PitchBook

# US VC Valuations Report

2019 Annual

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# Introduction

**US VC deal sizes have declined YoY at the late stage.** Both median and average deal sizes shrank relative to 2018's figures—a distinct shift from the steadily climbing deal sizes and valuations over the last decade. However, we still expect VC deal activity to remain healthy in 2020, including a significant portion of mega-deals ($100 million+).

**The sizes and valuations of US VC deals with nontraditional investment are significantly larger than those without nontraditional investor participation.** The characteristics that diversify nontraditional investors from traditional VCs make them less price sensitive, either because a single VC deal provides minimal exposure to the larger funds or because non-cash elements can increase the overall return for investors, as is the case with many CVCs.

**The median valuation step-up at the time of an IPO trends toward the 1.0x breakeven mark.** A handful of massive valuations for money-losing startups have been called into question by increasingly skeptical public market investors, leading to disappointing aftermarket performance of some recent VC-backed IPOs. Any further struggles in the IPO market could drop the median below 1.0x, indicating more than half of IPOs are completed at a lower price than their last private market valuation. This would be detrimental to the VC market, especially at the late stage, as investors may pull back support if faced with significant losses.


**Cameron Stanfill, CFA**
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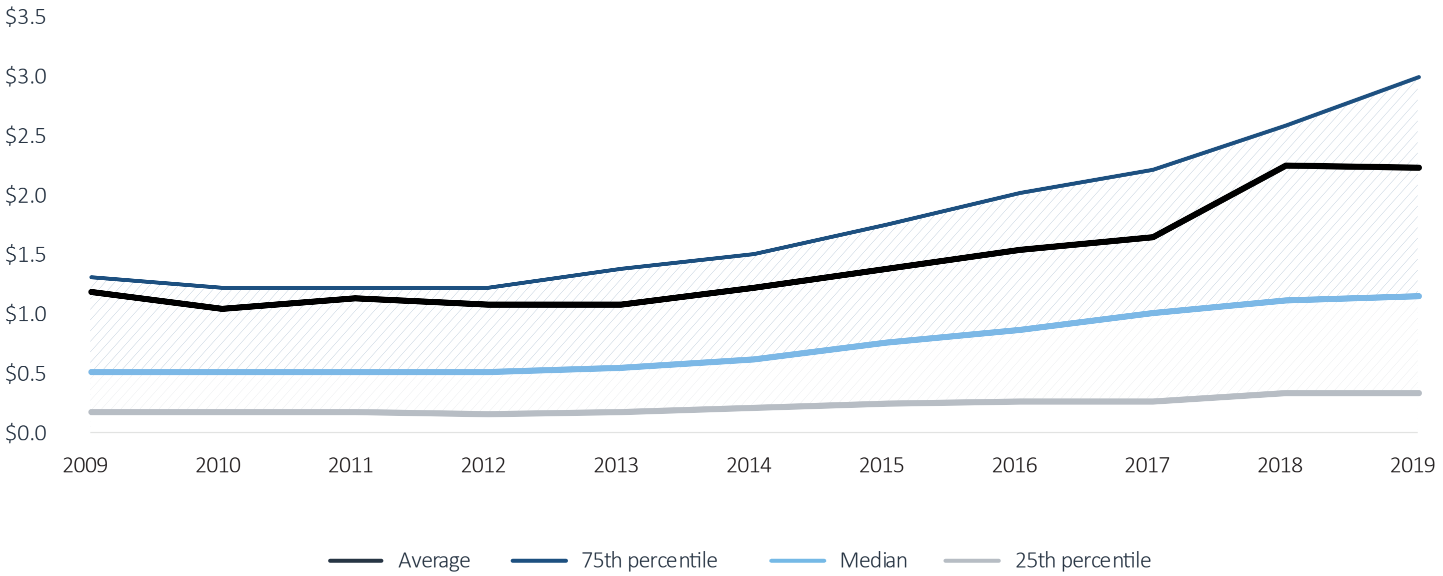
# Angel & seed

## Percentile distribution of angel & seed deal sizes ($M)

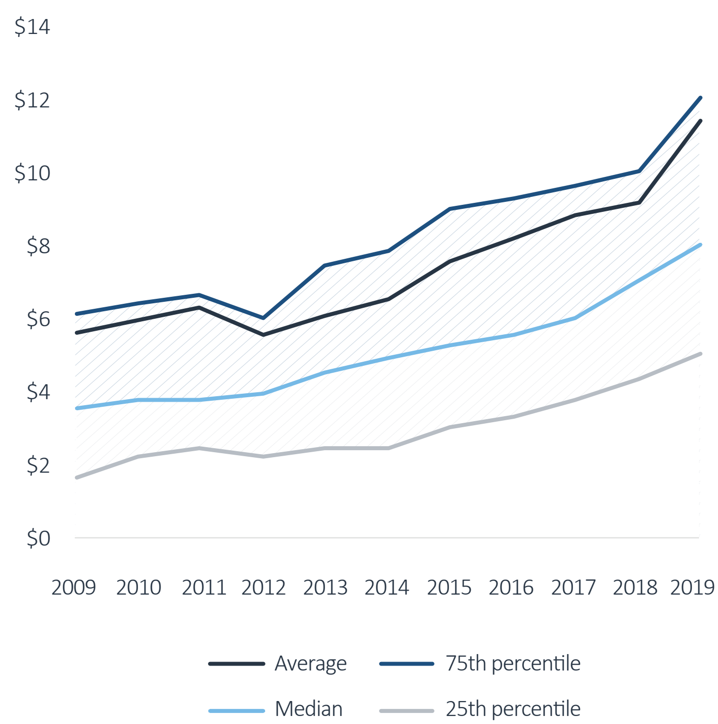



**Source:** PitchBook | **Geography:** US

While US angel deal sizes haven't changed much over the past decade, seed deal sizes and pre-money valuations have continued to increase steadily over the last couple years, highlighting investors' sustained appetite for the risks associated with this stage. The underlying factors for the growth of both sizes and valuations seem to imply seed-stage companies are entering the VC pipeline with more developed business models than in the past, commanding higher multiples on the ability to provide investors a better view into their operation. As traditional seed investors are able to source more mature companies, a developing stage of pre-seed investments has filled the gap. These investments, which are not included in this dataset, have also contributed to the growth of seed deal sizes, which may no longer always be the first institutional investment in a company. The median age of companies receiving angel or seed financing has steadily grown by more than a year over the past decade, reaching 2.9 years in 2019.

The initial costs of starting a company, especially a software company, have continually declined over the past decade as the unbundling of tech services into the cloud have allowed companies to pay for only the necessary components. Coupled with ever-expanding financing options for young companies, these low starting costs help startups operate longer before raising institutional capital. Once higher capital infusions are needed for growth, investors have access to targets with a product and a developed business model; before, the need for VC came with a proof-of-

## Percentile distribution of angel & seed pre-money valuations ($M)



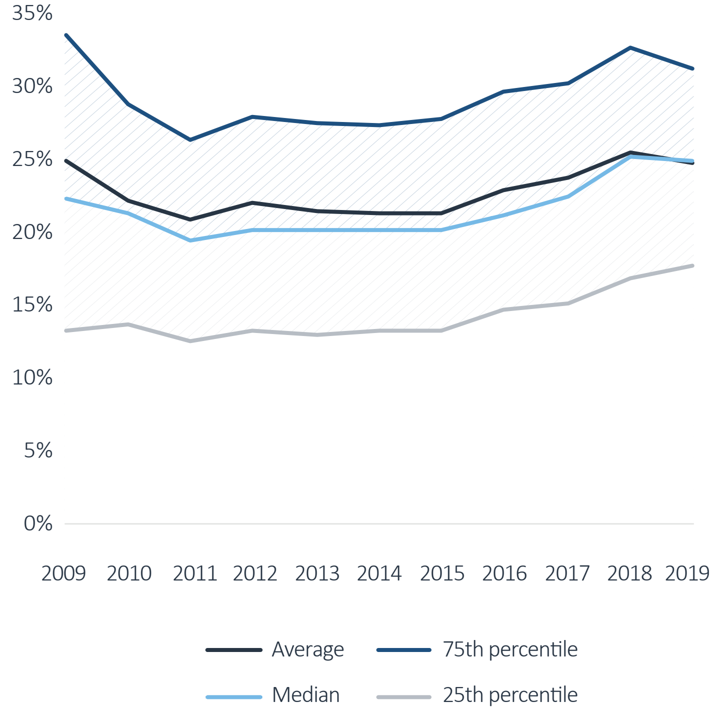

**Source:** PitchBook | **Geography:** US

concept and a pitch deck. This trend has pushed angel & seed valuations to the highest on record, with the median pre-money valuation reaching $8.0 million and representing 14.3% growth in the past year alone. Since 2009, median angel & seed deal valuations have grown 128.2%, a CAGR of just under 10%.

In many cases, it's natural for valuations to rise alongside deal sizes. This proved especially true in the top quartile of the angel & seed stage, in which deal sizes grew by 15.6% to $3.0 million in 2019, pushing top-quartile valuations up by an even higher percentage (20%) to $12.0 million. As the seed stage moves later into the VC lifecycle, competition between investors has added a boost to deal sizes and valuations alike. The current founder-friendly environment starts at this stage, where founders can gain leverage by receiving multiple term sheets from investors.

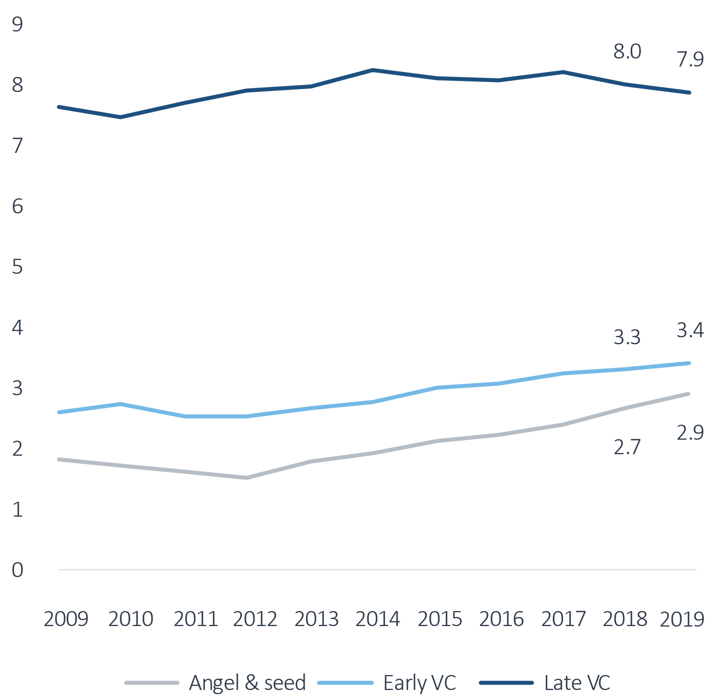
Despite growth and competition at the angel & seed stage, we have observed the stakes taken by investors growing over the past few years, a stark juxtaposition to the declining percentage acquired at other VC stages. In theory, this growth in stake percentage—which has hovered at roughly 25% for the past two years after dipping to 20% from 2011 through 2015—is a natural shift for startups raising angel & seed rounds as a compensation for investors taking higher risk with larger deals at this stage. The top-quartile stake acquired notched just over 31% in 2019, though the bottom-quartile stake acquired has shifted the most dramatically, increasing to 17.5% in 2019 from a decade low of 12.4% in 2011.

## Percentile distribution of proportion acquired at angel & seed stage




**Source:** PitchBook | **Geography:** US

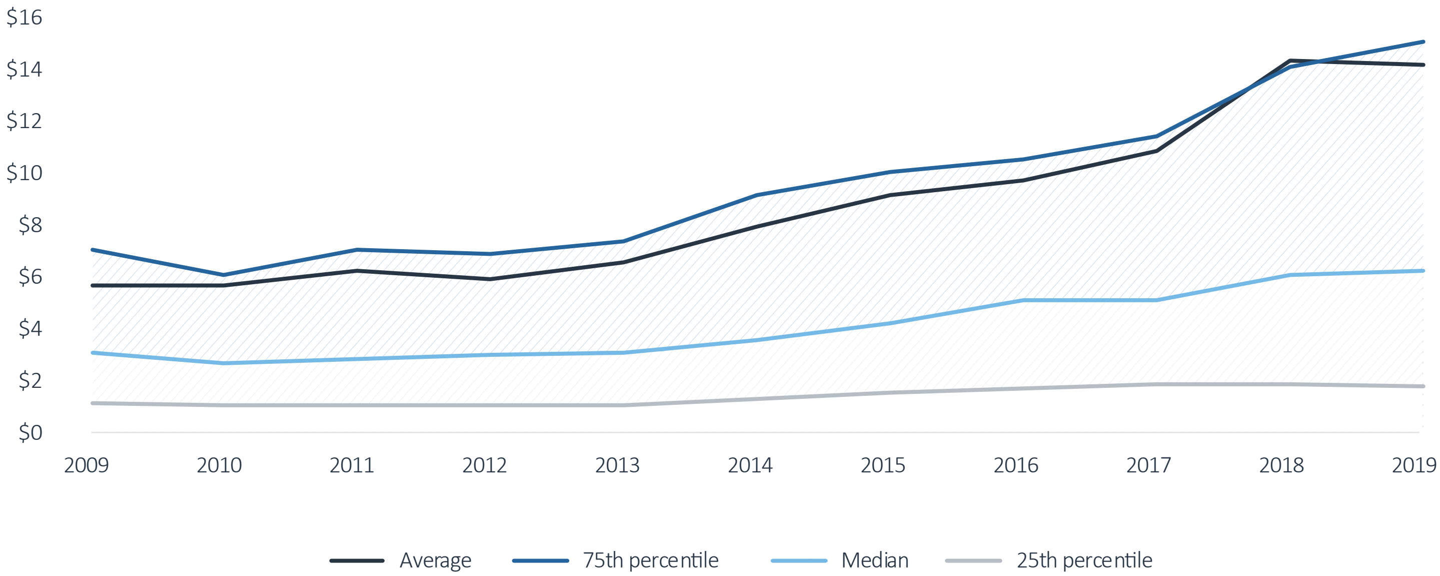
## Median time (years) from founding by stage




**Source:** PitchBook | **Geography:** US

# Early-stage VC

## Percentile distribution of early-stage VC deal sizes ($M)

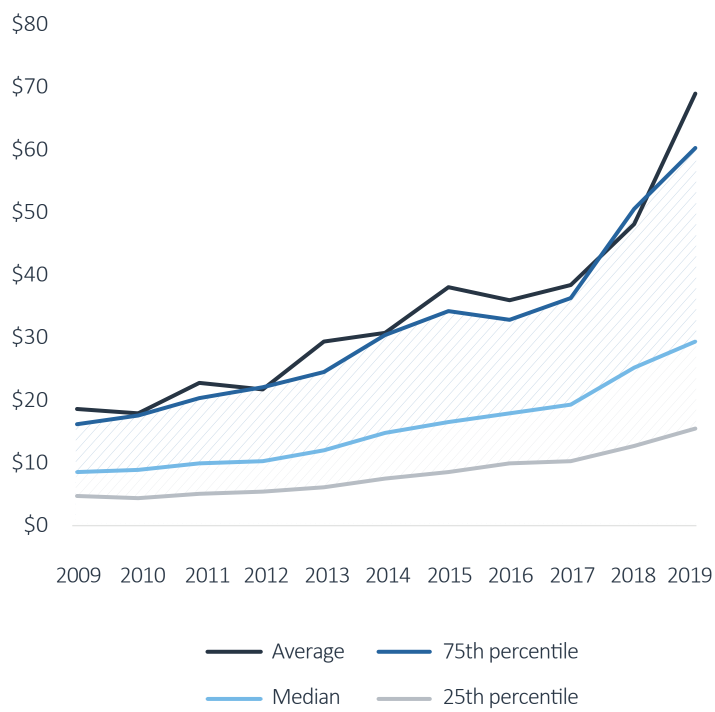



**Source:** PitchBook | **Geography:** US

Early-stage VC is in the midst of a dynamic shift within the venture ecosystem. In 2019, over 50 deals of $100 million+ were completed at the early stage, a testament to the surfeit of capital available to companies at this stage. Nontraditional investors, especially corporate VCs, have extended their VC investments into the early stage, building upon years of increased presence within the broader VC industry. These investors have generally been less price sensitive than traditional VCs for myriad reasons, translating into higher valuations for companies receiving nontraditional dollars. We don't believe this has had an overall negative effect on the industry—such investors bring different perspectives and benefit packages to companies moving through the venture ranks. Going forward, the presence of nontraditional capital portends sustained competition for deals, spurring the growth in deal value at the early stage.

The top-quartile early-stage VC deal size grew 7.0% YoY to $15.0 million, pushing above the early-stage average deal size again after the average eclipsed the top quartile in 2018 for the first time this decade. As deal sizes grow, early-stage companies are posting the strongest valuation step-ups of any stage. The median early-stage step-up reached 2.0x in 2019, while the average step-up stayed at 2.5x. The steady step-up figures over the past several years provide validation for the capital sums and valuations of investments made earlier in the startup lifecycle; despite the growth in deal size and valuation, realized and expected growth metrics continue to meet or surpass

## Percentile distribution of early-stage VC pre-money valuations ($M)

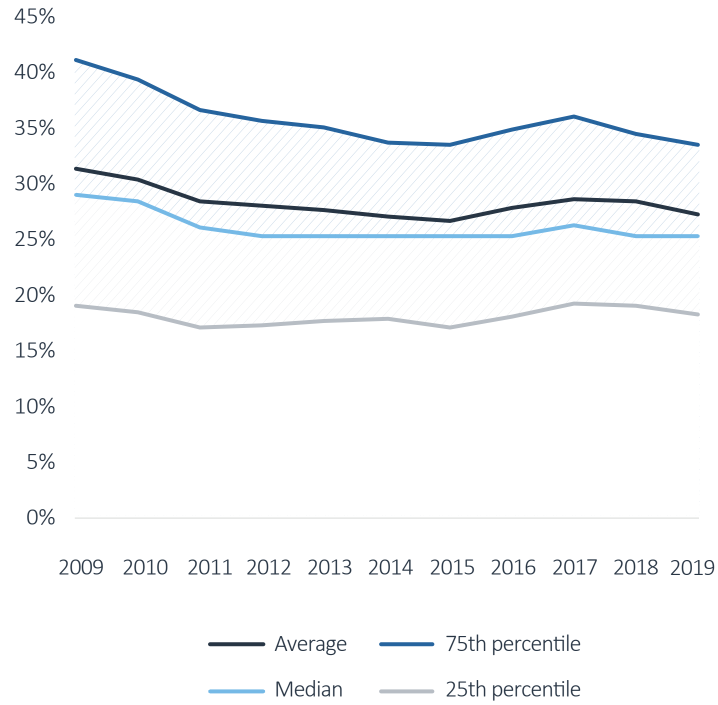



**Source:** PitchBook | **Geography:** US

investor expectations. In fact, early-stage companies raising rounds in 2019 saw their relative velocity of value creation (RVVC) rise to 59.7%, meaning that early-stage companies realized valuation growth of nearly 60% each year since their previous investment. This method has inherent survivorship biases because it only tracks companies receiving funding; however, this figure is by far the highest growth rate of any stage in the industry, and the highest we have seen for early-stage companies.

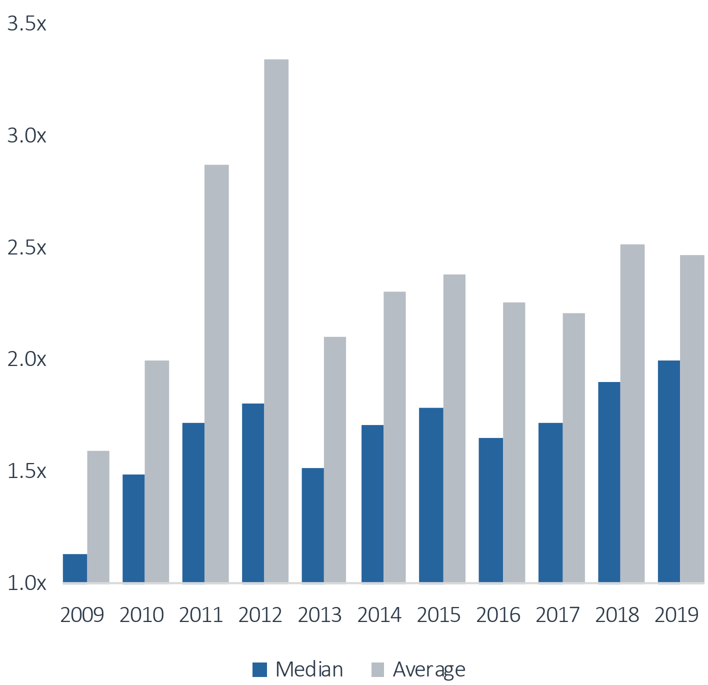
Early-stage VC continues to move into even more founder-friendly territory, a byproduct of heightened interest in the asset class. The median stake acquired in early-stage companies has drifted down from 26.2% in 2017 to 25.0% in 2019. Series B financings have fallen to 20.0% acquired at the median, the lowest figure of the decade. Founders have many options when striving to keep dilution low at this stage. As deal sizes continue to increase, the use of debt to lever deals and lower the overall cost of capital provides a path toward massive growth while keeping control centered on the executive team, especially for capital-intensive business models. Knock, Flyhomes and Mission Lane, all of which operate in real estate or lending markets, have raised substantial amounts of debt alongside equity investments. Increased competition within deals should also continue to put downward pressure on the percentage acquired figure, at least continuing current trends moving forward.

## Percentile distribution of proportion acquired at early VC stage



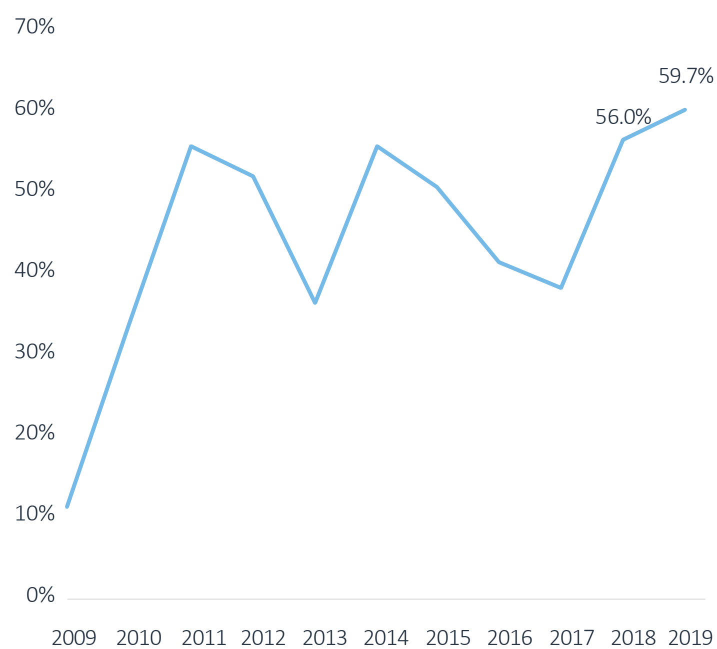

**Source:** PitchBook | **Geography:** US

## Median and average early-stage VC step-up multiples




**Source:** PitchBook | **Geography:** US

## Median early-stage RVVC between rounds

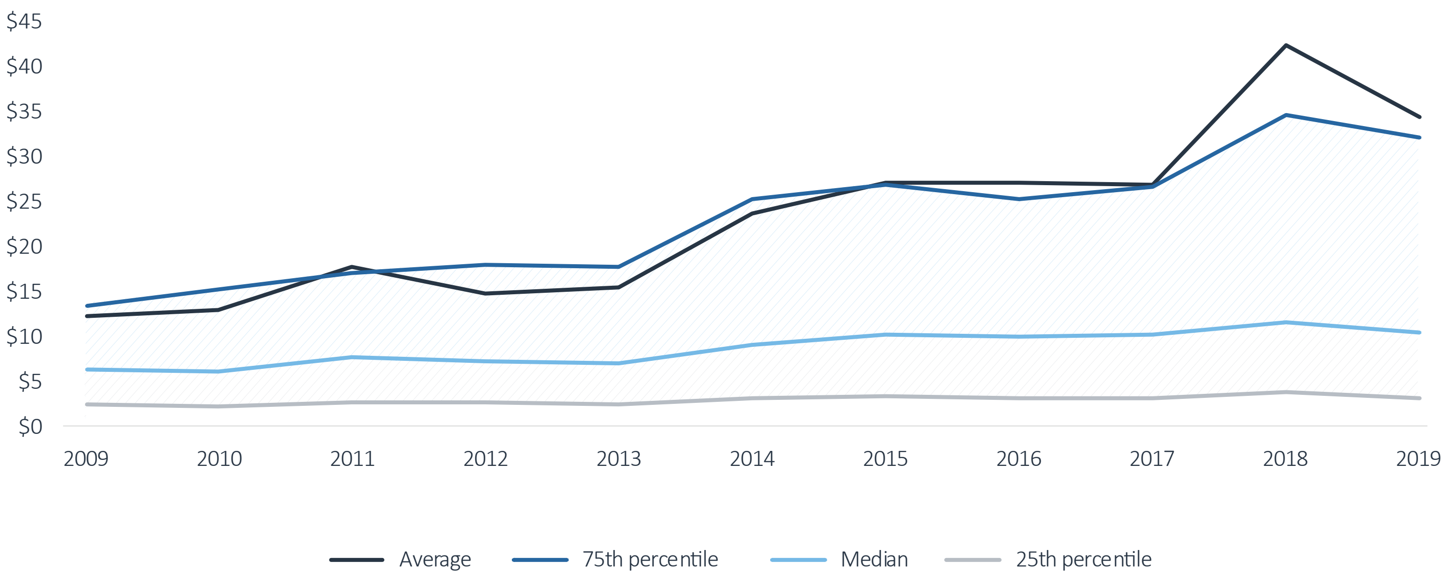



$$RVVC = \frac{\textit{\% growth in valuation between rounds}}{\textit{years between rounds}}$$

**Source:** PitchBook | **Geography:** US

# Late-stage VC

## Percentile distribution of late-stage VC deal sizes ($M)

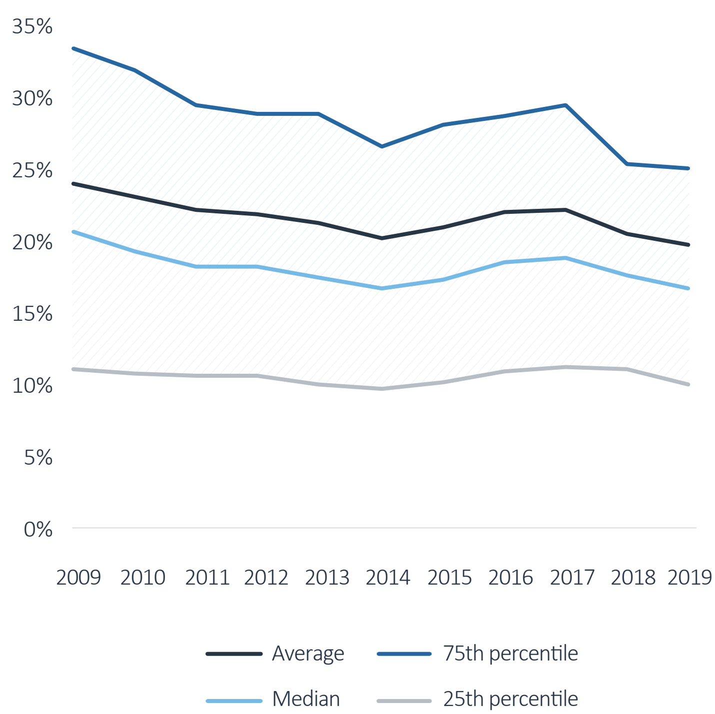



**Source:** PitchBook | **Geography:** US

Capital continued to pour into the late stage throughout 2019; however, the end of the year saw some cooling in deal sizes. In a market characterized by the rise of mega-deals, our data illustrates a YoY decline in late-stage deal sizes across all quartiles, with the largest drop at the average. This is a fairly distinct shift when compared to the continued increase in valuations and the trend of steadily climbing deal sizes over the last decade. Despite this, we still expect healthy VC dealmaking in 2020, including a significant proportion of mega-deals.

Smaller deal sizes also fetched slightly lower ownership percentages than in 2018, continuing a larger downward trend over the past few years. The sustained abundance of capital available to startups at the late stage has diminished the pure bargaining power of cash, giving entrepreneurs leeway to negotiate more favorable terms, including raising capital in the private markets to postpone an IPO. This competition for deals driving higher deal sizes for lesser ownership has logically also engendered a long-term valuation growth trend at this stage. In 2019, pre-money valuations sustained a growth trend across all quartiles, although at a slower pace than in 2018. Further, the data also highlights a plateauing of valuations at the average, suggesting some tempering at the very top of the market. We expect dealmaking at the late stage to remain healthy in 2020, but the trajectory of valuations for those deals seems slightly more in flux with the potential of

## Percentile distribution of proportion acquired at late VC stage

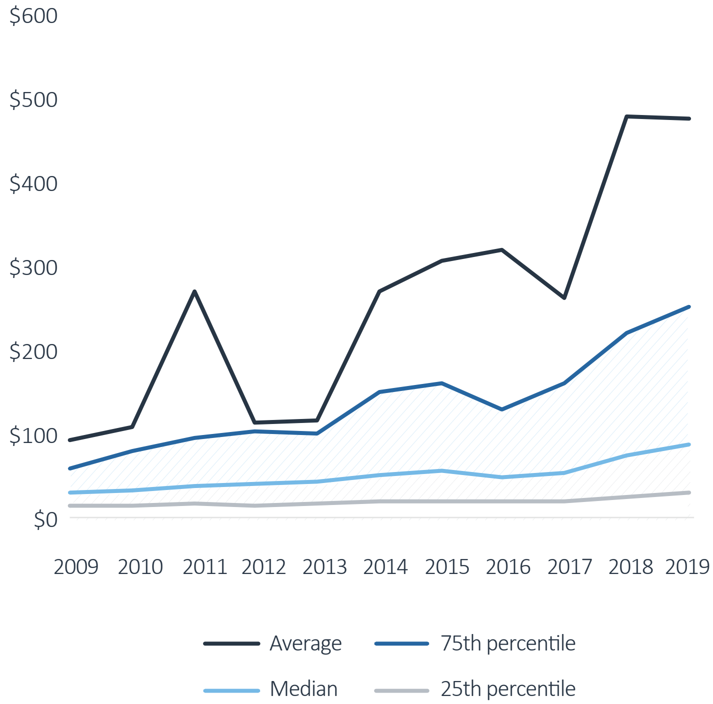



**Source:** PitchBook | **Geography:** US

increased scrutiny on operating efficiency driven by some high-profile struggles in the public markets.

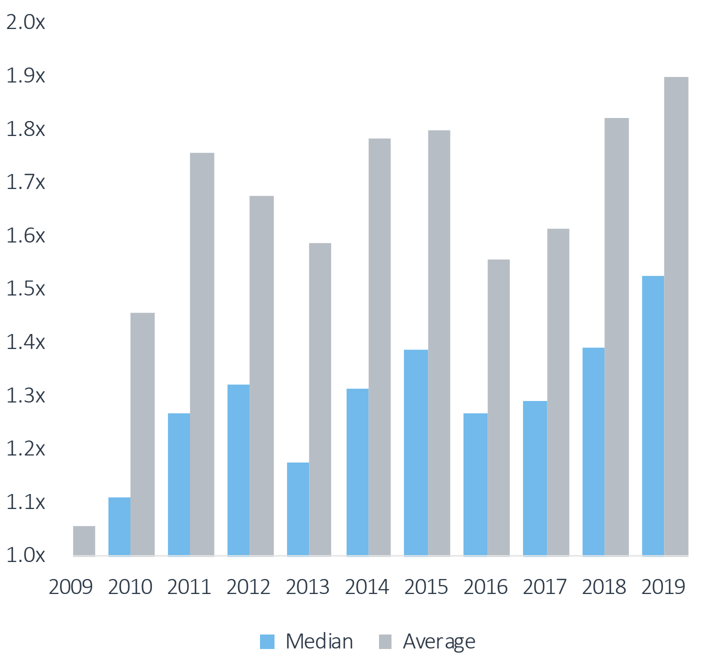
Valuation step-ups climbed for the third-consecutive year, reaching decade highs of 1.5x and 1.9x for the median and average, respectively. The perseverance of this trend in the face of some more muted changes in deal sizes and valuations communicates how strong company-level growth is at this stage. However, if a true inflection point in deal sizes and valuations materializes over the next year, late-stage step-ups will also see more pressure. The late-stage RVVC tells a similar story of positive growth trends. The trajectory of the line follows the movements seen in step-ups, with impressive gains each of the last two years to the current 2019 mark of 31.7%. By comparing these two metrics, we observed that while the median step-up indicates a 50% valuation increase, the RVVC factors in time, demonstrating the median company is growing valuations 31.7% per year.

## Percentile distribution of late-stage VC pre-money valuations ($M)



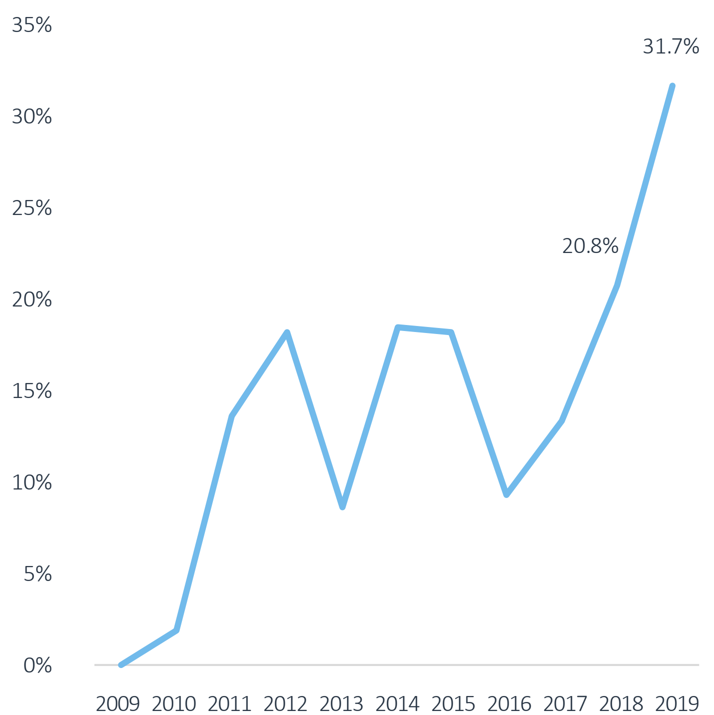

**Source:** PitchBook | **Geography:** US

## Median and average late-stage VC valuation step-up multiples




**Source:** PitchBook | **Geography:** US

## Median late-stage RVVC between rounds




$$RVVC = \frac{\textit{\% growth in valuation between rounds}}{\textit{years between rounds}}$$

**Source:** PitchBook | **Geography:** US

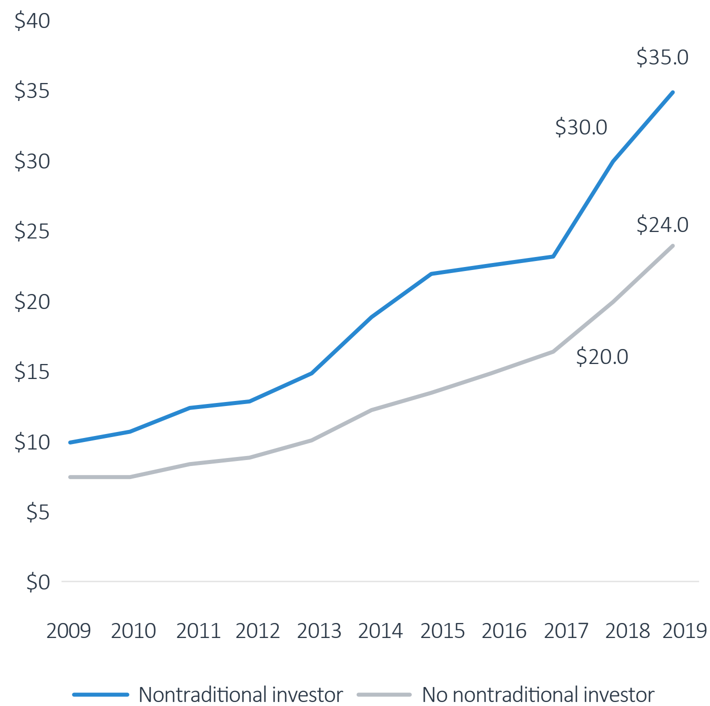
# Nontraditional investors

Nontraditional investors—which include hedge and mutual funds, PE firms and corporate VCs, to name a few—have become entrenched in the VC ecosystem in recent years. Once thought by many to be fleeting investors pumping up valuations and making decisions with the fear of missing out on the next unicorn, nontraditional investors have continued to invest capital across the strategy, in some cases moving earlier in investment lifecycle to take stakes in younger startups. These investors are generally less price sensitive than traditional VC firms. Hedge funds and mutual funds have much larger pools of capital to invest, naturally lowering the riskiness of VC investments, while most corporate VC investments can factor in non-cash elements, such as partnership synergies, into total return. In addition, because large nontraditional investors can be multitudes larger than traditional VC funds, these firms must achieve relatively larger returns to materially affect their fund. These factors can drive higher prices paid by nontraditional investors to ensure they win deals that can achieve the returns needed, pitting nontraditional investors against other participants in the industry.

The pre-money valuations of deals with nontraditional investor participation are considerably higher than deals without nontraditional investment. Early-stage VC pre-money valuations in deals with nontraditional investor participation have tripled over the last 10 years, bouncing to a decade-high median of $35.0 million in 2019. This is $11 million higher than the same metric of deals without nontraditional backing, creating the largest spread between the two values in our records. The same can be said for the spread observed at the late stage, in which the median pre-money valuations of deals with nontraditional investment reached a massive $140.0 million in 2019, a 16.7% growth above 2018's figure. Even more pronounced is nontraditional investors' ability to enable the enormous deals that seem commonplace today. Of the 237 mega-deals completed in 2019, more than 85% included participation from a nontraditional investor. Hedge funds, mutual funds and other investors, such as SoftBank, have much larger capital pools to invest from than more classic VC funds, and despite their frequent participation in mega-deals, retain a relatively smaller exposure to the VC industry within their portfolios.

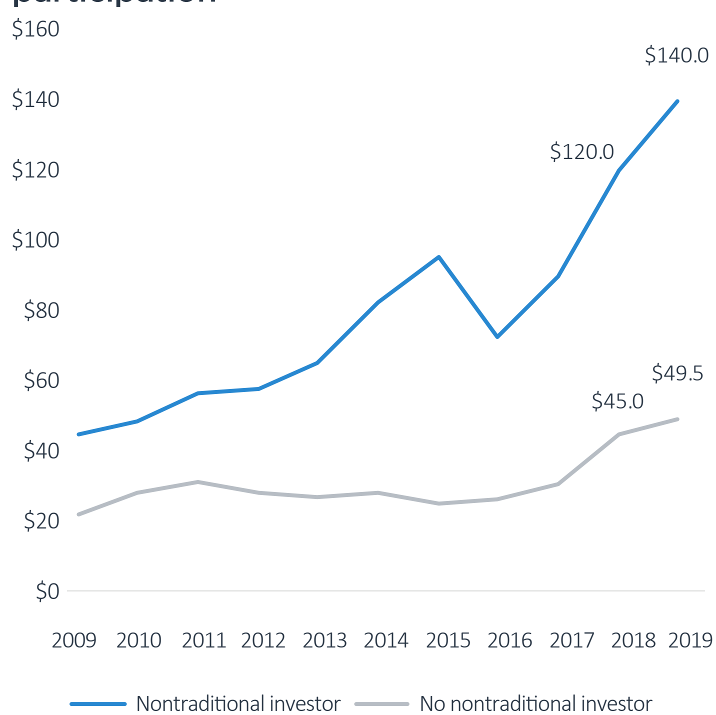
Corporate VCs are the most active of the nontraditional investor group, participating in around 1,800 deals during each of the past two years, compared to the roughly 3,000 deals in aggregate in which nontraditional investors have participated. But compared to other nontraditional

## Median early-stage VC pre-money valuation ($M) with nontraditional investor participation




**Source:** PitchBook | **Geography:** US

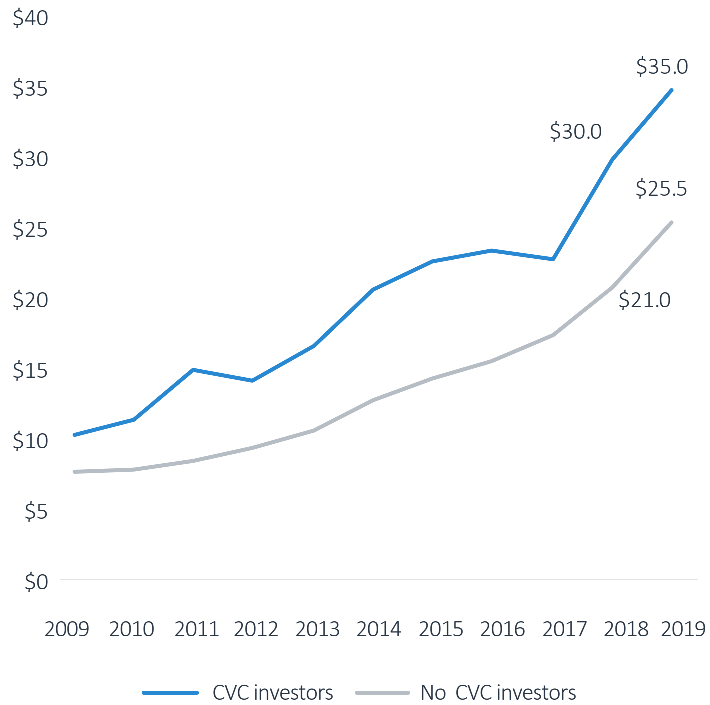
## Median late-stage VC pre-money valuation ($M) with nontraditional investor participation




**Source:** PitchBook | **Geography:** US

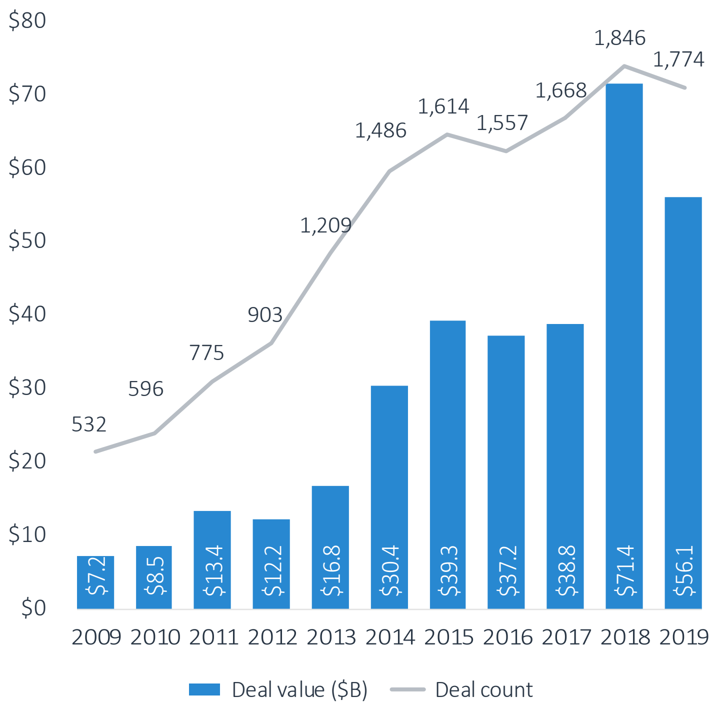
investors, CVC plays out more prominently in the early stage. The costs associated with corporate growth can be high while the agility of large companies can be slow. To combat this, corporations have sought to increase investment in startups either with the intention of adding functionality to their offering with new technologies or supplementing internal R&D programs. Though capital appreciation is a desired effect of these VC investments, the ability to leverage new technologies can enhance potential returns in ways that create a pricing misbalance in certain deals between CVCs and the rest of the industry. Median CVC deal sizes at the early stage clock in at $13.2 million in 2019, higher than deals with other nontraditional participation at this stage and roughly 2x the industry median. Corporations flush with cash from the bull market and faced with startups challenging for market share have been eager to move capital toward startup investments, doubling the number of participants over the past decade. Even amid potential economic headwinds, we believe that startup investment will continue to become a more prominent part of corporate growth programs.

## Median early-stage VC pre-money valuation ($M) with CVC participation



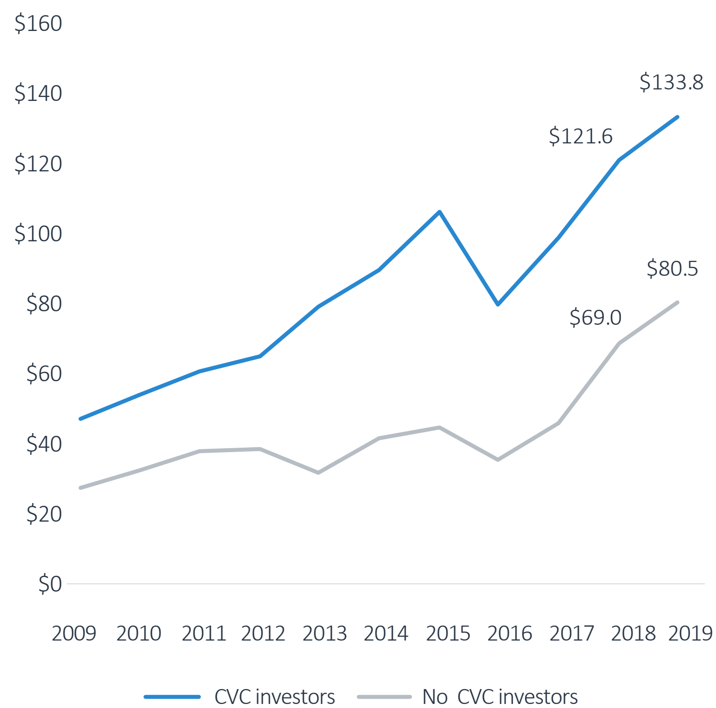

**Source:** PitchBook | **Geography:** US

## CVC deal activity




**Source:** PitchBook | **Geography:** US

## Median late-stage VC pre-money valuation ($M) with CVC participation




**Source:** PitchBook | **Geography:** US

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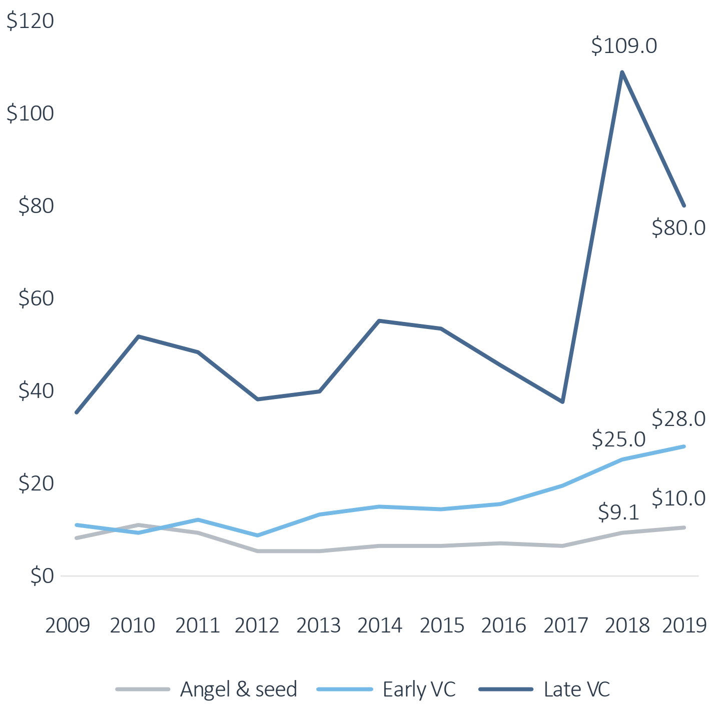
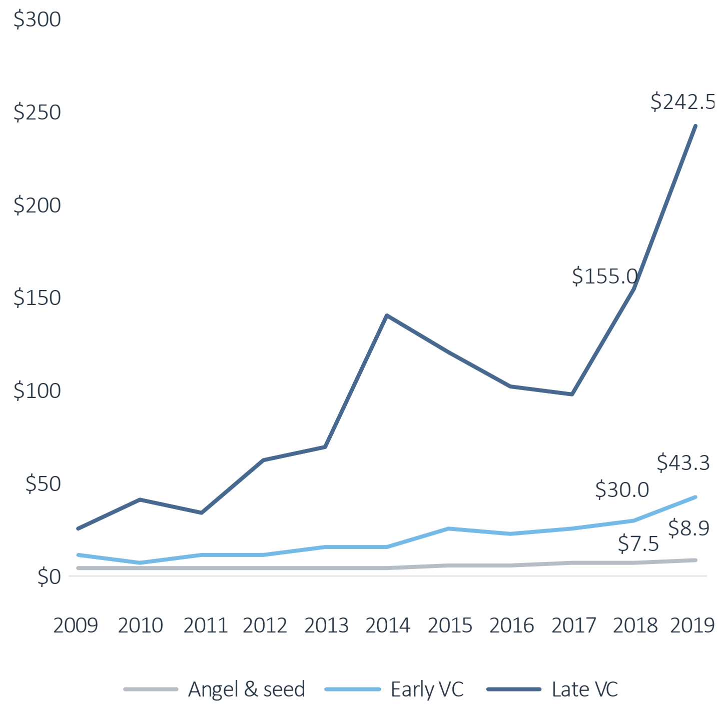
# Valuations by sector

### Median pharma & biotech VC pre-money valuation ($M) by stage



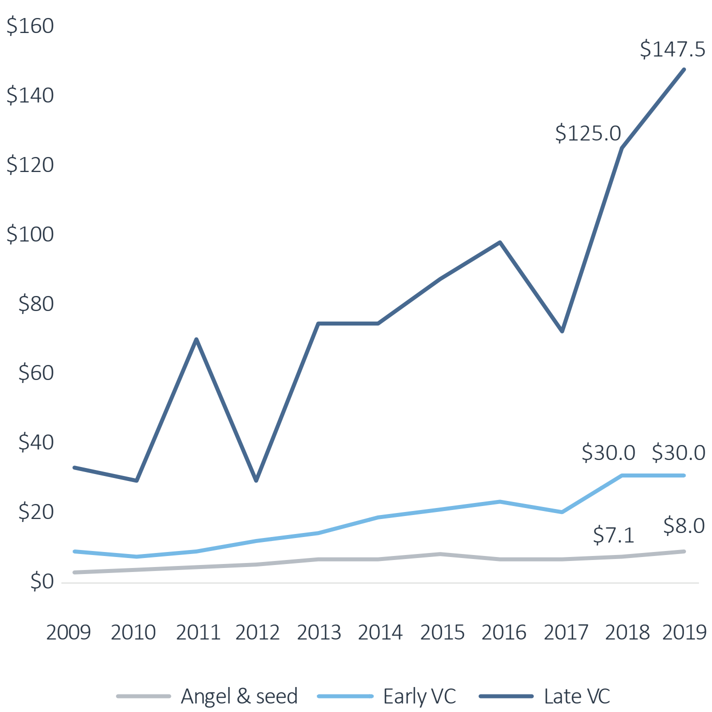

**Source:** PitchBook | **Geography:** US

### Median fintech VC pre-money valuation ($M) by stage



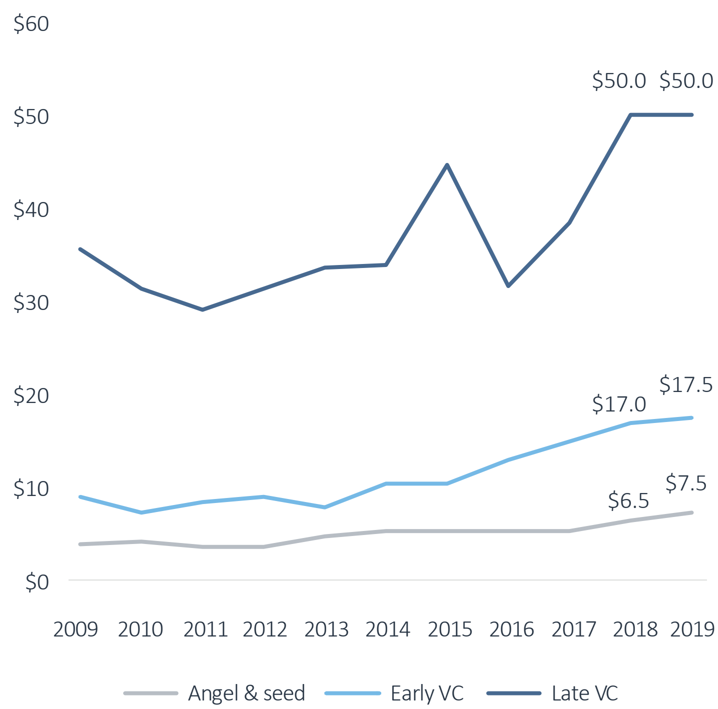

**Source:** PitchBook | **Geography:** US

### Median AI & ML VC pre-money valuation ($M) by stage




**Source:** PitchBook | **Geography:** US

### Median healthcare tech & services VC pre-money valuation ($M) by stage




**Source:** PitchBook | **Geography:** US

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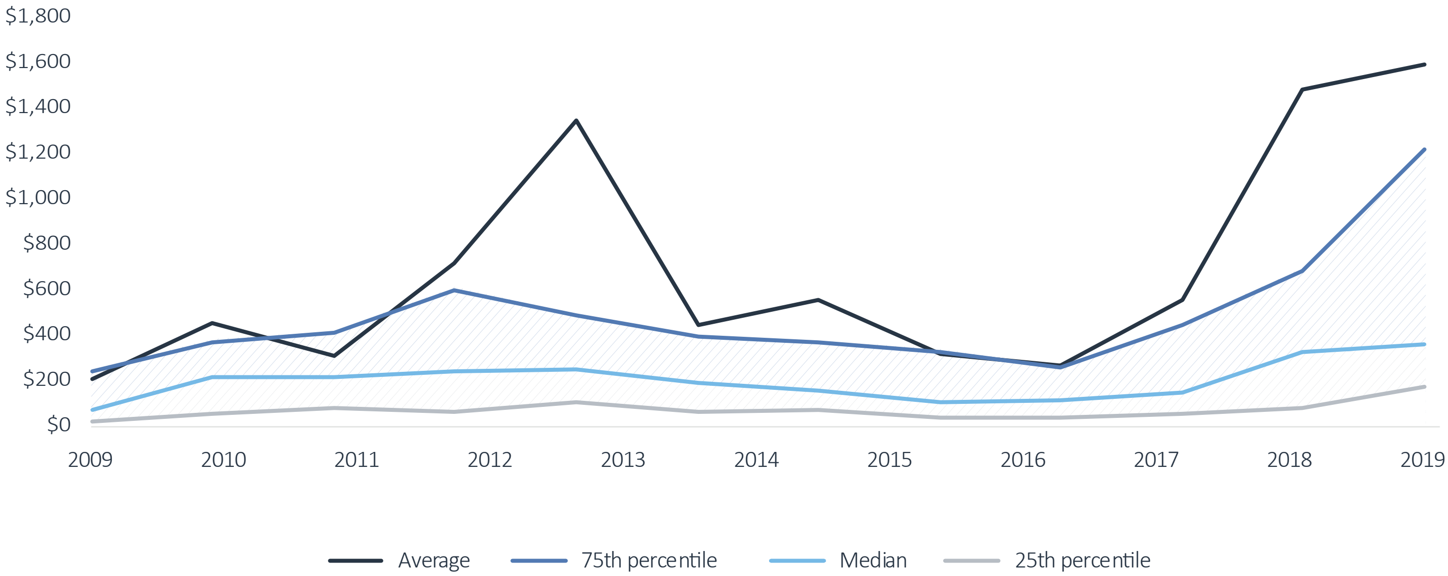
# Liquidity

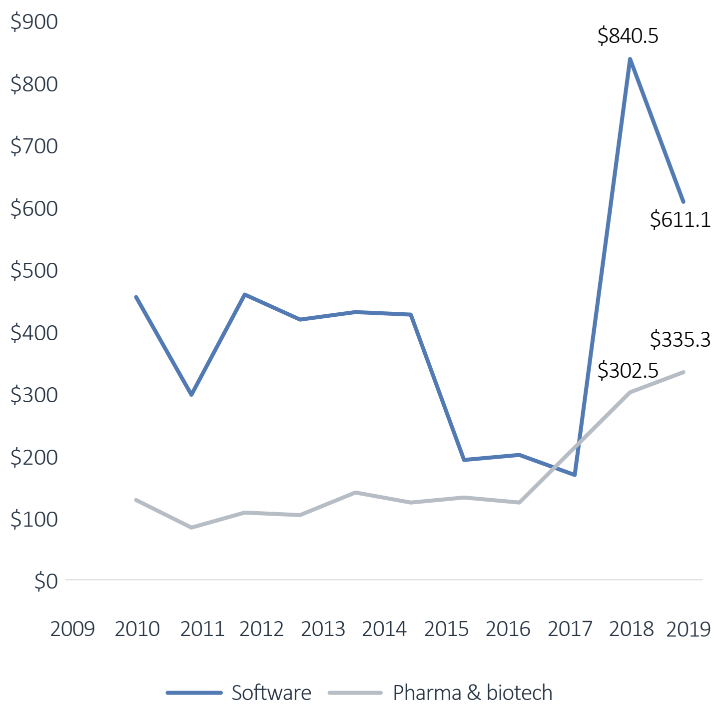
## Percentile distribution of VC-backed IPO valuations ($M)




**Source:** PitchBook | **Geography:** US

2019 was an exceptional year for US VC exit activity. An unprecedented $256.4 billion in value was recorded in the year, which will translate to some impressive returns for both GPs and LPs in VC funds. This elevated amount of capital exited was spread between a smaller number of exits than the last couple of years, leaning on ever-larger exits, specifically IPOs such as Uber, Lyft and Slack. The top-quartile and average IPO are now valued squarely over $1 billion at $1.2 billion and $1.6 billion, respectively. The disappointing aftermarket performance of some recent VC-backed IPOs has caused public market investors to question the massive valuations for money-losing startups. The ramifications of this in the broader IPO market are yet to be seen, and while we expect strong companies will still proceed with planned public listings, if this negative sentiment remains prevalent through 2020, we may see a lull in IPO activity, especially of technology businesses. An extended dip in technology listings would put downward pressure on the median and average IPO valuations given that the median 2019 software IPO of $611.1 million is nearly double the size of the median pharma & biotech listing of $335.3 billion. These pharma & biotech IPOs make up a high proportion of total IPO count, and while we see that as a steadier market given the established investor base and proven path to the public markets, a serious enough correction could also depress this activity.

## Median IPO size ($M) by sector




**Source:** PitchBook | **Geography:** US

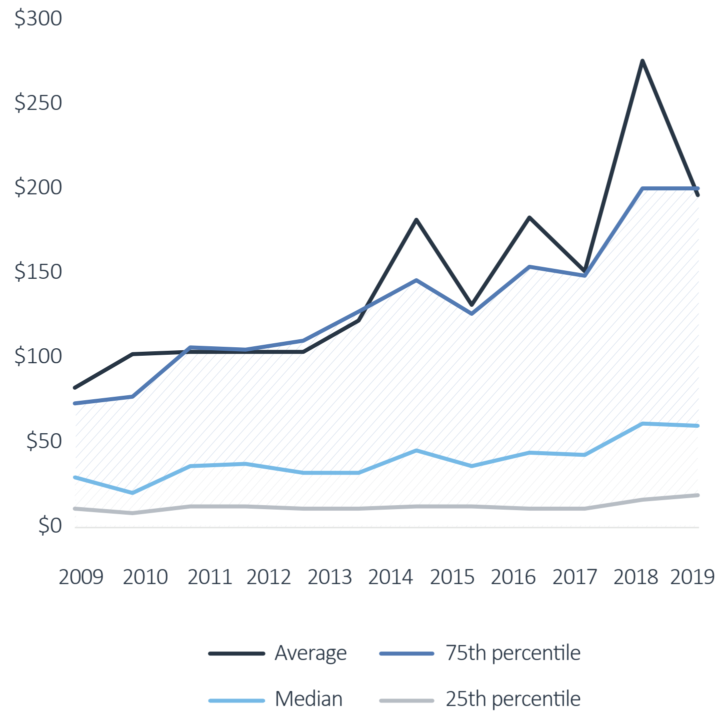
PitchBook



IPOs grab many of the headlines around VC exits, but acquisitions still make up a vast majority of exit count. And just like their steady volume, the range of valuations has remained remarkably stable from 2018. The bottom quartile saw the only positive move by increasing 15.7% while the average reverted closer to the top-quartile value. From 2013 to 2019, the average has exaggerated moves on both the upside and downside. As the data highlights, this bouncing pattern where the average moves higher quickly and then returns to the 75th percentile in the next period illustrates the effects of abnormally large exits.

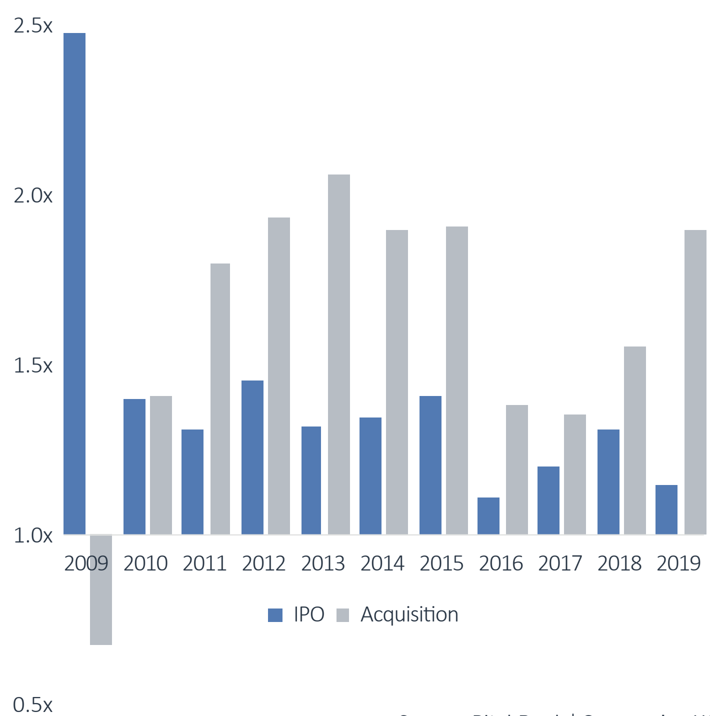
With the encouraging stability of acquisition valuations and continued climb of IPO valuations on an absolute basis, it is key to evaluate these options on a relative basis. Encouragingly, step-ups for both exit options are over 1.0x, implying positive returns for investors at least in the top 50% of cases. The median step-up at acquisition has sustained its upward momentum over the past two years, pushing to 1.9x for the year. The increase in this metric despite the consistent growth of valuations across all VC stages inspires confidence in the health of the overall VC ecosystem. On the flip side, the median IPO step-up is trending lower toward the 1.0x breakeven mark, with Q4 2019 touching that level. Any further struggles in the IPO market could drop the median below 1.0x, indicating over 50% of IPOs are completed at a lower price than companies' last private-market valuation. If faced with significant loses, investors may pull back support, which may prove detrimental to the VC market going forward, especially at the late stage.

## Percentile distribution of VC acquisition valuations ($M)




**Source:** PitchBook | **Geography:** US

## Median VC step-up multiples by exit type




**Source:** PitchBook | **Geography:** US

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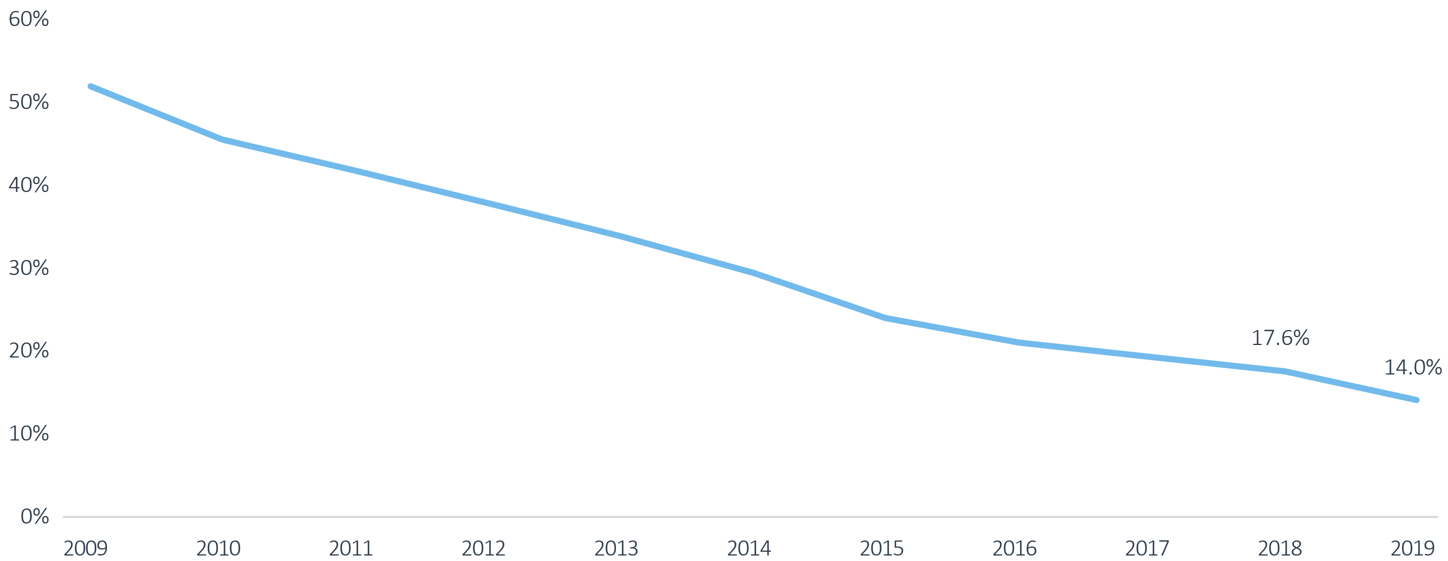
# Deal terms

## Proportion of VC deals with liquidation participation rights

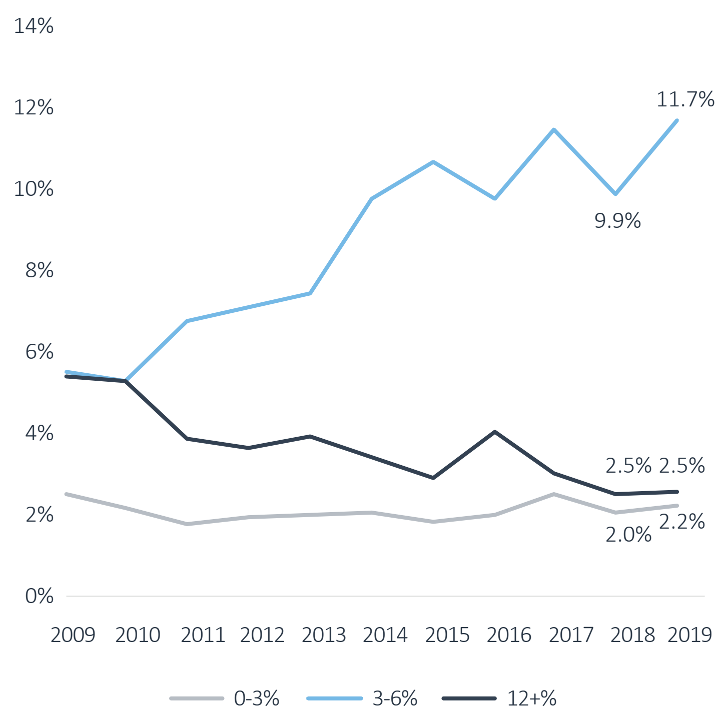



**Source:** PitchBook | **Geography:** US

Deal size and percentage acquired are key to the valuation discussion, but deal terms help cement these valuations by protecting investors from certain risks. Given that terms have the most importance in the case of a negative outcome, there has been a sustained decline in many of the most stringent protections because of the long-running bull market. Between this rampant optimism and the increasing bargaining power of entrepreneurs, the percentage of deal terms including liquidation participation rights has declined to a decade low of 14.0%. The abundance of capital in venture over the last few years has enabled high-performing startups to more easily seek out term sheets from multiple investors. This excess demand gives companies the opportunity to optimize terms and valuations to their goals, which tend to be the deals that have more relaxed terms.

Dividend terms have also tilted in favor of companies, with trends continuing around fewer cumulative dividend provisions and a greater proportion of lower dividend rates. Deals with 3.0% to 6.0% dividends (lower than the market standard of 8.0%) moved to a decade high of 11.7% of all deals. The optimism emphasized by our deal terms data, compounded with investors' willingness to commit to larger deal sizes at higher valuations, has led to at least a few mispricings of VC-backed businesses. While a few of those high-profile examples have seen recent struggles in the exit market, we don't expect any significant change in the founder-favorable deal terms until a much broader downtick in VC deal or exit activity occurs.

## Dividend terms for VC deals by dividend rate bucket




**Source:** PitchBook | **Geography:** US