VC Varies by Ecosystem

Median deal sizes and valuations show considerable spread across US regions

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Credits & contact

PitchBook Data, Inc.

John Gabbert Founder, CEO Nizar Tarhuni Senior Director, Institutional Research & Editorial

Institutional Research Group

Analysis

Kyle Stanford, CAIA Senior Analyst, VC kyle.stanford@pitchbook.com pbinstitutionalresearch@pitchbook.com

Data

Alex Warfel Data Analyst alex.warfel@pitchbook.com

Research

reports@pitchbook.com

Publishing

Designed by Drew Sanders

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Key takeaways

- More than half of all US VC deal activity occurs in New York, Boston, Los Angeles, and the San Francisco Bay Area—far and away the most active VC ecosystems in the country. Because of this, median and average US venture figures are heavily weighted toward the activity in these regions, thus skewing these figures much higher than they appear in small and even midsized ecosystems.
- Many factors affect deal activity, both in count and size. Local fundraising seems to be one factor with a major impact. New York-, Boston-, Los Angeles-, and Bay Area-based VCs have combined to both raise more than 1,400 venture funds since 2018 and amass \$216.0 billion for investment. Those ecosystems have also completed more than 23,400 venture deals since 2018—more than 4,000 deals greater than the rest of the US.
- The US median late-stage valuation has increased significantly over the past decade, but much of that gain can be attributed to the top four ecosystems. From 2010 to 2020, the median late-stage valuation tripled in the four VC hubs, while in the next six most active US VC areas, it grew just 49.8%.

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Introduction

"Seed is the new Series A" and other catchy phrases embodying VC's growth over the past decade are now commonplace in the industry. From a high level, they render some truth: As of Q2 2021, the median seed deal size in the US is \$2.6 million—surpassing the \$2.4 million median Series A round from 2011. Deal size growth has not been relegated to seed deals, of course. Series B rounds are now as large as past Series C deals, and today's median Series C deals are larger than the median Series D rounds of one decade ago.

	2010	2020	2021*
Seed	\$0.5	\$2.0	\$2.5
Series A	\$2.5	\$10.0	\$12.3
Series B	\$7.0	\$20.0	\$28.0
Series C	\$10.0	\$36.7	\$60.0
Series D+	\$12.0	\$59.1	\$101.5

Median VC deal size (\$M) by series

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

Today, we are seeing more investors than one decade ago, which increases competition for deals and pushes prices higher. Large, multistage investors now participate in seed and early-stage financings as well, and they bring less price sensitivity than investors traditionally active in those areas. Of course, inflation functions as a small multiplier of deal sizes, though its effect is less pronounced over shorter horizons, and US inflation has been relatively low over the past decade.

While researching this growth in the median size of US deals, however, we noticed that the so-called US medians reflected neither the local deal prices nor the valuations of many ecosystems. Even in second-tier ecosystems, the median prices were much lower than in the VC hubs. In fact, the median deal sizes for some locations with strong VC activity levels had hardly grown in the past decade, even as the US median has surged. Aggregating data is useful in many circumstances, but such data lacks the nuance needed to discuss more-specific market happenings.

The reasons for these discrepancies are manifold, and while certain factors may be easily seen—such as the Bay Area cost of living being higher than every other area in the US—others are less obvious. The number of serial entrepreneurs raising capital in an ecosystem can boost deal sizes as they are able to return to known investors or work through their networks and lean on their experience to raise larger rounds. Lack of capital availability in a region can also constrain deal sizes—especially at the earlier stages.

Tech hubs driving deal trends

Even with the rise of investment outside of the major VC tech hubs, activity in smaller ecosystems is often lumped with investment trends of those major regions. New York, Boston, Los Angeles, and the Bay Area are the premier VC areas in the US. From a deal activity standpoint, those four ecosystems are far and away the most active. From 2018 through Q2 2021, that group received more than 23,400 deals representing a combined \$450.1 billion in deal value. The rest of the US received more than 19,600 deals and just \$149.7 billion during the same timeframe.

More importantly, those four ecosystems still produce more than half of all US venture activity on a yearly basis. This affects US data by biasing median statistics toward trends occurring within those areas—sometimes by wide margins. The median late-stage valuation in the Bay Area has reached \$275.0 million in 2021, while the average is more than \$1.4 billion. In Seattle, those figures reached only \$57.5 million and \$447.5 million, respectively, despite it being the fifth-most-active VC ecosystem in the nation.

The assertion that tech hubs comprise more than half of US deal activity and therefore drive the trends is believable to the industry. The Bay Area, for instance, has been the only region with more than 1,000 investments each year since 2006. New York and Los Angeles are the only other two regions to reach at least 1,000 financings in one year. In fact, only one ecosystem outside of those top four has reached even 400 completed deals in one year: Seattle reached 431 deals in 2018 but has not come close to that figure since. The US venture industry has long been centered on Silicon Valley. Despite this dominance, the Bay Area has continued its growth, with 2021 on track to be a record year.



VC deal count by ecosystem

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

PitchBook Analyst Note: VC Varies by Ecosystem

In past research, we have looked at reasons for these deal activity discrepancies. Fundraising is easy to point out. Bay Area VCs have raised more than \$105 billion over the past 2.5 years. This is close to the rest of the US combined—\$111.1 billion—including fundraising activity in the other three hubs. However, fundraising is not the only reason for inflated activity and sizes.

With just four ecosystems dominating deal activity, it is important to note other factors that lead to differences in deal sizes and valuations between ecosystems. For one, San Francisco, New York, Boston, and Los Angeles are four of the most expensive cities in the US, if not the world. Not only in terms of cost of living, which dictates employee compensation and therefore capital needs, but also commercial real estate prices. Other factors likely also lead to increases in deal sizes in these ecosystems. Based on location, the top four areas also hold competitive advantages, such as a high volume of talent from top universities. Even factors such as the number of serial entrepreneurs in an ecosystem impact deal size and valuation metrics.

According to talent management platform Hired, the average annual tech salary in the San Francisco Bay Area is nearly \$158,654, compared with Dallas/Fort Worth's \$123,247.^{1,2} The cost of living in these two areas differs vastly, which affects salaries. According to the Zillow Home Value Index, the typical value for single family homes in Dallas/Fort Worth is just over \$320,000, compared with the Bay Area's more than \$1.3 million.³

These differences in cost of living, even among the 10 most active venture ecosystems in the US, create a wide variation in median deal size. Excluding current H1 2021 data to avoid low data counts in certain ecosystems, the median deal size in New York, San Francisco, Boston, and Los Angeles is more than double that of the next six ecosystems at every stage. In 2020, Denver sported the lowest median late-stage deal size of the group, reaching just \$5.0 million. That figure was \$3.0 million lower than the ecosystem's median from 2015. Meanwhile, the Bay Area median late-stage deal size surpassed \$23.2 million, while, through H1 2021, the area's median late-stage deal size has ballooned to \$38.0 million.

^{1: &}quot;Salaries in SF Bay Area," Hired, 2021, accessed September 1, 2021.

^{2: &}quot;Salaries in Dallas/Ft Worth," Hired, 2021, accessed September 1, 2021.

^{3. &}quot;Dallas-Fort Worth-Arlington Metro Home Values," Zillow, August 31, 2021.

Median early-stage deal size (\$M) by ecosystem \$15 \$10 \$5 \$0 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021* – New York 🛛 — - Los Angeles – Boston – - Austin - Washington, D.C. - Bay Area – Seattle – – Denver – — Chicago Philadelphia US median _

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



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

While angel- and even seed-stage deals have become more formulaic in recent years, early- and late-stage deals display greater variance of deal terms and stakes acquired, among other things. Continuing the example of Denver versus Bay Area deals, we see a large gap in the percentage stake acquired at the late stage. In 2020, Denver-based companies gave up a median stake percentage of 22.9% in late-stage deals, while Bay Area companies sold just 17.8%. Denver's VC activity has spiked in recent years, but the ecosystem does not yet have a staple of local, late-stage venture funds to support the growing need for late-stage capital. This reliance on nonlocal funds may also lead to diminished competition and therefore larger stakes acquired during investments.

PitchBook Analyst Note: VC Varies by Ecosystem

As late-stage valuations surge, it is easier to sell smaller portions of a company during each round. Along with the Bay Area, Los Angeles-, Boston-, and New York-based companies sell less than 20% of the company in late-stage rounds, while five of the next six most active ecosystems see the median percentage stake taken rise above 20%. In these cases, the fact that late-stage companies in smaller ecosystems have more saleable equity due to not raising as many rounds on average could contribute to the valuation disparity. Regardless of the reasons, smaller-ecosystem-based companies are raising capital at a relatively lower cost to GPs.

The lack of local fundraising in nonhub ecosystems—especially from latestage funds—is a likely culprit not only for the higher deal sizes in those areas but also for the lower prices of the rounds. In theory, larger rounds should result in a higher stake acquired—if valuation is held constant—and a higher stake acquired should boost the compensation to the investors by increasing returns on great investments. Risks can be offset by other deal terms that would kick into effect later, such as an IPO ratchet, so low stakes acquired when the deal is struck can grow over time.

Valuation disparity across ecosystems

The spread in deal sizes also has a major impact on valuations across combined statistical areas (CSAs). In 2020, the median early-stage valuation in the top four markets was consistent, ranging between \$30.0 million and \$35.0 million. Across the next six markets, the range spread between \$20.0 million and \$30.0 million, with the median coming in at \$25.0 million. While this range may not seem large, and while the difference between the top four and next six is only \$10.0 million at the median, this still represents a 40.0% jump.

Valuations begin to separate in earnest at the late stage. Even among the top four markets, the spread between median late-stage valuations is enormous. Boston's 2020 median late-stage pre-money valuation is \$65.0 million; the Bay Area's is \$121.0 million. Again, when looking at the rest of the 10 most active ecosystems, Seattle's late-stage pre-money median reached \$73.0 million in 2020, while no other market outside of the largest four surpassed \$53.1 million. This further demonstrates the vast differences between the top four and the rest.

Median early-stage pre-money valuation (\$M) by ecosystem



*As of June 30, 2021



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

Some of the consistent increase in the US median valuation is due to the bias inherent to data collection immediacy. Generally, the largest valuations are announced as soon as a round is closed, while lagged data often contains smaller valuations, which pulls down the median and average. These data shifts do not change the trends; rather, they simply soften the disparities. A formerly impressive milestone for VC-backed companies was a \$1.0 billion valuation. The unicorn valuation became a mark of significance in 2013, back when only a handful of companies reached that echelon each year. Unicorns have been disproportionately created in the top four VC markets. Of the nearly 800 rounds in the US since 2006 that had a valuation of at least \$1.0 billion, 656, or 82.4%, were raised by a Bay Area-, New York-, Boston-, or Los Angeles-based company. Showing the further market bias to the Bay Area, nearly 56%, or 444, of all unicorn rounds have been raised by companies headquartered there.

PitchBook Analyst Note: VC Varies by Ecosystem

We should not simply question why this has happened. The fundraising disparity between the Bay Area and every other ecosystem has been well noted, and this undoubtedly has played into the skewed valuation data. But there is also the question of how companies in the Bay Area and in the other top markets can grow faster than those in smaller ecosystems to achieve such disproportionately high valuations.

The network effect is omnipresent when speaking about venture deal sizes and valuations. The ability to reach large numbers of people, funds, and firms is a surefire way to raise further venture funding should even a small amount of traction be gained. Networks in smaller ecosystems are much less developed, and even strong local networks may be missing the nodes in hub ecosystems that can bring later-stage funding to companies.

At its core, a valuation is built upon the potential growth of the target company or the industry in which that company operates. Software contains the ultimate growth potential because of its ability to be instantly delivered at scale. This high valuation sector is also centered in the VC hubs. Nearly 60% of completed software deals occur in the top four ecosystems, thereby boosting the valuations within those regions. Software deals have accounted for roughly 38% of total investment counts in the four main hubs regardless of sector, while they have reached just over 30% elsewhere.

Whether due to the density of software companies, the high number of investors, or simply the ability for companies in the tech hubs to drive adoption and usage of their products, the valuation growth between financing rounds in those areas varies substantially from other ecosystems, thus contributing to the gap seen today. In 2020, companies in those areas increased their early-stage valuations at a median annualized rate of \$20.3 million. The US median of this velocity of value creation (VVC) sat right at \$16.0 million—again underscoring the trend-powering activity levels of the New York, Los Angeles, Boston, and Bay Area ecosystems. Median VVC beyond the hubs was just \$7.1 million. Largely because of this ability to rapidly increase valuation, we expect current valuation trends to persist. Not only will it continue to drive opportunistic investment and thus lead to higher prices, but it also signals that the network effects and location-based advantages allow companies to scale at a pace that is as of yet unattainable in smaller ecosystems.

Moving forward

Perhaps the most important idea behind this research is simply highlighting that deal sizes and valuations are not uniform throughout the US, which can get lost when viewing the data in aggregate. The COVID-19 pandemic blew open the idea that companies must be headquartered in venture hubs to succeed. Other venture ecosystems have experienced successful growth during this time—such that each of the 20 most active ecosystems will likely set a new deal activity record in 2021. However, the disparities between deal sizes and valuations will likely continue due to the high levels of dry powder located in the hubs. On a basic level, local fundraising and increases in the number of local venture funds leads to organic growth of VC ecosystems. Successful exits of local companies also tend to spur growth in company creation and eventually growth in nonlocal investor participation.

2021 has shown that growth in one area does not preclude growth in another, as the venture market has not only demonstrated resiliency in the face of adversity but also surpassed previous industry highs. When Q3 data is released, many annual records will likely be broken.

Investor sentiment within VC ecosystems is unable to be modeled. Clusters of wealth can be risk averse. Investors in hubs are likely more accustomed to taking risks on startups. Further, fear of missing out on startup investments can also drive prices higher as investors try to pile into the top companies.

Since 2016, VC-backed companies headquartered in the four main US hubs have generated more than \$1 trillion in liquidity for investors, as of June 30, 2021. Other ecosystems across the country have generated \$218.5 billion. For now, and likely for the near-term future, the four main tech hubs are receiving and will continue to receive the benefit of the doubt from LPs and GPs.

We expect the variability between the four hubs and the smaller ecosystems to remain. The pandemic has boosted the position of emerging areas of VC, but without a significant shift in where capital is stored or where VC returns are generated, financing trends will continue to favor hubs.