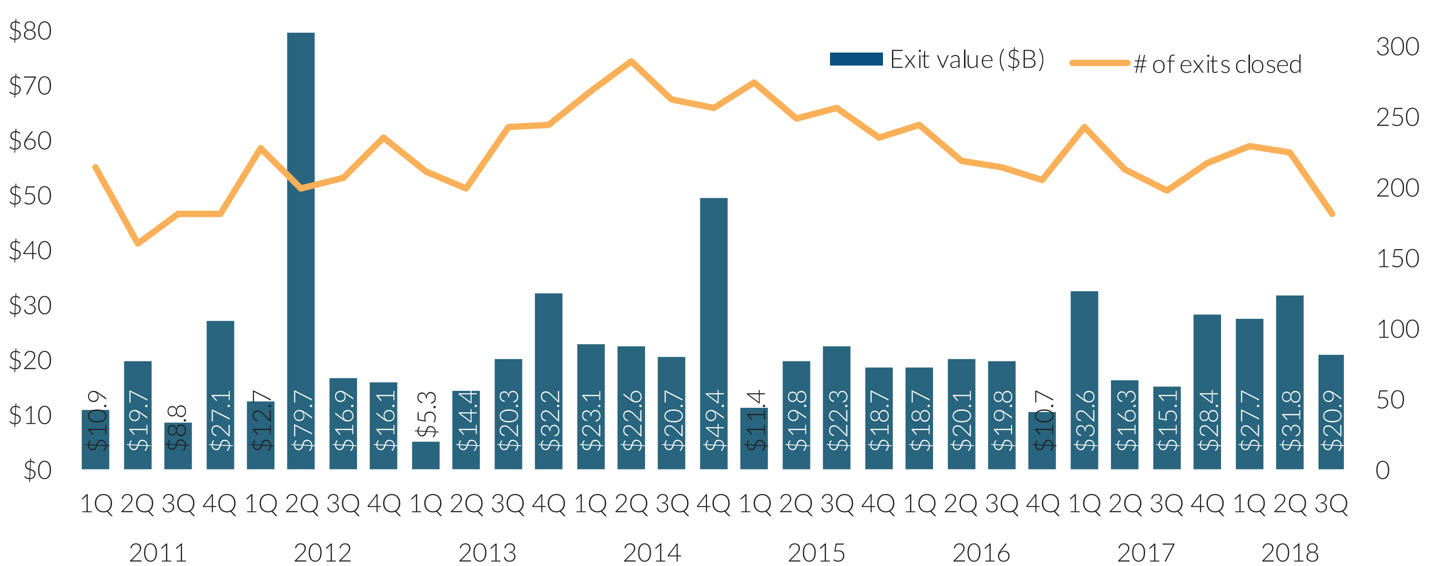
Exit value dips slightly in 3Q without host of mega-acquisitions

US VC exit activity



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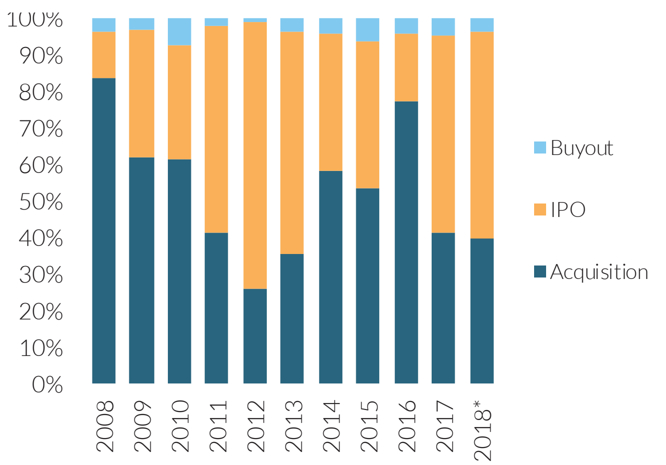
cited as a cause for the longer-term drop-off in IPO counts, 2018 has shown that the liquidity function is operating smoothly. IPOs have continued their strong run in 2018—another dataset passing the full-year 2017 data through YTD 3Q—as myriad VC-backed life sciences companies transitioned to public markets. To illustrate, 17 out of 23 VC-backed IPOs in 3Q came from the life sciences sector, as well as 45 out of 68 YTD 2018. VCs have shown some willingness to fund late-stage, pre-revenue biotech businesses, but the popularity of IPOs has been cemented by public investors' wealth of experience and familiarity with this business model. The capital intensity and regulatory considerations inherent in biotech business models also play a role, as the time and capital required to bring a pharmaceutical to market are well beyond the scope of the normal VC structure. While current public market conditions remain favorable, we expect to see healthy life sciences IPO activity.

As the driver of the return in the VC cycle, liquidity for VC-backed businesses through the exit market is so critical to the asset class as a whole. A diverse exit market with options to cater to individual companies while enabling attractive investor returns is a welcome development for venture investors. With the current environment characterized by an open IPO window, increased PE interest in VC and a recent cash windfall from tax reform for strategic acquirers, it is little surprise that VC exit data has been such a bright spot in 2018.

IPO and buyouts taking larger proportion of exit value

US VC exits ($) by type



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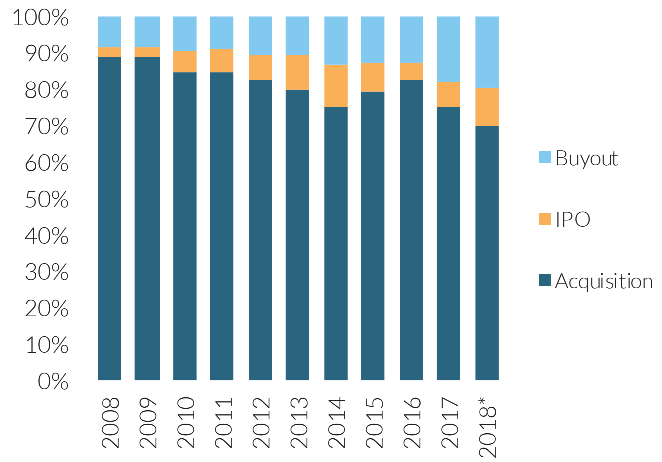
Composition of VC exit types become more diverse

US VC exits (#) by type



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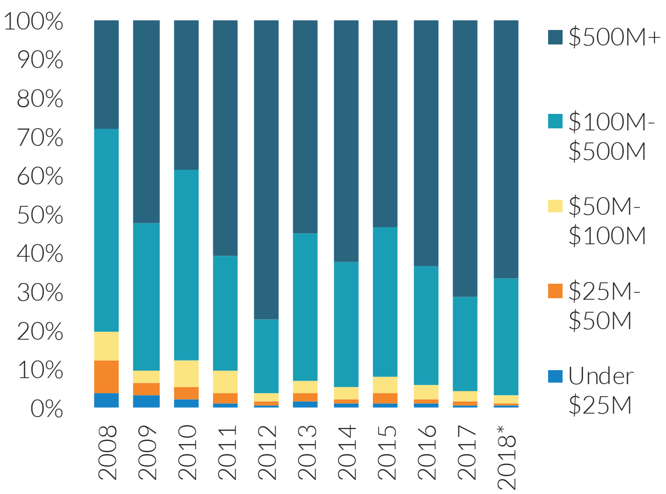
*As of September 30, 2018

Exits greater than $500 million contribute less value than in 2017

US VC exits ($) by size



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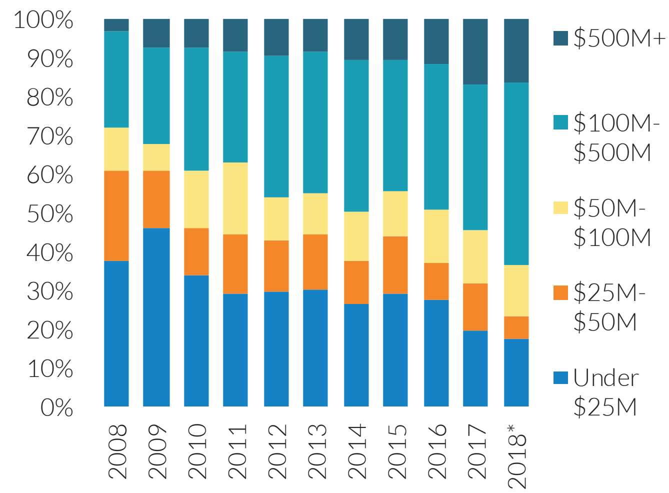
Exits greater than $100 million making up more than 60% of total deals

US VC exits (#) by size



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How to spot Space 2.0 opportunities

By Ann Kim, Director of Hardware and Frontier Tech, Silicon Valley Bank

The private race to space is on. The commercial applications are growing by leaps and bounds, establishing new markets and disrupting existing ones. Although a SpaceX Falcon rocket first reached orbit a decade ago, only now are investors—including Silicon Valley VCs—growing more comfortable investing in space.

Advances in communication and satellite technology are driving a whole new industry centered on the miniaturization of satellites. Many of the companies that launch the rockets carrying these payloads to space are relative newcomers. Consider that while the overall number of launches is relatively stable, newcomers (companies making their first rocket launch in the past 10 years) are taking a much larger slice of the pie.

Still, challenging hurdles remain for investors and entrepreneurs. Because the technology is evolving so quickly and government oversight can be complicated, tapping knowledge and experience is key for investors seeking to identify the best deals and provide true value to the entrepreneurs they choose to back.

Experience in space counts

Government agencies have historically dominated the satellite sector. But with the arrival of the CubeSat, a nanosatellite that can be built for a fraction of the cost of earlier-generation satellites, new companies are springing up. Sometimes, the founders formerly worked for NASA and other agencies and have moved to the private sector to more quickly iterate and move concepts from idea to execution.

Rocket Lab, which started as a New Zealand-based developer of propulsion systems and launch vehicles for government and commercial customers, is a pioneer in rocket launches designed for small satellites as the primary payload to be placed in low Earth orbit. The rush to space has driven others to consider new approaches; this includes SpinLaunch, a Silicon Valley-based company that is building a space catapult, as well as Zero 2 Infinity, a Spanish company that is using high-altitude balloons to accomplish the task.

Advances in earth-imaging technology are also presenting new commercial applications and investment opportunities. With the application of machine-learning techniques, data from space becomes more valuable to businesses and government. Also, the miniaturization of SAR (Synthetic Aperture Radar) sensors—which "see" through cloud cover and survey at night—are poised to add another layer to the imaging market. Underscoring how experience counts in this business, the founding team of Planet, a provider of satellite imagery data, had worked at NASA on lunar orbiter and small-spacecraft missions, as well as others.

Financing opportunities are growing

While barriers to entry remain very high for rocket commercialization compared with other technologies, near-term market opportunities, particularly around small satellites, are enticing investors. Last year, Vector, an Arizona-based small-rocket company led by a former SpaceX executive, raised a $21 million Series A round. The round was led by Sequoia Capital, and the proceeds are being used to build a program to offer launches for as little as $3 million. Other VCs active in space investments include Bessemer Venture Partners, Draper Fisher Jurvetson and Khosla Ventures.

Industry-specific funds, such as Space Angels and the United Kingdom-based Seraphim Space Fund, have grown in recent years.

Some entrepreneurs find that partnering with strategic corporate investors can be helpful, for example, to gain a pilot customer for their product and speed up the path to commercialization.

What's next for space investors?

While earth imagery, small rockets and satellites are attracting investments today, the longer-term opportunities for space tourism, mining and manufacturing may hold the biggest promise. For entrepreneurs and investors alike, industry experience is fundamental when tackling the challenges of space commercialization.

The path to commercialization here, however, is littered with uncertainty and heavily influenced by politics, regulation and public perception, leaving most investors on the sidelines for now. Navigating International Traffic in Arms (ITAR) regulations, the Committee on Foreign Investment in the United States (CFIUS) process—which is focused on national security issues—and the requirements of government contracts takes experience and persistence.

Fundraising

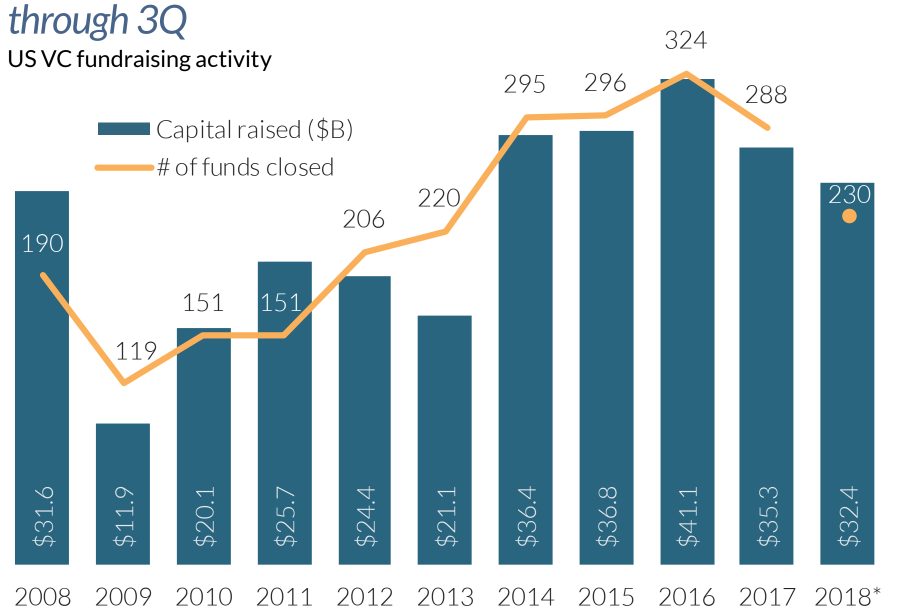
Venture fundraising in 2018 is on track for another healthy showing, currently pacing to reach over $30 billion in commitments for the fifth consecutive year. While historically VCs have favored smaller funds, recent years have seen an increasing focus on larger vehicles. The number of micro-funds closed has steadily decreased in the last three years and, of the 230 funds closed so far this year, 41.7% are larger than $100 million (compared to 33.5% in 2015). This observation contributes to a trend that has been salient throughout the year—elevated levels of available capital for startups.

With venture rounds growing ever-larger and increased competition among investors, some venture fund managers have gradually adjusted their strategy to target larger vehicles. Median and average fund sizes have trended to 10- and eight-year highs of $68.0 million and $151.3 million, respectively. So far in 2018, VCs have raised 27 vehicles in the $250 million-$500 million range, surpassing 2017's final count of 25. The numbers also show that 2018 surpassed last year's billion-dollar fund count (three in total), with five vehicles closed at $1 billion or greater.

Some investors have noted that mega-funds, such as SoftBank's behemoth Vision Fund, have "shocked" venture markets by using outsized financings as a competitive tool to pick and nurture winning startups. Large capital infusions can be a crucial differentiator for both investors and startups. With high competition among venture investors, those with larger funds and the ability to write bigger checks have a significant advantage when looking to close deals with leading late-stage startups.

Venture funds secure $32.4 billion in commitments through 3Q

US VC fundraising activity



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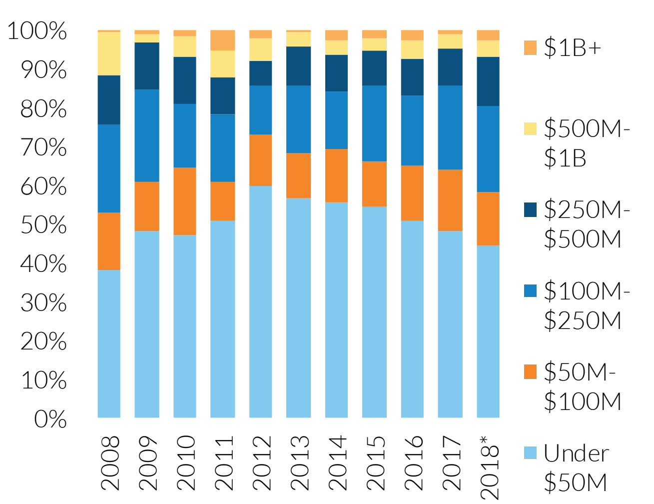
Growing proportion of funds larger than $250M

US VC fundraising (#) by size



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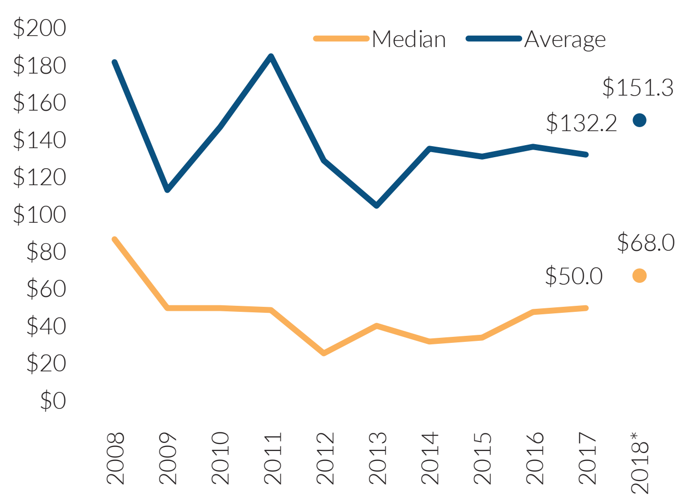
Median fund size trends to five-year high of $68M

Median and average US VC fund size ($M)



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For startups, these sums are vital for grabbing market share, achieving scale, and facilitating talent acquisition, especially for consumer-focused startups with high customer-acquisition costs.

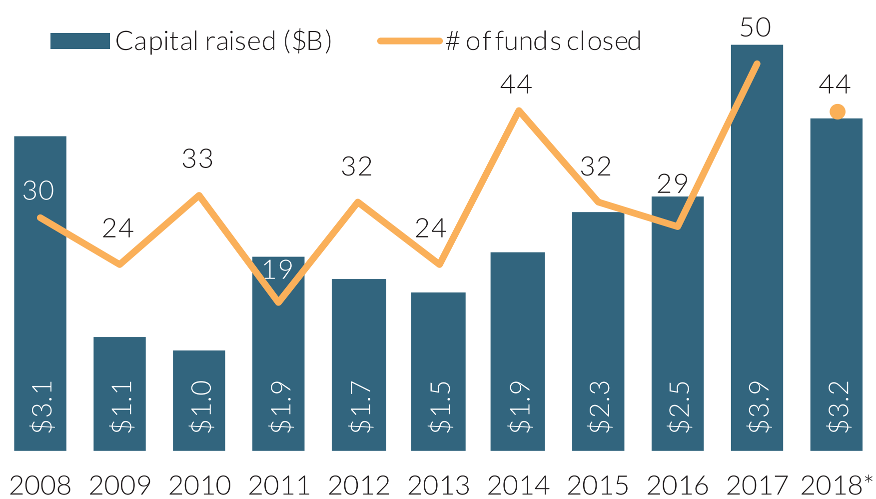
At the same time, critics argue that deep-pocketed investors run the risk of overlooking inherent flaws in startups such as capital inefficiency and a lack of a long-term path to profitability. The multitude of mega-funds raised recently will keep startups well capitalized for the foreseeable future, which in turn will keep valuations and round sizes elevated barring a significant economic downturn.

Some additional factors driving larger funds come from the LP side. First, while larger institutional investors have looked toward the venture asset class to drive returns and diversification, their minimum check size is far above the typical threshold of a traditional $50 million-$100 million venture fund size, facilitating cash flows to larger vehicles. Second, the administrative and management costs associated with manager selection have induced some LPs to consolidate their allocations in larger sums to fewer managers. Finally, our recent research on fund performance suggests that larger venture funds have outperformed smaller vehicles, and that net cash flows to LPs remain positive.

While larger funds are pervasive in developed venture hubs like Silicon Valley, smaller fundraises throughout the rest of the country highlight growing and emerging venture hubs that are slowly aggregating more local resources. Select GPs investing in emerging ecosystems include the Alabama Futures Fund (investing exclusively in Alabama), Seven Peaks Ventures (investing in Oregon and larger markets in the Pacific Northwest) and One Better Ventures (investing in North Carolina). These vehicles tend to be smaller given the supply of startups in these emerging ecosystems are often in earlier stages of development and the relatively smaller pool of LPs interested in such vehicles. Additionally, the costs of living and running a business tend to be lower in these regions, decreasing the need for outsized funding rounds. As more VCs look to opportunities outside Silicon Valley, early movers will play a vital role in the capitalization and maturation of startups in these emerging ecosystems.

First-time funds on track to outpace 2017 numbers

US VC first-time fundraising



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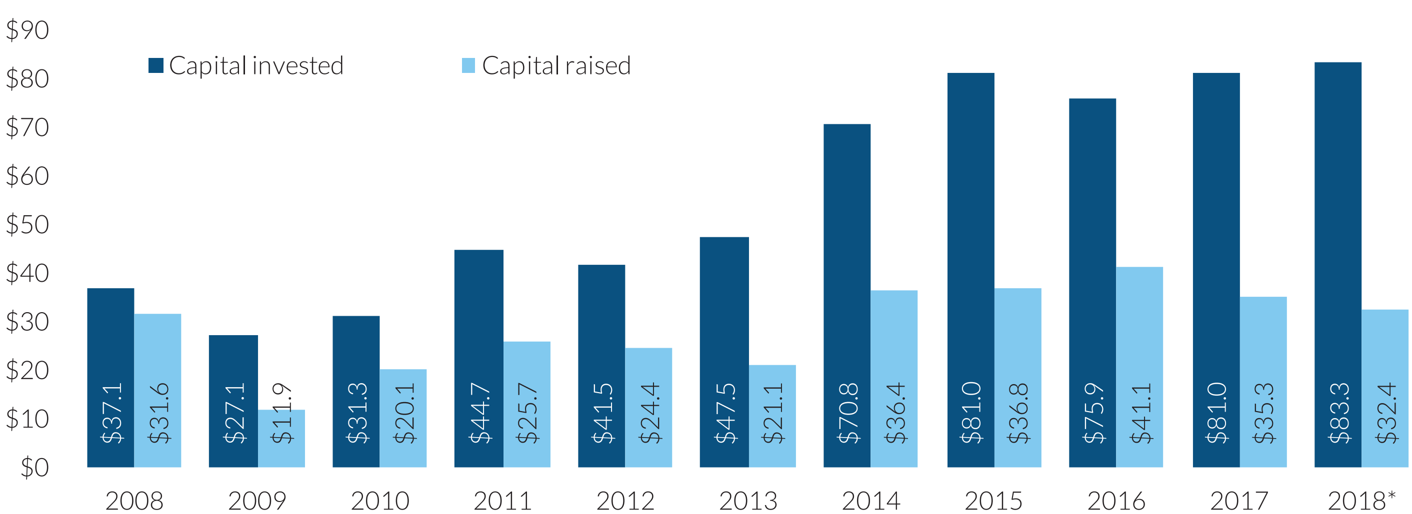
Investors deploying capital at a rapid clip

Capital raised versus capital invested ($B)



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*As of September 30, 2018

3Q 2018 league tables

Most active investors angel & seed

Plug and Play Tech Center	31
Keiretsu Forum	13
Keiretsu Capital	11
Rev1 Ventures	10
Hatcher Plus	8
Alliance of Angels	8
New Media Ventures	7
Connecticut Innovations	7
Techstars	6
Alumni Ventures Group	5
Baidu Ventures	5
First Round Capital	5
Social Capital	5
Crosscut Ventures	4
Greycroft	4
Khosla Ventures	4
Madrona Venture Group	4
Service Provider Capital	4
Sinai Ventures	4
Slow Ventures	4
SOSV	4
SV Angel	4
Village Global	4
Y Combinator	4

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Most active investors early stage

Keiretsu Forum	30
Keiretsu Capital	23
Alumni Ventures Group	22
Plug and Play Tech Center	17
F-Prime Capital Partners	12
Alexandria Venture Investments	10
Andreessen Horowitz	10
Kleiner Perkins	10
Y Combinator	10
General Catalyst	9
GV	9
Khosla Ventures	8
SV Angel	8
Connecticut Innovations	7
8VC	7
Bessemer Venture Partners	7
Service Provider Capital	7
Social Capital	7
ARCH Venture Partners	6
BoxGroup	6
Elevate Ventures	6
First Round Capital	6
Founders Fund	6
M25	6
New Enterprise Associates	6
Sequoia Capital	6
Tusk Ventures	6

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Most active investors late stage

New Enterprise Associates	17
Accel	15
Alumni Ventures Group	12
Kleiner Perkins	11
GV	10
Salesforce Ventures	9
Andreessen Horowitz	8
Keiretsu Forum	8
Revolution	7
Y Combinator	7
Battery Ventures	6
Khosla Ventures	6
Bain Capital Ventures	5
Bessemer Venture Partners	5
CapitalG	5
GE Ventures	5
GGV Capital	5
Keiretsu Capital	5
Polaris Partners	5
Scale Venture Partners	5
Sequoia Capital	5
SV Health Investors	5

PitchBook-NVCA Venture Monitor

Methodology

Fundraising

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

Deals

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

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

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

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

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

Corporate VC: Financings classified as corporate VC include rounds that saw both firms investing via established CVC arms or corporations making equity investments off balance sheets or whatever other non-CVC method actually employed. Rounds in VC-backed companies previously tagged as just corporate investments have been added into the dataset.

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

Exits

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

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

Why we teamed up

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

Meet the PitchBook-NVCA Venture Monitor

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

THE PERKS OF PARTNERSHIP

The PitchBook Platform

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

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

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

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

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

More data. Less dough.

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Help us help you

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

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