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Key takeaways

Early-stage VC valuations saw a sharp increase across all quartiles in Q3. Valuations have been buoyed by elevated early-stage deal sizes and a prevalence of capital availability as late-stage and growth investors move earlier up the venture lifecycle. Also, the median RVVC currently sits at 115% in YTD 2021, indicating that valuations more than double between rounds on an annualized basis, and early-stage VC is the strongest segment of the venture lifecycle when it comes to valuation growth.

Late-stage VC valuations showed a slight QoQ contraction in Q3, yet valuations remain robust when compared with just a few years ago. The prevalence of mega-deals throughout 2021 has uplifted valuations to new levels, as these outsized deals tend to be accompanied by sky-high valuations, particularly as public comparables continue their recent tear to frothy heights. Rolling four-quarter step-up multiples at the late stage have reached dizzying elevations, with the median hitting 2.0x for the first time, indicating that half of all late-stage financings in the last four quarters raised new capital at more than double their previous valuations.

The seed stage is set to be fundamentally altered, with Andreessen Horowitz and Greylock Partners allocating \$400 million and \$500 million, respectively. We have witnessed large multistage funds pushing up the venture timeline in recent years; this shift is seemingly coming to a head with these focused allocations. Alongside this change, we have already seen 240 micro-funds (less than \$50 million) close this year, setting 2021 on pace for a record number of these funds, which typically target the earliest investments in venture. Altogether, we see a continued increase in competition and activity at seed over the coming years.

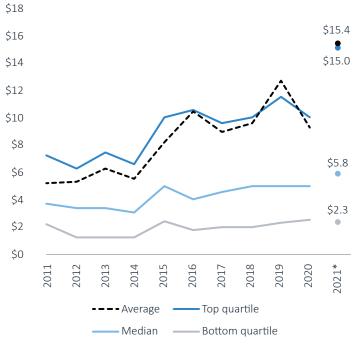
Exit demand has pushed step-ups to new heights for both acquisitions and public listings, despite rising valuations. Public listing step-ups advanced to 1.8x in Q3 while the median valuation step-up for acquisitions rocketed to a remarkable 2.8x. This is the highest value we have recorded in our dataset, and it speaks to the top-to-bottom strength of the current market for VC exits. Elevated step-ups at exit are one of the most positive indicators of the VC market's strength, as we have not seen a negative impact on exit step-ups despite record-high valuations across the lifecycle.



Angel and seed

Spread in angel valuations widens in 2021

Range of angel VC pre-money valuations (\$M)



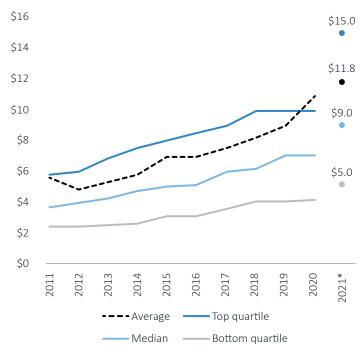
Source: PitchBook | Geography: US *As of September 30, 2021

With the Q3 additions to the seed investor pool of Andreessen Horowitz's \$400 million seed fund and Greylock Partners' \$500 million allocation, the seed stage has completed its dissection from the angel market, at least metaphorically. Seed continues to grow, not only by deal count but by the type of active investors within the market. Along with the interest of large multistage investors, small investment vehicles also continue to proliferate and create more opportunities for young companies and founders to access venture capital (VC). 240 micro-funds have closed in the US through Q3, setting pace to easily break the previous record for these small funds and hinting that the earliest venture stages will continue to expand in the coming years.

Seed valuations have seen a significant boost in 2021, reaching a median of \$9.0 million through Q3. With the high activity of larger investors, the top quartile valuation has pushed to \$15.0 million, creating a spread of \$10.0 million between the top and bottom quartiles for the first time in our dataset. The angel market is seeing a similar dichotomy, though the median YoY growth is more muted. Also at \$15 million, the top quartile valuation for angel investments is 50% higher than in 2020, showcasing that high-net-worth individuals continue to retain, and even increase, their appetite for risk in the current environment.

Top quartile seed valuation jumps 50% YoY

Range of seed VC pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of September 30, 2021

Little change in angel investor stakes Range of percentage acquired in angel investments

35% 30% 25% 21.0% 20% 14.9% 14.3% 15% 10% 5.4% 5% 0% 2012 2018 2011 2021* 201

---- Average

- Median

Source: PitchBook | Geography: US *As of September 30, 2021

Top quartile

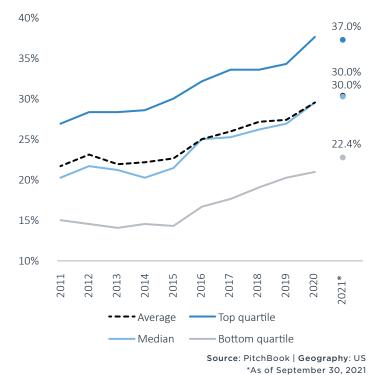
- Bottom quartile



Angel and seed

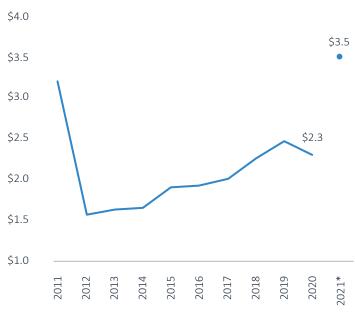
Seed stakes remain steady

Range of percentage acquired at seed



Young companies growing faster

Median VVC (\$M) at seed



Source: PitchBook | Geography: US *As of September 30, 2021

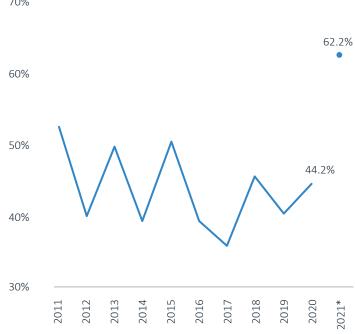
The frenzied environment of the later stages is also present within the seed stage, where companies are adding value at a pace not previously seen. Velocity of value creation (VVC—the annual increase in valuation between rounds, measured in dollars) and relative velocity of value creation (RVVC—the annualized percent increase in valuation between rounds) for seed deals have moved higher to \$3.5 million and 62%, respectively—each the highest in our dataset for years with sufficient data points. The increase in these figures points not only to an increase in valuations but to the speed with which these valuation jumps are being realized. Valuation step-ups have remained in line with past years for seed, coming in at 2.3x through Q3, meaning high valuations of past rounds are being met with comparably higher seed valuations.

The current seed market is an interesting microcosm of the current venture environment. Firms that have traditionally targeted the seed stage are being met with competition not only from an increase in seed-focused funds but also from larger investors pushing earlier in the venture lifecycle. Nontraditional investors participated in 20 seed deals of \$10 million or more during Q3 alone. This competition has put upward pressure on deal sizes and valuations, something we believe will continue for the foreseeable future.

Seed RVVC hits highest in our dataset

Median RVVC at seed

70%







Early-stage VC

Median early-stage valuation cracks \$50 million mark for the first time Range of early-stage VC pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of September 30, 2021

Early-stage VC pre-money valuations have seen explosive growth over the last year, rising to new heights in Q3. The median and average pre-money valuations for early-stage financing rounds in Q3 notched new quarterly records of \$53.0 million and \$138.2 million, respectively, bringing the YTD median and average to \$45.0 million and \$110.0 million. This represents notable increases over full-year 2020's

numbers, which were already at all-time highs despite pandemic-related disruptions and broader market uncertainty.

Q3 was the first quarter in which the median earlystage valuation cracked the \$50 million mark. Just three years prior, the median hovered around the \$20 to \$25 million mark. This doubling in such a short period is a

Deal sizes remain elevated throughout Q3

Range of early-stage VC deal sizes (\$M)

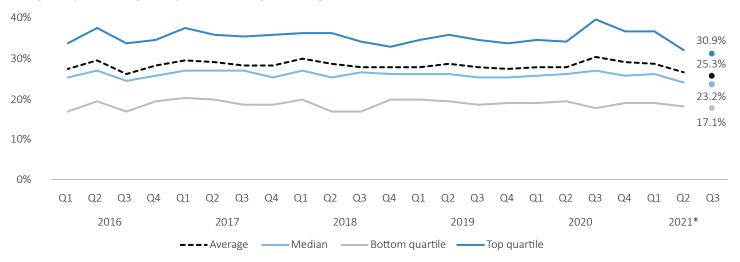




Early-stage VC

Equity stake quartiles continue to drop as startups command valuations

Range of percentage acquired at early VC stage



Source: PitchBook | Geography: US *As of September 30, 2021

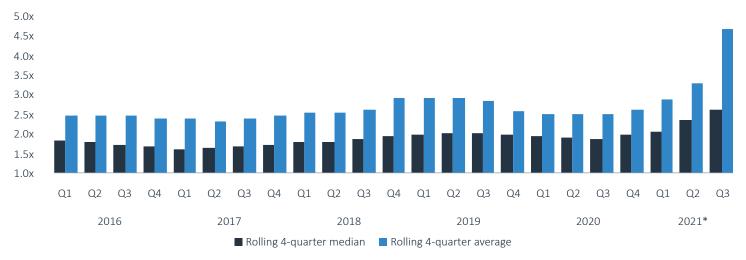
testament to the changing landscape of early-stage venture, specifically, Series A and B financings. The frenzied dealmaking pace in the last several quarters of 2021 is a byproduct of the underlying identity shift of early-stage VC, as late-stage and growth investors move earlier up the venture lifecycle. As such, the

prevalence of capital from many of these investors has resulted in increased competition for high-quality earlystage deals, further driving up valuations.

Notably, financial technology (fintech) continued to attract strong investment throughout Q3. As we have

Massive upticks in both median and average step-up multiples

Rolling 4-quarter median and average early-stage VC step-ups





Early-stage VC

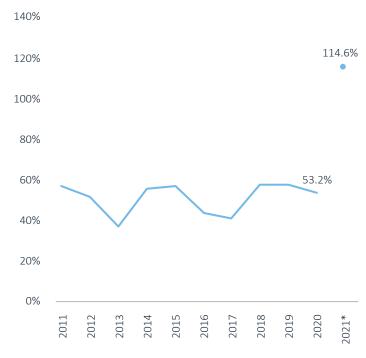
VVC more than doubles prior year's record Median early-stage VVC (\$M) between VC rounds



Source: PitchBook | Geography: US *As of September 30, 2021

RVVC hits new record through Q3

Median early-stage RVVC between VC rounds



Source: PitchBook | Geography: US *As of September 30, 2021

previously highlighted in our quarterly fintech emerging tech research, VC deal activity has exploded in 2021 as the transformation of financial services edges toward increased digitization. Indeed, three of the top five most highly valued early-stage financings that occurred in Q3 sit within the fintech vertical. Fintech startups' aspirational promises to disrupt various elements of the financial services sector have been equally met with investors' elevated excitement.

VVC at the early stage has more than doubled last year's record to reach a median of \$39.4 million in YTD 2021. RVVC has hit a new record through Q3 with a median of 114.6%, indicating that valuations more than double between rounds on an annualized basis. To note, the median RVVC at the early stage is the strongest when compared with the other segments of the venture lifecycle, signifying that early-stage VC exhibits the greatest valuation growth on a time-adjusted basis.

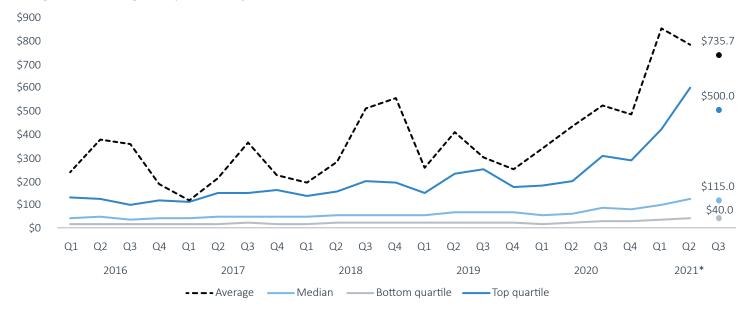


ALLVUE ///

Late-stage VC

Both median and average valuations contract QoQ

Range of late-stage VC pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of September 30, 2021

Late-stage VC pre-money valuations showed a slight QoQ contraction in Q3, although they are still quite robust when compared with just a few years ago. The median and average pre-money valuations for late-stage financing rounds in Q3 decreased slightly to \$115.0 million and \$735.7 million, respectively, bringing the YTD median and average to \$115.0 million and \$790.9 million. On a yearly basis, despite the slight downturn in Q3's latestage valuations, 2021's numbers have expanded over 2020's valuations, which had already hit record highs.

Mega-deal activity (deals at or exceeding \$100 million) at the late stage was particularly rampant in Q3. As we presented in our Q3 2021 PitchBook-NVCA Venture Monitor report, 493 late-stage mega-deals closed in YTD 2021, with 163 of these in Q3 alone—this is the second-highest number recorded in our dataset after Q2 2021's 169 mega-deals. Series C financings and beyond have attracted elevated levels of capital investment that are typically reserved for growth equity transactions. These outsized deals tend to be accompanied by sky-high valuations, particularly as public comparables continue their recent tear to frothy heights.

Aggregate rolling four-quarter step-up multiples for latestage VC have continued to see sharp growth sustained across all quarters in 2021. In Q3, the median and average rolling four-quarter step-ups notched new records of 2.0x and 2.6x, respectively. This is the first time that the median has reached 2.0x, indicating that half of all late-stage financings in the last four quarters raised new capital at more than double their previous valuations. Companies have also been opportunistic in their timing to raise new late-stage rounds, given the tailwinds seen in the last two years. Indeed, the median time between rounds for late-stage financings in YTD 2021 has dropped to 1.52 years, the lowest seen since 2015.

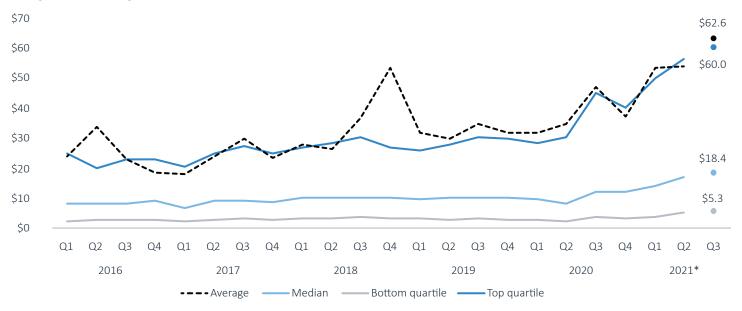
Software companies continue to attract some of the highest valuations at the late stage. Eight of the top 10 most highly valued late-stage financings that occurred in Q3 involved software companies. Databricks, a unified data analytics platform, snagged the top position with a \$1.6 billion Series H raised at a \$36.4 billion pre-money valuation. Other notable valuations include Chime, a mobile banking services company, which raised a \$1.1



Late-stage VC

Outsized late-stage financings push average deal size into top quartile

Range of late-stage VC deal sizes (\$M)



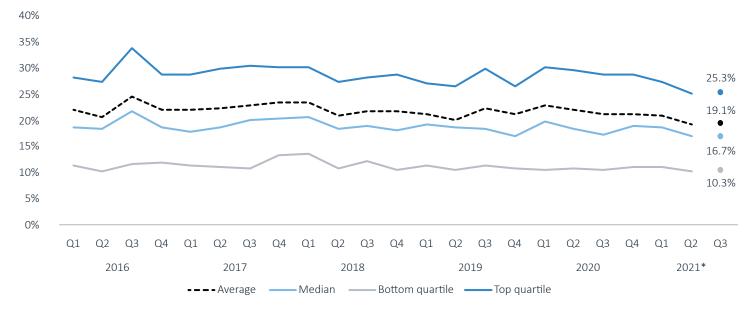
Source: PitchBook | Geography: US *As of September 30, 2021

billion Series G at a \$23.9 billion pre-money valuation, and Discord, a gaming-centric instant messaging company that nearly sold to Microsoft earlier in the year, which raised a \$500.0 million Series I at a \$14.5 billion pre-money valuation. Given how well software companies

have been received on the exits front, with many upsizing their IPOs and raising significant amounts of capital at eye-popping valuations, it is unsurprising to see so many software companies attract this level of crossover capital from investors.

Notable drop in equity stakes seen across all quartiles

Range of percentage acquired at late VC stage



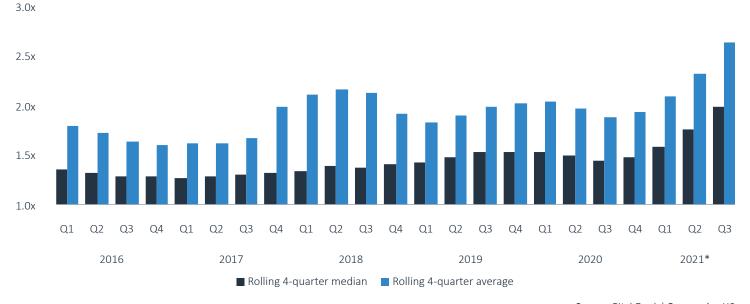




Late-stage VC

Sharp growth in step-up multiples sustained throughout 2021

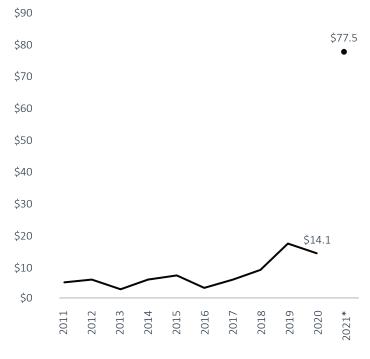
Rolling 4-quarter median and average late-stage VC step-ups



Source: PitchBook | Geography: US *As of September 30, 2021

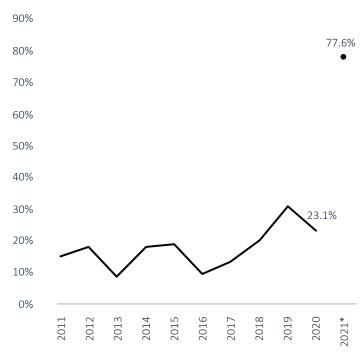
VVC in 2021 more than quintuples 2020's value

Median late-stage VVC (\$M) between VC rounds



Source: PitchBook | Geography: US *As of September 30, 2021

RVVC sees explosive increase in 2021 Median late-stage RVVC between VC rounds







Biotech & pharma

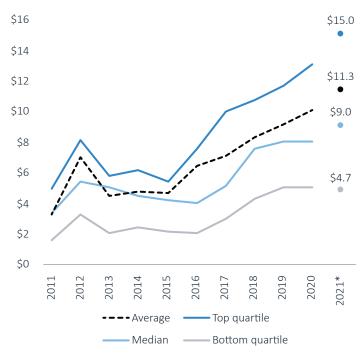
Mature biotech startup valuations show modest growth compared to industry average Range of biotech & pharma late-stage VC pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of September 30, 2021

Median biotech & pharma seed valuation more than doubles over 10 years

Range of biotech & pharma seed pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of September 30, 2021

Top quartile early-stage biotech valuation tops \$100 million for first time

Range of biotech & pharma early-stage VC pre-money valuations (\$M)

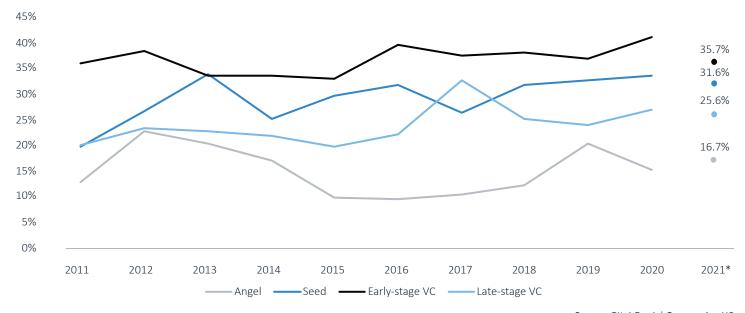




Biotech & pharma

Early-stage percentage acquired falls from 2020 highs

Biotech & pharma median percentage acquired by VC stage

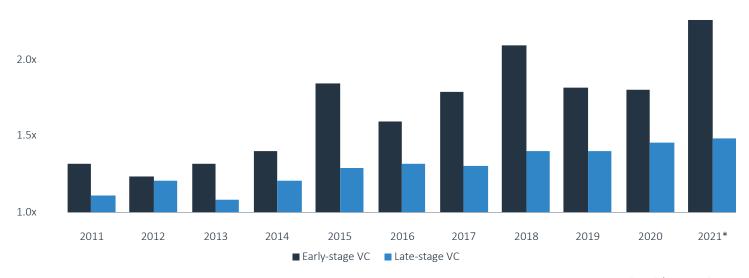


Source: PitchBook | Geography: US *As of September 30, 2021

Early-stage pharma valuation growth speeds up

Biotech & pharma median step-up by VC stage

2.5x

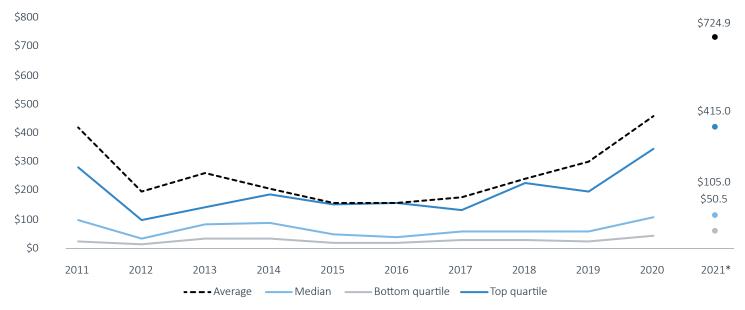




Climate tech

Dispersion from top to bottom quartile valuations widens further

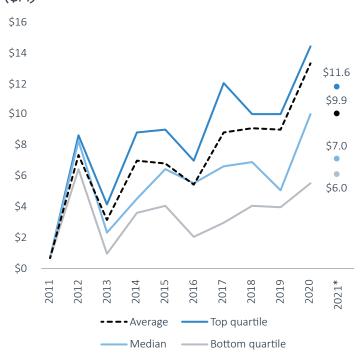
Range of climate tech late-stage VC pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of September 30, 2021

Climate tech seed valuations temper growth in 2021

Range of climate tech seed pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of September 30, 2021

Series A & B climate tech deals see strong demand and valuation growth in 2021

Range of climate tech early-stage VC pre-money valuations (\$M)

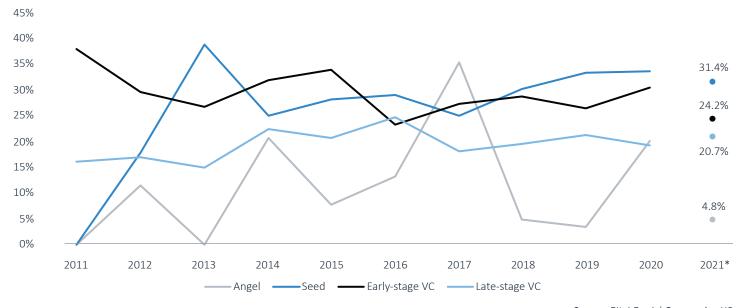




Climate tech

Dilution by stage remains flat YoY

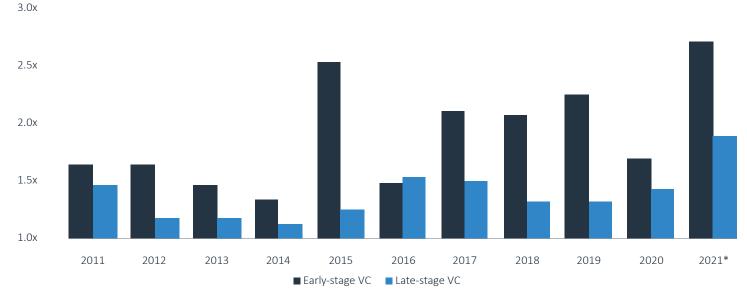
Climate tech median percentage acquired by VC stage



Source: PitchBook | Geography: US *As of September 30, 2021

Late-stage valuation growth accelerates in 2021

Climate tech median step-up by VC stage

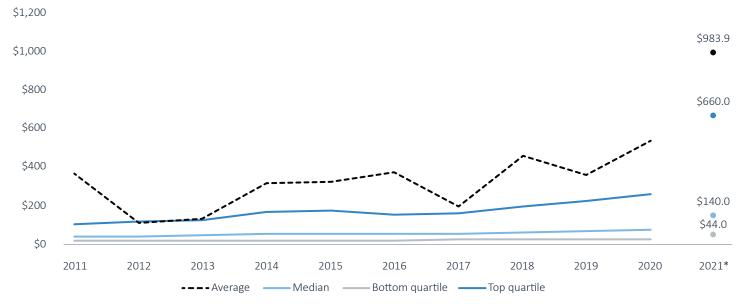




Enterprise tech

Mature enterprise startups securing outsized and growing valuations

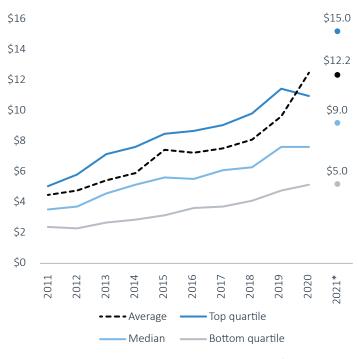
Range of enterprise tech late-stage VC pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of September 30, 2021

Seed enterprise tech valuations show moderate growth

Range of enterprise tech seed pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of September 30, 2021

Dichotomy between top to bottom quartiles grows for enterprise startups

Range of enterprise tech early-stage VC pre-money valuations (\$M)

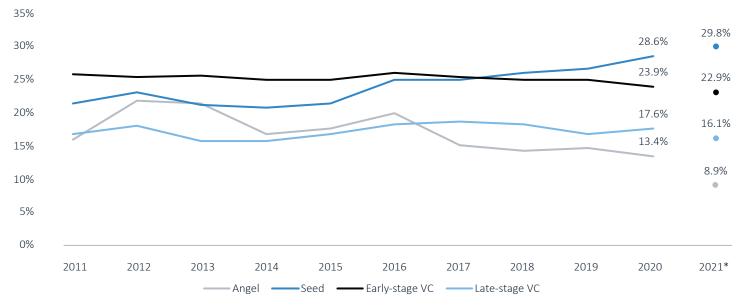




Enterprise tech

Median equity stakes remain flat outside of angel deals

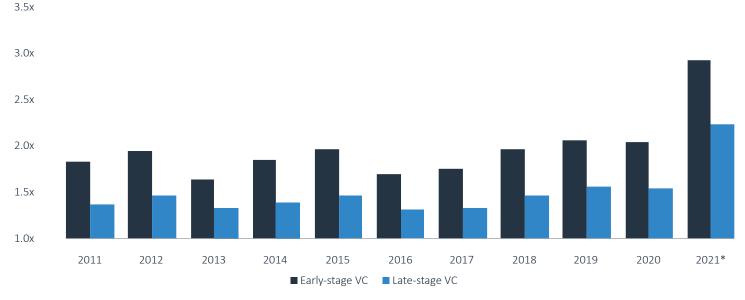
Enterprise tech median percentage acquired by VC stage



Source: PitchBook | Geography: US *As of September 30, 2021

Valuation step-ups see spike across maturities in 2021

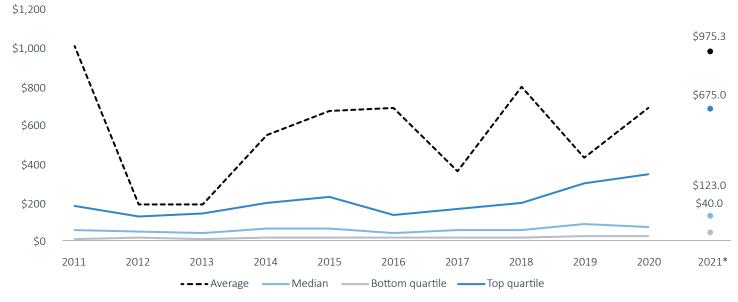
Enterprise tech median step-up by VC stage





Consumer tech

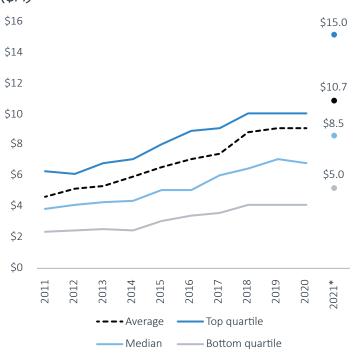
Recovering consumer demand pushes up late-stage valuations, especially for mature businesses Range of enterprise tech late-stage VC pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of September 30, 2021

Seed valuations continue steady march

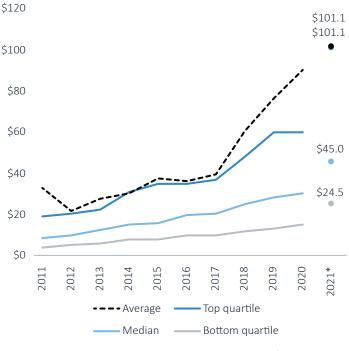
Range of consumer tech seed pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of September 30, 2021

Early-stage valuation growth gains momentum after flat 2020

Range of consumer tech early-stage VC pre-money valuations (\$M)

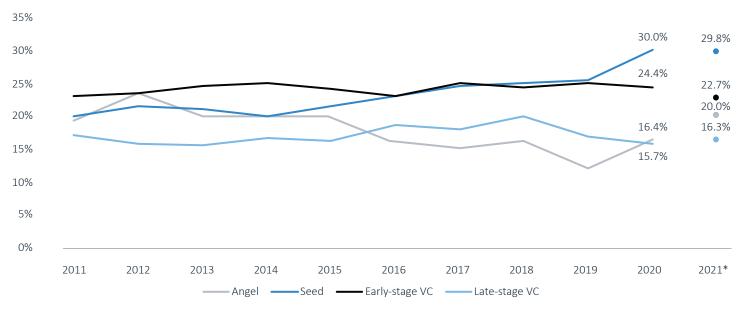




Consumer tech

Investors seeing relatively constant risk in consumer space

Consumer tech median percentage acquired by VC stage

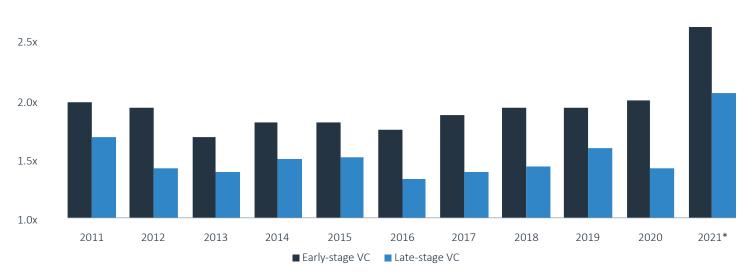


Source: PitchBook | Geography: US *As of September 30, 2021

Late-stage step-ups top 2.0x for first time in 10 years

Consumer tech median step-up by VC stage

3.0x



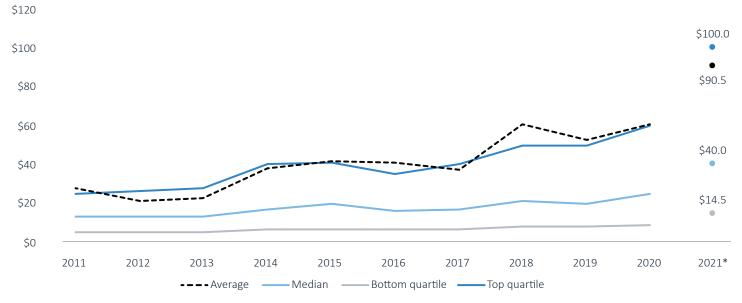




Nontraditional investors

Top quartile nontraditional investor late-stage deals reach mega-deal status

Range of late-stage VC deal sizes (\$M) with nontraditional investor participation



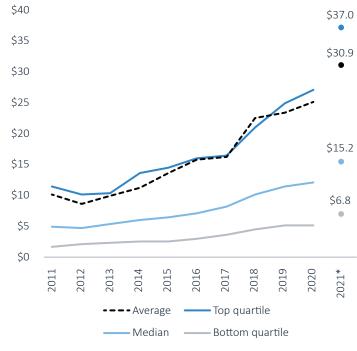
Source: PitchBook | Geography: US *As of September 30, 2021

Hedge funds, mutual funds, private equity (PE) firms, and corporate venture capital firms (CVCs) have been on a VC spending spree in 2021 unlike any before. These firms and other nontraditional investors have participated in \$184.7 billion worth of venture deals through Q3, already nearly \$60 billion higher than last year. Record amounts of dry powder are sitting in venture funds, but nontraditional investors continue to press the market in terms of pricing by bringing enormous sums of capital into the smaller market and demonstrating less price sensitivity than classic seed-stage firms. Through Q3, the median latestage valuation of a deal with nontraditional institutions participating reached \$200.0 million, more than 4.1x the valuation of late-stage deals without their involvement.

The growth of venture at the top end of the market has increased the opportunity set for these investors to participate. As companies look to raise larger amounts of capital at higher valuations, sovereign wealth funds (SWFs), for example, have increased their market participation and are pacing for a record number of direct investments in 2021. The median investment valuation for these institutions has reached \$640.0

Nontraditional investors making presence known at top of early stage

Range of early-stage VC deal sizes (\$M) with nontraditional investor participation



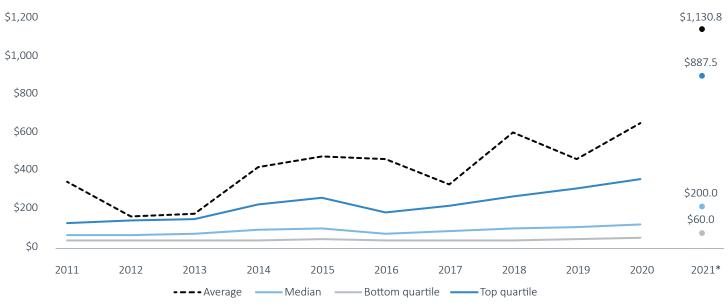




Nontraditional investors

Average late-stage valuation now a unicorn

Range of late-stage VC pre-money valuations (\$M) with nontraditional investor participation



Source: PitchBook | Geography: US *As of September 30, 2021

million, more than 3x the previous high, while the median deal size has reached \$100.0 million. Other investors have seen their median investment valuations surge as well: PE firms (\$168.0 million), asset managers (\$230.0 million), and CVCs (\$80 million) have all seen their deals' median valuations at least double YoY.

Compared with other nontraditional institutions, CVCs tend to employ a much different VC investment strategy, gaining nonfinancial benefits such as returns on synergies and partnerships with startups, as well as knowledge of emerging technologies. In the past, this has led their investments to skew more toward the early stage. Recently, however, their strategy has begun to shift as the proportion of CVC deals made with late-stage companies has grown to 45% through Q3, up from 34% in 2017. Though this may be due more to market dynamics than a wholesale strategy change, the higher prices associated with the late-stage are new territory for many CVCs, which largely invest out of smaller funds, unlike investors heavily involved with late-stage VC.

Valuations of deals with nontraditional investor participation continue to soar

Range of early-stage VC pre-money valuations (\$M) with nontraditional investor participation

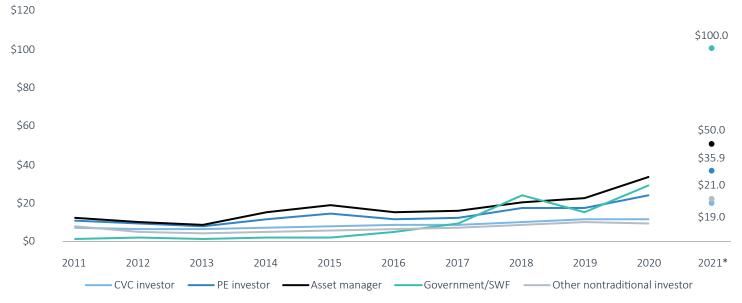




Nontraditional investors

Investment sizes increasing for all nontraditional investors

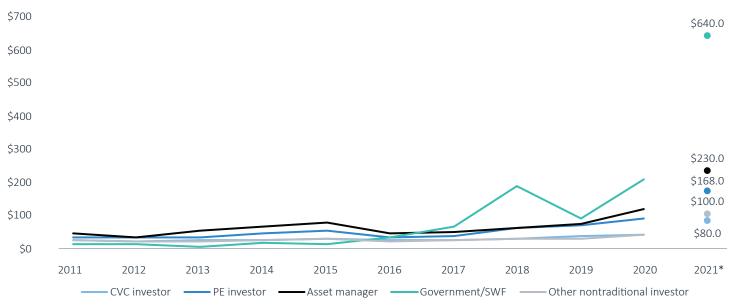
Median VC deal sizes (\$M) by nontraditional investor type



Source: PitchBook | Geography: US *As of September 30, 2021

SWF valuation participation hits \$600 million median

Median VC pre-money valuations (\$M) by nontraditional investor type





Liquidity

Public listings met with robust demand

Range of VC-backed public listing exit valuations (\$M)



Source: PitchBook | Geography: US *As of September 30, 2021

The biggest story of 2021 within VC has undoubtedly been the record exit environment. Demand from public market investors and strategic acquirers remained at the dizzying heights seen near the end of 2020; this competition has allowed valuations to stay at or near record levels. The median valuation for VC exits in Q3 2021 was \$950.0 million for public listings and \$150.0 million for acquisitions, both of which represent QoQ increases and new records in our dataset. Additionally, strategic acquisitions have trended earlier in the company lifecycle-2021 shows that most of these exits come after a seed or Series A round, driving valuations that are relatively lower when compared with public listings, which typically skew toward more-established businesses. The search for innovation and growing assets has been a consistent theme of the financial markets over the last 10 years, and this trend has only ramped up in 2021.

Public listings were the driving force behind the exit value explosion in 2021 as companies found receptive valuations and willing buyers, which has engendered even more IPOs. Step-ups for these IPOs have also moved in a positive direction, advancing to 1.8x in Q3 and edging back toward the recent high of 1.9x in Q1 2021. While these statistics are attractive, the step-ups for acquisitions

Acquisitions see strength across spectrum Range of VC-backed M&A exit valuations (\$M)





Liquidity

Acquisition step-ups reach new highs

VC valuation median step-ups at exit by exit type



Source: PitchBook | Geography: US *As of September 30, 2021

almost overshadow this success with the incredible 2.8x median valuation step-up in Q3. This is the highest value recorded in our dataset, and these elevated step-ups at exit are one of the most positive indicators of the strength of the current exit market, as valuations for private companies also hit record highs across the lifecycle without negatively impacting step-ups.

Step-ups for public listings remain elevated Rolling 4-quarter median step-ups at exit by exit type



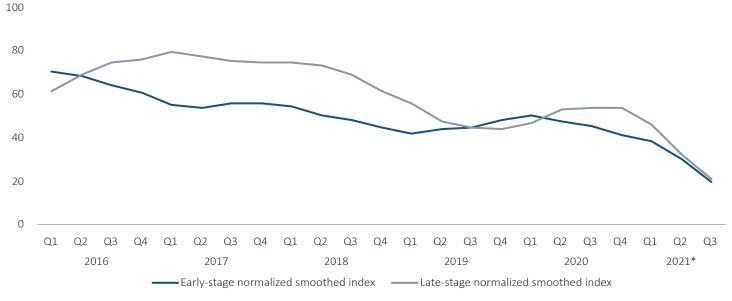




Deal terms

VC environment continues to get more founder-friendly

VC dealmaking indicator

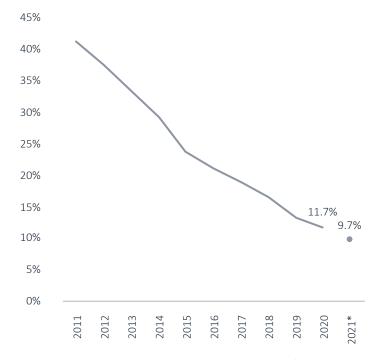


Source: PitchBook | Geography: US *As of September 30, 2021

The rapid dealmaking environment continued to push deal terms in a more founder-friendly direction for the fourth consecutive quarter, according to our VC dealmaking indicator, which blends multiple factors such as board seats, liquidation participation, and more. As of Q3 2021, the value for this statistic has dropped to 19.5 for the early stage and 20.5 for the late stage—a lower value indicates a market that is more company friendly. This is a relatively steep drop from around 30 for both just last quarter. Increasing investor competition around deals, especially at the late stage, is a key driver of these trends regarding the broader decline of protectionist terms, as well as the convergence of the early-stage and late-stage indicator figures.

Decline in participation rights continues unabated

Deals with liquidation participation as a share of all VC deals



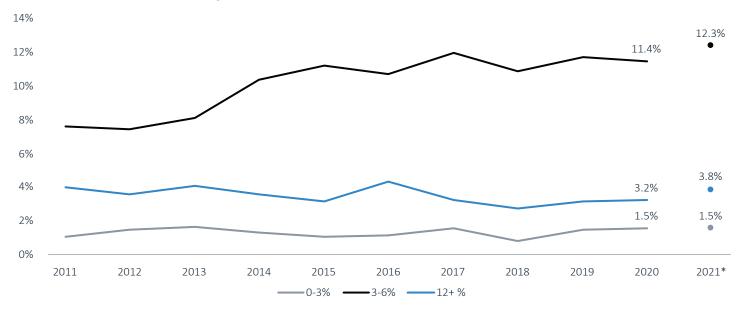




Deal terms

Slightly lower dividends

VC dividend buckets (excluding 6% to 9%)

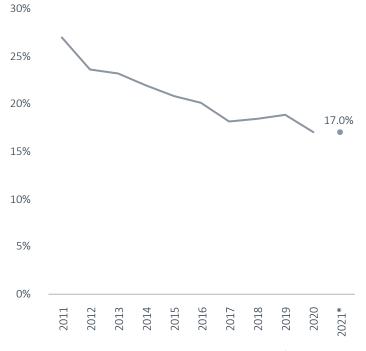


Source: PitchBook | Geography: US *As of September 30, 2021

The growth in available capital, especially from nontraditional investors, has put pressure on the terms that investors can impose on deals. In the current economic environment of cheap rates, capital has persistently declined as a value-add from VC investors, which need to adapt to this current reality by providing other benefits, such as nonfinancial support, to startups, or as we can see from our data, offering favorable terms and valuations to secure an allocation in a coveted deal. These long-term dynamics do not show any signs of shifting with record capital investment and deal volume that has been paired with record valuation step-ups at exit. Until we see broader shifts in the macroeconomic climate, it seems that the power around deal terms will remain with the startups.

Cumulative dividends terms plateau in 2021 deals

Deals with cumulative dividends as a share of all VC deals



Additional research

Venture capital



Q3 2021 PitchBook-NVCA Venture Monitor

Download the report here



Q3 2021 Quantitative Perspectives: US Market Insights

Download the report here



Analyst Note: VC Returns by Series: Part III

Download the report here



Analyst Note: VC Varies by Ecosystem

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Analyst Note: US VC Manager Style Drift

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Analyst Note: High Valuations, Higher Returns

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