PitchBook

PitchBook Data, Inc.

John Gabbert Founder, CEO

Nizar Tarhuni Vice President, Institutional Research and Editorial

Dylan Cox, CFA Head of Private Markets Research

Institutional Research Group

Analysis

Nalin Patel
Lead Analyst, EMEA Private Capital
nalin.patel@pitchbook.com

Data

Charlie Farber
Senior Data Analyst

pbinstitutionalresearch@pitchbook.com

Publishing

Designed by **Drew Sanders**

Published on October 10, 2023

Contents

Global VC Ecosystem Rankings

Introducing our new location-based VC Ecosystem Rankings

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

- PitchBook is introducing a global VC Ecosystem Ranking to compare how locations rank in overall development and in their growth rates relative to one another. The framework provides a scoring system for development and growth by assessing the size, maturity, and growth rates of a VC ecosystem using proprietary data points housed in the PitchBook Platform. The purpose of the framework is to help founders, operators, and investors identify locations that could be beneficial to expand or invest in to generate outlier returns in the long run.

- Our development rankings outlined that:

1. **San Francisco is the most developed VC ecosystem in the world by a considerable amount.**
2. **VC ecosystems in the US and Asia account for 85% of the 20 most developed VC ecosystems.**
3. **London is the only European city among the top 10 most developed VC ecosystems globally.**

- In high-growth VC ecosystems, we found:

1. **Dubai pips Detroit at the top of our VC Ecosystem Growth Rankings.**
2. **65% of the 20 highest growth VC ecosystems are in Europe or the US.**
3. **Only three locations in Asia are among the 20 fastest-growing VC ecosystems.**

Introduction

As private capital markets have expanded, so have established VC ecosystems, and new locations have emerged across the globe in recent years. Investors have targeted new countries, startups have secured hundreds of millions of euros, and valuations have surged past the multi-billion-euro threshold. While growth has been strong during the past decade, the VC landscape has shifted in the past 18 months and capital availability has become scarcer.

As it has become increasingly challenging to secure capital, LPs, GPs, and founders are evaluating where to invest their resources for the best chance of success in the long run. With macroeconomic issues impacting decision-making, different locations could prove effective to invest into. This analyst note introduces PitchBook's new VC Ecosystem Rankings, which helps identify areas of interest for VC stakeholders. The purpose of this framework is to compare how VC ecosystems rank in overall development and in their growth rates relative to one another.

PitchBook's VC Ecosystem Rankings

The PitchBook-derived VC Ecosystem Rankings provide a numerical score for development and growth in specific locations across the globe. In this section, we provide an overview of our approach and key findings from the analysis.

Our Development Scores center around the size and maturity of a VC ecosystem. For example, high ranking cities are well-known VC hubs that possess a robust capital raising track record for GPs, large amounts of deal activity involving startups, and the production of exited VC-backed companies. Cities with high Growth Scores will have demonstrated short-, medium-, and long-term growth momentum regarding VC deal, exit, and fundraising activity. Locations with high Growth Scores may not have lofty headline figures, however, the rate at which they grow dictates their ranking.

Development Scores

Our Development Score is derived from two criteria: size and maturity. To measure size, we have analyzed various inputs including but not limited to VC deal, exit, and fundraising activity in a specific area.

For example, deal count and value data points will have a strong weightings in the size category, as high amounts of deal activity in an area are a leading indicator of a dense VC ecosystem. Strong deal activity suggests there are several startups based in the city seeking funding. If high amounts of deal activity happen, startups are receiving funding; therefore, resources are developed and ready for deals to take place. Moreover, if startups headquartered in a region are obtaining backing, it means investors are targeting the region and recognize it is a place where viable investment opportunities exist.

When assessing the maturity of an ecosystem, emphasis is on the ability of startups based in the city to secure capital, grow, successfully exit, and create outliers. Mature companies will obtain greater sums of capital, increase their valuation, attract talent, and generate returns for investors looking for the best-in-class opportunities.

For example, the quantity of $1-plus billion dollar VC-backed company exits from a city will have a bearing on how mature its VC ecosystem is considered. If a healthy pipeline of companies is able to secure funding and mature in a city, high levels of development and expertize would be expected. Other factors such as valuations and late-stage and venture-growth activity impact Maturity Scores for cities too. For more information on our inputs, weightings, and scoring please refer to the methodology section.

Key findings

San Francisco is the most developed VC ecosystem in the world by a considerable amount.

As expected, San Francisco is statistically the most developed VC ecosystem in the world. There is a sizeable gap between San Francisco and the remaining locations, with New York ranking second. The volume and value of VC activity across dealmaking, exits, and fundraising in the region has been robust for several years. For context, over a six-year period from Q3 2017 to Q2 2023, $364.5 billion was invested into startups based in San Francisco, while New-York-based startups attracted less than half that figure. With VC born out of the US West Coast several decades ago, the region continues to drive activity in VC on a monumental scale.

VC ecosystems in the US and Asia account for 85% of the 20 most developed VC ecosystems.

Aside from San Francisco and New York, US locations such as Los Angeles and Boston ranked highly in terms of development. Beijing and Shanghai in China also registered robust Development Scores. Globally, the US houses the most developed

VC ecosystems, providing nine of the leading 20. Eight locations were based in Asia, including Seoul and Tokyo.

London is the only European city among the top 10 most developed VC ecosystems.

There was a lack of European locations when analysing the top 20 developed ecosystems. London was the only European city to break into the top 10, reaching seventh place. In 16th place, Berlin was the only other European city. We also incorporate Israel as part of our European dataset for reporting purposes, with Tel-Aviv rounding off the leading 20.

Top 20 locations ranked by Development Score (Q3 2017 to Q2 2023)*

Location	Deal value ($B)	Deal count	Exit value ($B)	Exit count	Fund value ($B)	Fund count	Development Score
San Francisco	$364.5	19,178	$664.2	2,079	$261.8	1,945	89.4
New York	$153.2	12,825	$145.0	1,138	$121.1	1,089	75.8
Beijing	$157.5	9,207	$242.3	311	$180.3	1,504	74.9
Shanghai	$106.0	7,278	$148.9	239	$105.2	1,136	71.7
Los Angeles	$123.1	9,357	$150.4	761	$23.3	442	70.8
Boston	$99.2	5,829	$146.1	690	$51.2	483	70.4
London	$85.8	11,090	$59.5	608	$37.6	373	63.2
Shenzhen	$40.3	4,815	$55.3	115	$51.1	735	61.2
Seoul	$27.0	5,481	$57.8	280	$33.1	915	59.0
Hangzhou	$40.7	3,264	$78.9	97	$20.6	377	58.6
Tokyo	$20.8	5,157	$23.7	380	$158.7	312	57.6
Washington DC	$34.7	2,609	$24.9	275	$14.3	181	54.2
Seattle	$26.7	2,602	$30.6	256	$11.0	126	53.5
Austin	$21.9	2,447	$25.1	223	$8.7	148	52.2
Singapore	$39.5	4,173	$37.5	165	$11.5	185	52.1
Berlin	$26.4	2,293	$13.4	256	$8.8	85	51.8
San Diego	$27.2	1,968	$36.6	203	$1.2	38	51.5
Denver	$20.7	2,378	$26.4	220	$3.8	111	49.9
Guangzhou	$25.2	1,654	$18.4	55	$20.3	258	49.5
Tel Aviv	$16.8	1,812	$23.5	152	$7.8	109	49.0

Source: PitchBook • Geography: Global
*As of June 30, 2023

Growth Scores

Growth Scores have been derived to focus less on eye-catching statistics and more on relative growth rates of activity. To facilitate the creation of a balanced score and smooth near-term data fluctuations based on outlier activity, we have analyzed one-year, three-year, and five-year growth rates for VC deal, exit, and fundraising activity in locations that meet our baseline criteria.[1] We have also incorporated a longer-term two-year rolling growth rate to measure comparative growth between longer time periods.[2]

The purpose of the Growth Score is to highlight VC clusters that have been growing in recent years. These places could be growing their VC activity at a faster rate than more established, expensive, and saturated locations. Cities with high Growth Scores may have less developed VC footprints, but their potential upside with better value for money investments and future growth could be greater. For more information on our inputs, weightings, and scoring please refer to the methodology section.

Key findings

Dubai pips Detroit at the top of our VC ecosystem growth rankings.

Dubai's emergence as a business, tourism, and financial center helps it take the top spot in our growth rankings. Detroit, a location known historically for its automobile industry, ranked second, thus indicating it is emerging as a tech hub. Berlin registered the third largest Growth Score and was highest among European cities, with Raleigh and Houston completing the five leading rankings. With competition fierce and costs increasing in well-known VC clusters, startups and investors will be targeting new locations to conduct VC activity.

65% of the 20 highest growth VC ecosystems are located in Europe or the US.

Our 20 leading Growth Scores exhibited a fairer split across continents, with Europe increasing its share of constituents. The next best European city after Berlin was Madrid in seventh place. Milan, Talinn, and Vienna also featured, illustrating the diversity of European countries producing high-growth VC areas. Alongside the leading US locations, Indianapolis, Miami, and Philadelphia appeared on the top 20 list.

Only three locations in Asia are among the 20 fastest-growing VC ecosystems.

Only 15% of the 20 fastest-growing VC ecosystems are in Asia. By comparison, 40% of the 20 best-ranked development ecosystems are in Asia.

1: The one-year growth rate period compares activity between the period of Q3 2022 to Q2 2023 versus Q3 2021 to Q2 2022; the three-year growth rate period compares activity between Q3 2022 to Q2 2023 versus Q3 2019 to Q2 2020; and the five-year growth rate period compares Q3 2022 to Q2 2023 versus Q3 2017 to Q2 2018.
2: The two-year rolling growth period compares Q3 2021 to Q2 2023 versus Q3 2019 to Q2 2021.

Top 20 locations ranked by Growth Score (Q3 2017 to Q2 2023)*

Location	Deal value ($B)	Deal count	Exit value ($B)	Exit count	Fund value ($B)	Fund count	Growth score
Dubai	$3.8	815	$3.7	35	$1.5	20	72.8
Detroit	$4.0	694	$3.7	63	$1.1	34	72.5
Berlin	$26.4	2,293	$13.4	256	$8.8	85	71.8
Raleigh	$12.4	1,016	$6.5	85	$1.6	32	71.3
Houston	$6.8	934	$4.4	88	$1.2	41	70.3
Nanjing	$14.9	1,289	$14.7	31	$12.9	171	69.6
Madrid	$4.5	987	$0.3	69	$1.9	39	69.5
Milan	$3.9	679	$0.7	70	$1.6	37	69.3
Tallinn	$3.0	559	$0.2	20	$0.4	10	67.1
Vienna	$2.5	490	$1.3	42	$0.7	15	66.4
Istanbul	$1.9	681	$2.9	26	$0.3	16	66.0
Calgary	$1.7	422	$0.4	22	$0.1	7	65.4
Changsha	$7.0	378	$10.1	23	$3.4	45	65.1
Gurgaon	$7.5	516	$0.8	31	$0.2	5	63.8
Indianapolis	$1.8	540	$0.6	47	$0.3	20	62.5
Miami	$17.9	1,975	$10.6	116	$5.7	109	60.5
Philadelphia	$19.6	2,367	$10.9	172	$2.2	54	58.1
Sao Paulo	$14.2	1,532	$37.3	145	$3.4	75	57.7
Lyon	$1.4	338	$0.2	23	$0.2	5	57.2
St. Louis	$2.5	389	$1.5	42	$1.1	27	56.9

Source: PitchBook • Geography: Global
*As of June 30, 2023

Overall Scores

Taking our rankings one step further, we have assigned weightings to Development and Growth Scores and combined them to evaluate how locations position overall. For more information on our inputs, weightings, and scoring please refer to the methodology section.

Key findings

Cities with the largest Development Scores possess lower Growth Scores.

Generally, there is an inverse correlation between the locations with the largest Development Scores and their respective Growth Scores. For example, San Francisco, Beijing, and Boston all possess outlier Development Scores, but their Growth Scores lag. This is largely expected as growth for the largest VC ecosystems will be harder to achieve given their size. Conversely, smaller ecosystems might be able to grow at faster rates relative to their size. Larger ecosystems may be hampered by current market conditions; they may have grown in the past decade but will be experiencing a contraction in activity given the global weakening in activity in the past 18 months.

Top 10 locations ranked by Overall Score (Q3 2017 to Q2 2023)*

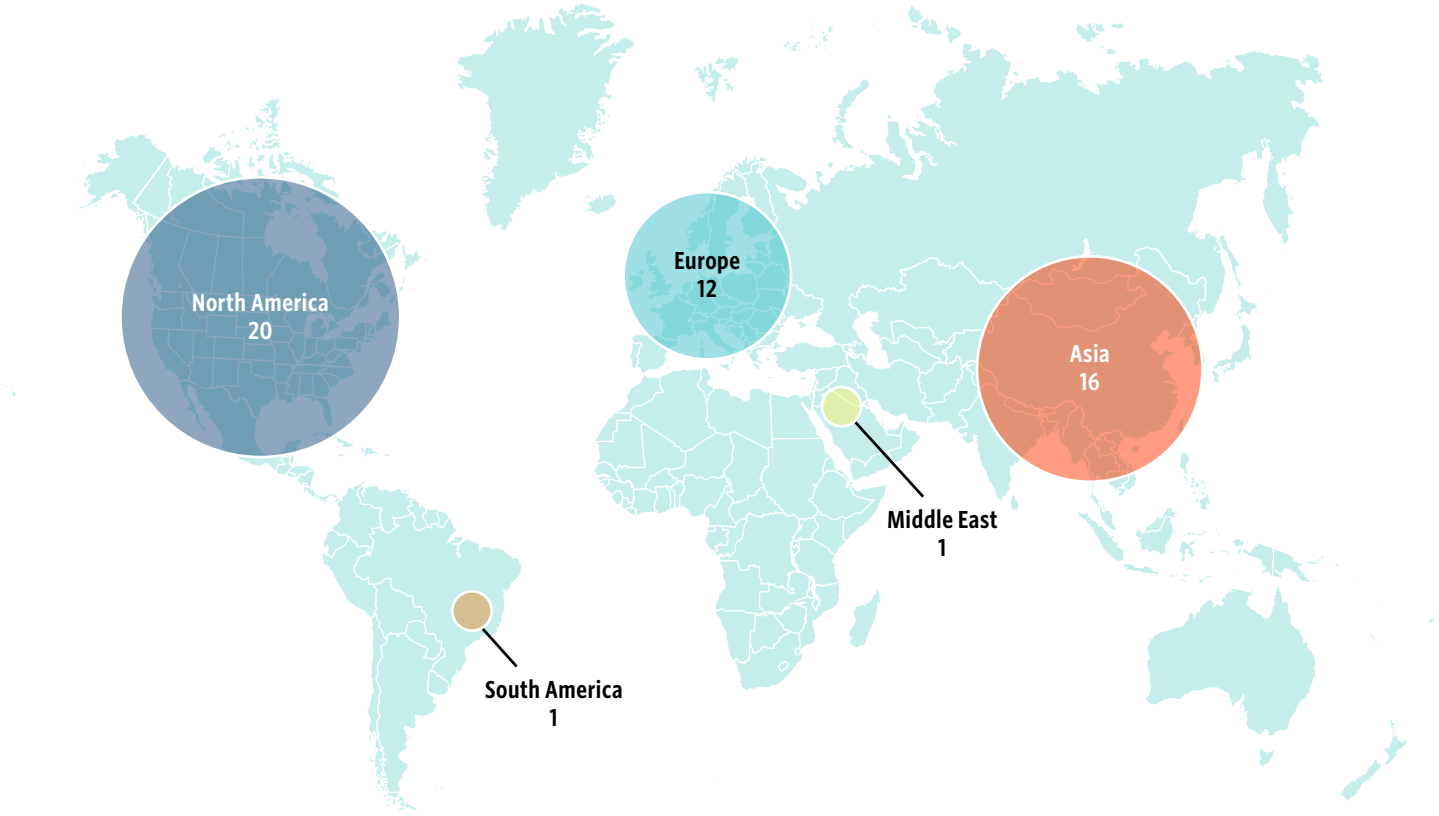
Location	Global region	Development Score	Growth Score	Overall Score
San Francisco	North America	89.4	18.9	68.3
New York	North America	75.8	44.9	66.5
Shanghai	Asia	71.7	41.8	62.7
Los Angeles	North America	70.8	34.4	59.9
London	Europe	63.2	49.9	59.2
Beijing	Asia	74.9	18.7	58.0
Boston	North America	70.4	28.9	58.0
Berlin	Europe	51.8	71.8	57.8
Shenzhen	Asia	61.2	43.4	55.9
Seoul	Asia	59.0	47.2	55.5

Source: PitchBook • Geography: Global
*As of June 30, 2023

The top 50 overall rankings are spread across the globe with 40% in North America, 32% in Asia, and 24% in Europe.

The regional split of our overall rankings highlights how globalized VC has become. Locations are dotted around continents and indicate that VC has evolved into an extensive asset class within financial markets.

Regional split of top 50 locations ranked by Overall Score (Q3 2017 to Q2 2023)*

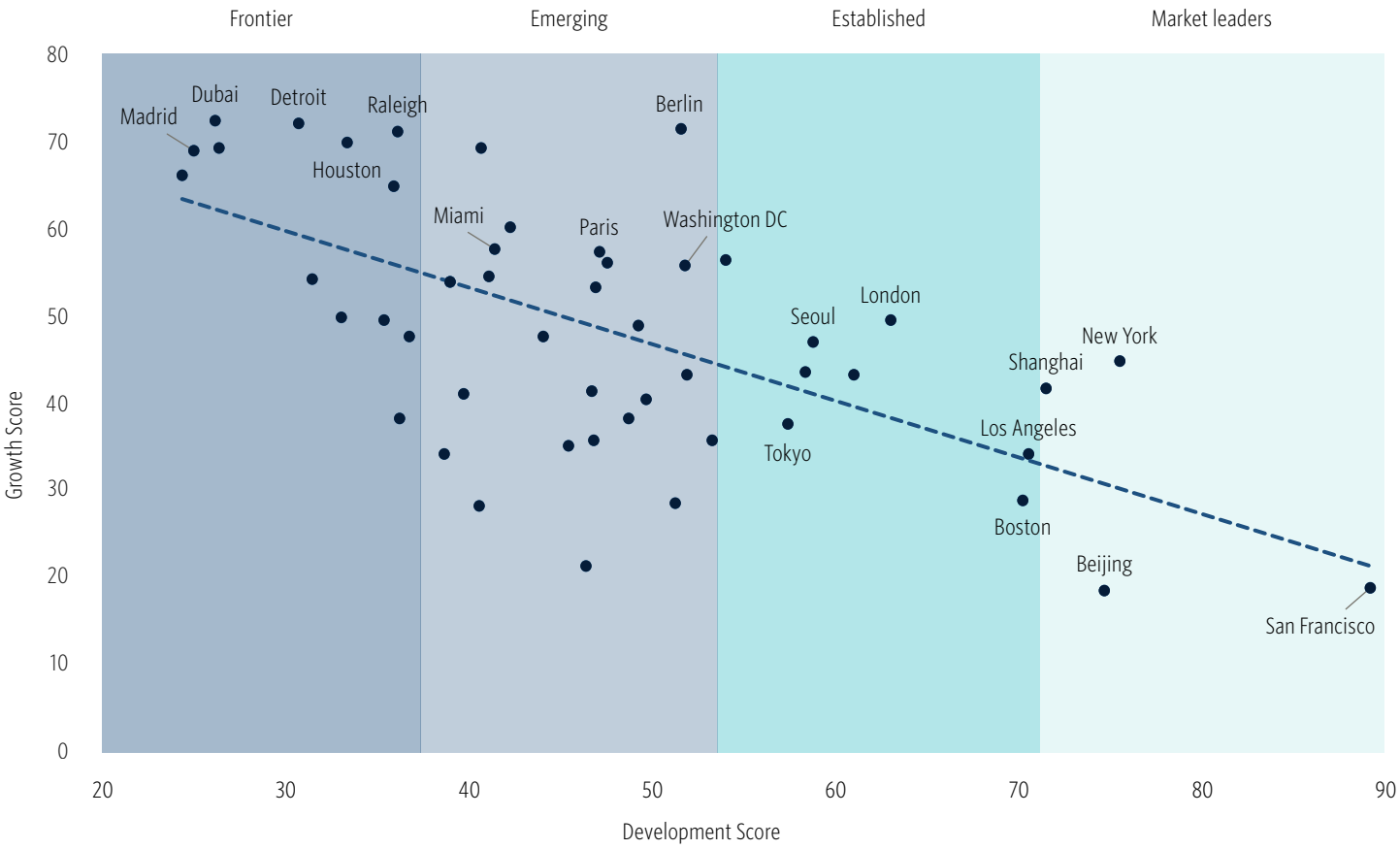


Source: PitchBook • Geography: Global
*As of June 30, 2023

New York, Shanghai, London, and Berlin strike a balance between development and growth.

When mapping our Development and Growth Scores, we have identified a selection of cities that provide a balance between the two. Locations with high Development Scores typically fall into the "established" and "market leaders" ecosystem categories. Meanwhile, high Growth Scores are predominately grouped in the "frontier" and "emerging" ecosystem categories.

Top 50 locations by Development Score and Growth Score*



Source: PitchBook • Geography: Global
*As of June 30, 2023

Methodology

The scores provide comparative rankings rather than highlighting areas that have registered largest figures. This is to ensure we can provide insight into locations that are potentially growing or slowing in terms of VC activity. For the purposes of this framework, we have solely used quantitative company and fund location-based data from the PitchBook Platform to establish the scores. We have excluded qualitative factors in this iteration; however, we may incorporate these elements in future versions.

Scope

To define our scope and discount anomalies that skew data, we established a minimum threshold for deal, exit, and closed fund count per location over a trailing six-year period (Q3 2017 to Q2 2023).[3] With the baseline established, the sample size of ecosystems in scope for the analysis was determined. Where possible, we have grouped locations for simplicity. For example, we have utilized combined statistical areas for US locations.

Scoring

Next, we established the two main areas for comparison: development and growth. To create the framework, we utilized multiple proprietary data points housed in the PitchBook Platform. Once defined, these data points formed the inputs for the scores. The inputs have been assigned weightings based on their importance in relation to Development and Growth Scores. The inputs have subsequently been combined as the basis of the Development and Growth Scores for the geographical locations in scope.

To establish a comprehensive evaluation for each location, we employ a multivariate statistical approach. These individual inputs undergo Z-score calculations, rescaling, and weighted aggregation to derive a final score.

Prior to calculating the Z-scores, a crucial initial step involves transforming the raw data by taking the natural logarithm of the values, which enhances the comparability of the dataset for statistical analysis. We do not perform this step for the Growth Score inputs since these percentages are already proportional. However, due to the presence of outliers in the growth inputs, we apply data winsorizing by capping the top and bottom quartiles.

Subsequently, these individual assessments are transformed into Z-scores by examining how many standard deviations the value is from the mean. The Z-scores are then normalized by rescaling them to a range spanning from one to 100. This rescaling ensures that each location's performance can be meaningfully compared with others within the analysis.

Finally, we incorporate predetermined weightings by multiplying each rescaled score by its corresponding weighting. The weighted results are then aggregated,

3: 50 completed VC deals, 20 completed VC exits, and five closed VC funds.

resulting in a composite score that reflects the standing of each market relative to the entire dataset under examination.

Putting our methodology into action, we can look at San Francisco as an example:

San Francisco Development Score breakdown (Q3 2017 to Q2 2023)*

		Overall values	Z-score	Normalized score	Weights	Weighted normalized score
Size Score (50%)	Deal value ($B)	$364.46	2.9	100	8.35%	8.4
	Deal count	19,178	2.9	100	12.50%	12.5
	Exit value ($B)	$664.18	2.7	100	8.35%	8.4
	Exit count	2,079	3.4	100	12.50%	12.5
	Fund value ($B)	$261.81	2.6	100	4.15%	4.2
	Fund count	1,945	2.8	100	4.15%	4.2
Maturity Score (50%)	Mega exit count	102	3.1	100	9.38%	9.4
	Unicorn Count	250	3.3	100	9.38%	9.4
	Late-stage to early-stage ratio	43%	0.6	61	6.25%	3.8
	Nontraditional investor participation	42%	0.5	49	6.25%	3.1
	Exit value to deal value ratio	1.82	0.9	44	6.25%	2.7
	First financing count	4,959	2.7	100	6.25%	6.3
	Median pre-value ($M)	$93.15	1.0	62	3.13%	1.9
	Median deal value ($M)	$17.70	2.0	91	3.13%	2.9
					Development Score	89.4

Source: PitchBook • Geography: Global
*As of June 30, 2023

Using San Francisco inputs, here is the breakdown of this process. Over the past six years, San Francisco has demonstrated a noteworthy deal value amounting to $364.5 billion. In the initial step of our analysis, we logarithmically transform this value, resulting in a value of 5.9. Within the dataset, this 5.9 logarithmic value is associated with a Z-score of 2.9, signifying that it stands nearly three standard deviations above the dataset's mean.

This Z-score places it as the highest among all Z-scores within the dataset. Consequently, when we rescale this Z-score to the range of zero to 100, it receives the highest attainable score of 100. To ascertain a weighted score that integrates this deal value into our overall evaluation, we apply the predetermined weight for deal value, which is 8.35%, to the normalized score of 100. This yields a weighted score of 8.4%. Ultimately, San Francisco achieves a maximum score across all of the size inputs, which makes up 50% of the Development Score.

San Francisco Growth Score breakdown (Q3 2017 to Q2 2023)*

		Overall values	Z-score	Normalized score	Weights	Weighted normalized score
VC 1-Year Growth Score (25%)	Deal value ($B)	-0.05%	0.08	51	4.18%	2.1
	Deal count	-0.03%	-1.11	4	6.25%	0.3
	Exit value ($B)	-0.09%	-1.00	0	4.18%	0.0
	Exit count	-0.05%	-1.20	0	6.25%	0.0
	Fund value ($B)	-0.06%	-0.46	23	2.08%	0.5
	Fund count	-0.04%	0.11	43	2.08%	0.9
VC 3-Year Growth Score (25%)	Deal value ($B)	0.01%	-0.64	24	4.18%	1.0
	Deal count	0.00%	-0.71	21	6.25%	1.3
	Exit value ($B)	-0.08%	-0.97	0	4.18%	0.0
	Exit count	-0.03%	-1.19	0	6.25%	0.0
	Fund value ($B)	-0.02%	0.22	28	2.08%	0.6
	Fund count	0.02%	1.01	100	2.08%	2.1
VC 5-Year Growth Score (25%)	Deal value ($B)	0.07%	-0.63	25	4.18%	1.0
	Deal count	0.00%	-1.09	0	6.25%	0.0
	Exit value ($B)	-0.08%	-1.10	0	4.18%	0.0
	Exit count	-0.03%	-1.03	0	6.25%	0.0
	Fund value ($B)	0.09%	0.13	39	2.08%	0.8
	Fund count	0.03%	0.89	78	2.08%	1.6
VC 2-Year Agg Growth Score (25%)	Deal value ($B)	0.03%	-0.42	33	4.18%	1.4
	Deal count	0.01%	-0.48	29	6.25%	1.8
	Exit value ($B)	-0.05%	-0.84	4	4.18%	0.2
	Exit count	-0.01%	-0.97	5	6.25%	0.3
	Fund value ($B)	0.02%	0.49	51	2.08%	1.1
	Fund count	0.02%	1.11	93	2.08%	1.9
					Growth Score	18.9

Source: PitchBook • Geography: Global
*As of June 30, 2023

Inputs, weightings, and rationale

In order to create our scoring system, we selected inputs, and assigned specific weightings to reflect the importance of these inputs in relation to overarching scores.

The Development Score is calculated using the following equation:

Development Score = Size Score (50% weight) **+ Maturity Score** (50% weight)

Our Size Score inputs and associated weightings are:

Total VC deal value (8.35% of Development Score)

- The amount of capital invested into startups based in a location will directly impact how large an ecosystem is considered.
- Assigned a medium-high weighting, given deal value can reflect capital flowing into startups but can also be skewed by outlier deals upwardly inflating totals.

Total VC deal count (12.5% of Development Score)

- The volume of deals for startups based in a location is a leading indicator of activity and the density of an ecosystem.
- Assigned a high weighting, as deal count is less likely to be impacted by outliers and more reflective of VC deals being conducted across various VC financing stages.

Total VC exit value (8.35% of Development Score)

- Exit value generated by startups based in a specific location indicates that companies are able to go through the VC lifecycle, and leads to capital flowing back to investors, which could potentially be recycled into new startups.
- Assigned a medium-high weighting, given outliers can skew figures upwards, and exit value may not be reinvested.

Total VC exit count (12.5% of Development Score)

- Exit count indicates that a high concentration of companies are able to go through the VC financing stages and execute exits.
- Assigned a high weighting, given that exit count is less likely to be skewed by outliers and illustrate high levels of potential return opportunities.

Total VC fund value (4.15% of Development Score)

- Closed funds in a location indicate capital is being secured and entering the top of the VC ecosystem, with companies ready to be funded.
- Assigned a medium-low weighting in comparison to deal and exit inputs, as capital raised by a fund may be deployed into investments across different regions.

Total VC fund count (4.15% of Development Score)

- Fund counts indicate high quantities of VC GPs with capital-raising expertise in a region.
- Assigned a medium-low weighting, as a closed fund is likely to deploy capital across regions.

Our Maturity Score inputs and associated weightings are:

VC mega exit count (9.375% of Development Score)

- Large exits take time and indicate that an ecosystem can produce mature companies ripe for liquidity.
- Assigned a medium-high weighting, as exit counts are crucial to identify where the largest exits are taking place and to distinguish between mature and less developed ecosystems.

Unicorn count (9.375% of Development Score)

- Existing unicorns require substantial amounts of funding and resources, which indicates an ecosystem is mature.
- Assigned a medium-high weighting, as the most valuable companies are likely to be housed in the most mature ecosystems globally.

VC late-stage to early-stage ratio[4] (6.25% of Development Score)

- Greater counts of late-stage, venture-growth deal counts, along with exits relative to early-stage deal counts, indicate an ecosystem is tilted in favor of more mature companies.
- Assigned a medium weighting, as VC deal coverage of emerging markets tends to favor more late-stage deals, which may misrepresent smaller ecosystems by assigned higher late-stage ratios.

Percentage of deal count with nontraditional investor participation (6.25% of Development Score)

- Deals with nontraditional investors tend to involve more mature companies, as this is where the majority of nontraditional investors target VC-backed companies.
- Assigned a medium weighting, as nontraditional investors can invest across all financing stages; however, deals for more mature companies are more likely to have a diverse set of investors on board.

4: For the purposes of this ratio, late stage includes late stage, venture growth, and exits. Early stage includes pre-seed, seed, and early-stage rounds.

Exit value to deal value ratio (6.25% of Development Score)

- Selected as the dollar amount of exit value generated per dollar amount of invested into a location provides an indication of how a sophisticated location creates value.
- Assigned a medium weighting, as various factors can impact on capital efficiency of a location, individual companies have varying degrees of capital requirements.

VC first-time financing round count (6.25% of Development Score)

- First time financings indicate there is a depth of resources to leverage, leading to a larger quantity of companies going on to drive up activity at more mature financing stages within a VC ecosystem.
- Assigned a medium weighting, as first-time financings remain critically important to increase the down stream activity in a VC ecosystem; however, companies may ultimately not go on to secure subsequent funding.

VC late-stage and venture-growth median pre-money valuation (3.125% of Development Score)

- Selected as valuations will reflect the presence of mature companies.
- Assigned a low weighting, as mature companies can be at different financing stages and individual valuations can be skewed by outliers.

VC late-stage and venture-growth median deal value (3.125% of Development Score)

- Selected as median deal values will reflect the presence of mature companies.
- Assigned a low weighting, as mature companies can be at different financing stages and deal values can be skewed by outliers.

Each of our Growth Score inputs are:

One-year growth rate of the Size Score (25% equal weighting of Growth Score)

- Measure the short- to medium-term momentum linked to deals, exits, and fundraising in an ecosystem to identify recent developments.

Three-year growth rate of the Size Score (25% equal weighting of Growth Score)

- Measure medium- to long-term momentum by comparing a recent 12-month period to the same period three years ago.

Five-year growth rate of the Size Score (25% equal weighting of Growth Score)

- Measure long-term momentum by comparing a recent 12-month period to the same period five years ago.

Two-year aggregate growth rate of the Size Score
(25% equal weighting of Growth Score)

- Measure the long-term sustainability of growth from a recent 24-month period versus the preceding 24-month period to negate market conditions, bumper quarters, and evaluate a longer time period.

Finally, our Overall Score is calculated using the following equation:

Overall Score = Development Score (70% weight) **+ Growth Score** (30% weight)

And given **Development Score = Size Score** (50% weight) **+ Maturity Score** (50% weight), the underlying split is as follows:

Overall Score = Size Score (35% weight) **+ Maturity Score** (35% weight) + **Growth Score** (30% weight)

Additional factors to consider

Various factors can impact the development and growth rate of a VC ecosystem. The business environment in a particular location can impact how it measures against peers globally. Factors including corporate tax rates, legislation promoting entrepreneurship, and technological adoption can have an effect. The cost of living in a particular location could be much higher, leading to inflated expenses for businesses, valuations, and round sizes. An environment that promotes VC activity is likely to have policies and regulations that encourage risk-taking and the use of financial markets for capital raising. Additional factors to consider include education, culture, skills, visas, and networks. These considerations can feed into a VC ecosystem's performance.

Openness, disclosure rates, and reporting requirements among countries across the globe vary too. Therefore, certain locations could be over- or under-represented at various stages within the VC ecosystem. For example, smaller deals can be abundant and are inherently tougher to capture, as founders and investors may want to keep portfolios in stealth mode for as long as possible. While largescale exits are rare, they tend to be publicized heavily and parties involved want to promote the liquidity event. As a result, both factors can influence the Development and Growth Score of a region.