

PitchBook Data, Inc.

John Gabbert Founder, CEO

Nizar Tarhuni Senior Director, Institutional Research & Editorial

Dylan Cox, CFA Head of Private Markets Research

Institutional Research Group

Analysis



Kyle Stanford, CAIA
Senior Analyst, US Venture Lead
kyle.stanford@pitchbook.com

Data

Susan Hu
Data Analyst

pbinstitutionalresearch@pitchbook.com

Publishing

Designed by **Jenna O'Malley**

Published on December 1, 2022

Contents

Key takeaways	1
Introduction	2
Why is a new stage needed?	3
How did we develop the methodology?	6
Venture growth dataset	7
Moving forward	11

Introducing Venture Growth

A definition and methodology for a new stage of VC

PitchBook is a Morningstar company providing the most comprehensive, most accurate, and hard-to-find data for professionals doing business in the private markets.

Key takeaways

- The late stage has changed considerably since PitchBook's methodologies to define the venture market were created in the early days of the company. The range of deal sizes and valuations in the late stage has made the stage difficult to analyze, even rendering certain data points useless when speaking about the stage as a whole. In 2021, the top-decile late-stage valuation in the US peaked at \$1.4 billion while the bottom-decile late-stage valuation hit \$15.0 million. The wide variation of the stage now encompasses a similarly wide range of investment risk profiles for investors to choose from. For example, the dollar failure rate of Series F investments is less than 5%, while the dollar failure rate for Series C and Series D rounds hovers near 10%.
- To better assess key trends in what was traditionally called late-stage venture, we have created a new category dubbed the "venture growth stage." Defined as any financing that is Series E or later or any VC financing of a company that is at least seven years old and has raised at least six VC rounds, this new category generally exhibits a different risk/reward profile than what has traditionally been associated with VC. Companies that met these criteria in 2021, such as SpaceX, Stripe, and Databricks, accounted for 25.5% of all VC dollars deployed globally.
- The venture growth stage of the VC dataset will enable deeper analysis of the latest stage of the venture market. The new stage will be integrated into all of our quarterly reports across different regions and will be included in VC research moving forward.

Introduction

We are introducing a new stage to our VC dataset: venture growth.

The past decade has been a whirlwind for venture, with more capital invested annually than has been invested across multiple years. Deal count has increased, of course, but a large majority of the capital investment, and the broader change in the market, has come from the late stage. A quick look at any of our venture reports makes this very clear. During 2021, \$237.2 billion was invested in the late stage in the US, and nearly \$70 billion was invested in Europe. These figures were roughly 110% and 130% higher, respectively, than those same figures from the year before and represented more than two-thirds of the total capital investment within each market for the year.

Several factors have played major roles in the global venture market's growth. While nowhere near an exhaustive list, these are some of the most prominent contributors to the changes we have seen within the venture market over the last decade-plus:

- The Jumpstart Our Business Startups (JOBS) Act, signed into law in 2012, increased the number of maximum shareholders in a private company from 500 to 2,000. This change was instrumental in allowing companies to grow to a much larger size with private backing, ironically helping depress the number of new IPOs.
- VC has outperformed other private investment strategies since the global financial crisis (GFC), with seven of the past 10 fund vintage years leading all other private strategies. As allocators have increased their investment in private markets to participate in these returns, VC has benefited from an increase in capital availability that has allowed for further growth while remaining private.
- A significant amount of capital has come from nontraditional investors, which is an umbrella term for all other market participants outside of VC firms. The key types of investors in this nontraditional bucket include corporate venture capital groups, hedge funds, mutual funds, and sovereign wealth funds (SWFs).¹

In reality, the above factors all work in tandem. The JOBS Act has enabled companies to stay private longer, which has increased private valuations and returns and brought about heaps of nontraditional capital. The term “unicorn” has changed from a novelty moniker to an important piece of VC. We have estimated that \$2.3 trillion of the US VC market's value—around two-thirds—derives from this small group of companies. Whether the term “unicorn” helped change the venture market is up for debate, but what is certain is that the venture market has extended into company growth cycles and that the risk/reward profile of a pre-IPO company has changed.

¹: [“Harnessing Unicorns: Demystifying the Venture Capital Market with the Morningstar PitchBook Global Unicorn Indexes,” Morningstar, Sanjay Arya, et al., November 8, 2022.](#)

To keep the PitchBook dataset in line with market trends and the natural changes in VC over the past decade, we are introducing a methodology that will capture companies and deals that fall into risk profiles not traditionally associated with venture. Called “venture growth,” this new stage will help define the true venture market and will enable a more thorough and complete analysis of VC. It will be included alongside our angel, seed, early-stage, and late-stage methodologies. None of those methodologies will change; however, venture growth will be further into the venture lifecycle than the late stage.

Why is a new stage needed?

Beyond what was outlined above, the venture market has been as dynamic as any market since the GFC, growing at unprecedented rates as markets take note of the speed of company development and the returns being generated by the industry. These figures highlight the rapid change in VC since the GFC:

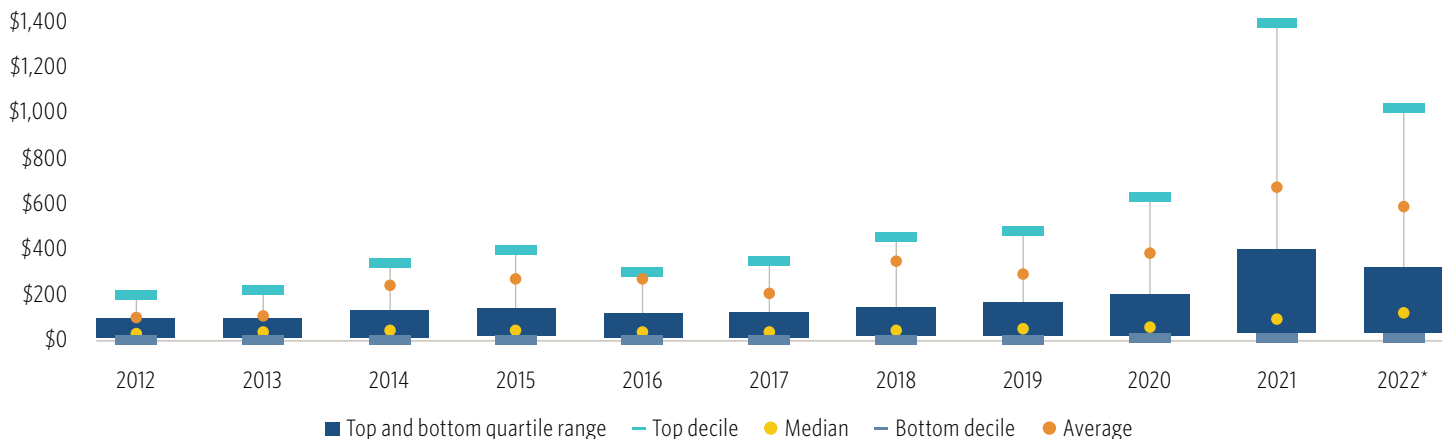
- Globally, nearly 1,300 private companies currently have a valuation of \$1 billion or higher. Just 18 held that valuation at the end of 2008.
- More than \$700 billion was invested in global VC deals in 2021. This figure is greater than the 2008 total by more than \$660 billion.
- The average public listing valuation for global tech companies surpassed \$3.0 billion in 2021, 14.5x the average valuation in 2008.

These data points are not representative of many companies that fall into our late-stage venture methodology, complicating the delivery of targeted analysis. According to our late-stage VC methodology, a company raising a Series C round or a company that is five years from its founding date would fall in the late stage, regardless of the size of the deal or the company’s valuation. At the time the VC methodology was created in the early days of PitchBook, it made sense to group together every company with these data points.

Over the past couple of years, several interesting trends have caught our eye. For example, the average pre-money valuation was above the top-decile figure. Valuations for companies such as Stripe (\$95.0 billion), Uber (\$69.5 billion), and SpaceX (\$127.0 billion) have put outside pressure on these figures, but a few deals were not enough to change our charts. However, they were indicative of structural changes within the market that needed to be addressed in our data.

The risk/reward profile of VC is distinct from other investment strategies. Startups often fail. Nearly one-quarter of companies that make it to Series A go out of business. Our estimates show that 12.1% of companies that raise a Series D round even fail. Investment losses can be 100%, and the illiquidity in the market means that investors may have no other option than to watch their investment falter. But this is also a broad generalization of VC. The risks of a seed investment also differ greatly from the risks of investment in a Series D round, which also differ from those of a Series F, pre-IPO round.

US late-stage VC pre-money valuation (\$M) dispersion

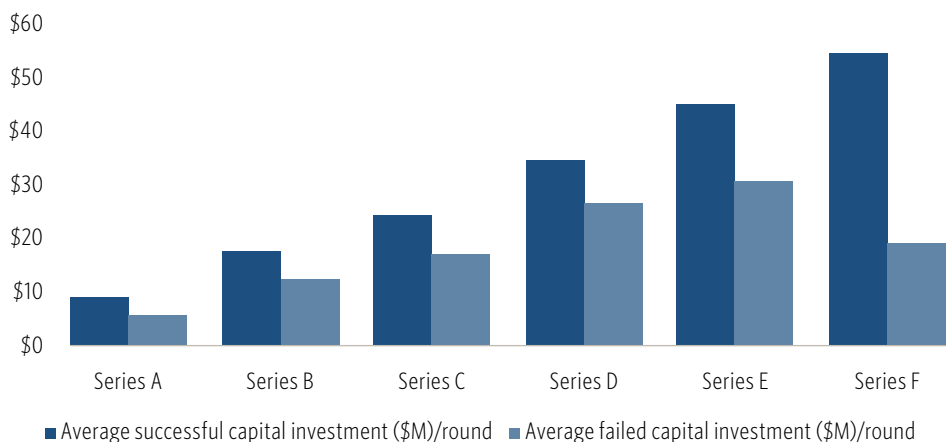


Source: PitchBook | Geography: US
*As of September 30, 2022

The data should showcase these differences. We have published research that highlights the return discrepancies among different investments, and it was clear that there was too wide of a spread in returns falling under our late-stage methodology. For example, we found that there were very few Series F investments that wholly failed: The dollar failure rate of Series F investments is less than 5%. Looking at the adjusted annualized returns (adjustments made to account for company failure rates), Series F investments show a higher return than any other series by a significant margin.

The shift in risk toward the top of the market has allowed non-VC investors to invest in private companies while maintaining their risk profiles. Over the past few years, hedge funds, mutual funds, PE firms, and SWFs have been very active in the late stage. And while these investors are participating earlier in VC, their larger investment vehicles have significant influence at the top of the market. The extension of the late stage has been dependent on these large institutions putting capital to work in VC. More than \$400 billion was invested globally into mega-deals (deals that are at least \$100 million in size) in 2021, more than had been invested in the entire VC market in any year prior.

Selected VC metrics by series*



Source: PitchBook | Geography: US
*As of August 5, 2021

Failure rates by basis*

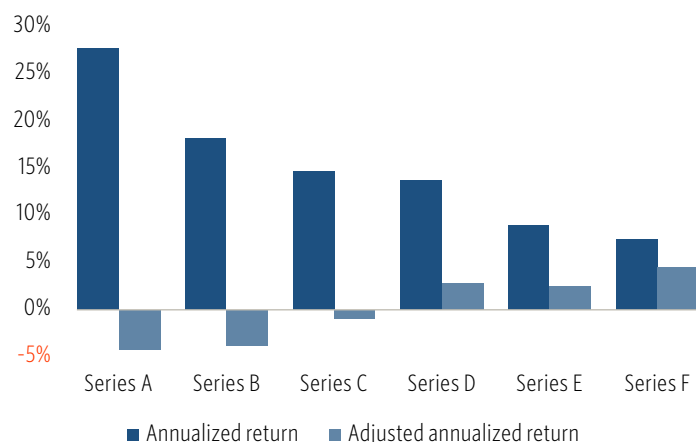
	Series A	Series B	Series C	Series D	Series E	Series F
Company count failure rate	23.6%	16.7%	13.5%	12.1%	10.8%	11.8%
Dollar failure rate	16.1%	12.5%	9.8%	9.6%	7.7%	4.5%

Source: PitchBook | Geography: US
*As of August 5, 2021

When we look at the adjusted annualized returns for different investments across the venture lifecycle, the change in risk is apparent. The adjustment takes into account the higher failure rates of young companies. As the following chart shows, the relatively small difference between annualized and adjusted annualized returns in Series E and Series F investments highlights the change in total risk as companies move through the venture lifecycle.

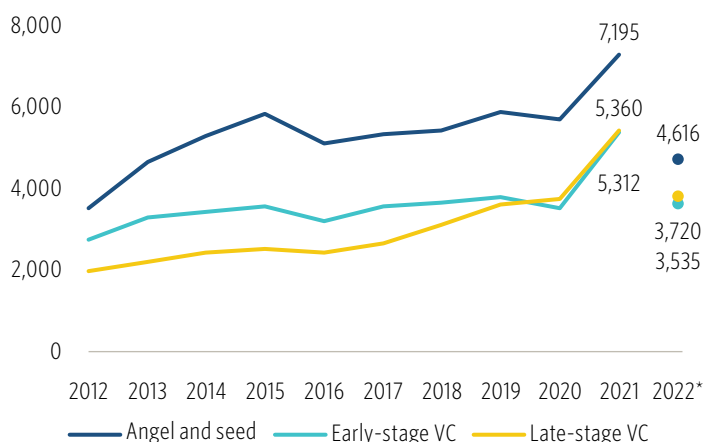
Another reason for the change is that the heavy late-stage dataset was upsetting the balance of our VC data. In theory, the data should reflect the traditional venture lifecycle. If 1,000 companies raise a seed round, fewer will raise a Series A, and fewer still will move on to a Series B. The exuberance of 2020 and 2021 finally shifted the balance of the venture dataset to put more companies in the late-stage bucket than the early stage.

VC returns by series*



Source: PitchBook | Geography: US
*As of August 5, 2021

US VC deal count by stage



Source: PitchBook | Geography: US
*As of September 30, 2022

Even during the shifting deal environment in 2022, more companies were raising late-stage investments than early-stage investments, so we knew this was truly a market shift and not a one-year change that would rebalance once cooler heads prevailed in VC. In truth, late-stage deal counts had been creeping toward parity with early-stage deal counts for several years. 2020 was just the breaking point.

All together, these reasons led to the decision to create a new stage of venture to reflect the evolution of the market.

How did we develop the methodology?

Creating a methodology that shakes up a dataset is not simple. It would have been easy to create a unicorn stage and lump \$1 billion companies together or to create a methodology that looked solely at total capital raised (\$100 million in total VC funding, for example). But neither of these options would have addressed true structural changes in the market. Adam Neumann raised \$350.0 million in a seed round for his new company, even without much of a publicly known plan or website. This was not the type of company we believed should be captured in the venture growth stage, but it likely would have been pulled into the stage if limits on funding or valuations were used in the methodology.

The new methodology also needed to be easily replicable, with clear definitions to delineate the stages. Without every deal in the dataset containing the exact same pieces of information, the characteristics of the companies needed to be replicable to encompass a broad set of companies. Without company revenues or many growth metrics, we needed to use data points that were available in a timely fashion. Our initial talks centered around valuations and the use of a specified level to define the growth stage. But valuations are a lagging data point for many deals, so they would not have been useful for the methodology.

Being that it is a major reason for this methodology change, identifying an area that demonstrated a shift in risk/reward across the venture lifecycle was imperative. We started looking for shifts in returns seen in past research using series tags (Series A, Series B, Series C, etc.). These tags are integral to our other stage definitions, so they needed to be used here as well. Series tags do decline in count as companies raise further rounds, however. Aside from the declining number of Series F rounds compared with earlier series, many deals are collected without a series identifier, depleting the universe of companies even further.

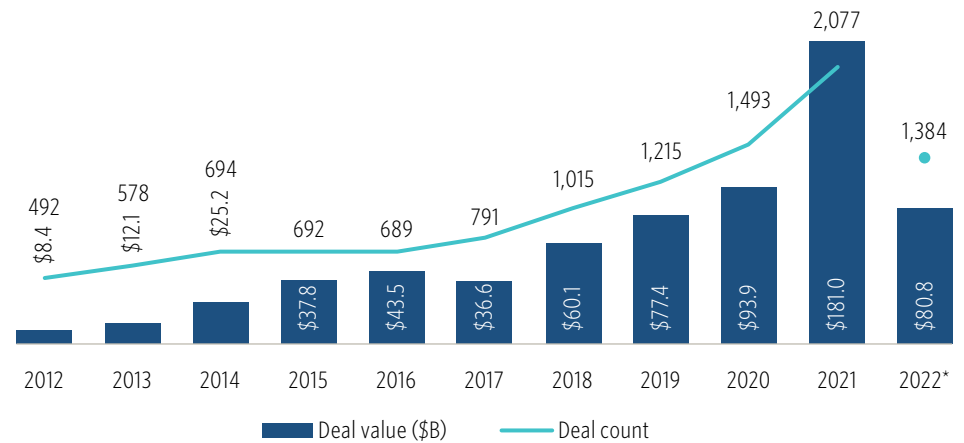
Once a shift in returns was identified, the dataset needed to be filled out by classifying other rounds under venture growth through similar characteristics as found through series tags. It would have been easy to simply apply a filter for deal values or capital raised. But this would have also created the possibility of another methodology change being needed down the road. A \$100 million deal today is not the same as it was a decade ago, nor will it be equal to a \$100 million deal 10 years from now. This could have made the venture growth stage obsolete. Mega-deals were not a major piece of the VC market a decade ago, but nearly \$200 billion was invested in such deals in 2021. Those deals could just as quickly disappear if the market determines they are worth less.

Once a series cutoff was identified, the next step was to identify a set of parameters that could add companies with similar profiles to fill out the dataset. This piece of the methodology was relatively easier, as we simply needed to analyze the data to find data points that were shared among the deals.

Venture growth dataset

The methodology for venture growth will be rounds tagged as Series E+ or deals involving companies that are at least seven years old and have raised at least six VC rounds.

Global venture growth deal activity

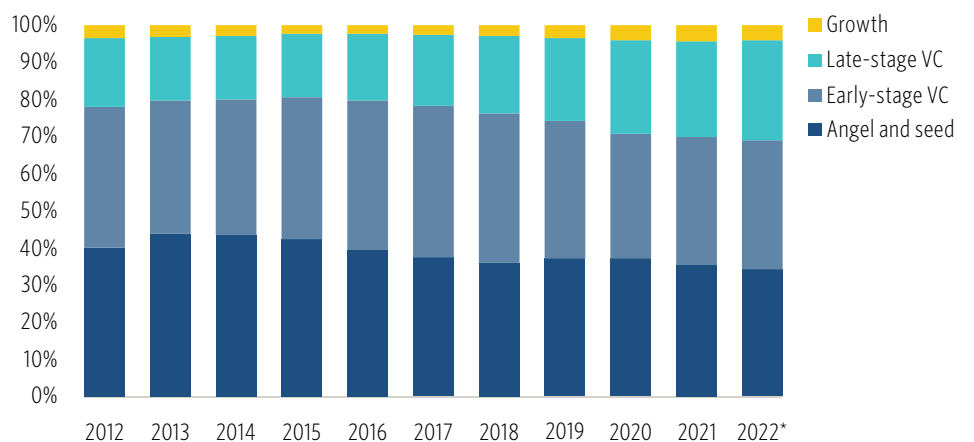


Source: PitchBook | Geography: Global
*As of September 30, 2022

Globally, the venture growth stage has remained a small portion of completed deals on an annual basis, reaching just 4.2% of completed deals in 2021. While that seems like a small segment of the market, consider that the median time from founding to exit has hovered around seven years, only surpassing eight years in 2022 as the exit market stalls.

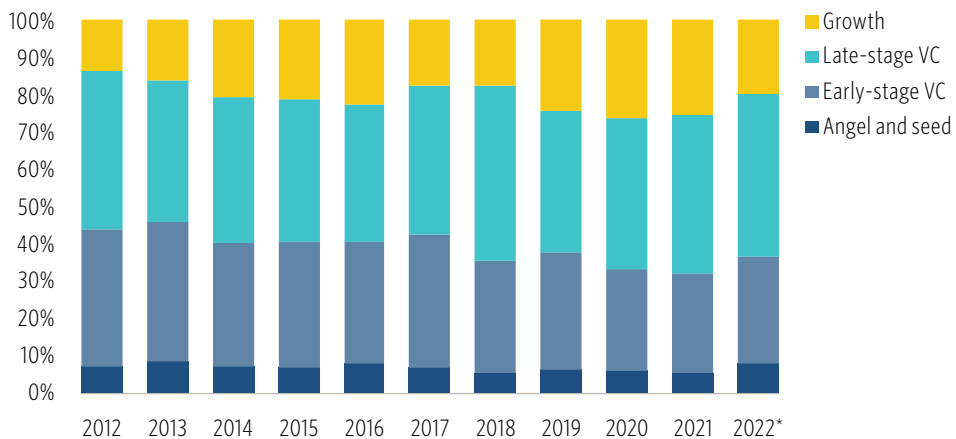
The fact that this segmentation does not shift much in terms of proportion of completed deals also highlights that this market does actually exhibit differing characteristics from traditional VC, staying void of excessive market speculation that can drive deal flows in early areas of the market.

Share of global VC deal count by stage



Source: PitchBook | Geography: Global
*As of September 30, 2022

Share of global VC deal value by stage



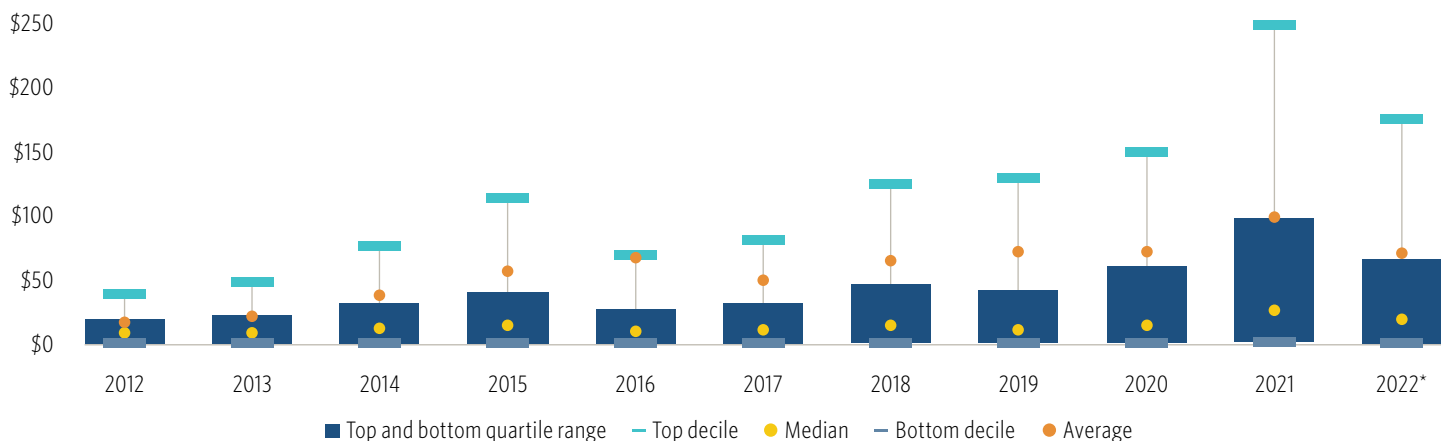
Source: PitchBook | Geography: Global
*As of September 30, 2022

While capturing just a small portion of the overall market, venture growth holds profound weight: Since the beginning of 2020, more than 24% of the capital invested into the global venture market has come from venture growth deals. The average deal size in the venture growth stage nearly reached the average value of a mega-deal in 2021, and since 2013, it has come in at more than double the value of the average late-stage deal. Even considering median deal value, the venture growth figure in 2021 was nearly three times the late-stage figure, a significant jump that highlights the market’s dependency on non-VC capital. In 2021, nearly one-quarter of completed venture growth deals were mega-deals.

Importantly, the proportion of deals receiving participation from crossover and large non-VC investors is much higher at the venture growth stage than others. In 2021, nearly 20% of venture growth deals involved a crossover investor, and 25% received investment from a nontraditional investor (this group also includes crossover investors). With the exception of the late stage, which just barely reached the mark during the past couple of years, no other stage received a double-digit proportion of investment from those investor types.

In 2021, almost 30% of venture growth deals were led by, or solely financed by, a nontraditional firm. This is a trend we have noted in recent years, highlighting the persistence of these institutions in the market and how much more ingrained in the venture market they have become. Though nontraditional firms have slowed capital deployment to VC in 2022, the venture growth stage is on pace to reach 450 deals led by nontraditional investors, a figure roughly 41% above the pre-2021 high.

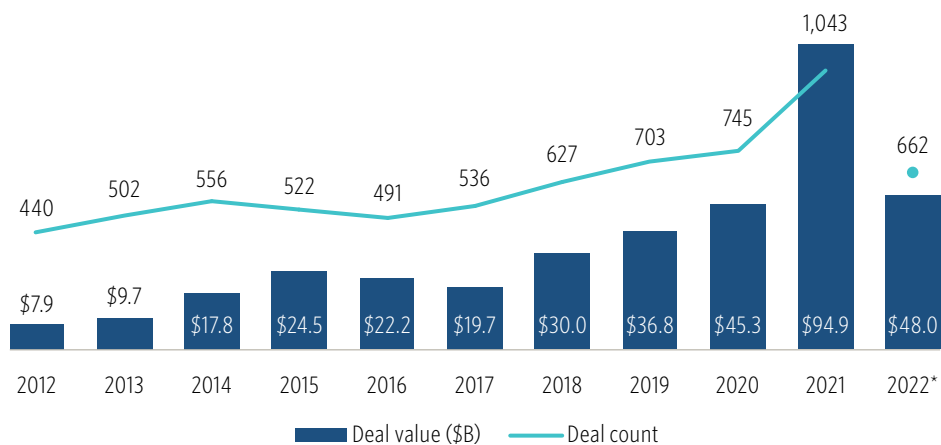
Global venture growth deal value (\$M) dispersion



Source: PitchBook | Geography: Global
*As of September 30, 2022

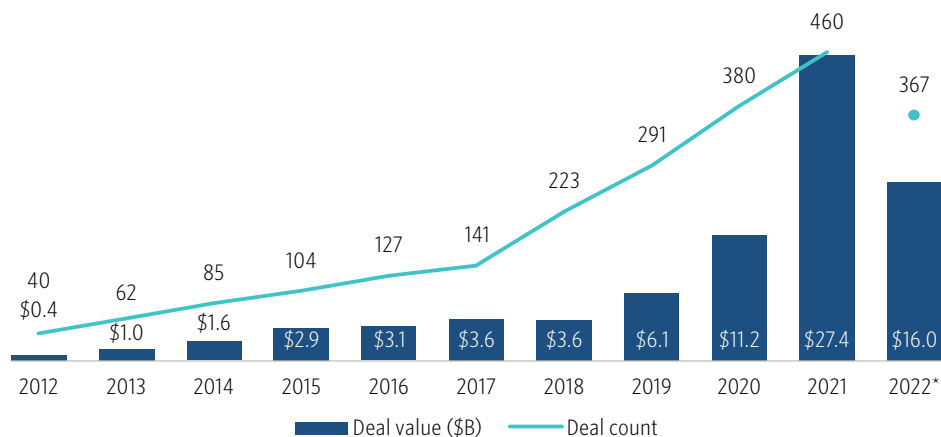
While the above figures are global, it is important to see the expansion and impact of the venture growth stage in more specific regions. North America boasts the most developed venture market, and in that continent, venture growth has accounted for more than 5% of deals in any given year. More than 26% of the capital invested in North America during 2021 derived from venture growth deals, a full \$94.9 billion, which represents a higher total than was invested in the North American market during any year up to 2018.

North American venture growth deal activity



Source: PitchBook | Geography: North America
*As of September 30, 2022

European venture growth deal activity

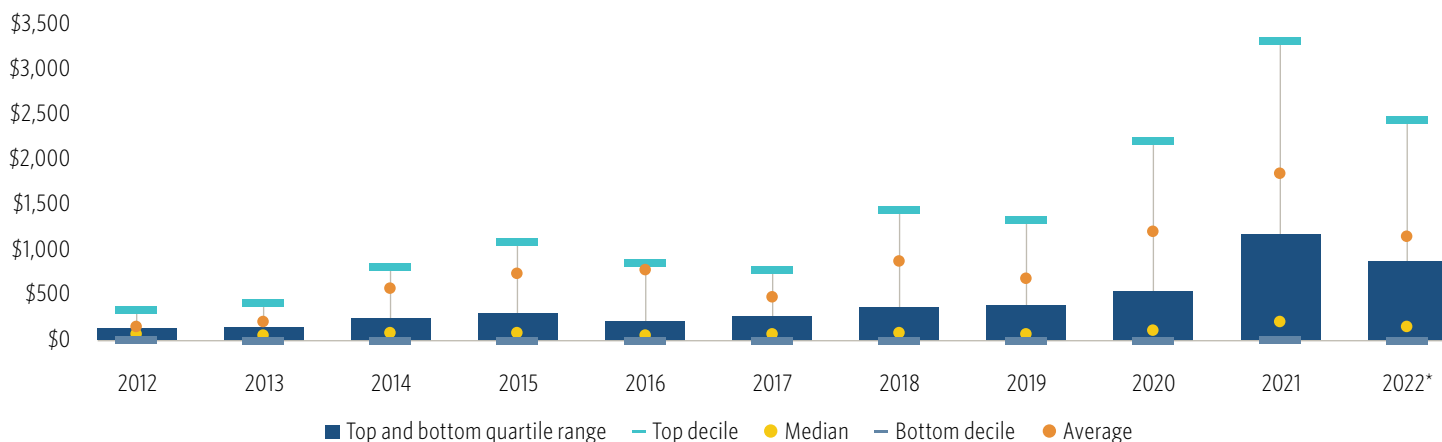


Source: PitchBook | Geography: Europe
*As of September 30, 2022

In Europe, the rise of venture growth is more pronounced, coinciding with the overall growth of the venture market within the continent. In 2006, just four deals would have been tagged as venture growth. 460 received a venture growth tag in 2021, a symbol of how the market within Europe has grown to a point that it can now support companies needing large amounts of capital and attract investors with risk needs that fit the venture growth segment. In 2021, more than \$27 billion was invested in venture growth deals in Europe, an increase of 843x the amount invested in those four venture growth deals in 2006.

While outliers created by the high-flying investment landscape will continue to skew averages across stages, it is important to note that there is a market for those deals, and that while they fall within the venture market methodology, they carry different risks and rewards than earlier stages. Even within venture growth, the average valuation in the global dataset reached nearly \$1.9 billion in 2021, spiking just as we have seen other stages do the same.

Global venture growth pre-money valuation (\$M) dispersion



Source: PitchBook | Geography: Global
*As of September 30, 2022

The methodology

Currently the venture growth methodology is being used only for our reports, but it will be introduced in more PitchBook products and will be available to use in custom searches so that our clients can dive deeper into our venture market data and look at the market through the lens of its true structure.

Moving forward

The purpose for adding a new stage to our VC methodology was to enable better analyses of venture by identifying the area of the market that exhibits a distinct difference in strategy for investors and provides returns that match those investors' expectations, and not those of the traditional venture industry. Hedge funds and pre-seed firms invest in the same market, broadly speaking, but they are in search of much different risk exposures and require much different returns because of it. While company details such as revenues, cash flows, and capital structures are unavailable for most companies, the venture growth methodology pulls together companies in a way that translates to companies that fit a more specific type of investment.

Our venture growth dataset will be exclusive of our PE growth/expansion tag used within our PE dataset. Keeping the two datasets (VC and PE) separated was important for individual market analysis.

Our primary need for the venture growth stage is to allow us to quickly segment data for analysis. The hope is that it can contribute to a deeper analysis of the VC market and provide an easy view into this area of the market for us, our clients, and the broader industry using private markets data to make investment decisions and find actionable insights.

COPYRIGHT © 2022 by PitchBook Data, Inc. All rights reserved. No part of this publication may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, and information storage and retrieval systems—without the express written permission of PitchBook Data, Inc. Contents are based on information from sources believed to be reliable, but accuracy and completeness cannot be guaranteed. Nothing herein should be construed as investment advice, a past, current or future recommendation to buy or sell any security or an offer to sell, or a solicitation of an offer to buy any security. This material does not purport to contain all of the information that a prospective investor may wish to consider and is not to be relied upon as such or used in substitution for the exercise of independent judgment.