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Key takeaways

The early stage continues to resemble the late stage of years past. In 2021, the median early-stage valuation jumped 50% YoY to \$45.0 million. This value represents a higher median than the late stage just a few years ago and illustrates the tsunami of capital that has flowed into the venture strategy.

Nontraditional investors continue to push top-line trends in VC. Notably, deals with nontraditional investor participation reached a median valuation of \$200.0 million at the late stage, representing a 2x growth over 2020. In 2021 more than ever, increased nontraditional investor participation added more capital to the market on top of existing record levels of dry powder and

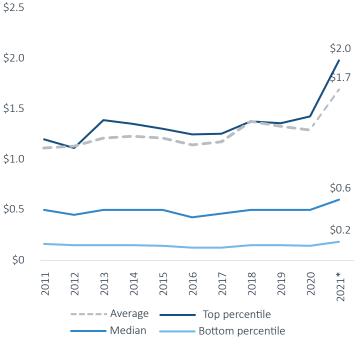
increased competition of deals that put upward pressure on both deal sizes and valuations.

The best IPO year since 2000 brought outsized valuation step-ups. Elevated public market valuations were a critical factor in driving this exodus, as public market investors sustained an elevated level of demand for growth assets. This demand is clear when looking at the valuation step-up at exit for public listings, which sits at a recent high of 1.6x in Q4 2021—the highest value we have recorded since 2012. However, aftermarket performance has surfaced as a concern, potentially affecting this market going forward.



Angel and seed

Angel deal sizes grew across all quartiles Range of angel deal sizes (\$M)



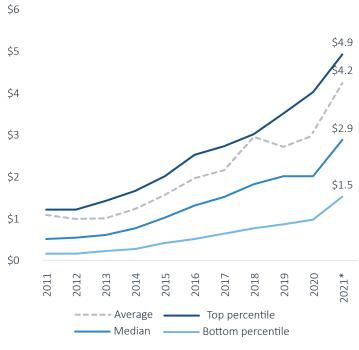
Source: PitchBook | Geography: US *As of December 31, 2021

2021 saw a record number of angel and seed financings completed, also coinciding with unprecedented investment deal sizes and valuations, as an enormous amount of dry powder flowed increasingly to these more-nascent startups. In the past, angel and seed deals took on a more structured style than other stages, with fewer size and valuation outputs, due to low revenues generated by still-new companies. As larger investors have plowed into seed, and companies have begun to grow faster at such an early stage, this structure has started to break down. The median seed size grew by nearly 50%, while the median seed valuation increased 34.3%. Furthermore, the quartile spread of seed valuations has grown to \$10.0 million in 2021, the largest spread in the dataset by far. Five years ago, the spread was just \$5.5 million, with each quartile sitting at least 40% lower than 2021's value.

Alongside this growth of angel and seed deal sizes, the percentage acquired for both groups either fell or stayed relatively flat. At the seed stage, this is a distinct change from the increased stakes that investors have trended toward in recent years. The increase in competition and capital focused on seed is finally putting downward pressure on stakes acquired and keeping deal terms extremely founder friendly.

As larger investors enter seed, deal sizes grow accordingly

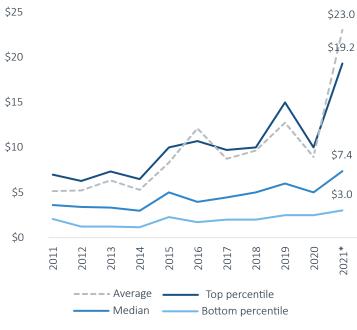
Range of seed deal sizes (\$M)



Source: PitchBook | Geography: US *As of December 31, 2021

Angels paying high prices for deals

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

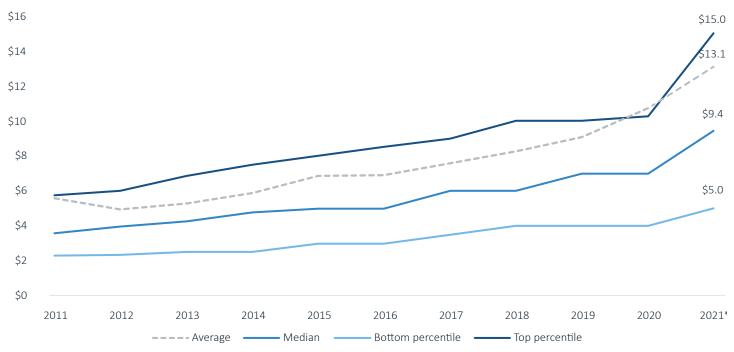




Angel and seed

Seed valuations realize large increase in 2021

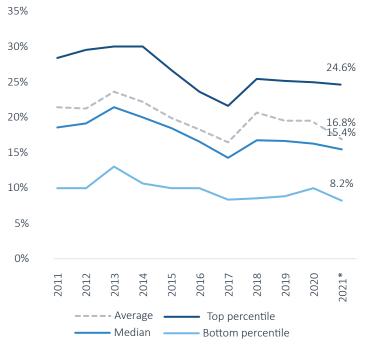
Range of seed pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of December 31, 2021

Angel stakes drop slightly

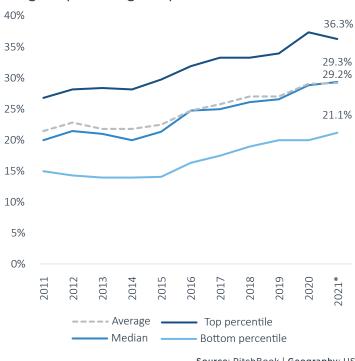
Range of percentage acquired in angel investments



Source: PitchBook | Geography: US *As of December 31, 2021

Seed stakes remain steady

Range of percentage acquired in seed investments

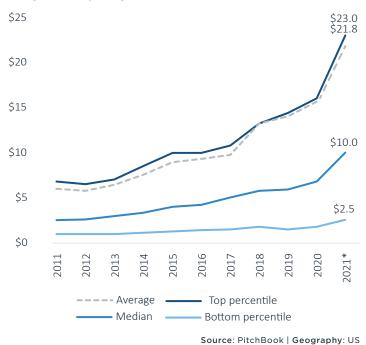




Early-stage VC

Early-stage deal sizes resemble late-stage sizes of old

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



The median early-stage pre-money valuation reached \$45.0 million in 2021, a YoY growth of 50%. Though already high, that figure is even more astounding because the median late-stage pre-money valuation did not reach that level until 2018, when the stage notched

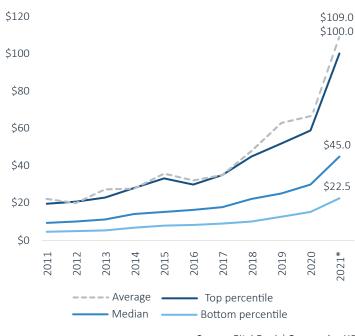
a median valuation of \$50.0 million.

*As of December 31, 2021

The early stage, which we generally define as Series A and Series B, has worked through a massive transition over the past several years. 231 early-stage deals were raised at valuations of \$200 million or higher throughout 2021; only 65 such rounds were raised in 2020, and only 24 hit that market in 2016. Impressively, in addition to the expansion in highly valued early-stage startups, we recorded the highest annual volume of early-stage rounds. Given this expansion in the aggregate of the stage, the anecdote of more money chasing fewer deals is not viable reasoning for the growth in deal sizes and valuations. There is more money in the market, but more companies are benefiting.

Valuations spike to new heights

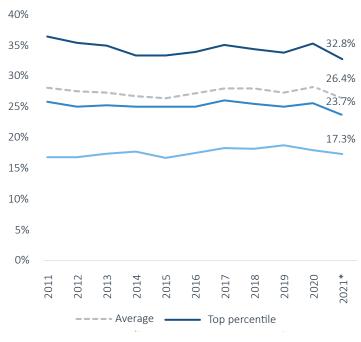
Range of early-stage VC pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of December 31, 2021

Stakes acquired slide YoY

Range of percentage acquired in early VC stage





Early-stage VC

Early-stage valuation step-ups showed a huge increase in 2021. At the median, these values were growing 2.8x from the previous round. On average, the valuation increase hit 4.9x, highlighting the frenzied nature of early-stage dealmaking in 2021. However, nearly 5x valuation growth between rounds seems unsustainable over the long term, especially given that this average has ranged between 2.4x and 3.0x for the past five years.

Average step-up nearly hits 5x

Median and average early-stage VC step-ups



Source: PitchBook | Geography: US *As of December 31, 2021

2021 median VVC nearly triples YoY

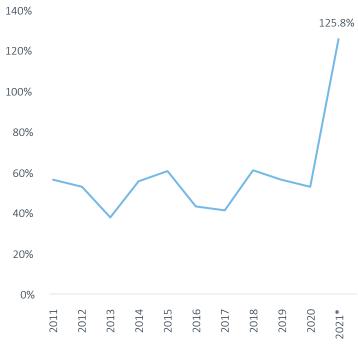
Median VVC between early-stage VC rounds



Source: PitchBook | Geography: US *As of December 31, 2021

Early-stage companies create value at record pace

Median RVVC between early-stage VC rounds

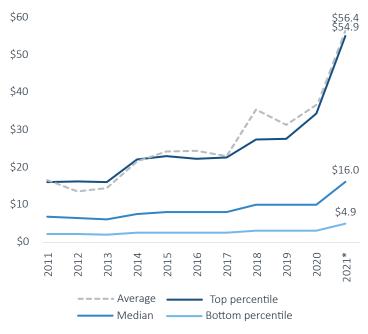




Late-stage VC

Top quartile surpasses average late-stage deal size

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



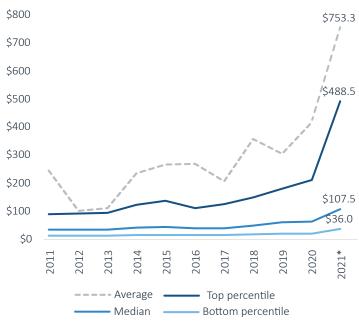
Source: PitchBook | Geography: US
*As of December 31, 2021

Given the maturity of late-stage startups, this group of companies has experienced a large influence from the activity of nontraditional investors. Coupled with the ever-increasing size of traditional venture capital (VC) funds, late-stage deals have seen their median size double in the past five years and their median valuation nearly triple.

After remaining steady for the past few years, valuation step-ups for late-stage deals saw a marked jump in 2021 across all quartiles—even the bottom quartile value increased 28% from 2020. On average, companies increased their valuations between rounds at a clip of 2.9x. Though this figure can easily be influenced by large increases in small valuations, more than half of the top 20 valuation step-ups in 2021 were mega-deals raised at unicorn valuations, highlighting that growth is occurring even in the largest, most highly valued companies.

Average late-stage valuation shoots above \$750 million

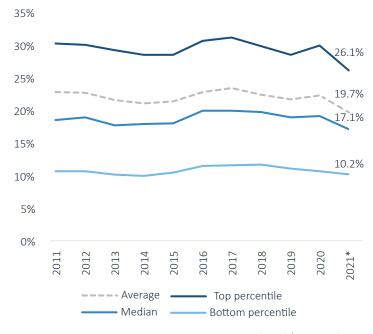
Range of late-stage VC pre-money valuations (\$M)



Source: PitchBook | Geography: US
*As of December 31, 2021

Competition drives lower stakes

Range of percentage acquired in late VC stage





Late-stage VC

In 2021, the median velocity of value creation (VVC)—the annualized valuation growth between rounds—hit \$68.3 million for late-stage startups. This is the first time the figure has crossed \$15 million when inclusive of full-year data. There are likely many reasons for this, but the high-flying public markets are undoubtedly a major factor. With recent public volatility and increases in interest rates forthcoming, we will be watching the impact these factors have on late-stage valuations. While we believe that nontraditional investors will continue to invest, a slow down or reset in public market valuations would have a significant impact on valuations at this stage. However, high amounts of dry powder are likely to continue supplying upward pressure on valuations in the short term.

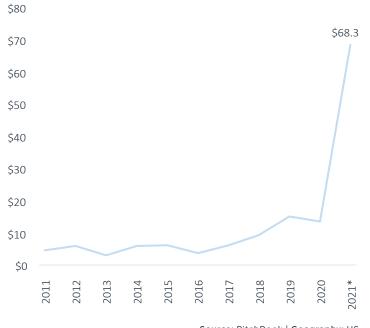
Late-stage step-ups reach highest peak yet Median and average late-stage VC step-ups



Source: PitchBook | Geography: US *As of December 31, 2021

Late-stage VVC up 5x from 2020

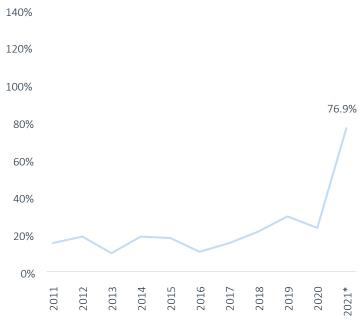
Median VVC between late-stage VC rounds



Source: PitchBook | Geography: US *As of December 31, 2021

Late-stage RVVC triples YoY

Median RVVC between late-stage VC rounds

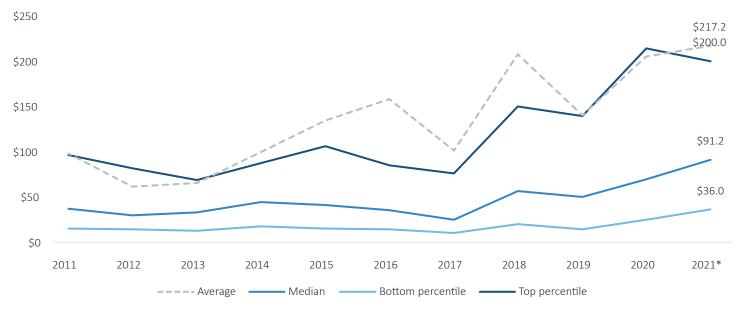




Biotech & pharma

Largest and most-mature biotech startups see flat valuation growth YoY

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



Source: PitchBook | Geography: US
*As of December 31, 2021

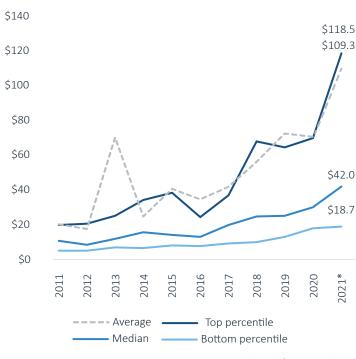
Seed valuations sustain growth trajectory Range of biotech & pharma seed pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of December 31, 2021

Largest early-stage deals see big spike in valuation

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

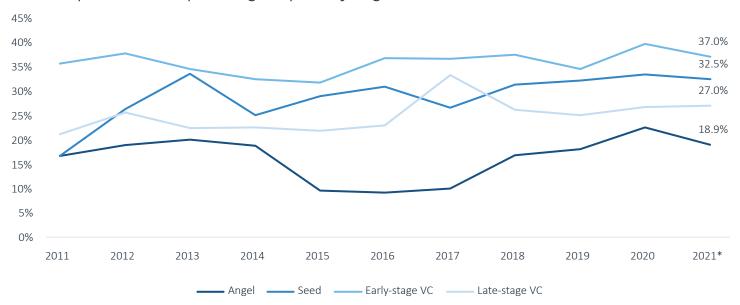




Biotech & pharma

Investors take similar stakes across stages

Biotech & pharma median percentage acquired by stage

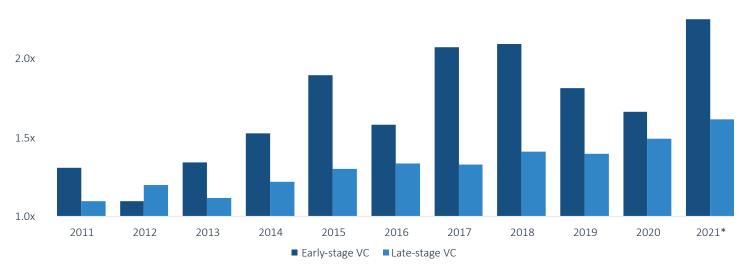


Source: PitchBook | Geography: US *As of December 31, 2021

Early-stage step-up sees significant expansion

Biotech & pharma median step-ups by stage

2.5x

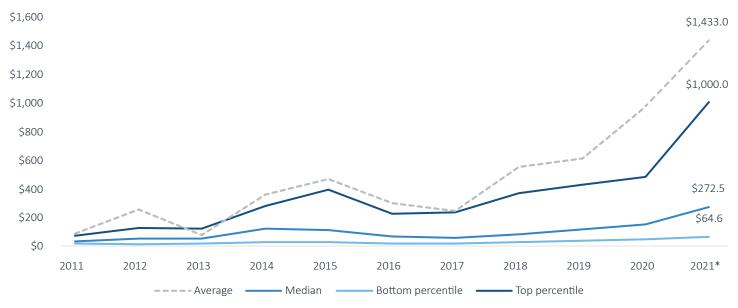




Fintech

Top quartile late-stage valuation tops \$1 billion for first time

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



Source: PitchBook | Geography: US *As of December 31, 2021

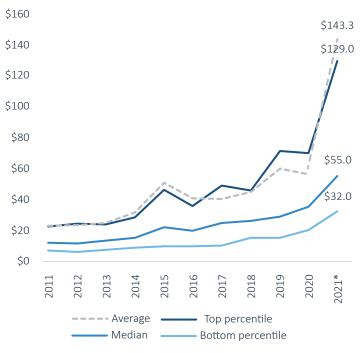
Average seed valuation nearly doubles YoY Range of fintech seed pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of December 31, 2021

Early-stage fintech sees explosion of valuations across entire spectrum

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

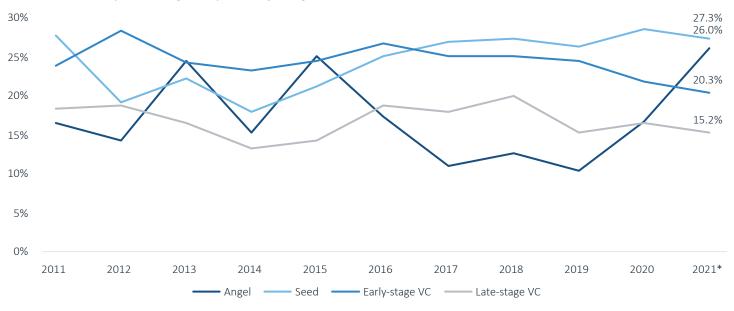




Fintech

Early-stage equity stakes drop to lowest median percentage on record

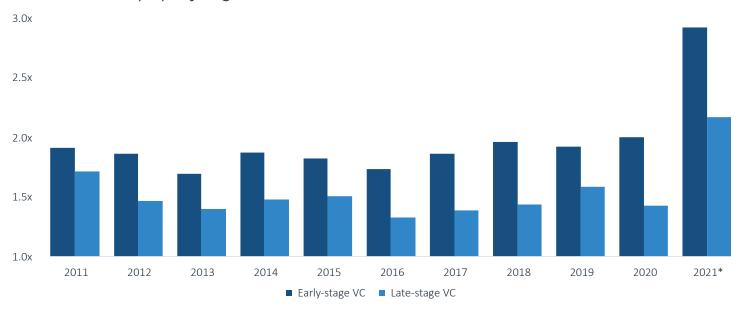
Fintech median percentage acquired by stage



Source: PitchBook | Geography: US *As of December 31, 2021

Median early-stage step-up tops 3.0x

Fintech median step-ups by stage

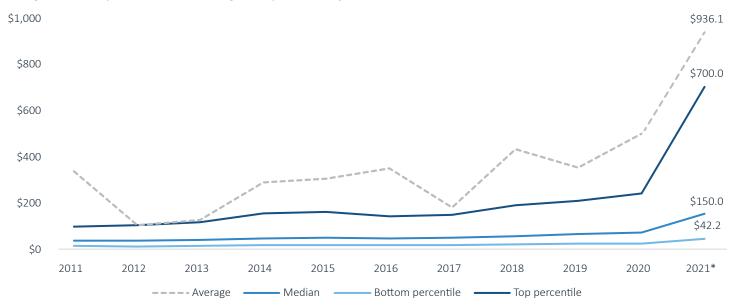




Enterprise tech

Median late-stage valuation doubles YoY

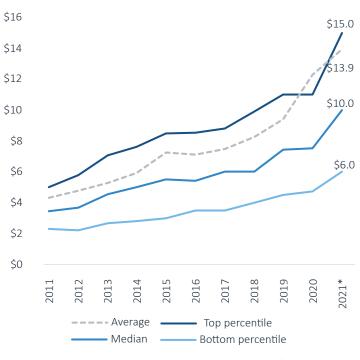
Range of enterprise tech late-stage VC pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of December 31, 2021

Seed valuation growth accelerates in 2021

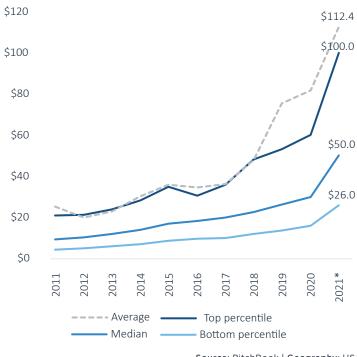
Range of enterprise tech seed pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of December 31, 2021

Early-stage enterprise valuations maintain robust growth trajectory

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

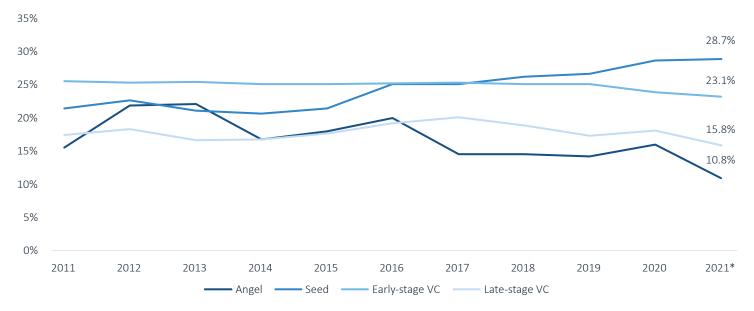




Enterprise tech

Equity stakes for enterprise tech deals fall across most stages

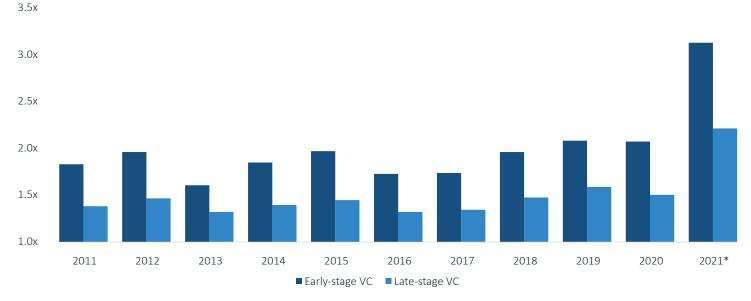
Enterprise tech median percentage acquired by stage



Source: PitchBook | Geography: US *As of December 31, 2021

Step-ups grow by an order of magnitude in 2021

Enterprise tech median step-ups by stage

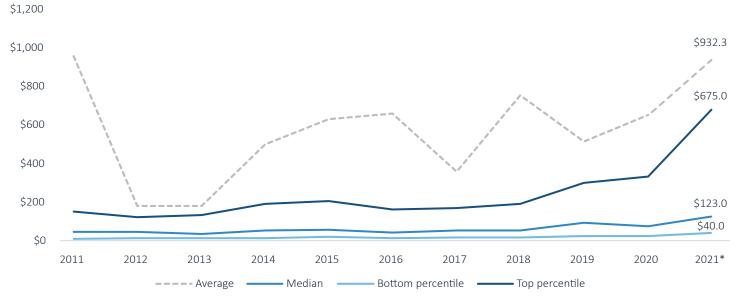




Consumer tech

Late-stage consumer valuations maintain growth trend

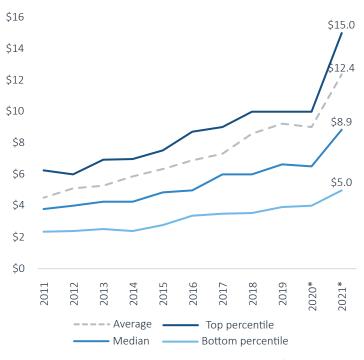
Range of consumer tech late-stage VC pre-money valuations (\$M)



Source: PitchBook | Geography: US *As of December 31, 2021

Seed valuations see consistent trend across all quartiles

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



Source: PitchBook | Geography: US *As of December 31, 2021

Consumer early-stage outliers recede, as average valuation plateaus

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

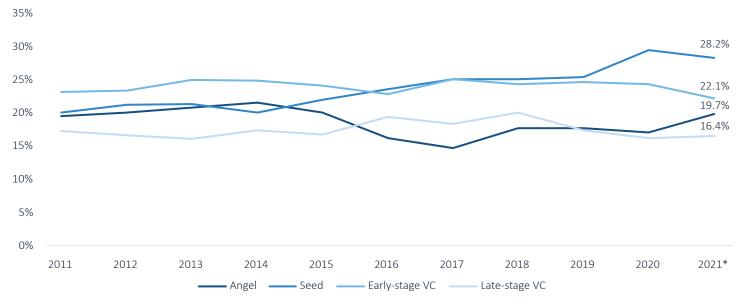




Consumer tech

Late-stage investors maintain historically low percentage acquired

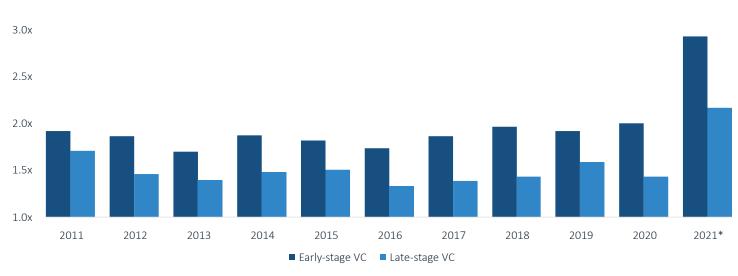
Consumer tech median percentage acquired by stage



Source: PitchBook | Geography: US *As of December 31, 2021

Late-stage 2021 step-up tops early-stage 2020 step-up

Consumer tech median step-ups by stage



Source: PitchBook | Geography: US *As of December 31, 2021

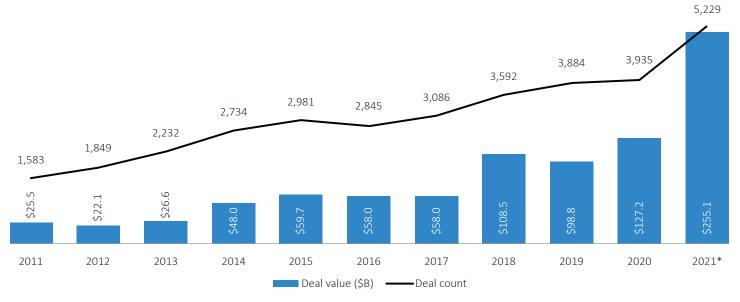
3.5x



Nontraditional investors

Nontraditional investors bring the heat in 2021

VC deal activity with nontraditional investor participation

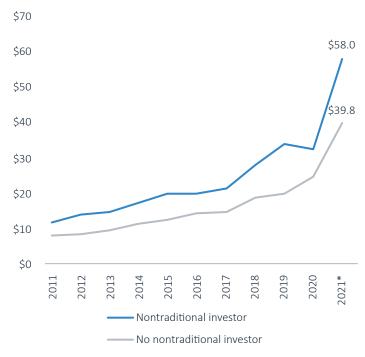


Source: PitchBook | Geography: US *As of December 31, 2021

As nontraditional investors continue to invest at an increasing pace, the difference between their investment strategies and those of traditional venture becomes even more important. These institutions now largely drive the top-line growth metrics of venture and have led the way for the extreme valuation growth seen over the past couple of years. In 2021, this group of investors participated in more than 5,000 deals and provided \$255.1 billion in deal value, which is double the previous high and the most that has been invested of any year on record.

With these high participation rates, it is unsurprising that deal sizes and valuations have also skyrocketed for these deals. In 2021, the median pre-money valuation for early-stage deals that did not receive nontraditional investment grew to a size of more than \$39 million, nearly 62% higher than in 2020. Yet, 2021's median pre-money valuation for late-stage deals featuring nontraditional investor participation doubled 2020's valuation, reaching \$200 million.

Valuation spread in early-stage VC deals widens Median early-stage VC pre-money valuations (\$M) by investor participation





Nontraditional investors

Given that nontraditional investors generally have access to larger sums of capital than traditional VCs, their investment has transformed all stages of venture in recent years. Not only have they integrated additional available capital into already-record levels of dry powder, but the increased number of investors has created a competitive landscape that alone drives higher deal values. As such, sizes and valuations of nontraditional deals are higher at every stage than those without their participation. Despite recent public market volatility and proposed interest rate increases in 2022, we expect nontraditional participation in VC to continue strongly over the next few years, continuing the upward trend in valuations and driving the market trends.

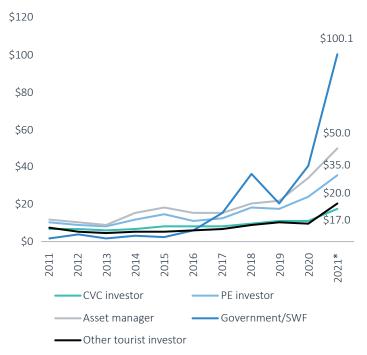
Late-stage valuations double YoY

Median late-stage VC pre-money valuations (\$M) by investor participation



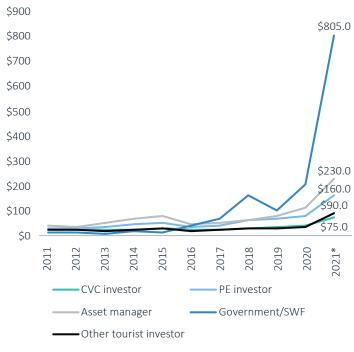
Source: PitchBook | Geography: US *As of December 31, 2021

Deal sizes grow for each investor type Median VC deal sizes (\$M) by nontraditional investor type



Source: PitchBook | Geography: US *As of December 31, 2021

SWF valuation participation reaches outlier Median VC pre-money valuations (\$M) by nontraditional investor type



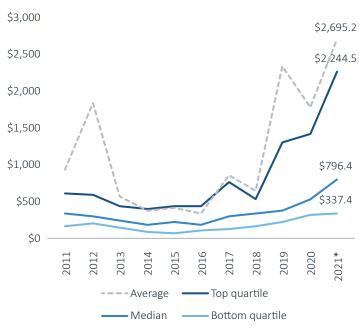


Liquidity

The VC exit market continued at a break-neck pace throughout Q4, pushing exit value particularly to record highs. This was especially true for public listing activity, which recorded the highest annual number of venture-backed companies making the transition to public markets since 2000. Public market valuations were a critical factor in driving this exodus, as public market investors sustained an elevated level of demand for growth assets. This relationship between public and private valuations is clear when looking at the valuation step-up at exit for public listings, which sits at a recent high of 1.6x in Q4 2021, or the rolling four-quarter median of 1.7x. These are the highest values we have recorded since 2012, but it is especially notable that the step-ups have reached these heights given the growth of absolute valuations over the last few years. For example, the 2021 median public listing was valued at \$796.4 million, while the 2012 median was only \$291.7 million.

Public listing valuations reach new heights across all quartiles

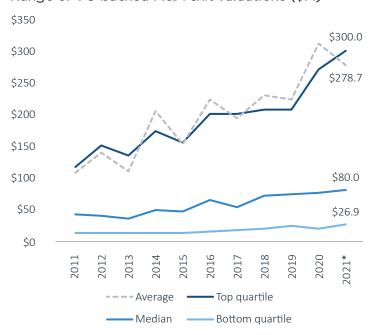
Range of VC-backed public listing exit valuations (\$M)



Source: PitchBook | Geography: US *As of December 31, 2021

Acquisition valuations retain strength, especially at top quartile

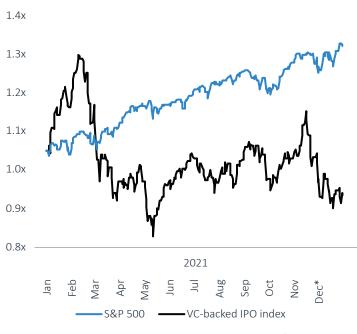
Range of VC-backed M&A exit valuations (\$M)



Source: PitchBook | Geography: US *As of December 31, 2021

VC-backed IPOs underperform the S&P 500 in 2021

Index performance comparison





Liquidity

2.5x

Step-ups remain historically high in Q4

Median VC step-ups at exit by type



Source: PitchBook | Geography: US *As of December 31, 2021

Aftermarket performance for these recent IPOs has not been quite as positive, as our VC IPO index significantly underperformed the S&P 500 during 2021. Much of this can be attributed to the IPO index's heavy exposure to the technology sector, which has been hit hard by the change in interest rate expectations during 2022. If this

lagging performance continues, or just sustains some general volatility over a few quarters, the IPO window may begin to shut for new VC-backed IPOs and cause some concern around liquidity for the currently private startups, given the VC exit market's reliance on public listings over the last two years.

Rolling step-ups climb for fourth consecutive quarter in 2021

Rolling four-quarter median VC step-ups at exit by type





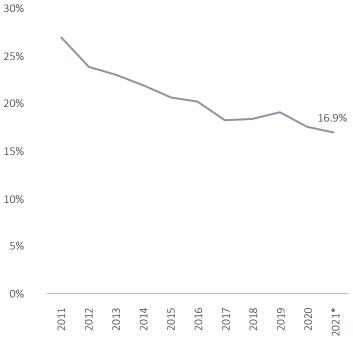
Deal terms

VC deal terms' long-term trend toward being more streamlined and founder friendly only strengthened during the record dealmaking year of 2021. As investors continue to deploy capital faster than ever, it is becoming increasingly important to commit to deals quickly in an effort to avoid being shut out of highly coveted deals. This standardization of terms has been another side effect of the influx of nontraditional involvement in VC, as these participants represent a massive amount of capital that necessitates a rapid pace of dealmaking to meet the investment need.

Going into 2022, we seem to be near a potential inflection point in the VC market, and broader financial markets in general, as we move toward a period of rising interest rates. This change may cause some rotation away from growth-oriented investments by asset allocators, and given enough time, would cause some drawdown on capital available to venture-backed startups. Still, the current dry powder sitting in VC funds is a short-term backstop for venture, especially after the record fundraising year of 2021. The illiquid nature of the VC market benefits the participants of a volatile market climate, where that feature will smooth out some of the troughs and reduce the possibility of

Cumulative dividends continue to slide out

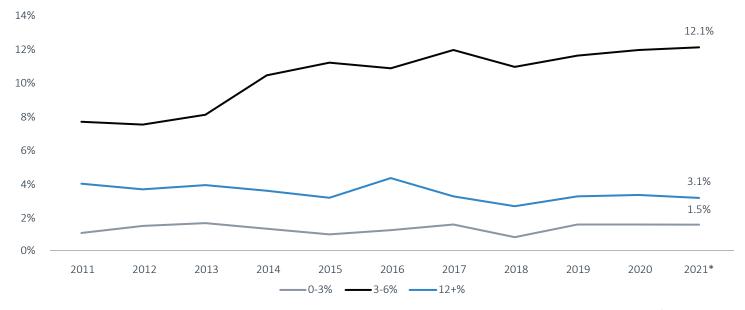
Deals with cumulative dividends as a share of all VC deals



Source: PitchBook | Geography: US *As of December 31, 2021

Dividend distributions find a plateau

VC dividend buckets (excluding 6% to 9%)



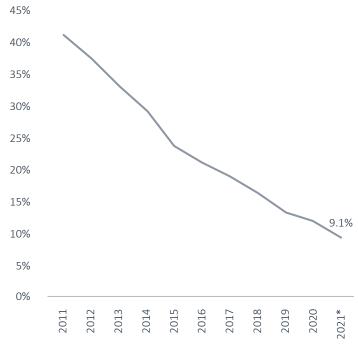


Deal terms

committed dollars fleeing the strategy during a shortterm negative shift in sentiment. However, if these market changes inhibit exit opportunities for venturebacked startups, we might start to see some of the downside of the lack of protectionist terms.

Participation provisions drop to lowest point on record

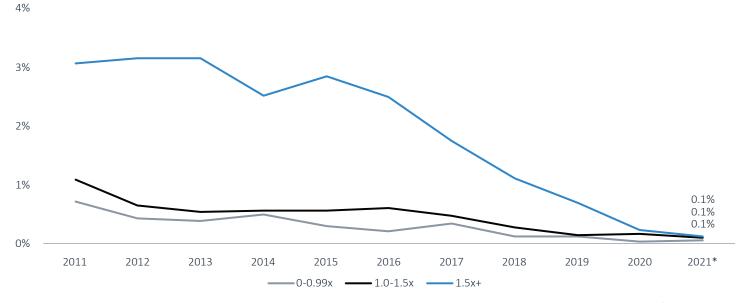
Deals with liquidation participation as a share of all VC deals



Source: PitchBook | Geography: US *As of December 31, 2021

Almost no liquidation preferences over 1.0x utilized in 2021

VC liquidation preference multiples (excluding 1.0x)



Additional research

Venture capital



Q4 2021 PitchBook-**NVCA Venture Monitor**

Download the report here



2021 Annual European **Venture Report**

Download the report here



SoftBank Maps Out Latin America

Download the report here



2022 US Venture Capital Outlook

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Index of Venture-Backed IPOs: Q3 2021 update

Download the report here



Taking the Pulse of **Medtech Innovation**

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