NATIONAL VENTURE CAPITAL ASSOCIATION

YEARBOOK

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Dear Readers

March 2019

Dear Readers:

NVCA's 22nd annual Yearbook shines a spotlight on the historic year the U.S. venture capital industry had in 2018. Record capital flows across the venture cycle led headlines in 2018, as limited partners (i.e., investors into venture funds) committed $54 billion to 257 U.S. venture funds closed last year; nearly 8,500 venture-backed companies raised more than $130 billion in funding; and 864 venture-backed exits surpassed a combined value of $122 billion.

However, beneath those large pools of capital has been an industry metamorphosis, with fewer funds raising capital, fewer companies receiving investment, and fewer venture-backed exits taking place. At the same time, more types of investors are actively investing in the startup ecosystem. The venture industry today looks much differently than it did 10-20 years ago, including shifting investment stages and large deals for later-stage companies reaching new heights.

What are the latest venture capital data trends for fundraising, investment, and exit activity? How do these compare to previous years? And what do they mean for 2019 and beyond? We unpack these trends in more detail in this publication, as well as dive into sector, geographic, and firm/fund size analyses.

Public market volatility at the end of 2018 and the start of 2019 gave pause to the global financial world, and potential corrections and the trickle-down effect on the venture market have been top of mind for the industry in recent months. And if creating the next big thing and navigating economic volatility aren't enough of a concern for the venture ecosystem, regulatory uncertainty continues to reign.

As the voice of the venture capital community, NVCA was hard at work in 2018, continuing to advocate on behalf of startups and venture firms on capital markets reform, foreign investment legislation, immigration policy, and tax proposals affecting the ecosystem, and more. While global venture investment dollars continue to grow, U.S.-based companies are attracting a smaller share (51% in 2018 and well below the 84% U.S. share in 2004). Policies that make the U.S. the most attractive country to start and grow a business continue to drive our advocacy efforts in Washington.

2018 also brought new faces to the NVCA team; educational initiatives; diversity and inclusion programs through VentureForward; and events to engage with the industry on topics that matter to you. A big thank you to the NVCA member firms who continue to support us for the greater good of advancing the venture industry. Our work would not be possible without you!

And we once again thank our partner PitchBook, NVCA's official data provider, for providing the data (unless otherwise noted) in this publication. The Yearbook and its supporting data may be accessed three ways: 1) this PDF report; 2) the PDF data pack, which is available to the public; and 3) the XLS data pack, which is available only to NVCA members.

Excitingly, we continue to hear—from venture capital investors, entrepreneurs, industry advisors, academics, limited partners, policymakers, and others across the country—that the NVCA Yearbook is an important resource, supplementary to the quarterly PitchBook-NVCA Venture Monitor. We hope you find this year's edition of the Yearbook helpful. Please share your feedback with us via our contact details below.

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Executive Summary

The U.S. venture capital (VC) industry had a historic year in 2018, capping a five-year flurry of activity where $70 billion+ was deployed into 8,000+ high-growth startups each year since 2014. Over that time period, nearly 49,000 venture investments attracted an aggregate of $445 billion to start, build, and fuel innovative companies across the country.

At the end of 2018, 1,047 venture firms were in existence, managing 1,884 active venture funds and translating to approximately $403 billion in U.S. venture capital assets under management. All three metrics represent continued growth of the industry. However, while capital flows have reached record heights, that capital is increasingly concentrated in the hands of fewer players.

In the past five to six years, the industry has trended towards bigger funds, bigger investments, bigger valuations, and bigger exits. At the same time, there has been a peak and then decline in the number of funds, investments, and exits. Nonetheless, the past year (and decade for that matter) has brought a new crop of transformative American venture-backed companies. These companies have disrupted traditional industries and created new ones, and capital and guidance from venture investors have fueled their growth.

The changing dynamic of the industry has partly come from shifts in early stage investing; the composition of capital supply, i.e., the diversity of the investor base, new types of investors, and new funds; and increased capital availability/investment at the later stages and via mega deals. The question remains of whether the venture industry has reached a new normal or a peak ahead of a cooling off period. While the answer to that question remains to be seen, there is no question that the venture industry of today is quite different than a decade ago.

A record year for capital flows in the venture ecosystem coincided with a busy year of public policies impacting investors and entrepreneurs in 2018. NVCA was at the forefront of these issues in Washington, advocating on behalf of the industry (see page 39). In addition to advocacy, NVCA continued to serve the ecosystem with education, programming, research, and resources. NVCA's 2018 "Year in Review" starting on page 37 showcases the highlights, and be sure to check out what's ahead in 2019 and how to get involved.

Highlights of the U.S. venture ecosystem in 2018:

CAPITAL COMMITMENTS TO VENTURE FUNDS (More details starting on page 19)

- Venture capital investors raised $54 billion across 257 funds to deploy into promising startups, marking the fifth consecutive year of $35 billion or more raised.
- 52 first-time funds raised $5.3 billion in commitments last year, with both metrics reaching a 15-year high.
- Sequoia Capital's Global Growth Fund held an $8 billion final close in September 2018, making it the largest VC fund closed to date.
- VC funds based in 28 states held final closes on venture funds in 2018, with Indiana, Kansas, Montana, Alabama, Kentucky, and Rhode Island all seeing funds raised in 2018 after no disclosed venture funds raised capital in those states in 2017.
- The overall U.S. median VC fund size in 2018 was $75 million, a ten-year high and more than 50% larger compared to 2017.
- Outside of California, Massachusetts, and New York, median VC fund size reached $25 million in 2018, a steady increase since 2014 but still relatively small compared to the dominant venture hubs – the median for California, Massachusetts, and New York, collectively, was $100 million.

CAPITAL DEPLOYED TO STARTUPS (More details starting on page 23)

- More than 8,380 venture-backed companies received $131 billion in funding in 2018, eclipsing the $100 billion watermark set at the height of the dot-com boom in 2000.
- Mega deals (i.e., investments of $100 million+ into venture-backed companies) accounted for nearly half (47%) of total capital invested in 2018.
- Unicorns (i.e., venture-backed companies valued at $1 billion+), many of which raised mega deals, attracted $46 billion, or 35% of total capital invested, but less than 2% of the total deals completed in 2018.
- The number of angel/seed VC investments returned to pre-2013 levels, with 3,760 deals completed representing 42% of total deals in 2018, the lowest absolute and relative figures since 2012.
- The number of both early stage and later stage VC investments increased for the second consecutive year in 2018, after what appeared to be a deceleration in 2016. However, on a quarterly basis, early stage and later stage deal count fell in 4Q 2018, suggesting a year-end deceleration with potential to spill over to 2019.
- Though the number of first-time financings (i.e., first round of equity funding in a startup by an institutional venture investor) continued to decline in 2018, the 2,040 companies raising first-time funding attracted a 15-year high of $10.1 billion.
- The software sector continued to attract the lion's share of VC activity. But the life sciences sector saw significant growth, with more than $23 billion invested across 1,230+ companies in 2018, a record high for both metrics. The sector accounted for 18% of total capital invested and 15% of all companies receiving venture funding in 2018.
- For the sixth straight year, more than 1,000 venture investments involved corporate venture capital (CVC) participation. In 2018, 16% of all VC deals involved CVC, the highest share since 2006.
- Growth equity* investment in 2018 spiked after strong years from 2014 to 2017. Investors deployed $66 billion across 1,057 growth equity investments last year, with both metrics reaching 15-year highs.
- Venture funding reached startups in all 50 states and the District of Columbia, 222 Metropolitan Statistical Areas (MSAs), and 393 Congressional Districts. Charleston, SC, Richmond, VA, and Indianapolis, IN saw the biggest growth rate** for annual number of VC investments over the past five years (for those MSAs with at least 15 in 2018). Indianapolis, IN, Columbus, OH, and New Haven, CT saw the largest annual growth for VC investment dollars over the past five years (for those MSAs with at least $10 million VC investment in 2013 and 2018).
- Globally, $254 billion was invested across nearly 15,300 deals in 2018. The U.S. represented 51% and 58% of the global total, respectively.

EXIT LANDSCAPE (More details starting on page 33)

- In 2018, 85 venture-backed IPOs raised $63.6 billion, the highest aggregate annual total for capital raised since the dot-com boom except for 2012 when Facebook went public.
- Venture-backed companies accounted for 40% of all U.S. IPOs in 2018, a 15-year high.
- The number of disclosed mergers and acquisitions (M&As) have continued their dip since 2014, with 779 M&As in 2018 and far from the peak of 953 in 2014. However, last year's 199 M&As with disclosed values represented a total of $58.4 billion in disclosed exit value, the highest since 2014.
- 33 unicorns held exits in 2018, the highest annual total on record, for an aggregate deal value of $76 billion.

**Growth equity is not included as a subset of overall VC data in this publication, but is rather its own unique dataset. More details on the methodology are on page [XX].*

*** Calculated as compound annual growth rate.*

Note to readers: Figures for prior years throughout this edition of the Yearbook may be different from last year's edition due to new and updated information.

Venture Capital 101

Venture capital has enabled the United States to support its entrepreneurial talent by turning ideas and basic research into products and services have transformed the world. Venture capital funds build companies from the simplest form—perhaps just the entrepreneur and an idea expressed as a business plan—to freestanding, mature organizations.

Risk Capital for High-Growth Businesses

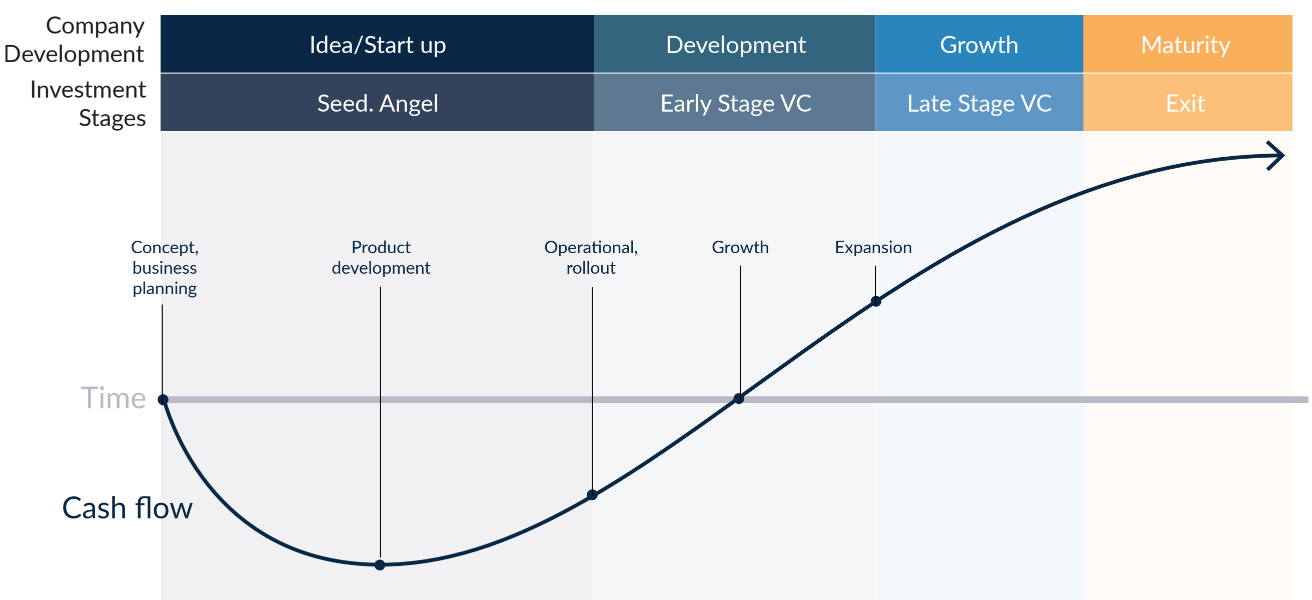
Venture capital firms are professional, institutional managers of risk capital that enable and support the most innovative and promising companies. Venture capital supports new ideas that 1) could not be financed with traditional bank financing; 2) threaten established products and services in a corporation or industry; and 3) typically require five to eight years (or longer!) to reach maturity.

Venture capital is quite unique as an institutional investor asset class. Venture capital funds make equity investments in a company whose stock is essentially illiquid and worthless until a company matures five to eight years down the road. Follow-on investment provides additional funding as the company grows. These "rounds," typically occurring every year or two, are also based on equity in the company, with the shares allocated among the investors and management team based on an agreed "valuation." However, unless a company is acquired or goes public, there is little actual value. Venture capital is a long-term investment.

Venture Investors Partner with Entrepreneurs

The U.S. venture industry provides the capital to create some of the most innovative and successful companies. However, venture capital is more than money. A venture capital professional's most precious asset is time. According to a 2016 study, *How to Venture Capitalists Make Decisions?*[1], for every company in which a venture firm eventually invests, the firm considers roughly 100 potential opportunities. The same study, which

Venture Capital Plays a Vital Role in a Startup's Growth



Sources of funding: VCs, angel investors, incubators, accelerators, strategic investors (corporate groups), growth equity investors, private equity firms, debt investors

[1]*Gompers, Paul A. and Gornall, Will and Kaplan, Steven N. and Strebulaev, Ilya A., How Do Venture Capitalists Make Decisions? (August 1, 2016). Stanford University Graduate School of Business Research Paper No. 16-33; European Corporate Governance Institute (ECGI) - Finance Working Paper No. 477/2016. Available at SSRN: https://ssrn.com/abstract=2801385*

included results from a survey of 889 venture capital professionals at 681 firms, showed that the median venture firm closes about four deals per year. Team, business model, product, market, valuation, fit, ability to add value, and industry are all important factors venture investors consider when evaluating investments into startups. Venture capital investors are seeking entrepreneurs who are addressing global markets, have superb scalability, demonstrate success within a reasonable timeframe, and truly innovative.

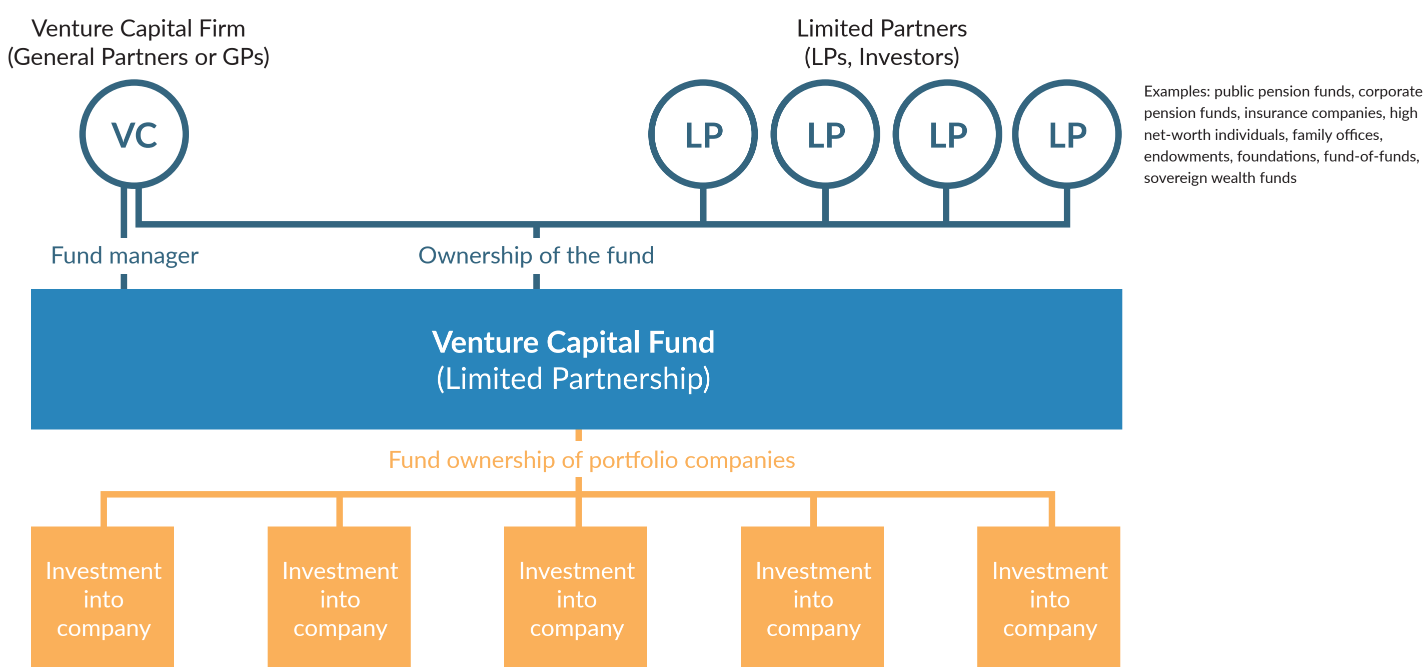
A venture capitalist's competitive advantage is the expertise and guidance they provide to the entrepreneurs in their portfolio. Once the investment into a company has been made, venture capital partners actively engage with a company, providing strategic and operational guidance, connecting entrepreneurs with investors and customers, taking a board seat at the company, and hiring employees. With a startup, daily interaction with the management team is common. This active engagement with a fledgling startup is critical to the company's success and often limits the number of startups into which any single fund can invest. Many one- and two-person companies have received funding, but no one- or two-person company has ever gone public! Along the way, the company must recruit talent and scale up. Any venture capitalist who has had an ultra-successful investment will tell you that the companies capable of breaking through were able to evolve the original business plan concept due to careful input from an experienced hand.

Common Structure — Unique Results

While the legal and economic structures used to create a venture capital fund are similar to those used by other alternative investment asset classes, venture capital itself is unique. Typically, a venture capital firm will create a Limited Partnership with the investors as LPs and the firm itself as the General Partner. Examples of LPs include public pension funds, corporate pension funds, insurance companies, family offices, endowments, and foundations. Each "fund," or portfolio, is a separate partnership.

A new fund is established when the venture capital firm obtains necessary commitments from its investors, say $100 million. The

The VC Fund Structure



money is taken from Limited Partners as the investments are made through what are referred to as "capital calls." Typically, an initial funding of a company will cause the venture fund to reserve three or four times that first investment for follow-on financing. Over the next three to eight years, the venture firm works with the founding entrepreneur to grow the company. The payoff comes after the company is acquired or goes public. Although the investor has high hopes for any company getting funded, the 2016 study *How Do Venture Capitalists Make Decisions?* found that, on average, 15% of a venture firm's portfolio exits are through IPOs while about half are through an M&A.

Economic Alignment of All Stakeholders — An American Success Story

Venture capital is rare among asset classes in that success is truly shared. It is not driven by quick returns, financial engineering, debt, or transaction fees. Economic success occurs when the stock price increases above the purchase price. When a company is successful and has a strong public stock offering, or is acquired, the stock price of the company reflects its success. The entrepreneur benefits from appreciated stock and stock options. The rank and file employees throughout the organization historically also do well with their stock options. The venture capital fund and its investors split the capital gains per a pre-agreed formula. Many college endowments, pension funds, charities, individuals, and corporations have benefited far beyond the risk-adjusted returns of the public markets.

At the same time, the risk capital that funds startups can bring benefits to local economies in the form of company growth, competitiveness, and job creation. In fact, recent studies have found that high-growth startups account for as many as 50% of gross jobs created, and an average of 2.9 million net jobs created annually between 1980 and 2010.[2]

How Venture Capital Works

Fundraising
VCs raise capital for funds from LPs.

Investment
VCs typically invest in young, high-growth companies in need of capital to scale.

Company Growth
VCs provide active management and act as advisors & mentors, taking board seats, providing strategic advice, facilitating introductions.

Exit
After about 5–10 years of creating a high-growth company, the VC exits its stake via an acquisition or IPO. IPOs have more advantages: greater capital raised, higher returns, local job creation.

Returns
In addition to companies benefitting, VCs and LPs make a profit on their investment. High-quality jobs are created, more capital is available for university research, retirees have more for retirement, foundations have more resources to fund their work.

Re-investment
The fund ends when all investments have been exited and proceeds have beem distributed to LPs. LPs can then reinvest earnings in a new crop of funds.

[2]*Kauffman Foundation, The Economic Impact of High-Growth Startups (January 7, 2016).* https://www.kauffman.org/-/media/kauffman_org/resources/2016/entrepreneurship-policy-digest/pd_highgrowth060716.pdf *and Decker, Ryan, John Haltiwanger, Ron Jarmin, and Javier Miranda. 2014. "The Role of Entrepreneurship in US Job Creation and Economic Dynamism." Journal of Economic Perspectives, 28 (3): 3-24.* https://www.aeaweb.org/articles?id=10.1257/jep.28.3.3

The Impact of Venture-backed Companies Beyond Financial Returns

While venture investing has generated billions of dollars for investors and their institutions and created millions of jobs over the years, the economic impact of venture-backed companies has been even more far-reaching. Many venture-backed companies have scaled, gone public, and become household names, and at the same time have generated high-skilled jobs and trillions of dollars of benefit for the U.S. economy.

A 2015 study, *The Economic Impact of Venture Capital: Evidence from Public Companies*[3], analyzed the impact venture-backed companies, as a subset of all U.S. public companies founded after 1974, have had on the economy. The study found that of the 1,339 U.S. companies that went public between 1974 and 2015, 556 (or 42%) are venture-backed. These 556 companies represent 63% of the market capitalization and 85% of total research and development of those 1,339 companies.

At the end of 2018, venture-backed companies accounted for five of the six largest publicly traded companies by market capitalization: Microsoft ($780B), Apple ($746B), Amazon ($737B), Alphabet ($727B), and Facebook ($374B).[4]

New and aspiring venture investors receive guidance from experienced venture investors and LPs at LP Office Hours

What's Ahead

Much of venture capital's success has come from the vibrant entrepreneurial spirit in the U.S., financial recognition of success, access to good science, a pipeline of talent, and fair and open capital markets. It is dependent upon investment in scientific research, motivated entrepreneurs, protection of intellectual property, a skilled workforce, and public policies that encourage new company formation. The nascent deployment of venture capital in some countries is gated by a country's or region's cultural fit, tolerance for failure, services infrastructure that supports developing companies, intellectual property protection, efficient capital markets, and the willingness of big business to purchase from small companies.

However, the rest of the world is catching on to the power of venture capital and entrepreneurship. Global venture investment has been growing, as it has in the U.S., but the U.S. has lost its dominance. In the 1990s, startups in the U.S. accounted for more than 90% of global venture capital dollars invested. In 2018, the U.S. accounted for 51% of global VC investment.

[3] *Gornall, Will and Strebulaev, Ilya A., The Economic Impact of Venture Capital: Evidence from Public Companies (November 1, 2015). Stanford University Graduate School of Business Research Paper No. 15-55. Available at SSRN: https://ssrn.com/abstract=2681841 or http://dx.doi.org/10.2139/ssrn.2681841*

[4] *Source: YCharts data as of December 31, 2018. Berkshire Hathaway ranked fifth with a market cap of $500B.*

At-A-Glance: The U.S. Venture Industry

The size of the U.S. venture industry has steadily increased over the past decade. At the end of 2018, 1,047 venture firms were in existence, defined as a rolling count of firms that have raised a fund in the last eight years. These 1,047 firms managed 1,884 venture funds and had approximately $403 billion in U.S. venture capital assets under management (AUM) and $100 billion in dry powder at the end of 2018.

Thanks to a strong VC fundraising year in 2018, VC AUM increased 14% year-over-year from 2017 to 2018, and brought capital raised by venture funds in the past five years to $200 billion. This has helped the industry's annual AUM grow at a rate of 6.44%* since 2004.

VC assets remain geographically concentrated in three states—the dominant hubs for venture activity—California, Massachusetts, and New York. These three states together made up more than 85% of total U.S. VC AUM in 2018, representing a ten-year steady rise since 2008 when they accounted for 73% of the country's AUM. California, Massachusetts, and New York saw year-over-year AUM increases of 16%, 14%, and 21%, respectively.

Kansas, Indiana, Montana, New Hampshire, and Alabama were among the states with the highest year-over-year VC AUM increases. In fact, 34 states witnessed increases in their VC assets under management from 2017 to 2018, and 31 states had more than $100 million in AUM at the end of 2018. However, as we always note, VC assets by a firm's headquarter state oftentimes is not the most telling figure since firms frequently invest in companies outside their state, as noted on the charts on page 27.

*Calculated as compound annual growth rate.

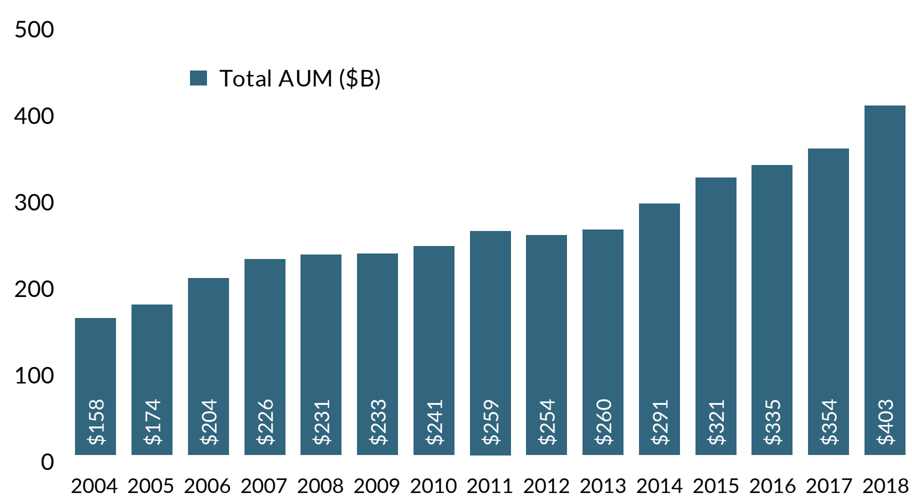
VC AUM Summary Statistics

	2006	2012	2018
# of VC Firms in Existance	876	765	1,047
# of VC Funds in Existance	1,233	1,187	1,884
# of First Time VC Funds Raised	47	31	52
# of VC Funds Raising Money this Year	191	203	257
VC Capital Raised this Year ($B)	33.4	24.4	53.8
VC AUM ($B)	204.5	253.7	403.5
Avg VC AUM per Firm ($M)	200.9	201.3	242.4
Avg VC Fund Size to Date ($M)	139.3	242.6	234.7
Avg VC Fund Size Raised this Year ($M)	200.0	130.0	218.8
Median VC AUM per Firm ($M)	57.7	38.5	38.6
Median VC Fund Size to Date ($M)	50.0	50.0	45.4
Median VC Fund Size Raised this Year ($M)	68.9	22.0	75.0
Largest VC Fund Raised to Date ($M)	2,560.0	3,000.0	8,000.0

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

* Number of firms in existence is based on a rolling count of firms that raised a fund in the last 8 vintage years
* Number of VC funds in existence is based on a rolling count of funds that have closed in the last 8 vintage years
* AUM is calculated by adding together a firm's total remaining value and their total dry powder.

US Venture Capital AUM by Year



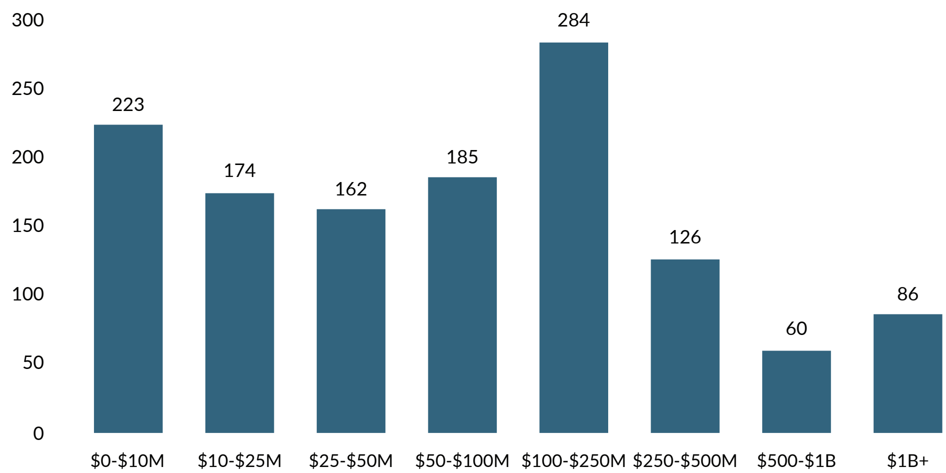
Source: NVCA 2019 Yearbook, Data Provided by PitchBook

The trend of larger firms getting larger, and an influx of newer, smaller funds continues to unfold. The median venture firm size* was $39 million in 2018. Most firms (744 firms or 57% of firms) managed less than $100 million at the end of 2018, and 86 firms managed $1 billion+, an uptick from 2017. Firms managing $100 to $250 million comprised 22% of all active U.S. VC firms last year.

Last year, 7,303 active investors (all types and headquartered globally) made one or more investment in U.S. companies, the third consecutive year of decline after peaking in 2015. Active U.S.-based VC investors also dropped slightly to 2,113 in 2018 after peaking in 2017. Similarly, U.S. VC investors making first round investments also declined to 908, while U.S. active life science VC investors rose to 604 (a 15-year high).

A banner year of investment in the U.S. buoyed global venture record highs of $80 billion in fundraising, $254 billion in investment, and $308 billion in exit value for venture-backed companies in 2018. The U.S. share of global fundraising has remained strong and last year accounted for two-thirds of total funds raised. However, the global shares of capital invested and exited attributed to U.S. companies have dropped precipitously over the past 15 years. The U.S. accounted for 40% of total capital exited in 2018, dipping below 50% for the first time. Similarly, the U.S. share of global venture investment has teetered close to 50% the past three years (reaching 51% in 2018), well below the 84% global share in 2004.

Distribution of Firms by AUM in 2018



Source: NVCA 2019 Yearbook, Data Provided by PitchBook

Fund and Firm Analysis

	Total Cumulative Funds	Total Cumulative Firms	Total Cumulative Capital ($B)	Existing Funds	Firms that Raised Funds in the Last 8 Vintage Years	AUM ($B)	Avg Fund Size ($M)	Avg Firm Size* ($M)	Median Fund Size ($M)	Median Firm Size* ($M)
2004	1356	866	262.78	1128	814	158.21	112.45	173.64	43.50	59.37
2005	1490	912	285.83	1174	846	173.75	139.66	175.96	50.00	56.35
2006	1658	943	319.24	1233	876	204.50	174.91	200.94	68.90	57.70
2007	1815	937	354.13	1205	870	226.09	190.66	213.31	100.00	58.02
2008	1976	831	385.59	1094	765	231.29	167.38	221.93	64.50	54.68
2009	2082	778	397.50	1016	726	232.67	100.06	208.86	33.00	49.37
2010	2216	787	417.43	1055	720	241.30	132.88	205.07	42.50	45.08
2011	2359	822	443.75	1125	746	258.91	169.79	212.36	40.00	43.56
2012	2543	852	468.19	1187	765	253.75	120.38	201.25	22.00	38.50
2013	2745	899	488.78	1255	794	260.45	95.36	206.97	30.50	41.04
2014	3019	949	524.06	1361	818	290.56	123.34	213.88	25.25	35.46
2015	3295	988	560.07	1480	866	320.66	124.61	221.02	30.00	35.62
2016	3593	1033	601.17	1617	906	335.12	132.57	218.67	45.50	34.50
2017	3844	1104	635.52	1762	982	354.19	134.69	217.62	50.00	34.22
2018	4100	1167	689.34	1884	1047	403.47	209.43	242.35	75.00	38.64

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

*Defined as Commitments + Net Asset Value

Number of Active Investors (#)

	# of Active Investors	# of Active 1st Round Investors	# of Active Life Science Investors	# of Active VC Investors	# of Active VC 1st Round Investors	# of Active VC Life Science Investors	# of Active US Investors	# of Active US 1st Round Investors	# of Active US Life Science Investors	#Active US VC Investors	#Active US VC 1st Round Investors	#Active US VC Life Science Investors
2004	2396	907	789	1291	565	463	1729	734	567	1006	476	368
2005	2528	1007	803	1289	567	466	1849	801	566	1038	492	365
2006	2768	1242	832	1376	684	500	2018	958	632	1087	558	404
2007	3344	1464	990	1560	740	559	2404	1122	731	1246	629	453
2008	3520	1456	969	1626	728	558	2533	1124	758	1289	600	453
2009	2995	1252	852	1424	579	494	2184	978	658	1114	497	404
2010	3499	1625	833	1570	697	488	2542	1246	655	1244	586	415
2011	4494	2344	882	1794	891	511	3046	1653	713	1401	748	438
2012	5644	2924	996	2042	1022	534	3545	1939	772	1584	835	447
2013	7081	3318	1123	2278	1038	593	3956	1963	839	1705	843	487
2014	9181	3738	1376	2632	1168	634	4515	2045	938	1950	950	505
2015	9924	3700	1543	2822	1211	703	4654	1937	1010	2074	976	567
2016	8142	2652	1199	2926	1172	650	4201	1552	840	2092	954	517
2017	7692	2436	1369	3034	1253	743	4043	1481	911	2182	1015	571
2018	7303	2130	1523	3115	1180	821	3849	1326	999	2113	908	604

*VC investors include entities with primary investor type as: Venture Capital, Corporate Venture Capital, or Not-for-profit Venture Capital
*VC investors are headquartered globally, but only counted if they invested in a US company

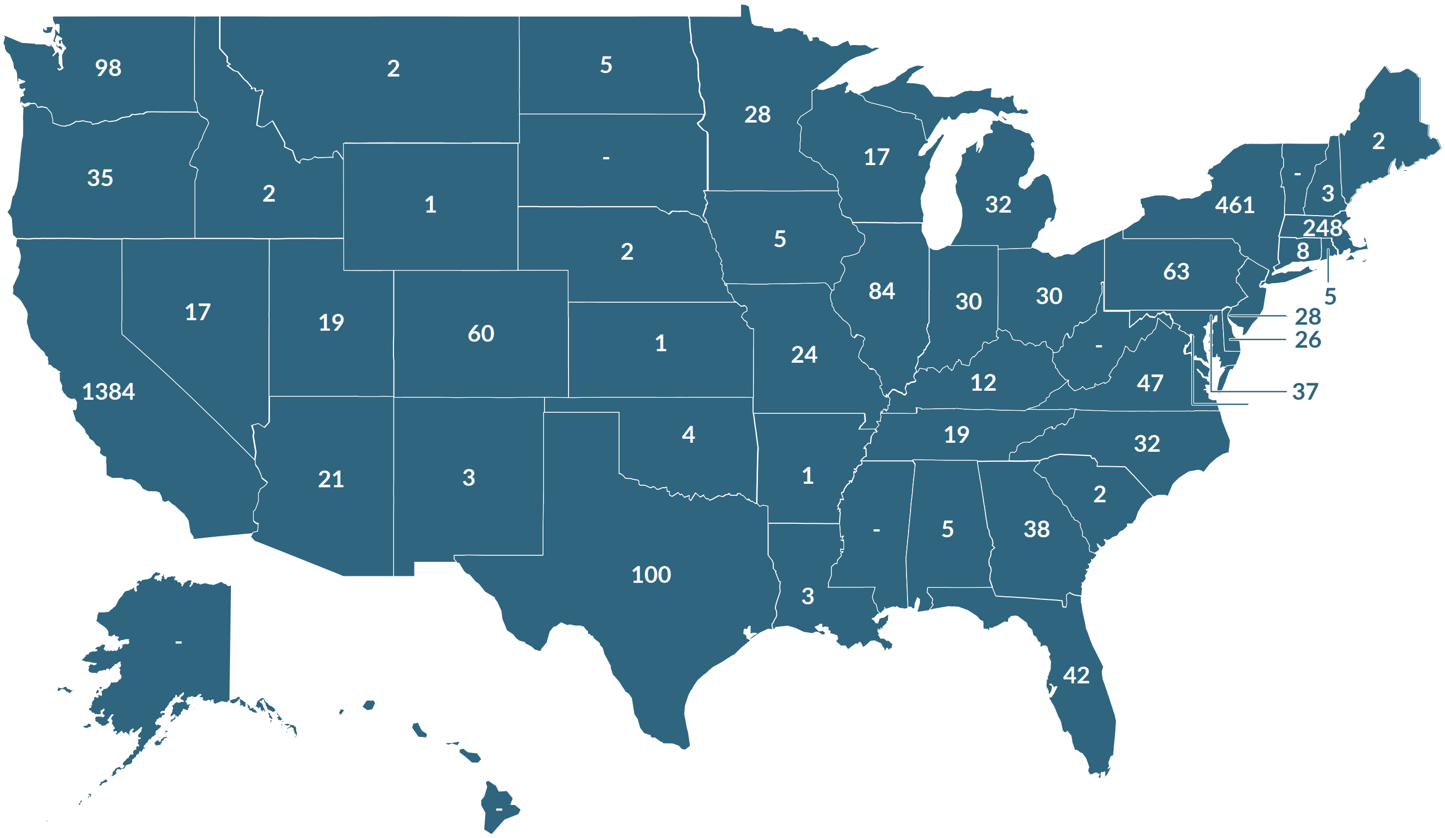
Source: NVCA 2019 Yearbook, Data Provided by PitchBook

U.S. as a % of Global VC Deal Flow by Year

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Global Deal Value ($B)	36.60	45.60	49.56	36.40	46.53	65.32	61.11	72.35	112.62	150.70	158.91	174.61	254.25
US Deal Value ($B)	29.23	36.01	36.94	27.17	31.27	44.75	41.51	47.54	71.03	82.97	77.23	82.95	130.93
Global Deal Value (#)	4,915	6,411	7,087	6,823	8,679	11,078	13,181	16,128	19,024	20,172	18,036	17,314	15,299
US Deal Value (#)	3,344	4,319	4,727	4,487	5,409	6,759	7,882	9,301	10,573	10,740	9,200	9,489	8,948
US as % of Global ($)	80%	79%	75%	75%	67%	69%	68%	66%	63%	55%	49%	48%	51%
US as % of Global (#)	68%	67%	67%	66%	62%	61%	60%	58%	56%	53%	51%	55%	58%

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

Active Investor count in 2018 deals by HQ state



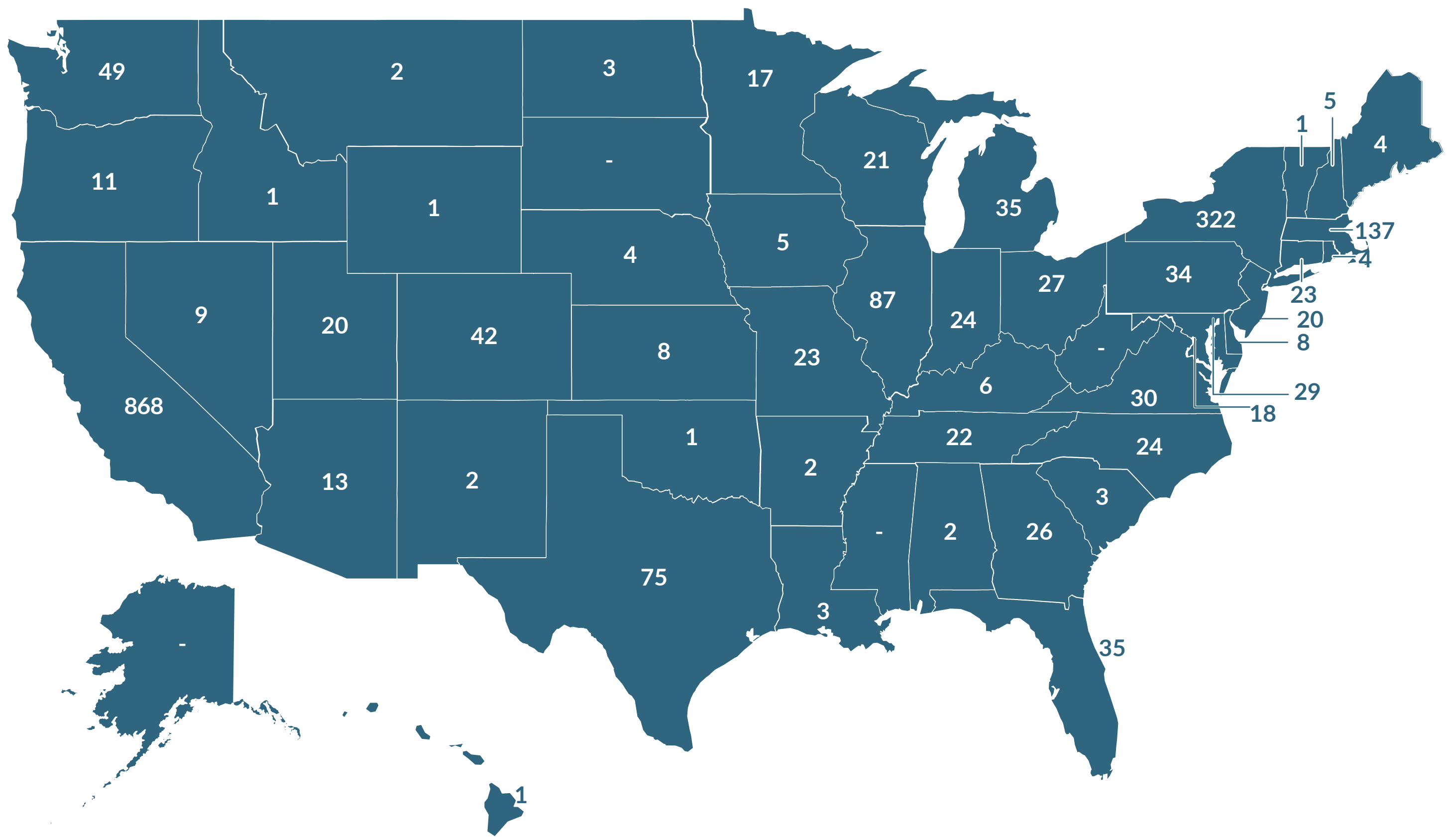
Source: NVCA 2019 Yearbook, Data Provided by PitchBook.

U.S. as a % of Global VC Exits by Year

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Global Exit Value ($B)	48.03	85.57	25.84	31.84	64.03	94.14	135.11	104.61	229.95	117.33	106.59	145.66	308.63
US Exit Value ($B)	31.89	57.97	18.00	22.26	39.74	67.05	125.37	72.75	116.79	72.19	70.98	91.96	122.01
Global Exit Value (#)	873	1,065	820	784	1,187	1,238	1,409	1,528	1,919	1,895	1,697	1,694	1,444
US Exit Value (#)	533	623	487	480	704	738	875	900	1,078	1,020	888	885	864
US as % of Global ($)	66%	68%	70%	70%	62%	71%	93%	70%	51%	62%	67%	63%	40%
US as % of Global (#)	61%	58%	59%	61%	59%	60%	62%	59%	56%	54%	52%	52%	60%

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

Active Investor count in 2018 deals by Investor HQ State



Source: NVCA 2019 Yearbook, Data Provided by PitchBook

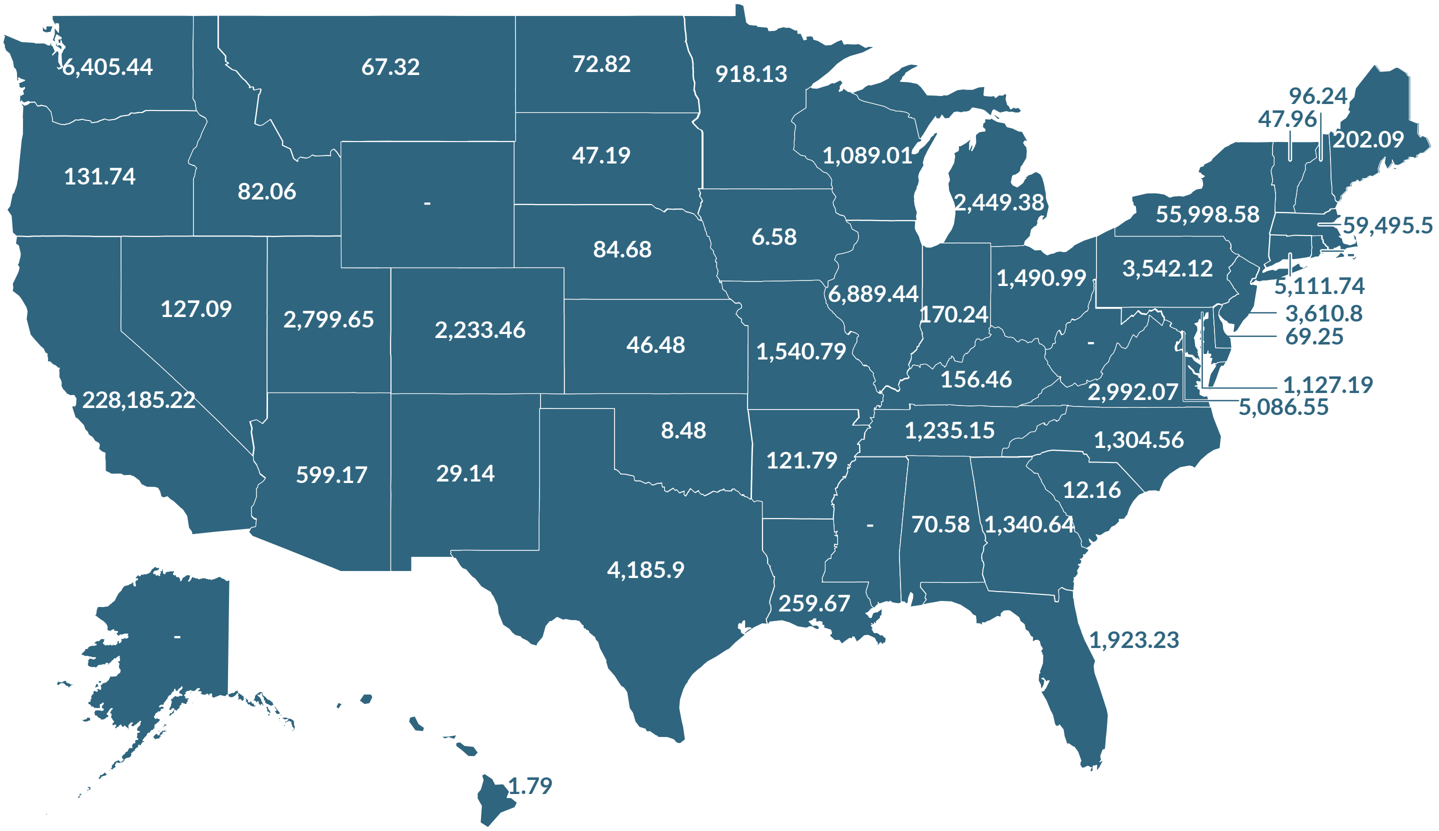
Note: This map breaks out the 2,113 active VC investors by their HQ state. Note that active VC investors headquartered outside of the U.S. are not included in this map.

U.S. as a % of Global VC Fundraising by Year

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Global Capital Raised ($B)	47.63	55.07	53.18	22.69	38.85	47.68	39.25	34.07	51.49	76.45	71.01	57.33	80.05
US Capital Raised ($B)	30.70	29.04	28.63	10.48	18.46	25.19	23.35	19.68	35.02	35.88	40.51	34.17	53.82
Global Capital Raised (#)	401	411	444	337	385	434	433	405	485	498	540	478	450
US Capital Raised (#)	191	183	188	119	150	155	208	221	292	298	333	285	296
US as % of Global ($)	64%	53%	54%	46%	48%	53%	59%	58%	68%	47%	57%	60%	67%
US as % of Global (#)	48%	45%	42%	35%	39%	36%	48%	55%	60%	60%	62%	60%	66%

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

AUM by State 2018 ($M)



Source: NVCA 2019 Yearbook, Data Provided by PitchBook

Top 5 States by AUM in 2018 ($B)

	AUM
California	228.19
Massachusetts	59.50
New York	56.00
Illinois	6.89
Washington	6.41
Total	356.97

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

AUM by As of Year by State ($M)

	2004	2005	2006	2007	2008	2009	2010	2011
Alabama	149.09	166.42	183.22	174.96	176.88	168.50	166.57	151.91
Arizona	96.07	90.64	89.95	80.03	71.31	65.74	51.81	93.83
Arkansas	-	-	-	-	-	-	-	-
California	73,452.53	81,792.14	96,984.68	104,372.02	111,139.84	113,180.54	118,938.43	127,496.25
Colorado	1,461.00	1,280.05	1,190.60	1,748.00	1,665.34	1,557.91	1,946.44	1,907.10
Connecticut	6,306.07	7,287.30	10,160.91	10,580.67	9,504.82	9,573.97	9,897.09	9,485.17
Delaware	8.50	6.07	24.11	17.46	12.66	11.44	11.83	11.75
District of Columbia	1,525.37	1,472.29	1,606.19	2,486.00	2,515.83	2,328.34	2,135.61	2,629.51
Florida	1,002.77	1,292.62	1,260.91	1,515.82	1,571.55	1,548.03	1,531.42	1,480.28
Georgia	865.19	896.36	1,204.87	1,308.52	1,210.95	1,296.65	1,524.51	1,551.14
Hawaii	7.62	6.80	7.03	6.88	7.20	6.99	6.29	5.72
Idaho	23.71	22.01	21.91	94.11	81.71	78.88	94.82	95.80
Illinois	3,311.23	3,288.42	3,948.46	4,389.52	4,514.67	4,410.87	4,783.77	5,594.44
Indiana	345.34	318.79	308.16	289.51	240.96	221.20	207.58	182.32
Iowa	30.93	28.71	28.58	26.54	21.34	18.20	16.43	14.37
Kansas	4.25	3.04	5.57	2.30	-	-	-	2.66
Kentucky	138.77	147.77	353.94	342.54	316.40	292.31	282.76	305.30
Louisiana	501.55	521.84	605.47	602.49	577.75	617.92	669.88	607.23
Maine	259.66	246.55	241.12	290.66	257.90	246.26	251.63	260.73
Maryland	1,871.10	1,844.96	2,146.36	2,440.75	2,110.22	1,965.65	1,752.44	1,551.42
Massachusetts	27,697.74	30,136.30	33,401.91	38,755.68	37,365.58	37,869.54	39,110.10	41,675.81
Michigan	424.81	395.45	387.34	438.25	1,324.47	1,454.30	1,708.03	1,910.94
Minnesota	859.62	1,196.23	1,581.22	2,064.32	2,115.72	1,920.58	1,815.05	1,716.35
Missouri	1,268.98	1,206.67	1,229.15	1,451.81	1,308.34	1,175.36	1,146.50	1,202.92
Montana	-	-	1.75	1.73	1.70	1.54	1.59	1.58
Nebraska	26.67	25.49	22.58	21.11	16.53	15.11	15.95	51.80
Nevada	52.12	48.55	44.25	43.01	81.83	78.53	74.88	70.89
New Hampshire	14.76	14.22	63.36	62.27	59.91	52.95	51.98	51.93
New Jersey	3,653.46	4,619.47	5,918.39	6,616.52	5,815.00	5,955.05	5,967.82	5,800.09
New Mexico	46.38	88.07	110.55	94.35	85.84	87.70	99.06	83.77
New York	16,286.01	16,917.91	21,258.83	23,394.37	21,219.27	20,914.62	22,062.10	27,668.71
North Carolina	910.82	1,099.11	1,443.16	1,388.04	1,364.55	1,264.24	1,220.18	1,035.92
North Dakota	-	-	-	-	10.58	10.39	10.73	10.92
Ohio	1,207.50	1,147.43	1,185.86	1,133.65	1,112.43	1,079.38	1,054.11	1,000.22
Oklahoma	53.06	46.37	69.53	66.41	51.33	47.68	41.01	27.19
Oregon	102.08	95.94	87.99	81.68	66.28	62.08	72.49	69.00
Pennsylvania	2,857.87	2,915.72	3,243.28	3,476.77	3,598.11	3,877.97	4,072.53	3,999.73
South Carolina	-	-	-	-	-	-	-	-
South Dakota	-	10.08	9.85	9.16	40.55	39.89	57.45	58.58
Tennessee	618.07	634.84	658.36	683.80	634.33	601.88	618.07	558.10
Texas	5,568.48	6,005.25	6,063.04	5,880.86	6,092.95	5,748.56	5,549.89	6,169.35
Utah	441.11	415.23	543.66	861.94	953.52	1,106.66	1,098.36	1,302.32
Vermont	13.74	12.76	12.70	11.80	22.95	21.31	25.76	25.01
Virginia	1,759.77	2,261.63	2,646.25	2,881.06	3,552.82	3,509.28	3,413.20	3,638.92
Washington	2,904.71	3,660.54	3,891.50	5,654.31	8,117.73	7,925.23	7,290.53	6,864.44
Wisconsin	64.24	70.94	235.73	234.40	272.39	251.53	445.63	480.46
Wyoming	16.91	16.16	14.32	13.39	10.48	9.58	8.53	7.09

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

	2012	2013	2014	2015	2016	2017	2018
Alabama	137.88	117.65	122.42	117.12	88.83	58.10	70.58
Arizona	129.05	248.12	420.15	448.72	482.03	552.49	599.17
Arkansas	-	-	9.91	9.78	104.31	115.01	121.79
California	126,269.96	129,089.83	151,794.86	169,760.43	185,683.36	197,292.83	228,185.22
Colorado	1,709.71	2,053.43	2,091.71	3,113.71	2,304.71	2,207.35	2,233.46
Connecticut	9,444.27	8,925.44	8,763.41	6,941.82	5,960.51	5,332.06	5,111.74
Delaware	15.46	16.17	41.93	44.56	56.84	67.53	69.25
District of Columbia	2,514.61	2,742.11	2,588.96	2,497.75	2,788.28	4,955.91	5,086.55
Florida	1,606.32	1,550.58	2,012.79	2,020.39	1,984.05	2,009.22	1,923.23
Georgia	1,388.17	1,407.76	1,498.24	1,590.07	1,416.98	1,412.75	1,340.64
Hawaii	3.78	3.74	4.26	3.85	3.18	1.59	1.79
Idaho	91.75	102.75	85.78	73.70	83.81	119.37	82.06
Illinois	5,328.65	5,359.37	6,013.11	6,099.81	5,757.79	6,582.54	6,889.44
Indiana	174.33	152.83	114.61	110.66	80.13	40.07	170.24
Iowa	16.26	18.10	5.06	5.93	5.53	6.45	6.58
Kansas	2.52	2.70	2.96	3.08	3.62	3.32	46.48
Kentucky	277.63	282.02	225.65	238.05	187.61	159.89	156.46
Louisiana	549.09	561.63	598.93	569.95	453.26	290.22	259.67
Maine	228.22	238.77	210.93	332.33	293.51	199.81	202.09
Maryland	1,489.95	1,531.68	1,429.92	1,375.04	1,099.68	979.05	1,127.19
Massachusetts	40,117.51	42,249.83	41,997.24	46,476.23	49,217.45	52,345.49	59,495.50
Michigan	1,761.89	1,988.56	2,133.07	2,249.06	2,379.79	2,284.56	2,449.38
Minnesota	1,821.07	1,783.97	1,891.06	1,526.71	1,123.48	1,052.23	918.13
Missouri	1,001.83	1,218.33	953.29	1,035.07	1,123.06	1,317.10	1,540.79
Montana	1.47	1.51	1.47	4.20	25.62	27.41	67.32
Nebraska	40.21	41.46	45.84	48.24	85.17	82.25	84.68
Nevada	108.17	97.63	114.75	115.06	97.04	120.53	127.09
New Hampshire	47.38	49.21	47.72	49.00	39.49	40.61	96.24
New Jersey	5,599.65	5,468.81	5,421.15	5,440.42	4,791.18	4,277.82	3,610.80
New Mexico	58.33	60.40	58.68	106.09	51.72	46.93	29.14
New York	28,296.01	29,402.14	36,120.51	43,427.57	43,080.25	46,241.32	55,998.58
North Carolina	1,076.31	1,162.26	1,075.77	1,084.05	1,190.67	1,404.13	1,304.56
North Dakota	10.62	54.32	62.44	66.97	67.84	69.29	72.82
Ohio	934.62	1,121.12	1,188.30	1,175.29	1,425.91	1,405.36	1,490.99
Oklahoma	13.72	12.97	12.57	12.07	9.26	8.92	8.48
Oregon	68.84	63.66	84.17	95.15	97.45	114.28	131.74
Pennsylvania	3,675.79	3,644.13	3,936.15	4,110.33	3,470.70	3,278.05	3,542.12
South Carolina	-	5.85	9.46	10.31	10.72	11.75	12.16
South Dakota	56.62	58.55	68.16	63.04	55.35	50.41	47.19
Tennessee	620.37	764.94	800.25	796.98	1,099.05	1,208.12	1,235.15
Texas	5,429.58	5,051.18	4,455.72	4,244.24	4,022.94	3,654.58	4,185.90
Utah	1,259.37	1,709.49	1,974.28	2,458.19	2,626.02	2,578.97	2,799.65
Vermont	24.38	24.46	35.41	32.66	41.74	45.31	47.96
Virginia	3,370.09	2,907.98	3,550.03	3,370.87	2,871.49	2,827.34	2,992.07
Washington	6,401.11	6,510.62	5,620.74	6,420.65	6,428.20	6,353.75	6,405.44
Wisconsin	571.44	590.79	870.91	882.44	854.64	956.78	1,089.01
Wyoming	5.80	-	-	-	-	-	-

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

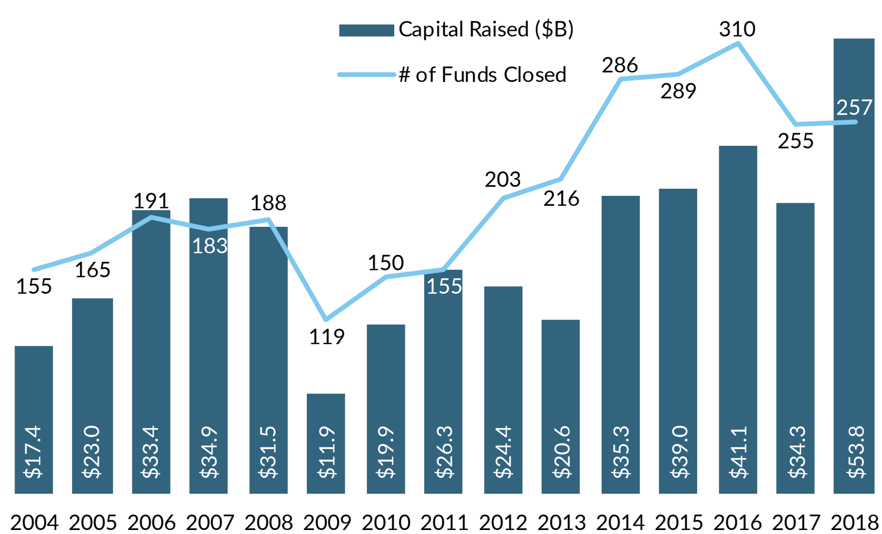
Capital Commitments: Venture Fundraising

In 2018, 257 U.S. venture capital funds closed on $54 billion in capital commitments. Last year's capital raised is the highest figure on record, and 2018 marked the fifth consecutive year of $35 billion+ in fundraising. Venture fund sizes reached a decade high with a median and average size of $59 million and $185 million, respectively. Factoring into this trend was Sequoia Capital's Global Growth Fund closing on $8 billion, earning the title of largest venture fund on record. Furthermore, 10 funds closed on $1 billion+ in 2018 and accounted for 41.86% of total capital raised, compared to 3 funds of that size closing in 2017 and accounting for 20.76% of capital that year.

The trend of larger funds has coincided with the growth of first-time funds. In 2018, 52 first-time funds raised $5.3 billion, marking the second consecutive year of 35+ first-time funds closing. Whether these funds have spun out of established firms or are created by new managers, first-time funds have been on the rise in recent years. Since 2014, 193 first-time funds have raised more than $15 billion. The prevalence of first-time funds, many of which are smaller in size, has made an impact on the number of players and capital availability at the seed and earlier stages of the venture investment cycle.

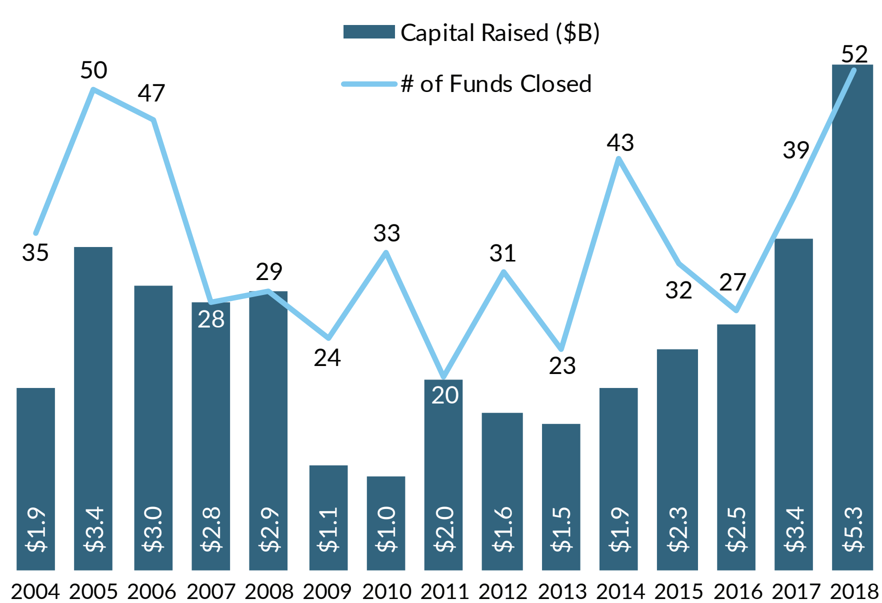
VC funds based in 28 states held final closes on venture funds in 2018, with Indiana, Kansas, Montana, Alabama, Kentucky, and Rhode Island all seeing funds raised in 2018 after no disclosed venture funds raised capital in those states in 2017. Funds based in California, New York, and

U.S. VC Fundraising by Year



Source: NVCA 2019 Yearbook, Data Provided by PitchBook

U.S. VC First-time Fundraising by Year



Source: NVCA 2019 Yearbook, Data Provided by PitchBook

Massachusetts accounted for 62%, 17%, and 13%, respectively, of total capital raised in the U.S. in 2018. The 92% collective fundraising share of these three states last year represented a 15-year high, buoyed by the 10 largest funds closed in 2018 coming from those states.

Outside of California, Massachusetts, and New York, median VC fund size reached $25 million, a continued increase since 2014, mirroring the overall increase in U.S. VC fund sizes. Funds in those states, however, still remain relatively small compared to the dominant venture fund hubs – the median fund size for California, Massachusetts, and New York collectively was $100 million in 2018.

A note on the VC fundraising data before moving on to the VC investment data in the next section: comparing fundraising to investment figures in this report is not apples-to-apples. Why? 1) Firms generally do not deploy all of their capital into startups in one year or in the year they close their fund; 2) The VC fundraising statistics only capture U.S. funds, whereas VC funds outside the U.S. frequently invest in U.S. startups. The VC investment statistics are inclusive of investors headquartered outside the U.S.; and 3) There are increasingly more types of investors becoming active in the venture ecosystem. Most of these investors do not invest in companies via venture funds, e.g., corporate venture groups, hedge funds, mutual funds, sovereign wealth funds, and family offices. An important takeaway from this section is that U.S. venture funds have raised more than $200 billion since 2014 to put to work at startups across the country.

10 Largest U.S. VC Funds in 2018

Sequoia Capital	Sequoia Capital Global Growth	8,000.00	9/6/18	California
Tiger Global Management	Tiger Global Private Investment	3,750.00	10/15/18	New York
Bessemer Venture Partners	Bessemer Venture Partners X	1,850.00	10/25/18	Massachusetts
Norwest Venture Partners	Norwest Venture Partners XIV	1,500.00	2/14/18	California
General Catalyst	General Catalyst	1,375.00	3/26/18	Massachusetts
GGV Capital	GGV Capital VII	1,360.00	10/16/18	California
Newview Capital	NewView Capital Fund I	1,350.00	12/3/18	California
Lightspeed Venture Partners	Lightspeed Venture Partners Select III	1,050.00	7/10/18	California
Thrive Capital	Thrive Capital Partners VI	1,000.00	10/23/18	New York
Index Ventures (UK)	Index Ventures Growth V	1,000.00	7/9/18	California

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

2018 Top States by VC Capital Raised

	# of Funds	Capital Raised ($M)
California	135	33,611.18
New York	53	9,539.37
Massachusetts	23	7,233.86
Texas	11	797.43
Washington	5	712.36
Connecticut	4	487.10
Illinois	7	457.60
Pennsylvania	3	403.96
Virginia	4	351.59
Utah	4	187.05
Missouri	1	184.40
Indiana	4	132.65
Wisconsin	5	126.28
Maryland	3	69.88
District of	1	67.72
New Hampshire	3	56.13
Colorado	4	45.20
Kansas	2	42.70
Oregon	2	40.35
Arizona	1	39.00
Montana	1	38.00
Florida	3	30.58
Michigan	2	26.70
New Jersey	1	25.00
Alabama	1	25.00

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

VC Fundraising by State by Year ($M)

	2004	2005	2006	2007	2008	2009	2010	2011
Alabama	56.60	23.00	21.90	-	25.70	-	-	-
Arizona	-	-	-	-	20.00	-	-	38.20
Arkansas	-	-	-	-	-	-	-	-
California	7,665.96	12,173.02	15,472.80	14,716.11	16,819.53	4,951.73	10,797.56	14,908.13
Colorado	80.00	25.00	22.33	420.80	111.94	-	328.00	-
Connecticut	1,946.00	795.01	3,605.00	45.00	650.00	25.00	1,200.70	15.00
Delaware	-	-	13.00	-	-	-	15.00	-
District of Columbia	475.10	-	200.00	828.00	380.00	-	-	450.00
Florida	4.08	345.00	-	348.50	164.13	145.60	94.00	97.62
Georgia	54.70	3.50	215.00	255.10	138.00	155.00	293.21	-
Hawaii	3.00	-	-	-	1.78	-	-	-
Idaho	-	-	-	75.00	-	-	-	-
Illinois	149.00	150.00	370.52	818.19	877.91	273.39	479.62	717.02
Indiana	80.00	6.00	26.26	-	-	10.00	90.00	-
Iowa	-	-	-	-	-	-	-	-
Kansas	-	-	-	-	-	-	-	2.60
Kentucky	-	20.10	36.44	-	175.00	-	-	-
Louisiana	175.52	50.00	70.00	28.00	60.00	70.00	56.00	-
Maine	160.00	-	-	65.00	-	-	-	-
Maryland	200.00	25.00	327.00	575.00	63.30	21.00	-	-
Massachusetts	2,704.28	3,886.08	4,957.75	6,835.06	3,232.66	3,159.81	2,747.03	4,084.75
Michigan	84.70	-	20.00	65.00	910.00	254.30	41.40	182.65
Minnesota	49.80	275.00	398.00	331.00	475.10	30.00	-	-
Missouri	43.00	66.00	-	210.20	128.90	10.00	2.00	-
Montana	-	-	1.75	-	-	-	-	-
Nebraska	-	-	-	-	-	-	2.60	37.30
Nevada	-	-	-	-	50.00	-	-	-
New Hampshire	-	-	50.00	-	-	-	-	-
New Jersey	212.90	1,176.80	1,063.00	895.22	9.00	516.00	250.00	500.00
New Mexico	-	47.50	5.20	-	-	-	15.50	10.00
New York	808.59	1,839.37	3,403.59	5,047.21	1,374.55	759.40	2,318.44	4,486.14
North Carolina	38.30	232.00	340.00	40.25	83.00	102.00	-	-
North Dakota	-	-	-	-	11.00	-	-	-
Ohio	266.30	18.92	100.00	15.50	126.12	23.70	66.00	24.61
Oklahoma	-	-	15.00	-	-	-	-	-
Oregon	-	-	-	0.90	2.55	3.00	20.35	3.35
Pennsylvania	423.60	228.80	407.20	192.49	739.61	940.51	129.86	100.00
Rhode Island	-	-	-	-	-	-	-	-
South Carolina	-	-	-	-	-	-	-	-
South Dakota	-	10.00	-	-	32.48	-	16.00	-
Tennessee	50.00	83.30	54.00	40.00	89.70	14.00	74.24	22.00
Texas	768.70	268.15	892.08	103.30	1,221.75	5.10	175.54	455.10
Utah	97.10	-	129.20	352.00	186.60	160.00	66.35	33.00
Vermont	-	-	-	-	14.00	-	5.00	-
Virginia	123.70	564.05	478.00	297.00	331.84	274.58	441.00	110.00
Washington	708.90	722.17	540.45	2,291.00	2,902.89	2.50	5.00	-
Wisconsin	-	10.73	171.50	-	57.78	-	201.51	40.00

Source: NVCA 2019 Yearbook, Data Provided by PitchBook
*For this table we give precedent to the fund location, but if unvailable, we use the HQ location of the firm

	2012	2013	2014	2015	2016	2017	2018
Alabama	5.00	-	-	-	-	-	25.00
Arizona	56.63	129.50	156.90	6.19	28.64	6.30	-
Arkansas	-	-	10.00	-	91.53	-	-
California	13,815.81	9,572.14	21,532.02	20,590.66	25,935.22	20,763.10	33,174.18
Colorado	60.70	230.54	193.83	640.84	60.72	20.02	10.20
Connecticut	617.50	193.10	500.00	1.00	263.71	600.00	387.10
Delaware	4.90	-	26.00	2.38	-	-	-
District of Columbia	70.50	200.00	8.00	14.50	805.61	2,320.00	67.72
Florida	268.00	-	352.94	184.00	56.36	42.20	28.48
Georgia	50.00	114.70	40.31	262.00	48.00	111.00	-
Hawaii	-	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	-
Illinois	240.00	268.55	500.58	574.02	943.03	457.85	435.91
Indiana	18.95	-	1.74	-	-	-	132.65
Iowa	3.00	1.80	-	-	-	-	-
Kansas	-	-	-	-	0.19	-	42.70
Kentucky	10.70	-	-	5.55	-	-	19.88
Louisiana	6.00	14.20	10.39	-	-	-	-
Maine	10.14	-	-	123.00	-	10.95	-
Maryland	145.00	213.04	82.18	81.15	0.81	56.00	69.88
Massachusetts	2,257.16	4,924.10	2,844.91	5,118.74	6,208.11	5,943.28	7,233.86
Michigan	45.16	73.01	26.31	306.30	407.50	50.50	26.70
Minnesota	150.00	107.36	-	5.50	-	36.15	-
Missouri	20.00	370.00	1.50	116.65	399.00	108.10	184.40
Montana	-	-	-	2.75	21.13	-	38.00
Nebraska	18.21	-	-	0.60	-	31.00	-
Nevada	50.00	-	-	-	-	5.00	-
New Hampshire	4.50	-	1.00	7.67	-	1.73	56.13
New Jersey	349.00	10.00	18.60	-	552.47	52.00	25.00
New Mexico	-	-	-	-	-	-	-
New York	4,920.45	1,682.74	7,278.51	6,048.85	2,898.88	2,321.40	9,375.87
North Carolina	2.50	215.00	35.60	32.10	205.20	273.00	21.15
North Dakota	-	45.00	3.50	-	-	-	-
Ohio	63.95	72.32	330.33	-	420.27	68.98	-
Oklahoma	-	-	-	-	-	-	-
Oregon	7.76	5.80	7.68	17.51	8.50	16.15	28.05
Pennsylvania	298.00	171.59	212.71	235.00	59.00	111.20	303.96
Rhode Island	-	-	-	-	-	-	1.30
South Carolina	-	6.00	3.42	-	-	-	-
South Dakota	-	-	-	-	-	-	-
Tennessee	180.00	103.00	2.50	-	380.00	126.01	8.00
Texas	31.18	523.85	469.01	166.94	87.45	90.80	777.43
Utah	131.88	570.88	151.86	245.20	397.55	53.00	187.05
Vermont	-	-	12.00	-	-	11.30	-
Virginia	80.15	225.00	53.50	531.60	181.55	156.12	351.59
Washington	328.20	549.20	190.75	692.04	606.08	420.75	684.60
Wisconsin	116.43	5.10	217.68	0.62	29.70	83.10	125.48

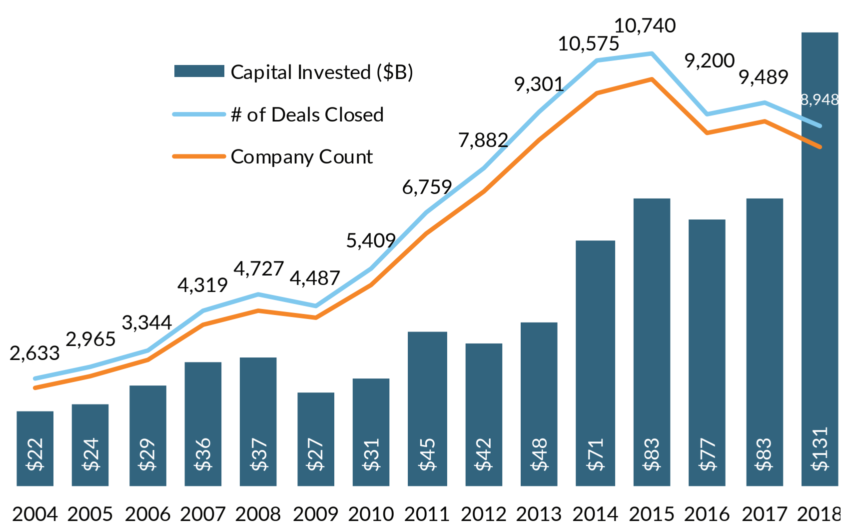
Source: NVCA 2019 Yearbook, Data Provided by PitchBook
*For this table we give precedent to the fund location, but if unavailable, we use the HQ location of the firm

Capital Deployed: Investment into Companies

A historic 2018 for the U.S. venture ecosystem was most notably marked by the record amount of capital invested into companies. More than 8,380 venture-backed companies received $131 billion in funding last year, eclipsing the $100 billion watermark set at the height of the dot-com boom in 2000.

Much of the capital influx was driven by mega deals (i.e., investments of $100 million+ into venture-backed companies), which accounted for nearly half (47%) of total capital invested in 2018. Unicorns (i.e., venture-backed companies valued at $1 billion+), many of which raised mega deals, attracted $46 billion, or 35% of total capital invested, but less than 2% of the total deals completed in 2018.

U.S. VC Deal Flow



Source: NVCA 2019 Yearbook, Data Provided by PitchBook

U.S. VC Deal Flow by Stage (#)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Angel/Seed	458	787	918	1226	1723	2600	3532	4639	5472	5716	4585	4521	3760
Early VC	1750	2117	2260	1830	2101	2426	2584	2780	3067	3061	2849	3119	3156
Later VC	1136	1415	1549	1431	1585	1733	1766	1882	2034	1963	1766	1849	2032

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

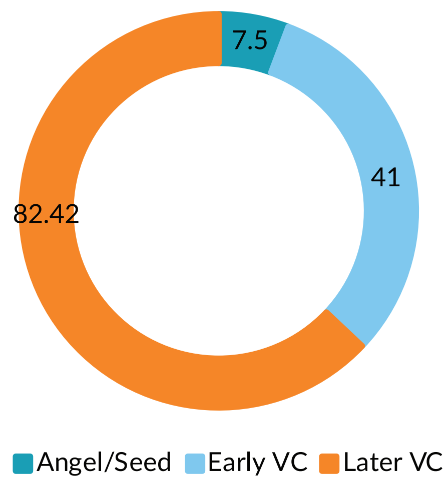
Beneath the surface of large companies raising (and bringing the year to) record venture funding was the continued trend of fewer companies receiving capital – 2018 reached a six-year low. The dip was most pronounced in angel/seed fundings and first-time fundings though 2018 levels were on par with pre-2014/2015 when company count peaked.

The expansion of types of capital and pools of capital in the venture ecosystem have been major factors in a changing investment landscape. As discussed in previous sections, the ecosystem has seen large venture funds raise larger follow-on funds; there has been a rise of new (i.e., first-time) funds to the market; and the majority of funds are small (i.e., less than $100 million). The latter two have shifted the early stage investment landscape. Furthermore, non-traditional newer investors like SoftBank's Vision Fund and sovereign wealth funds have poured capital into later stage companies and made their mark on the ecosystem. This section also uncovers the impact corporate venture investors and growth equity investors have had on venture investment activity.

Sectors

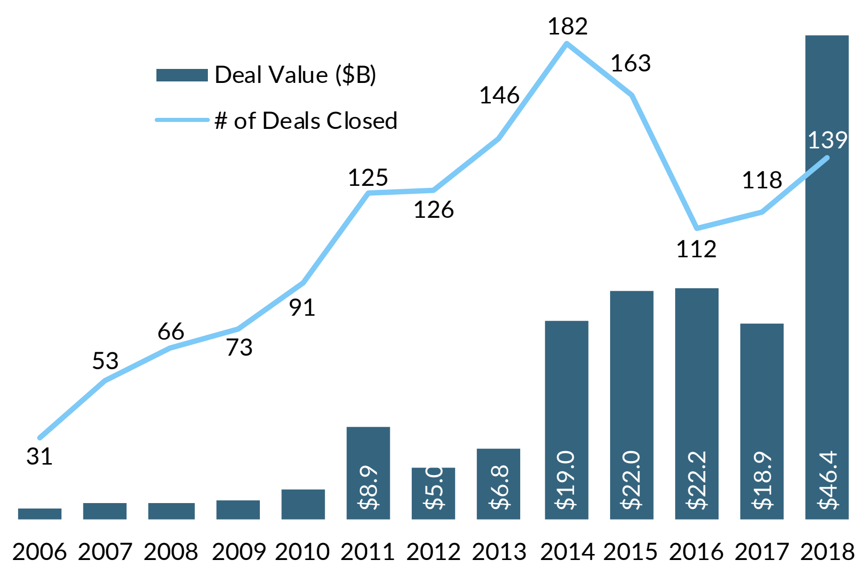
The software sector continued to attract the lion's share of VC activity, comprising 36% of capital invested and 42% of deal count in 2018. But in recent years, the life sciences sector has seen significant growth, with more than $23 billion invested across 1,230+ companies in 2018, a record high for both metrics. The sector accounted for 18% of total capital invested and 15% of all companies receiving venture funding in 2018. What's more, pharmaceuticals and biotechnology, healthcare services and systems, and healthcare devices and supplies were the only three major sectors to see year-over-year increases in capital invested, in addition to software.

2018 U.S. VC Deals by Stage ($B)



Source: NVCA 2019 Yearbook, Data Provided by PitchBook

U.S. VC Unicorn Deal Activity by Year



Source: NVCA 2019 Yearbook, Data Provided by PitchBook

Though software companies collectively garnered the largest amount of capital invested in 2018, they only accounted for three of the ten largest venture investments. Consumer products and services (B2C) companies comprised six of the ten largest deals last year, including Juul, Faraday Future, Lyft, Uber, and Magic Leap.

Investment Stages & First-time Fundings

The number of angel/seed VC investments returned to pre-2013 levels, with 3,760 deals completed representing 42% of total deals in 2018, the lowest absolute and relative figures since 2012. After a slight cooling off in 2016, early stage and later stage VC investments have increased the past two years in deal count in 2018 compared to 2017. Though the number of first-time financings (i.e., first round of equity funding in a startup by an institutional venture investor) continued to decline in 2018, the 2,040 companies raising first-time funding attracted a 15-year high of $10.1 billion.

Geographical Spread

Venture funding reached startups in all 50 states and the District of Columbia, 222 Metropolitan Statistical Areas (MSAs), and 393 Congressional Districts in 2018. Not surprisingly, companies headquartered in California, New York, and Massachusetts accounted for 59%, 11%, and 9%, respectively, of overall U.S. venture capital investment last year. These three states collectively accounted for 79% of total U.S. venture dollars invested in 2018, a 15-year high in both relative and absolute terms, and 53% of total U.S. venture deal count, less than a percentage point lower than 2017 though a continued annual decline since 2014 nonetheless.

Charleston, SC, Richmond, VA, and Indianapolis, IN saw the biggest annual growth rate (i.e., compound annual growth rate) for annual number of VC investments over the past six years, for those MSAs with at least 15 in 2018. Indianapolis, IN, Columbus, OH, and New Haven, CT saw the largest annual growth for VC investment over the past five years, for those MSAs with at least $10 million VC investment in 2013 and 2018.

Mirroring the U.S., global venture investment activity also reached a record high last year, when $254 billion was invested across nearly 15,300 deals. U.S.-based companies represented 51% global deal value and 58% of global deal count. In contrast, the U.S. accounted for 84% of global VC dollars and 76% of global deal count in 2004.

2018 U.S. VC Deals by Sector ($B)

Commercial Services	5.40	IT Hardware	2.28
Consumer Goods & Recreation	2.63	Media	1.37
Energy	1.75	Other	40.63
HC Devices & Supplies	5.87	Pharma & Biotech	17.38
HC Services & Systems	6.80	Software	46.82

Source: NVCA 2019Yearbook, Data Provided by PitchBook

*Other industry groups below:

Commercial Products
Commercial Transportation
Other Business Products and Services
Consumer Durables
Consumer Non-Durables
Services (Non-Financial)
Transportation
Other Consumer Products and Services
Utilities
Other Energy
Capital Markets/ Institutions
Commercial Banks
Insurance
Other Financial Services
Other Healthcare
IT Services
Other Information Technology
Agriculture
Chemicals and Gases
Construction (Non-Wood)
Containers and Packaging
Forestry
Metals, Minerals and Mining
Textiles
Other Materials

U.S. VC Deal Flow by State

State	Company Count	# of Deals Closed	Capital Invested ($M)
California	2869	3063	77,297.63
New York	981	1050	14,311.79
Massachusetts	624	660	11,885.72
Washington	337	366	2,957.47
Texas	398	427	2,686.69
North Carolina	173	185	2,620.56
Illinois	239	253	1,798.38
Florida	212	234	1,735.20
Colorado	258	283	1,635.91
Pennsylvania	250	267	1,496.75
Maryland	131	142	1,375.32
Utah	101	106	1,165.25
Georgia	112	120	1,147.33
Ohio	141	148	1,026.23
Minnesota	117	121	786.47
Virginia	135	145	742.70
New Jersey	83	86	732.01
Connecticut	87	89	683.12
District of Columbia	59	62	676.15
Arizona	81	89	538.95
Oregon	98	100	527.90
Michigan	104	111	502.48
Indiana	88	93	367.74
Missouri	65	69	311.27
Wisconsin	74	78	254.27
Tennessee	74	79	223.39
Kansas	20	21	164.18
Delaware	47	48	144.72
Nevada	36	38	131.61
New Hampshire	27	32	127.61
South Carolina	37	39	91.50
Kentucky	36	38	86.47
New Mexico	16	19	85.34
Iowa	27	34	84.99
Rhode Island	23	23	56.78
Oklahoma	12	12	52.69
Arkansas	28	28	46.49
Idaho	25	26	45.36
Montana	12	12	44.58
Unknown state	19	19	43.78
Vermont	22	24	36.57
Alabama	21	22	30.73
Maine	22	24	28.06
Nebraska	18	19	26.85
North Dakota	7	7	22.23
South Dakota	3	3	21.48
Louisiana	9	9	18.47
Hawaii	6	6	13.89
Wyoming	5	5	12.12
Mississippi	6	6	9.60
West Virginia	2	2	7.75
Alaska	3	3	3.73
Puerto Rico	3	3	2.96
Virgin Islands	0	0	
Other US Territory	0	0	

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

Top 10 U.S. VC Deals in 2018

Company Name	Close Date	Deal Size ($M)	Deal Type	Industry Sector	State
Juul	12/20/18	12,800	Corporate	Consumer Products and Services (B2C)	California
Faraday Future	6/25/18	2,000	Corporate	Consumer Products and Services (B2C)	California
Lyft	3/14/18	1,700	Later Stage VC	Consumer Products and Services (B2C)	California
Epic Games	10/26/18	1,250	Later Stage VC	Information Technology	North Carolina
Uber	1/18/18	1,250	Later Stage VC	Consumer Products and Services (B2C)	California
Juul	7/10/18	1,235	Early Stage VC	Consumer Products and Services (B2C)	California
WeWork	8/9/18	1,000	Corporate	Business Products and Services (B2B)	New York
Magic Leap	3/7/18	963	Later Stage VC	Consumer Products and Services (B2C)	Florida
Instacart	10/1/18	871	Later Stage VC	Information Technology	California
Katerra	1/24/18	865	Later Stage VC	Information Technology	California

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

2018 VC Deals & Company Counts by State

State	Company Count	% of Total	Capital Invested ($M)	% of Total
California	2869	34.22%	77,297.63	59.04%
New York	981	11.70%	14,311.79	10.93%
Massachusetts	624	7.44%	11,885.72	9.08%
Washington	337	4.02%	2,957.47	2.26%
Texas	398	4.75%	2,686.69	2.05%
North Carolina	173	2.06%	2,620.56	2.00%
Illinois	239	2.85%	1,798.38	1.37%
Florida	212	2.53%	1,735.20	1.33%
Colorado	258	3.08%	1,635.91	1.25%
Pennsylvania	250	2.98%	1,496.75	1.14%
All Others	2042	24.36%	12,501.10	9.55%
Total	8383		130,927.20	

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

Top 5 States by Percentage of 2018 Deals Done in State Which Feature Investor(s) from Outside State

Investor HQ State	% Invested Outside State
New Jersey	71%
District of Columbia	57%
New Hampshire	57%
Georgia	55%
Tennessee	51%

Example of how to read this table: In 2018, 71% of deals done by New Jersey-based investors were investments into New Jersey-based companies.

*This ranking is inclusive of states with 20 or more investments

Top 5 States by Percentage of 2018 Deals Done in State which Feature Investor(s) from that State

Company HQ State	% Invested Within State
California	77%
Colorado	73%
Pennsylvania	73%
Michigan	71%
Massachusetts	70%

Example of how to read this table: In 2018, 77% of investments in California-based companies featured at least one California-based investor.

*This ranking is inclusive of states with 20 or more investments

of States Invested into by Investor HQ

Investor HQ State	# of States Invested In
California	44
Illinois	37
New York	36
District of Columbia	32
Massachusetts	32
Texas	31
Colorado	30
Washington	30
Pennsylvania	29
Maryland	27
Virginia	24
Georgia	23
Connecticut	23
Michigan	23
New Hampshire	23
Minnesota	23
Tennessee	22
New Jersey	22
Florida	22
Missouri	21
North Carolina	19
Ohio	19
Utah	18
Indiana	18
Kansas	17
Wisconsin	15
Nebraska	10
Alabama	10
South Carolina	10
Nevada	10
Kentucky	10
Arizona	10
Oregon	10

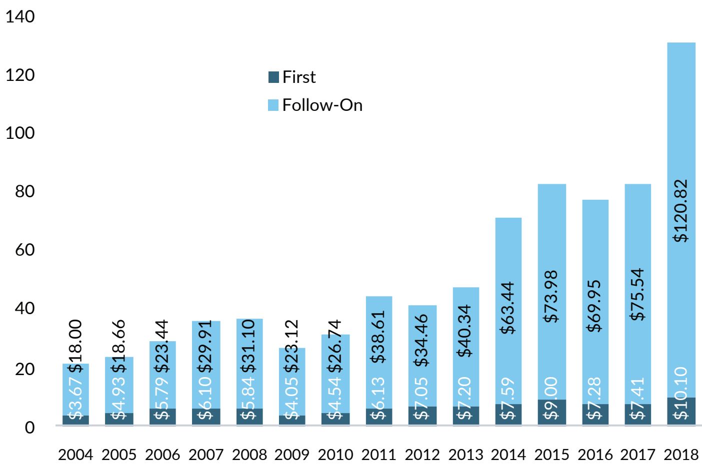
of States California Investors Invested into by Year

Year	# of States Invested In
2006	38
2012	46
2018	44

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

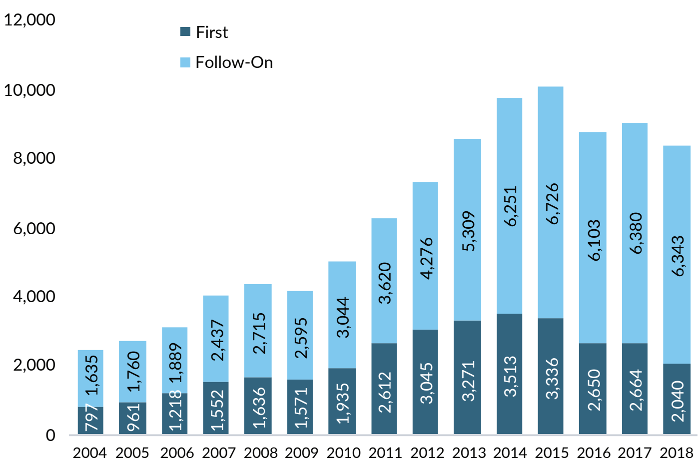
First-time Financings

U.S. First VC & Follow on VC Deal Flow ($B)



Source: NVCA 2019 Yearbook, Data Provided by PitchBook

U.S. First VC & Follow on VC Deal Flow (Company Counts)



Source: NVCA 2019 Yearbook, Data Provided by PitchBook

US VC Deal Flow by Sector: First Round VC in 2018

Sector	# of Deals Closed	Capital Raised ($M)
Commercial Services	183	341.88
Consumer Goods & Recreation	50	87.11
Energy	22	157.93
HC Devices & Supplies	68	288.87
HC Services & Systems	132	532.53
IT Hardware	33	69.13
Media	55	115.18
Other	583	1,959.27
Pharma & Biotech	143	3,252.65
Software	854	3,298.60

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

Life Sciences

U.S. Life Sciences VC Deal Flow

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Capital Invested ($B)	7.36	9.62	9.29	7.92	7.79	8.76	8.68	9.92	12.19	14.90	12.60	16.57	23.25
# of Deals Closed	666	828	873	871	963	1,039	1,094	1,168	1,240	1,289	1,141	1,273	1,308
Company Count	625	772	801	799	882	957	1,003	1,078	1,151	1,196	1,092	1,202	1,238

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

U.S. Life Sciences VC Invested ($M) by Sector

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Biotechnology	1,311.20	1,737.73	1,313.50	1,885.03	2,176.25	2,013.65	2,079.41	2,278.14	3,214.35	5,217.03	5,113.08	8,064.88	11,456.05
Diagnostic Equipment	476.49	784.39	805.95	422.79	776.69	649.64	678.51	709.37	781.40	982.69	735.51	1,028.19	1,423.68
Discovery Tools (Healthcare)	24.37	119.66	69.70	112.52	66.06	76.85	11.56	95.28	46.81	66.97	74.50	13.64	97.72
Drug Delivery	262.98	471.37	559.67	235.31	167.17	499.79	403.12	425.99	352.46	488.87	213.45	404.03	408.81
Drug Discovery	1,082.06	1,414.83	1,243.32	1,284.72	1,073.35	1,295.27	1,856.32	2,493.45	3,357.86	4,206.09	3,108.81	2,837.14	4,967.58
Medical Supplies	250.99	296.57	175.61	95.58	116.35	158.93	293.22	132.79	88.85	41.41	105.87	137.24	191.61
Monitoring Equipment	253.97	216.92	306.74	183.99	174.89	337.68	292.55	465.60	1,231.25	439.44	426.45	526.63	739.44
Other Devices and Supplies	143.14	249.34	207.60	120.42	93.27	218.67	257.12	173.25	221.99	298.78	199.45	335.54	614.60
Other Pharmaceuticals and Biotechnology	57.82	87.24	135.75	64.76	126.39	69.92	70.12	15.63	56.39	52.04	18.58	11.13	63.01
Pharmaceuticals	1,629.78	1,739.50	1,577.20	1,283.68	983.23	892.07	558.88	653.88	475.25	413.02	480.01	499.34	388.98
Surgical Devices	975.01	1,163.94	1,214.71	956.53	951.32	1,158.89	941.92	1,115.14	1,197.41	1,085.18	953.96	1,231.66	1,132.42
Therapeutic Devices	887.19	1,341.97	1,681.51	1,276.36	1,086.50	1,384.80	1,235.49	1,365.03	1,170.90	1,610.99	1,173.24	1,484.90	1,768.72

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

U.S. Life Sciences VC Deal Count by Sector

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Biotechnology	124	164	157	183	217	220	260	295	337	355	366	449	434
Diagnostic Equipment	81	103	114	87	129	120	135	120	133	131	122	110	132
Discovery Tools (Healthcare)	5	12	9	8	11	11	8	11	10	15	10	9	9
Drug Delivery	18	29	26	24	26	29	29	27	25	29	16	21	25
Drug Discovery	96	114	118	118	132	130	145	176	187	192	145	144	178
Medical Supplies	25	34	30	34	36	38	49	40	39	29	33	35	34
Monitoring Equipment	34	28	32	43	44	53	68	82	86	86	83	95	84
Other Devices and Supplies	26	29	37	47	43	68	61	63	77	90	71	93	90
Other Pharmaceuticals and Biotechnology	10	8	13	8	16	12	15	16	20	22	11	10	20
Pharmaceuticals	71	87	88	76	80	79	62	60	53	55	59	48	54
Surgical Devices	85	90	119	104	99	123	104	109	118	115	88	103	98
Therapeutic Devices	91	130	130	139	130	156	158	169	155	170	137	156	150

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

US VC activity (#) in life sciences

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Life Sciences Deal Count	666	828	873	871	963	1,039	1,094	1,168	1,240	1,289	1,141	1,273	1,308
Life Sciences as % of Total US VC (#)	19.92%	19.17%	18.47%	19.41%	17.80%	15.37%	13.88%	12.56%	11.73%	12.00%	12.40%	13.42%	14.62%
Company count	3,344	4,319	4,727	4,487	5,409	6,759	7,882	9,301	10,573	10,740	9,200	9,489	8,948

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

US VC activity ($B) in life sciences

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Life Sciences Capital Invested ($B)	7.36	9.62	9.29	7.92	7.79	8.76	8.68	9.92	12.19	14.90	12.60	17	23
Life Sciences as % of Total US VC ($)	33.95%	40.80%	31.79%	22.00%	21.09%	32.23%	27.75%	22.18%	29.38%	31.34%	17.74%	19.98%	30.11%

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

NATIONAL VENTURE CAPITAL ASSOCIATION

Data provided by PitchBook

Corporate Venture Capital

Corporate venture capital (CVC) investors remained an important source of capital and strategic guidance for startups in 2018. CVC investors participated in 1,443 venture deals last year, driving annual CVC participation to 16% of total VC deal count and the highest proportion since 2006. 2018 also marked the sixth consecutive year where 1,000+ venture investments had CVC participation. These 1,443 investments represented an aggregate deal size (including non-CVC investors) of $67 billion, a 15-year high and almost double the aggregate size of deals with CVC participation in 2017. What's more, three of the ten largest venture investments in 2018 (including the top two) were corporate deals.

U.S. Corporate VC Investment by Year

	# of All VC Deals	# of VC Deals with CVC Involvement	% of VC Deals with CVC Involvement (#)	Average Deal Value (All VC, $M)	Average Deal Value (CVC, $M)	Median Deal Value (All VC, $M)	Median Deal Value (CVC, $M)	Average Post Valuation (All VC, $M)	Average Post Valuation (CVC, $M)	Median Post Valuation (All VC, $M)	Median Post Valuation (CVC, $M)	Total VC Capital Raised ($M)	Total CVC Capital Raised ($M)	% of VC Deals with CVC Involvement ($)
2004	2,633	492	19%	8.7	13.7	5.3	9.6	34.2	46.6	20.8	31.5	21,662.5	6,447.8	30%
2005	2,965	493	17%	8.5	11.7	5.0	8.0	39.6	56.5	21.2	32.0	23,589.7	5,463.5	23%
2006	3,344	562	17%	9.4	16.6	5.0	10.0	45.5	66.4	22.6	40.0	29,226.1	8,890.9	30%
2007	4,319	659	15%	9.0	16.9	4.3	10.0	55.8	121.3	22.5	41.2	36,007.7	10,728.3	30%
2008	4,727	673	14%	8.4	15.3	3.8	8.6	55.5	77.8	21.2	37.1	36,936.7	9,740.9	26%
2009	4,487	475	11%	6.6	14.5	2.5	8.9	53.2	81.3	17.6	35.3	27,166.4	6,362.7	23%
2010	5,409	562	10%	6.3	15.3	2.0	8.0	58.5	90.4	17.4	33.9	31,274.2	8,000.5	26%
2011	6,759	716	11%	7.5	19.4	1.7	8.5	117.1	157.8	17.2	41.6	44,748.0	12,934.8	29%
2012	7,882	842	11%	5.9	14.8	1.5	7.0	58.4	102.4	16.1	37.0	41,506.6	11,624.1	28%
2013	9,301	1,081	12%	5.8	15.1	1.5	6.6	58.7	118.9	16.1	39.9	47,543.8	15,041.9	32%
2014	10,573	1,327	13%	7.7	21.5	1.5	7.6	109.9	214.1	17.6	44.4	71,031.6	26,315.6	37%
2015	10,740	1,460	14%	8.8	27.7	1.8	10.0	121.2	347.7	19.0	52.0	82,974.9	37,251.6	45%
2016	9,200	1,402	15%	9.4	28.5	2.0	10.0	125.0	339.1	20.0	45.8	77,229.8	36,300.7	47%
2017	9,489	1,427	15%	9.8	28.1	2.4	10.3	110.5	237.0	22.0	48.0	82,952.1	36,479.6	44%
2018	8,948	1,443	16%	16.2	50.0	3.0	14.4	243.5	494.4	32.9	67.7	130,927.2	66,844.6	51%

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

Growth Equity

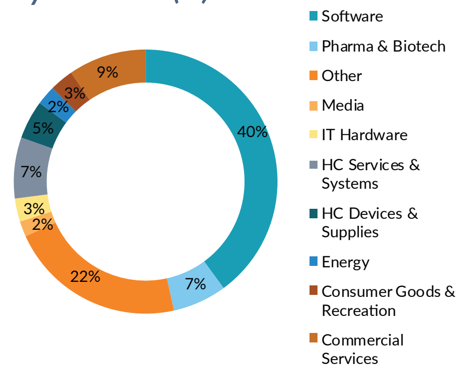
Growth equity* sits at the later end of the venture capital spectrum, filling a gap for mature companies that do not have a need for early stage venture capital nor would a buyout by a private equity firm make sense for their growth. Growth equity can also meet capital needs for larger later stage companies staying private longer than historically was the case. Some growth deals included in this section are also classified as VC deals and included in the overall VC stats in this Yearbook; however, all growth deals are not since some may be classified differently in the PitchBook platform. More details on the growth equity critieria used in this section are available on page 60.

As in recent editions of the Yearbook, NVCA—through its Growth Equity Group—defines most growth equity investments as having the following key characteristics: 1) company has a proven business model (established product and/or technology and existing customers); 2) company's revenues are growing rapidly; 3) company is often cash flow positive, profitable or approaching profitability; 4) company is often founder-owned and / or managed; 5) investor is agnostic about control and purchases minority ownership positions more often than not; 6) industry investment mix is similar to that of earlier stage venture capital investors; 7) capital is used for company needs or shareholder liquidity; 8) additional financing rounds are not usually expected until exit; 9) investments are often unlevered or use light leverage at purchase; and 10) investment returns are primarily a function of growth, not leverage, with a lower expected loss ratio than venture capital portfolios.

Growth equity investment in 2018 spiked after strong years from 2014 to 2017. Investors deployed $66 billion across 1,057 growth equity investments last year, with both metrics reaching 15-year highs. Software companies—which comprised the largest share of growth equity activity—saw the biggest rise, with $28 billion raised across 422 investments, representing year-over-year increases of 96% and 32%, respectively. Mirroring venture activity, California-based companies accounted for the majority of growth equity investments – 38% of deal count and 56% of capital invested.

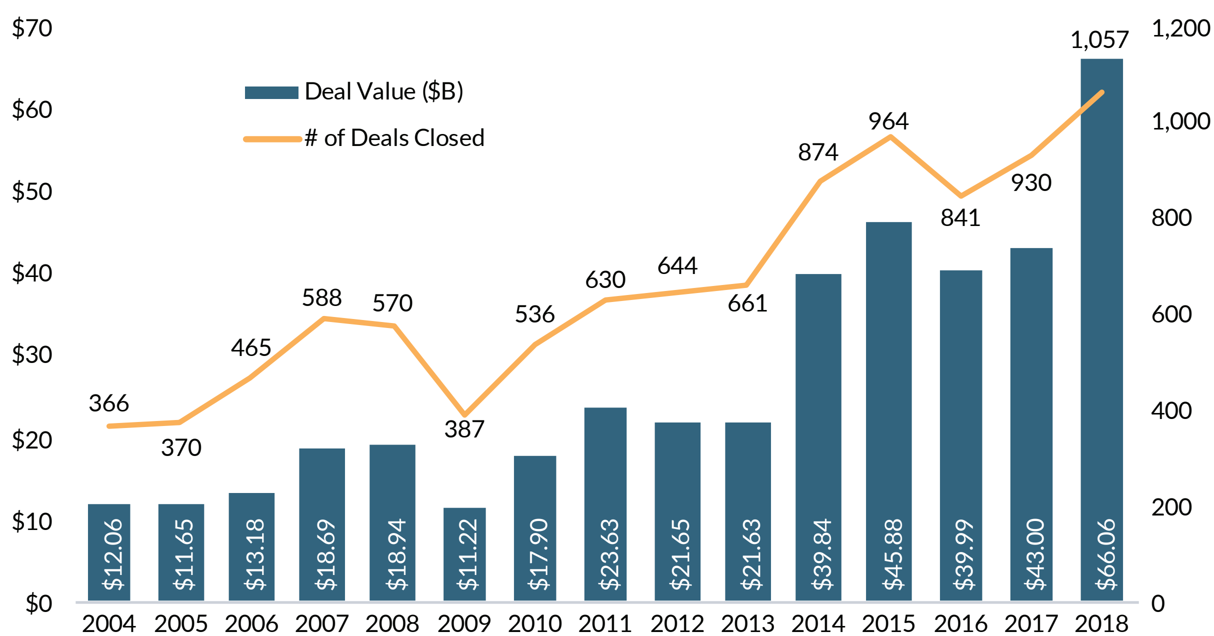
*Growth equity is not included as a subset of overall VC data in this publication, but is rather its own unique dataset. More details on the methodology are on page [60].

U.S. Growth Equity Investments in 2018 by Sector (#)



Source: NVCA 2019 Yearbook, Data Provided by PitchBook

U.S. Growth Equity Deal Flow by Year



Source: NVCA 2019 Yearbook, Data Provided by PitchBook

Exit Landscape: Venture-backed IPOs & M&As

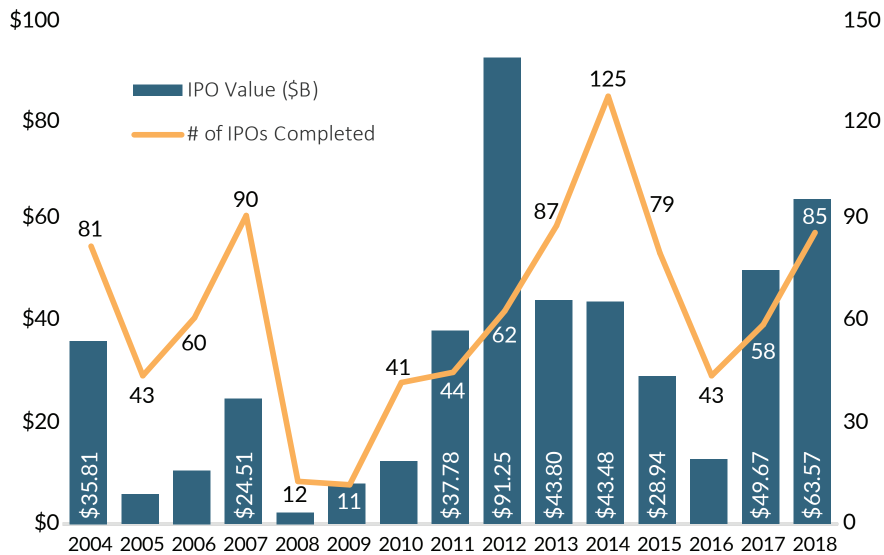
A healthy environment for venture-backed exits is a critical component of the venture lifecycle. Once successful portfolio startups mature, venture funds generally exit their positions in those companies by taking them public through an initial public offering (IPO) or by selling them to presumably larger entities (via an acquisition, merger, or trade sale) or to a financial buyer (e.g., a private equity buyer). This exit in the company allows the venture firm to distribute the proceeds to investors, raise a new fund for future investment, and invest in the next generation of companies. This section collectively refers to any type

U.S. IPOs by Year

	# of All IPOs	# of VC Backed IPOs
2006	296	60
2007	370	90
2008	170	12
2009	102	11
2010	204	41
2011	200	44
2012	232	62
2013	339	87
2014	384	125
2015	261	79
2016	184	43
2017	227	58
2018	213	85

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

U.S. VC-backed IPOs by Year



Source: NVCA 2019 Yearbook, Data Provided by PitchBook

Top 10 U.S. VC-backed IPOs in 2018

Company Name	Deal Size ($M)	Industry Sector	State
Dropbox	7,473.96	Information Technology	California
Moderna Therapeutics	6,961.46	Healthcare	Massachusetts
DocuSign	3,945.45	Information Technology	California
Mercari	2,580.99	Information Technology	California
Elasticsearch	2,249.74	Information Technology	California
Tenable	1,844.13	Information Technology	Maryland
Anaplan	1,804.44	Information Technology	California
Allogene	1,750.08	Healthcare	California
Zscaler	1,685.30	Information Technology	California
Pluralsight	1,669.13	Consumer Products and	Utah

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

of sale to a corporate entity or to a financial buyer as a merger and acquisition (M&A). IPO trends are analyzed separately.

In 2018, 85 venture-backed companies went public, raising a collective $64 billion at IPO. Together, these 85 IPOs had a post-money valuation of $75 billion, created from just $16 billion invested prior to IPO. The median size of IPOs in 2018 reached $348 million and median IPO post-money valuation reached $443 million, both 15-year highs. Companies that went public last year were younger than IPOs in prior years – the median time from first VC investment to IPO was 4.8 years.

The strong IPO environment for venture-backed companies was led by: cloud-based file storage provider Dropbox (the largest IPO of 2018), drug discovery company Moderna Therapeutics (the largest biotechnology IPO on record), and

Ratio of IPO Pre Valuation to Total VC Invested

	Post Value ($B)	Capital Raised ($B)	IPO Pre Value ($B)	Total VC Raised to Date ($B)	Ratio
2007	33.2	24.5	24.5	5.1	4.8
2008	2.8	2.3	2.3	0.4	5.8
2009	9.6	7.8	7.8	0.8	9.9
2010	15.7	12.3	12.3	4.5	2.8
2011	43.3	37.8	37.8	6.5	5.8
2012	112.6	91.2	91.2	7.6	12.0
2013	52.7	43.8	43.8	10.3	4.2
2014	53.9	43.5	43.5	11.5	3.8
2015	39.1	28.9	28.9	8.7	3.3
2016	16.1	12.7	12.7	5.0	2.5
2017	58.9	49.7	49.7	9.5	5.2
2018	74.8	63.6	63.6	15.8	4.0

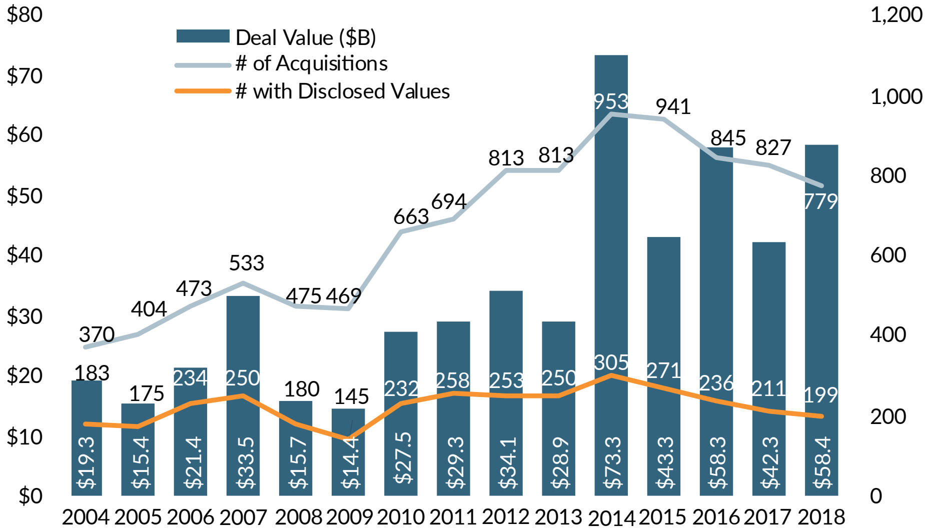
Source: NVCA 2019 Yearbook, Data Provided by PitchBook

U.S. VC Backed IPO Value and Age Characteristics

	# of IPOs	Deal Value ($M)	Median Deal Value ($M)	Average Deal Value ($M)	Post Value ($M)	Median Post Value ($M)	Average Post Value ($M)	Median Time from 1st VC to Exit	Average Time from 1st VC to Exit
2007	90	24,510.3	248.8	310.3	33,169.3	330.2	409.5	5.18	5.60
2008	12	2,254.1	143.6	281.8	2,849.3	212.2	356.2	7.05	5.71
2009	11	7,838.8	317.1	783.9	9,624.2	387.1	962.4	7.32	7.50
2010	41	12,263.1	199.3	299.1	15,680.9	280.3	382.5	6.61	7.24
2011	44	37,779.4	331.2	944.5	43,322.7	423.6	1,083.1	5.81	6.73
2012	62	91,249.3	303.3	1,862.2	112,576.6	356.6	2,084.8	7.06	7.46
2013	87	43,804.5	240.0	554.5	52,707.3	320.7	635.0	6.68	7.21
2014	125	43,481.0	185.8	362.3	53,929.3	249.9	449.4	6.91	7.07
2015	79	28,941.1	222.0	402.0	39,122.3	302.5	535.9	6.96	6.42
2016	43	12,703.8	180.6	325.7	16,131.8	249.3	393.5	8.15	7.29
2017	58	49,667.6	336.6	955.1	58,877.4	434.0	1,132.3	7.08	6.84
2018	85	63,568.2	348.4	784.8	74,779.4	443.1	934.7	4.77	6.65

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

U.S. Venture-backed M&A Activity



Source: NVCA 2019 Yearbook, Data Provided by PitchBook

U.S. VC Backed M&A Value and Age Characteristics

	# of Acquisitions	# with Disclosed Values	Deal Value ($M)	Mean Deal Value ($M)	Median Deal Value ($M)	Median Time from 1st VC to Exit	Average Time from 1st VC to Exit
2006	473	234	21,425.5	91.6	42.3	4.78	4.72
2007	533	250	33,460.6	133.8	50.0	4.74	4.92
2008	475	180	15,746.0	87.5	34.4	4.75	4.97
2009	469	145	14,425.9	99.5	25.0	4.40	4.90
2010	663	232	27,477.8	118.4	37.3	4.35	5.00
2011	694	258	29,266.1	113.4	47.0	4.23	4.93
2012	813	253	34,122.5	134.9	45.0	4.53	5.06
2013	813	250	28,949.4	115.8	37.2	3.85	4.98
2014	953	305	73,309.2	240.4	50.2	4.44	5.31
2015	941	271	43,250.1	159.6	46.0	4.27	5.44
2016	845	236	58,271.7	246.9	76.5	4.58	5.73
2017	827	211	42,292.0	200.4	81.0	5.28	6.19
2018	779	199	58,441.8	293.7	105.0	5.35	6.34

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

e-signature provider DocuSign. Seven of the ten largest IPOs for U.S. venture-backed companies in 2018 hailed from California, with the exception of Massachusetts-based Moderna Therapeutics, Maryland-based Tenable, and Utah-based PluralSight.

Software companies garnered 47% of 2018 IPO value and 18% of IPO count in 2018, both on par with 2017. Pharmaceuticals and biotechnology companies continued to attract the majority of IPOs, increasing its share to 56% of IPO count, and gained ground on its overall share of IPO value, reaching 35% (vs. 15% in 2017).

Venture-backed companies accounted for 40% of all U.S. IPOs in 2018, a 15-year high. The strong IPO environment, relative to recent years, also increased the share of all venture-backed exits via IPO versus M&A to 11%, the highest since 2014. Despite a relatively solid 2018 for venture-backed IPOs, larger structural issues remain a challenge for the health of U.S. public markets with what's been a longer-term decline in overall number of listed companies and venture-backed IPOs (more details on NVCA's capital markets reform public policy on page 44). And M&As continue to account for the majority of venture-backed exits.

2018 saw 779 M&As, and 199 M&As with disclosed values represented a total of $58.4 billion in disclosed exit value. M&A exit count has been on the decline since 2015, but by exit value, 2018 was the second highest in the past 15 years (after 2014). Accordingly, the median M&A deal value also reached a 15-year high of $105 million in 2018. Companies that were acquired or merged last year were older than in prior years, with a median age from first venture funding to exit of 5.35 years.

Software companies accounted for the majority (51%) of disclosed M&As by value, followed by pharmaceuticals and biotechnology (21%). Microsoft's $7.5 billion acquisition of software development platform GitHub ranked as the largest M&A of the year. Three healthcare companies rounded out the top ten largest M&As, and all but one company in the top ten was headquartered in California, Massachusetts, or New York. Michigan-based internet security service provider Duo Security's $2.35 billion acquisition by Cisco Systems was the lone M&A in the ten largest of 2018 outside those three states.

The optimism for venture-backed exits, particularly IPOs, that started 2018 came to fruition (more so than the optimism that kicked off 2017). Public market volatility at the end of 2018 and the government shutdown in early 2019 were top of mind for the IPO outlook in 2019, but a slew of high-profile IPO registrations and expected 2019 listings suggest the optimism continuing.

Top 10 U.S. VC-backed M&A in 2018

Company Name	Deal Size ($M)	Industry Sector	State
GitHub	7,500.00	Information Technology	California
Impact Biomedicines	7,000.00	Healthcare	California
Duo Security	2,350.00	Information Technology	Michigan
AppNexus	2,000.00	Information Technology	New York
Flatiron	1,900.00	Healthcare	New York
Adaptive Insights	1,600.00	Information Technology	California
AlienVault	1,600.00	Information Technology	California
Ring	1,200.00	Consumer Products and Services (B2C)	California
Glassdoor	1,200.00	Consumer Products and Services (B2C)	California
Syntimmune	1,200.00	Healthcare	Massachusetts

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

U.S. VC backed IPO Post Valuation by Range (Company Count)

	>$10B	$1B-$10B	$500M-$1B	$100M-$500M	<$100M
2006	-	-	6	40	14
2007	-	5	14	55	16
2008	-	1	-	5	6
2009	-	2	2	6	1
2010	-	3	5	28	5
2011	1	7	9	19	8
2012	1	7	11	32	11
2013	1	9	12	49	16
2014	-	11	18	72	24
2015	-	9	14	36	20
2016	-	3	8	22	10
2017	1	13	10	24	10
2018	-	22	13	41	9

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

U.S. VC backed M&A by Range (Company Count)

>$1B	$500M-$1B	$100M-$500M	<$100M
1	4	54	414
2	11	78	442
1	4	42	428
1	6	33	429
1	11	65	586
3	7	69	615
6	7	81	719
5	5	77	726
10	15	100	828
9	11	83	838
9	18	80	738
6	17	73	731
11	11	87	670
8	18	62	93

Source: NVCA 2019 Yearbook, Data Provided by PitchBook

NVCA Year in Review

From opposing the government to support immigrant entrepreneurs to protecting startups and entrepreneurs in the new foreign investment bill (FIRRMA) and regulations, 2018 was a busy year for NVCA representing the entrepreneurial ecosystem in Washington. NVCA also continued to advance programs and initiatives to help address sexual harassment and diversity & inclusion in the VC industry. In addition, NVCA convened the industry at our Leadership Gala, VCs-to-DC, policy conferences, LP Office Hours, and other events throughout the year. Revisit NVCA's highlights in our 2018 Year in Review timeline.

January 10: NVCA hosted the Annual Life Science Investor Dinner in San Francisco.

January 18: NVCA Chair Scott Kupor testified to Senate on CFIUS legislation.

January 19: NVCA hosted an ICO and Blockchain webinar.

February 5: Stephanie Volk named VP of Development for NVCA.

February 7: NVCA unveiled updated Model Legal Documents addressing crypto-currency and sexual harassment & discrimination.

February 8: NVCA and other organizations called on President Trump to maintain the International Entrepreneur Rule.

February 21: NVCA hosted an ICO & Cryptocurrency Industry Vertical event in San Francisco.

February 22: NVCA unveiled resources to help address sexual harassment in the venture ecosystem.

March 13-14: The first annual Stanford/ NVCA VC Symposium took place in Palo Alto—providing practical education to VC professionals.

March 15: NVCA honored leaders in the VC industry at its annual Leadership Gala, including giving out six awards to exceptional individuals and firms in the industry.

March 16: NVCA released the 2018 Yearbook, which highlighted a busy 2017 for NVCA and the VC industry.

April 11: NVCA hosted an event on the 5G Digital Ecosystem in San Francisco.

April 12: NVCA recommended key changes to the FIRRMA foreign investment bill to protect investment in U.S. startups.

April 26: NVCA & other organizations released a report on how policy could encourage more public companies.

May 9: NVCA filed a court motion for discovery in its lawsuit against DHS on the International Entrepreneur Rule.

May 16: Alexis Borisy was appointed the new Chair of NVCA, and seven new directors joined the NVCA Board.

May 16-17: NVCA convened VCs and policymakers in Washington, D.C. at the first annual VCs-to-DC event.

May 25: NVCA strongly opposed DHS's proposal to rescind the International Entrepreneur Rule.

June 20: NVCA hosted a VC Leadership Breakfast in Boston.

June 25: NVCA hosted a VC Leadership Dinner in Los Angeles.

June 27: NVCA hosted a Summer Party in San Francisco for the entrepreneurial ecosystem.

June 28: NVCA defended the International Entrepreneur Rule in comments to DHS.

2018 NVCA Leadership Gala awards

VCs-to-DC keynote speaker Kevin McCarthy

Emerging Technology Meets National Security Lunch

Strategic Operations & Policy Summit Panel

July 17: NVCA hosted its first LP Office Hours event in Palo Alto to connect diverse new VC investors with experienced GPs and LPs.

July 17: NVCA cheered the overwhelming House passage of the JOBS and Investor Confidence Act.

August 22: NVCA hosted a dinner for next generation VCs in San Francisco with featured speaker Jon Callaghan of True Ventures.

August 28: NVCA and Citi Ventures co-hosted a Regulatory Roundtable in San Francisco focused on automation and workforce development.

September 5: NVCA hosted a webinar on the FIRRMA legislation and its implications for the VC industry.

September 10: NVCA launched the first in its 'Spotlight on Rising Stars in VC' blog series.

September 27: NVCA cheered House passage of the American Innovation Act of 2018, which included NOL Reform for startups.

October 1: Cassie Ann Hodges named Director of Communications for NVCA.

October 2: NVCA hosted a webinar on Privacy and Cybersecurity.

October 16: NVCA hosted the 2018 Strategic Communications Summit in San Francisco.

October 17: NVCA filed a comment letter on the Volcker Rule, proposing solutions to allow banks to invest in VC funds again.

October 18: NVCA recommended Volcker Rule Reforms to encourage investment into U.S. startups to several government agencies.

October 24-25: NVCA held the Strategic Operations & Policy Summit for CFOs and senior operations professionals at VC firms.

October 25: NVCA hosted its annual Impact Investor Reception in San Francisco.

November 9: NVCA hosted a Members-Only webinar providing analysis on the 2018 Midterm election.

November 13: NVCA hosted its second LP Office Hours event in Boston.

November 14: NVCA hosted the first Emerging Technology Meets National Security conference to bring together emerging tech and D.C. security agencies.

November 27: NVCA hosted an event on building your personal brand as a woman in VC.

November 29: NVCA submitted recommendations to the SEC on how it could modernize the definition of "venture capital fund" for ERA/RIA purposes.

December 4: NVCA held an event on what VCs and Startups should know about recent changes in Foreign Investment Review.

December 5: NVCA-WAVC Annual December Luncheon in Menlo Park.

VCs-to-DC attendees

Looking Ahead: NVCA's 9 for 2019

Here is a snapshot of NVCA's top priorities as we look ahead into 2019. To see the full breath of what NVCA is up to this year, visit nvca.org.

1

Data & the Pitchbook-NVCA Venture Monitor

Jointly produced by NVCA and PitchBook, the *PitchBook-NVCA Venture Monitor* serves as the authoritative quarterly report on venture capital activity in the entrepreneurial ecosystem. The *Venture Monitor* provides a complete look at venture capital activity, reporting on fundraising, investments, exits, and other relevant industry analysis in one comprehensive report each quarter. We look forward to continuing to provide flagship data for the VC industry to American entrepreneurs across the country.

2

Foreign Investment Scrutiny and VC

The FIRRMA legislation that was signed into law in 2018 is now being implemented, which is creating new challenges for VCs with foreign LPs and co-investors, and for portfolio companies looking for financing from foreign investors. NVCA was very involved in the legislative process around FIRRMA, and now we're advocating heavily on behalf of the industry during the ongoing regulatory process, which implements the law. We're also trying to make it easier for VCs and portfolio companies to navigate these new challenges by updating our model legal documents with foreign investment related language.

3

Modernizing the Definition of VC

We want to update the ERA/RIA definition so that a VC looking to make investments into secondaries, cryptocurrencies, or investing into another fund doesn't have to change their SEC registration from an ERA to an RIA. This will allow VCs to invest more into portfolio companies.

4

Tax Policy to Encourage New Company Formation

The 2018 Midterm Elections brought changes in Washington, and in state capitals, that will change the way tax policy is debated across the country. It is our job in D.C. to educate policymakers that tax policy should encourage entrepreneurship and new company formation.

5

Reform the Volcker Rule

Before the Volcker Rule passed, regional banks used to help capital formation for VC investors in the Midwest and other parts of the middle of the country, supporting investment into startups in those regions. The Volcker Rule has made it much more difficult to support entrepreneurs in the middle of the country. We're working hard with policymakers and regulators to ensure that banks can once again be an important source of capital for entrepreneurs.

6

Engage NVCA Working Groups

It's very important for us at NVCA to understand what's important to the VC community. Therefore, we have several dynamic working groups on a variety of issues. This year, we have two new working groups. One is a regional working group to help address issues for VC funds in emerging ecosystems outside of the traditional epicenters of venture capital. The second is a blockchain working group so that we can understand from those making investments into cryptocurrencies and blockchain technologies what's important for NVCA to focus on, and what we should advise policymakers on what they should and shouldn't do.

7

Diversity & Inclusion (VentureForward)

This year, we are continuing our LP Office Hours program, which brings together experienced LPs and GPs to give expert advice to new diverse investors who are trying to get into the VC industry. We are also releasing the second *NVCA-Deloitte Human Capital Survey*, which will help measure the state of the VC industry and how it has changed since the last Human Capital Survey from 2016.

8

VC Education

We're putting on the 2nd Annual Stanford/NVCA Venture Capital Symposium this March in Palo Alto, where leaders in the industry get the latest on what they need to know, so that they can bring that knowledge back to their firms and portfolio companies. We also recently announced our new partnership with the University of California, Berkeley, called VC University, which is designed for new entrants to the VC industry. These are both part of our efforts to help support VCs across the country with education and resources.

9

New NVCA Website

This year, we're going to update our website to ensure that it is more member-friendly and that members of the entrepreneurial ecosystem can find the information they need to know. The new website will also be an easier place for policymakers and their staff to find out more about how VCs are working with portfolio companies to build the next great American companies.

NVCA 2019 Calendar of Programs & Events

NVCA's expanded 2019 events include a brand-new program with UC Berkeley featuring digital and in-person venture curriculum and regional VC leadership dinners in San Francisco, LA, Boston, Seattle, and D.C.! Join us in-person or via machine at one of our upcoming events.

Contact membership@nvca.org to learn more or if you are interested in sponsorship, speaking opportunities, or partnering on an event.

*2019 EVENTS**

Life Science Investor Reception
January 10
San Francisco, CA

San Diego Leadership Dinner
January 16
San Diego, CA

Dallas Leadership Dinner
January 23
Dallas, TX

Seattle Leadership Dinner
January 31
Seattle, WA

Members-Only Policy Briefing
February 27
San Francisco, CA

Leadership Gala
February 27
San Francisco, CA

VC University Online Certificate Program
March 22 application deadline for April 1 cohort. Additional cohorts in fall and winter 2019.

Bay Area Leadership Dinner
March 25
Palo Alto, CA

Venture Capital Symposium
March 26-27
Palo Alto, CA

Growth Equity Group West Coast Dinner
March 28
San Francisco, CA

LA Leadership Dinner
March 28
Los Angeles, CA

Members Only Happy Hour
April 25
San Francisco, CA

Chicago Leadership Dinner
April 30
Chicago, IL

PitchBook/NVCA 1Q Venture Monitor Webinar
April 30
Online webinar

VC StratComm Live: Becoming a Content Champion
May 2
Boston, MA

Boston Leadership Dinner
May 15
Boston, MA

VC University LIVE with the University of Michigan Ross School of Business
May 15-17
Ann Arbor, MI

Regional VC Fund Leadership Dinner
June 4
Washington, DC

VCs-to-DC
June 5-6
Washington, DC

LP Office Hours
June 6
Washington, DC

PitchBook/NVCA 2Q Venture Monitor Webinar
July 30
Online webinar

Washington, D.C. Leadership Dinner
September 11
Washington, DC

VC University LIVE with the A. B. Freeman School of Business at Tulane University
September 19-21
New Orleans, LA

Strategic Operations & Policy Summit
October 24-25
Washington, DC

New York Leadership Dinner
November 6
New York, NY

Annual December Luncheon
December 4
Bay Area

Subject to change. Additional events to be added!

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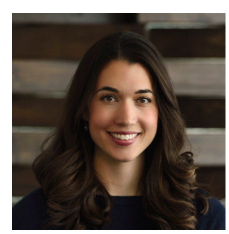

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2019 NVCA Public Policy Initiatives

The results of the 2018 mid-term election bring a new balance of power in Congress and will dictate the policy and political landscape over the next two years. NVCA will remain engaged with policymakers and regulators to ensure the voice of VCs and startups is heard in Washington. Below are key policy initiatives for NVCA in 2019 and a brief description on the current state-of-play.

Reopening the Public Markets to Growth Companies

The U.S. has about half the total number of public companies than it did twenty years ago, in no small part because of a lack of IPOs since 2000. A priority for NVCA is to make the public markets more attractive to venture-backed companies by building off the success of the JOBS Act. Among the proposals NVCA is advocating for include making Emerging Growth Company (EGC) status more attractive, requiring disclosure of short positions, and encouraging small cap liquidity and research. Reforms which encourage a more robust IPO environment will create economic growth by providing opportunities for startups and small cap companies to grow as public companies.

Medical Innovation

Venture is partnering with startups to discover groundbreaking treatments and cures for the most deadly and costly diseases. NVCA supports policies that streamline the regulatory approval process at the FDA—particularly for novel technologies—as well as the reimbursement process at the Centers for Medicare and Medicaid. Steady funding and process improvements at these agencies are critical to encouraging investors to take the long-term risk of pursuing new medical innovations that will save and improve patients' lives. NVCA will also continue to ensure venture's voice is heard as policymakers work to reduce the price of prescription drugs. Making drugs affordable for all Americans is important, but reforms should be sensitive to the current policy balance in the U.S. that has made our country the world leader in life-saving drug development.

Encouraging Talented Immigrants to Found and Build Startups

Immigrant entrepreneurs have made incredible contributions to the U.S. economy, with one-third of U.S. venture-backed companies that went public between 2006 and 2012 having at least one immigrant founder. But their true potential has not been realized because of the lack of a reliable immigration category. NVCA continues to be the leading advocate for policies that will allow immigrant entrepreneurs to build startups in the U.S. and create American jobs, particularly through a 'startup visa' that allows the world's top entrepreneurs to launch new enterprises in the U.S., and under the International Entrepreneur Rule that was the subject of a successful lawsuit NVCA filed against the federal government.

Protecting Patents for Startups

NVCA advocates for ways to address abusive patent litigation, while preserving access to the patent system for startups. Startups are often victimized by 'patent trolls,' but efforts in recent years to crack down on these entities would have had their most severe impact on venture-backed startups. NVCA believes abusive patent litigation practices must be solved so as not to deter investment in patent-reliant startups, but we must be mindful not to create unintended consequences that would reduce the value of patents to startups and pose a threat to the entrepreneurial ecosystem.

Regulatory Reforms for a Healthier Entrepreneurial Ecosystem

NVCA advocates for regulatory reforms that will lead to a healthier entrepreneurial ecosystem. A current priority proposes modifying the definition of a venture capital fund at the Securities and Exchange Commission for purposes of determining fund registration. Our proposal includes making the following investments qualifying: secondary investments in Emerging Growth Companies, fund of funds investments in other VC funds, and cryptocurrency investments. NVCA also continues to advocate for reforms to the Volcker Rule to allow bank investment into venture capital funds.

Supporting Tax Policy that Encourages New Company Formation

NVCA supports tax policy that encourages patient, long-term investment and new company formation. In 2019, we are advocating for a pro-entrepreneurship tax agenda with proposals such as increasing the value of the R&D credit to startups, simplifying QSBS rules, and creating a safe harbor for startups from Section 382 loss limitation rules. We will continue working to ensure that the new tax law is implemented in a way that supports startups and entrepreneurship, as well as advocating against any proposals to increase taxes on carried interest capital gains.

Vigilance on Modernization of Foreign Investment Laws

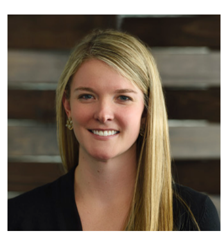
Venture capital funds with foreign limited partners, foreign co-investors, and startups considering taking foreign investment have been impacted by a recent law that expands the mandate of the Committee on Foreign Investment in the U.S. (CFIUS). Last year, NVCA fought during the legislative process to protect passive investment into venture funds from foreign LPs, and this issue remains a high priority in 2019 as the Treasury and Commerce departments implement the new law through the rulemaking process. These rulemakings are especially significant because key terms (such as 'emerging technologies') must be defined that will affect how the statute affects the startup ecosystem.

Basic Research and Technology Transfer

A foundation to ensuring a robust entrepreneurial ecosystem is a strong federal commitment to basic research funding and a system to effectively commercialize innovation. NVCA supports a return to our historical leadership position of federally funded basic research activity by committing to a sustained annual growth in funding of at least four percent. In addition, we can make more efficient use of today's basic research dollars by encouraging support for key federal commercialization programs such as SBIR, STTR, and I-Corps.

Technology Policy for Startups

NVCA supports policies that spur technology startup activity including easing regulatory burdens, reforming government procurement laws, and freeing additional spectrum for innovative products. In 2019, NVCA will engage on privacy policy to ensure that legislation and regulation in this space does not harm young, high-growth companies as policymakers work to address harm by large companies.



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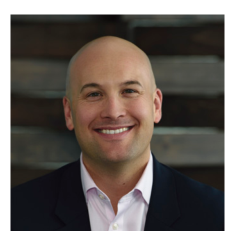

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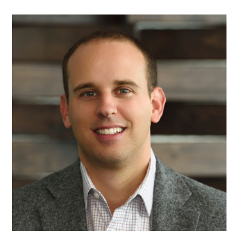

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Our Vibrant Member Community

Join NVCA's dynamic member network with representation from 35 states and micro VCs to mega funds

NVCA empowers the next generation of American companies that will fuel the economy of tomorrow. As the voice of the U.S. venture capital and startup community, NVCA advocates for public policy that supports the American entrepreneurial ecosystem. Serving the venture community as the preeminent trade association, NVCA arms the venture community for success, serving as the leading resource for venture capital data, practical education, peer-led initiatives, and networking.

All VCs, corporations, and individuals actively investing risk equity capital in the U.S. are invited to become NVCA members.

Who are NVCA members?

- VC partnerships
- Corporate venture groups
- Seed/Micro VCs
- Growth equity firms
- University accelerators & innovation funds

See a full list of NVCA members here.

How does NVCA help you succeed?

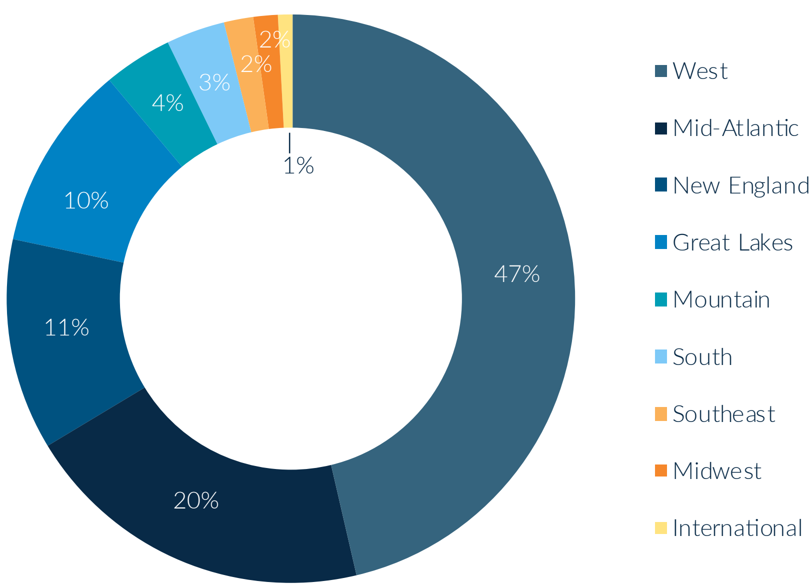
Policy & Advocacy

Education & Advancememt

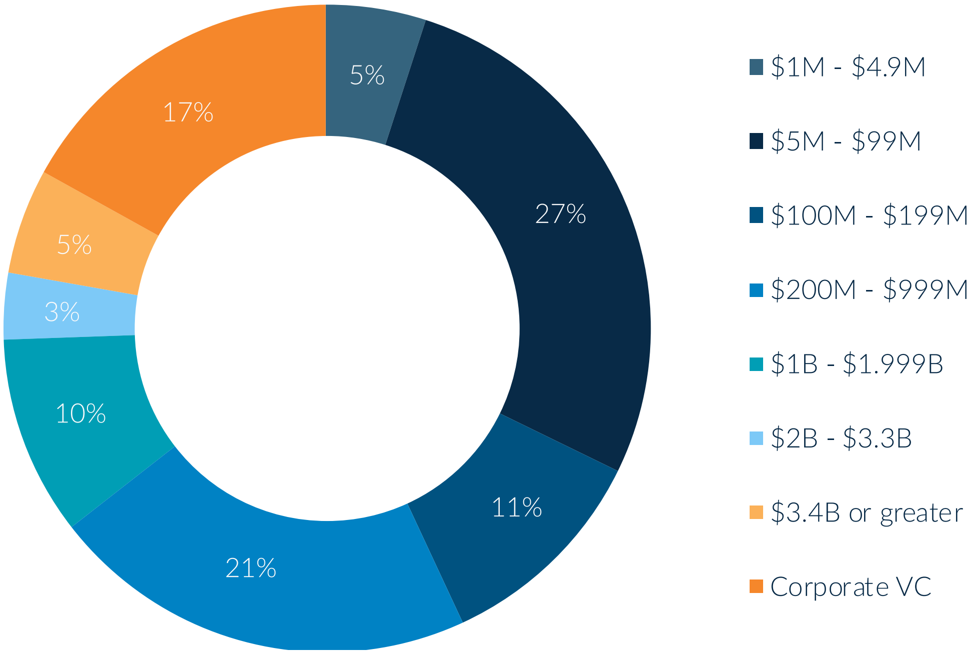
Community & Convening

Research & Data

Geographic distribution of NVCA Members



A look at NVCA Members by AUM



Key Programs and Initiatives

- NVCA/Stanford Venture Capital Symposium – Exclusive two-day conference for emerging managers and experienced investors to discuss key management, governance, and technology topics
- VentureForward – Expansive platform to provide opportunities and accelerate success in VC for individuals from all backgrounds
- **LP Office Hours** – Educational program for diverse professionals to receive advice from and connect with experienced LPs and GPs
- **Online Webinars** – Ongoing opportunities for virtual learning on important industry and technology topics, led by NVCA or trusted subject matter experts
- Legal Documents – Model documents that aim to reflect, guide, and establish industry standards, including HR practices and policies to promote diversity and inclusion

Must Attend Events

- Leadership Gala – Celebratory evening honoring achievement in the VC industry
- VCs to DC – Annual meeting to convene VCs and policymakers for dialogue on issues that strengthen the entrepreneurial ecosystem, including meetings on Capitol Hill
- **CFO/Operations Summit** – Conference dedicated to CFOs and senior operations executives at VC firms. Content includes accounting best practices, leadership development, and relevant public policy topics
- **Strategic Communications Summit** – Annual private forum for communications and marketing professionals to share best practices and discuss common challenges with peers and press

How to become a member

Visit nvca.org to apply online.

What's new for 2019

- Regional Funds Working Group
- Venture Capital University
- Members-Only Policy Briefings
- CVC Mentor Studio
- Member Spotlight Blog Series
- VC StratComm Live: East Coast Edition | Boston and NYC

Questions? Contact membership@nvca.org

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Glossary

The following definitions are graciously provided by the Center for Private Equity and Venture Capital at the Tuck School of Business at Dartmouth (cpevc.tuck.dartmouth.edu). Used by permission. NVCA and PitchBook are grateful to the Center for its support. Definitions of terms related to early stage financing have been revised since last year's edition to reflect the emergence in recent years of the Series Seed round as a separately named series of preferred stock between friends and family financings and Series A financing.

"A" round ("Series A") – formerly the first "institutional" capital raised by a Company, the "A" round is now typically the second institutional round of financing for a young company where venture capitalists are sufficiently interested in a company to invest a larger amount of capital after the "Seed" round to fund the company to the next stage of its development. Subsequent rounds of financing are called "B", "C", "D", etc.

Accredited investor – a person or legal entity, such as a company or trust fund, that meets certain net worth and income qualifications and is considered to be sufficiently sophisticated to make investment decisions in private offerings. Regulation D of the Securities Act of 1933 exempts accredited investors from protection of the Securities Act. The Securities and Exchange Commission has proposed revisions to the accredited investor qualifying rules, which may or may not result in changes for venture investors. The current criteria for a natural person are: $1 million net worth (excluding the value of a primary residence) or annual income exceeding $200,000 individually or $300,000 with a spouse. Directors, general partners and executive officers of the issuer are considered to be accredited investors. See Rule 501 of Regulation D of the SEC for current details.

Alpha – a term derived from statistics and finance theory that is used to describe the return produced by a fund manager in excess of the return of a benchmark index. Manager returns and benchmark returns are measured net of the risk-free rate. In addition, manager returns are adjusted for the risk of the manager's portfolio relative to the risk of the benchmark index. Alpha is a proxy for manager skill.

Alternative asset class – a class of investments that includes venture capital, leverage buyouts, hedge funds, real estate, and oil and gas, but excludes publicly traded securities. Pension plans, college endowments and other relatively large institutional investors typically allocate a certain percentage of their investments to alternative assets with an objective to diversify their portfolios.

Angel – a wealthy individual who invests in companies in relatively early stages of development.

Angel Groups – groups of individual angels who invest together, individually or through a pooled vehicle, enabling them to share deal flow with each other.

Anti-dilution – a contract clause that protects an investor from a substantial reduction in percentage ownership in a company due to the issuance by the company of additional shares to other entities. The mechanism for making an adjustment that maintains the same percentage ownership is called a Full Ratchet. The most commonly used adjustment provides partial protection and is called Weighted Average.

ASC Topic 820 – FASB Accounting Standards Codification (ASC) Topic 820 (formerly known as FAS 157) is the accounting standard that dictates how to measure and disclose fair value for financial reporting purposes. FASB ASC Topic 946 (Investment Companies) dictates that all investments should be reported at fair value.

"B" round ("Series B") – a financing event whereby investors such as venture capitalists and organized angel groups that are sufficiently interested in a company provide additional funds after the "A" round of financing. Subsequent rounds are called "C", "D" and so on.

Basis point ("bp") – one one-hundredth (1/100) of a percentage unit. For example, 50 basis points equals one half of one percent. Banks quote variable loan rates in terms of an index plus a margin and the margin is often described in basis points, such as LIBOR plus 400 basis points (or, as the experts say, "bips").

Beta – a measure of volatility of a public stock relative to an index or a composite of all stocks in a market or geographical region. A beta of more than one indicates the stock has higher volatility than the index (or composite) and a beta of one indicates volatility equivalent to the index (or composite). For example, the price of a stock with a beta of 1.5 will change by 1.5% if the index value changes by 1%. Typically, the S&P 500 index is used in calculating the beta of a stock.

Beta product – a product that is being tested by potential customers prior to being formally launched into the marketplace.

Blockchain – a distributed ledger that uses advanced cryptography to create a "chain" of "blocks" of information that are unalterable and verifiable. Useful for recording any number of transactions or sets of data in a verifiable way that is extremely difficult to modify.

Board of directors – a group of individuals, typically composed of managers, investors and experts who have a fiduciary responsibility for the well-being and proper guidance of a corporation. The board is typically elected by the shareholders.

Book – see Private placement memorandum.

Bootstrapping – the actions of a startup to minimize expenses and build cash flow, thereby reducing or eliminating the need for outside investors.

Bp – see Basis point.

Bridge financing – temporary funding that will eventually be replaced by permanent capital from equity investors or debt lenders. In venture capital, a bridge is usually a short term note (6 to 12 months) that converts to preferred stock. Typically, the bridge lender has the right to convert the note to preferred stock at a price that is a 20% to 25% discount from the price of the preferred stock in the next financing round. See Mezzanine and Wipeout bridge.

Broad-based weighted average anti-dilution – A weighted average anti-dilution method adjusts downward the price per share of the preferred stock of investor A due to the issuance of new preferred shares to new investor B at a price lower than the price investor A originally received. Investor A's preferred stock is repriced to a weighted average of investor A's price and investor B's price. A broad-based anti-dilution method uses all common stock outstanding on a fully diluted basis (including all convertible securities, warrants and options) in the denominator of the formula for determining the new weighted average price. See Narrow-based weighted average anti-dilution.

Burn rate – the rate at which a startup uses available cash to cover expenses in excess of revenue. Usually expressed on a monthly or weekly basis.

Business Development Company (BDC) – a publicly traded company that invests in private companies and is required by law to provide meaningful support and assistance to its portfolio companies.

Business plan – a document that describes a new concept for a business opportunity. A business plan typically includes the following sections: executive summary, market need, solution, technology, competition, marketing, management, operations, exit strategy, and financials (including cash flow projections). For most venture capital funds, fewer than 10 of every 100 business plans eventually receive funding.

Buyout – a sector of the private equity industry. Also, the purchase of a controlling interest of a company by an outside investor using substantial debt (in a leveraged buyout) or a management team (in a management buyout).

Buy-sell agreement – a contract that sets forth the conditions under which a shareholder must first offer his or her shares for sale to the other shareholders before being allowed to sell to entities outside the company.

C Corporation – an ownership structure that allows any number of individuals or companies to own shares. A C corporation is a stand-alone legal entity so it offers some protection to its owners, managers and investors from liability resulting from its actions.

Capital Asset Pricing Model (CAPM) – a method of estimating the cost of equity capital of a company. The cost of equity capital is equal to the return of a risk-free investment plus a premium that reflects the risk of the company's equity.

Capital call – when a private equity fund manager (usually a "general partner" in a partnership) requests that an investor in the fund (a "limited partner") provide previously committed capital. Usually a limited partner will agree to a maximum investment amount and the general partner will make a series of capital calls over time to the limited partner as opportunities arise to finance startups and buyouts.

Capital gap – the difficulty faced by some entrepreneurs in trying to raise between $2 million and $5 million. Friends, family and angel investors are typically good sources for financing rounds of less than $2 million, while many venture capital funds have become so large that investments in this size range are difficult.

Capitalization table (or Cap Table) – a table showing the owners of a company's shares and their ownership percentages as well as the debt holders. It also lists the forms of ownership, such as common stock, preferred stock, warrants, options, senior debt, and subordinated debt.

Capital gains – a tax classification of investment earnings resulting from the purchase and sale of assets. Typically, a company's investors and founders have earnings classified as long term capital gains (held for a year or longer), which are often taxed at a lower rate than ordinary income.

Capital stock – a description of stock that applies when there is only one class of shares. This class is known as "common stock".

Capital Under Management – A frequently used metric for sizing total funds managed by a venture capital or private equity firm. In practice, there are several ways of calculating this. In the US, this is the total committed capital for all funds managed by a firm on which it collects management fees. This calculation ignores whether portions of the committed capital have not yet been called and whether portions of the fund have been liquidated and distributed. It typically does not include aging funds in their "out years" on which fees are not being collected. For purposes of this book in calculating capital managed in figure 1.04, because direct data is not available, the last eight vintage years of capital commitments is considered a proxy for the industry's total capital under management.

Capped participating preferred stock – preferred stock whose participating feature is limited so that an investor cannot receive more than a specified amount. See Participating preferred stock.

Carried interest capital gains – the share in the capital gains of a venture capital fund which is allocated to the General Partner. Typically, a fund must return the capital given to it by limited partners plus any preferential rate of return before the general partner can share in the profits of the fund. The general partner will typically receive a 20% carried interest, although some successful firms receive 25%-30%. Also known as "carry" or "promote."

Clawback – a clause in the agreement between the general partner and the limited partners of a private equity fund. The clawback gives limited partners the right to reclaim a portion of disbursements to a general partner for profitable investments based on significant losses from later investments in a portfolio.

Closing – the conclusion of a financing round whereby all necessary legal documents are signed and capital has been transferred.

Co-investment – the direct investment by a limited partner alongside a general partner in a portfolio company.

Collateral – hard assets of the borrower, such as real estate or equipment, for which a lender has a legal interest until a loan obligation is fully paid off.

Commitment – an obligation, typically the maximum amount that a limited partner agrees to invest in a fund. See Capital call.

Common stock – a type of security representing ownership rights in a company. Usually, company founders, management and employees own common stock while outside investors own preferred stock. In the event of a liquidation of the company, the claims of secured and unsecured creditors, bondholders and preferred stockholders take precedence over common stockholders. See Preferred stock.

Comparable – a private or public company with similar characteristics to a private or public company that is being valued. For example, a telecommunications equipment manufacturer whose market value is 2 times revenues can be used to estimate the value of a similar and relatively new company with a new product in the same industry. See Liquidity discount.

Control – the authority of an individual or entity that owns more than 50% of equity in a company or owns the largest block of shares compared to other shareholders. Control can also be granted through special voting rights and protective provisions in a company's organizing documents.

Consolidation – see Rollup.

Conversion – the right of an investor or lender to force a company to replace the investor's preferred shares or the lender's debt with common shares at a preset conversion ratio. A conversion feature was first used in railroad bonds in the 1800's.

Convertible debt – a loan that allows the lender to exchange the debt for common shares in a company at a preset conversion ratio. Also known as a "convertible note."

Convertible preferred stock – a type of stock that gives an owner the right to convert preferred shares to common shares of stock. Usually, preferred stock has certain rights that common stock doesn't have, such as decision-making management control, a promised return on investment (dividend), or senior priority in receiving proceeds from a sale or liquidation of the company. Typically, convertible preferred stock automatically converts to common stock if the company makes an initial public offering (IPO). Convertible preferred is the most common tool for private equity funds to invest in companies.

Co-sale right – a contractual right of an investor to sell some of the investor's stock along with the founder's or majority shareholder's stock if either the founder or majority shareholder elects to sell stock to a third-party. Also known as Tag-along right.

Cost of capital – see weighted average cost of capital (WACC).

Cost of revenue – the expenses generated by the core operations delivering the product or services of a company.

Covenant – a legal promise to do or not do a certain thing. For example, in a financing arrangement, company management may agree to a negative covenant, whereby it promises not to incur additional debt. The penalties for violation of a covenant may vary from repairing the mistake to losing control of the company.

Coverage ratio – describes a company's ability to pay debt from cash flow or profits. Typical measures are EBITDA/Interest, (EBITDA minus Capital Expenditures)/ Interest, and EBIT/Interest.

Cram down round – a financing event upon which new investors with substantial capital are able to demand and receive contractual terms that effectively cause the issuance of sufficient new shares by the startup company to significantly reduce ("dilute") the ownership percentage of previous investors.

Cryptocurrency – a natively-digital currency using encryption techniques to regulate the creation of units of currency and verify transfer of funds. Usually created and managed independently of a central bank.

Cumulative dividends – the owner of preferred stock with cumulative dividends has the right to receive accrued (previously unpaid) dividends in full before dividends are paid to any other classes of stock.

Current ratio – the ratio of current assets to current liabilities.

Data room – a specific location where potential buyers / investors can review confidential information about a target company. This information may include detailed financial statements, client contracts, intellectual property, property leases, and compensation agreements.

Deal flow – a measure of the number of potential investments that a fund reviews in any given period.

Defined benefit plan – a company retirement plan in which the benefits are typically based on an employee's salary and number of years worked. Fixed benefits are paid after the employee retires. The employer bears the investment risk and is committed to providing the benefits to the employee. Defined benefit plan managers can invest in private equity funds.

Defined contribution plan – a company retirement plan in which the employee elects to contribute some portion of his or her salary into a retirement plan, such as a 401(k) or 403(b). The employer may also contribute to the employee's plan. With this type of plan, the employee bears the investment risk. The benefits depend solely on the amount of money made from investing the employee's contributions.

Demand rights – a type of registration right. Demand rights give an investor the right to force a startup to register its shares with the SEC and prepare for a public sale of stock (IPO).

Dilution – the reduction in the ownership percentage of current investors, founders and employees caused by the issuance of new shares (for example to investors in follow on rounds, , employees by increasing the stock option pool, debt providers in the form or warrants, etc.).

Dilution protection – see Anti-dilution and Full ratchet.

Direct secondary transaction – A transaction in which the buyer purchases shares of an operating company from an existing seller. While the transaction is a secondary sale of shares, the transacted interest is a primary issue purchase directly into an operating company. Sellers are often venture capitalists selling their ownership stake in a portfolio company. Buyers are often funds that specialize in such investments.

Discount rate – the interest rate used to determine the present value of a series of future cash flows.

Discounted cash flow (DCF) – a valuation methodology whereby the present value of all future cash flows expected from a company or investment is calculated.

Distressed debt – the bonds of a company that is either in or approaching bankruptcy. Some private equity funds specialize in purchasing such debt at deep discounts with the expectation of exerting influence in the restructuring of the company and then selling the debt once the company has meaningfully recovered.

Distribution – the transfer of cash or securities to a limited partner resulting from the sale, liquidation or IPO of one or more portfolio companies in which a general partner chose to invest.

Dividends – payments made by a company to the owners of certain securities.

Down round – a round of financing whereby the valuation of the company is lower than the value determined by investors in an earlier round.

Drag-along rights – the contractual right of an investor in a company to force all other investors to agree to a specific action, such as the sale of the company.

Drawdown schedule – an estimate of the gradual transfer of committed investment funds from the limited partners of a private equity fund to the general partners.

Due diligence – the investigatory process performed by investors to assess the viability of a potential investment and the accuracy of the information provided by the target company.

Dutch auction – a method of conducting an IPO whereby newly issued shares of stock are committed to the highest bidder, then, if any shares remain, to the next highest bidder, and so on until all the shares are committed. Note that the price per share paid by all buyers is the price commitment of the buyer of the last share.

Early stage – the state of a company after the seed (formation) stage but before middle stage (generating revenues). Typically, a company in early stage will have a core management team and a proven concept or product, but no positive cash flow.

Earnings before interest and taxes (EBIT) – a measurement of the operating profit of a company. One possible valuation methodology is based on a comparison of private and public companies' value as a multiple of EBIT.

Earnings before interest, taxes, depreciation and amortization (EBITDA) – a measurement of the cash flow of a company. One possible valuation methodology is based on a comparison of private and public companies' value as a multiple of EBITDA.

Earn out – an arrangement in which sellers of a business receive additional future payments, usually based on financial performance metrics such as revenue or net income.

Elevator pitch – a concise presentation, lasting only a few minutes (an elevator ride), by an entrepreneur to a potential investor about an investment opportunity.

Employee Stock Ownership Program (ESOP) – a plan established by a company to reserve shares for employees.

Entrepreneur – an individual who starts his or her own business.

Entrepreneurship – the application of innovative leadership to limited resources in order to create exceptional value.

Enterprise Value (EV) – the sum of the market values of the common stock and long term debt of a company, minus excess cash.

Equity – the ownership structure of a company represented by common shares, preferred shares or unit interests. Equity = Assets – Liabilities.

ESOP – see Employee Stock Ownership Program.

Evergreen fund – a fund that reinvests its profits in order to ensure the availability of capital for future investments.

Exit strategy – the plan for generating profits for owners and investors of a company. Typically, the options are to merge, be acquired or make an initial public offering (IPO). An alternative is to recapitalize (releverage the company and then pay dividends to shareholders).

Expansion stage – the stage of a company characterized by a complete management team and a substantial increase in revenues.

Fair value – a financial reporting principle for valuing assets and liabilities, for example, portfolio companies in venture capital fund portfolios. In 2007, more defined rules took effect. See ASC Topic 820.

Fairness opinion – a letter issued by an investment bank that charges a fee to assess the fairness of a negotiated price for a merger or acquisition.

FAS 157 – See ASC Topic 820 entry.

First refusal – the right of a privately owned company to purchase any shares that employees would like to sell before they are offered to outside buyers

Founders stock – nominally priced common stock issued to founders, officers, employees, directors, and consultants.

Free cash flow to equity (FCFE) – the cash flow available after operating expenses, interest payments on debt, taxes, net principal repayments, preferred stock dividends, reinvestment needs and changes in working capital. In a discounted cash flow model to determine the value of the equity of a firm using FCFE, the discount rate used is the cost of equity.

Free cash flow to the firm (FCFF) – the operating cash flow available after operating expenses, taxes, reinvestment needs and changes in working capital, but before any interest payments on debt are made. In a discounted cash flow model to determine the enterprise value of a firm using FCFF, the discount rate used is the weighted average cost of capital (WACC).

Friends and family financing – capital provided by the friends and family of founders of an early stage company. Friends and family financings may also include individual angel investors known to or introduced to the founders. Friends and family financing rounds are typically structured as notes convertible into a Seed or Series A round of financing. Founders should be careful not to create an ownership structure that may hinder the participation of professional investors once the company begins to achieve success.

Full ratchet – an anti-dilution protection mechanism to protect earlier investors from dilution when a new round is raised at a lower price. In the case of a full ratchet for a Series A followed by a Series B at a lower price per share, additional shares would be issued to the Series A preferred investors so that their resulting cost per share is equal to the price per share paid by the Series B preferred investors. Often as a result of the implementation of a ratchet, company management and employees who own a fixed amount of common shares suffer significant dilution. See Narrow-based weighted average anti-dilution and Broad-based weighted average anti-dilution.

Fully diluted basis – a methodology for calculating any per share ratios whereby the denominator is the total number of shares, both preferred and common, issued by the company on the assumption that all warrants and options are exercised.

Fund-of-funds – a fund created to invest in other funds (e.g. VC Funds, PE funds, etc.). Typically, individual investors and relatively small institutional investors participate in a fund-of-funds to minimize their portfolio management efforts and leverage the size and scale of the fund-of-funds.

Gatekeepers – intermediaries which endowments, pension funds and other institutional investors use as advisors regarding private equity investments.

General partner (GP) – a class of partner in a partnership. The general partner retains liability for the actions of the partnership. Historically, venture capital and buyout funds have been structured as limited partnerships, with the venture firm as the GP and limited partners (LPs) being the institutional and high net worth investors that provide most of the capital in the partnership. The GP earns a management fee and a percentage of gains (see Carried interest).

GP – see General partner.

GP for hire – In a spin-out or a synthetic secondary, a GP for hire refers to the professional investor who may be hired by a purchasing firm to manage the new fund created from the orphaned assets purchased. In past cases, the GP has often expanded its role to fundraise for and run new funds alongside the initial fund.

Going-private transaction – when a public company chooses to pay off all public investors, delist from all stock exchanges, and become owned by management, employees, and select private investors.

Golden handcuffs – financial incentives that discourage founders and / or important employees from leaving a company before a predetermined date or important milestone.

Growth stage – the stage of a company when it has received one or more rounds of financing and is generating revenue from its product or service. Also known as "middle stage."

Hart-Scott-Rodino (HSR) Act – a law requiring entities that acquire certain amounts of stock or assets of a company to inform the Federal Trade Commission and the Department of Justice and to observe a waiting period before completing the transaction to allow the agencies to assess whether there will be any anti-competitive implications as a result of the transaction.

Hedge fund – an investment fund that has the ability to use leverage, take short positions in securities, or use a variety of derivative instruments in order to achieve a return that is relatively less correlated to the performance of typical indices (such as the S&P 500) than traditional long-only funds. Hedge fund managers are typically compensated based on assets under management as well as fund performance.

High yield debt – debt issued via public offering or public placement (Rule 144A) that is rated below investment grade by S&P or Moody's. This means that the debt is rated below the top four rating categories (i.e. S&P BB+, Moody's Ba2 or below). The lower rating is indicative of higher risk of default, and therefore the debt carries a higher coupon or yield than investment grade debt. Also referred to as Junk bonds or Sub-investment grade debt.

Hockey stick – the general shape and form of a chart showing revenue, customers, cash or some other financial or operational measure that increases dramatically at some point in the future. Entrepreneurs often develop business plans with hockey stick charts to impress potential investors.

Holding period – amount of time an investment remains in a portfolio.

Hot issue – stock in an initial public offering that is in high demand.

Hot money – capital from investors that have no tolerance for lack of results by the investment manager and move quickly to withdraw at the first sign of trouble.

Hurdle rate – a minimum rate of return required before an investor will make an investment.

Incorporation – the process by which a business receives a state charter, allowing it to become a corporation. Many corporations choose Delaware because its laws are business-friendly and up to date.

Incubator – a company or facility designed to host startup companies. Incubators help startups grow while controlling costs by offering networks of contacts and shared back office resources.

Indenture – the terms and conditions between a bond issuer and bond buyers.

Initial Coin Offering (ICO) – An offering of units of a new cryptocurrency or crypto-token, usually in exchange for existing cryptocurrencies like Bitcoin or Ether, as a presale against a future blockchain project, i.e., the new coins or tokens sold will be the "currency" for transactions in a new or future blockchain project.

Initial public offering (IPO) – the first offering of stock by a company to the public. New public offerings must be registered with the Securities and Exchange Commission. An IPO is one of the methods that a startup that has achieved significant success can use to raise additional capital for further growth. See Qualified IPO.

In-kind distribution – a distribution to limited partners of a private equity fund that is in the form of publicly traded shares rather than cash.

Inside round – a round of financing in which the investors are the same investors as the previous round. An inside round raises liability issues since the valuation of the company has no third party verification in the form of an outside investor. In addition, the terms of the inside round may be considered self-dealing if they are onerous to any set of shareholders or if the investors give themselves additional preferential rights.

Institutional investor – professional entities that invest capital on behalf of companies or individuals. Examples are: pension plans, insurance companies and university endowments.

Intellectual property (IP) – knowledge, techniques, writings and images that are intangible but often protected by law via patents, copyrights, and trademarks.

Interest coverage ratio – earnings before interest and taxes (EBIT) divided by interest expense. This is a key ratio used by lenders to assess the ability of a company to produce sufficient cash to service its debt obligation.

Internal rate of return (IRR) – the interest rate at which a certain amount of capital today would have to be invested in order to grow to a specific value at a specific time in the future.

Investment thesis / Investment philosophy – the fundamental ideas which determine the types of investments that an investment fund will choose in order to achieve its financial goals.

IPEV – Stands for International Private Equity Valuation guidelines group. This group is made up of representatives of the international and US venture capital industry and has published guidelines for applying US GAAP and international IFRS valuation rules. See www.privateequityvaluation.com. Widely regarded in the US as the global successor to the US-focused PEIGG group.

IPO – see Initial public offering.

IRR – see Internal rate of return.

J curve – a concept that during the first few years of a private equity fund, cash flow or returns are negative due to investments, losses, and expenses, but as investments produce results the cash flow or returns trend upward. A graph of cash flow or returns versus time would then resemble the letter "J".

Later stage – the state of a company that has proven its concept, achieved significant revenues compared to its competition, and is approaching cash flow break even or positive net income. Typically, a later stage company is about 6 to 12 months away from a liquidity event such as an IPO or buyout. The rate of return for venture capitalists that invest in later stage, less risky ventures is lower than in earlier stage ventures.

LBO – see Leveraged buyout.

Lead investor – the outside investor that makes the largest investment in a financing round and manages the documentation and closing of that round. The lead investor sets the price per share of the financing round, thereby determining the valuation of the company.

Letter of intent – a document confirming the intent of an investor to participate in a round of financing for a company. By signing this document, the subject company agrees to begin the legal and due diligence process prior to the closing of the transaction. Also known as a "Term Sheet".

Leverage – the use of debt to acquire assets, build operations and increase revenues. By using debt, a company is attempting to achieve results faster than if it only used its cash available from pre-leverage operations. The risk is that the increase in assets and revenues does not generate sufficient net income and cash flow to pay the interest costs of the debt.

Leveraged buyout (LBO) – the purchase of a company or a business unit of a company by an outside investor using mostly borrowed capital.

Leveraged recapitalization – the reorganization of a company's capital structure resulting in more debt added to the balance sheet. Private equity funds can recapitalize a portfolio company and then direct the company to issue a one-time dividend to equity investors. This is often done when the company is performing well financially and the debt markets are expanding.

Leverage ratios – measurements of a company's debt as a multiple of cash flow. Typical leverage ratios include Total Debt / EBITDA, Total Debt / (EBITDA minus Capital Expenditures), and Senior Debt / EBITDA.

L.I.B.O.R. – see The London Interbank Offered Rate.

License – a contract in which a patent owner grants to a company the right to make, use or sell an invention under certain circumstances and for compensation.

Limited liability company (LLC) – an ownership structure designed to limit the founders' losses to the amount of their investment. An LLC itself does not pay taxes, rather its owners pay taxes on their proportion of the LLC profits at their individual tax rates.

Limited partnership – a legal entity composed of a general partner and various limited partners. The general partner manages the investments and is liable for the actions of the partnership while the limited partners are generally protected from legal actions and any losses beyond their original investment. The general partner collects a management fee and earns a percentage of capital gains (see Carried interest), while the limited partners receive income, capital gains and tax benefits.

Limited partner (LP) – an investor in a limited partnership. The general partner is liable for the actions of the partnership while the limited partners are generally protected from legal actions and any losses beyond their original investment. The limited partner receives income, capital gains and tax benefits.

Liquidation – the sale of a company. This may occur in the context of an acquisition by a larger company or in the context of selling off all assets prior to cessation of operations (Chapter 7 bankruptcy). In a liquidation, the claims of secured and unsecured creditors, bondholders and preferred stockholders take precedence over common stockholders.

Liquidation preference – the contractual right of an investor to priority in receiving the proceeds from the liquidation of a company. For example, a venture capital investor with a "2x liquidation preference" has the right to receive two times its original investment upon liquidation before other more junior forms of equity share in the liquidation proceeds.

Liquidity discount – a decrease in the value of a private company compared to the value of a similar but publicly traded company. Since an investor in a private company cannot readily sell his or her investment, the shares in the private company must be valued less than a comparable public company.

Liquidity event – a transaction whereby owners of a significant portion of the shares of a private company sell their shares in exchange for cash, in the case of an IPO or cash based M&A transaction, or shares of an acquiring company.

Lock-up agreement – investors, management and employees often agree not to sell their shares for a specific time period after an IPO, usually 6 to 12 months. By avoiding large sales of its stock, the company has time to build interest among potential buyers of its shares.

London Interbank Offered Rate (L.I.B.O.R.) – the average rate charged by large banks in London for loans to each other. LIBOR is a relatively volatile rate and is typically quoted in maturities of one month, three months, six months and one year.

Management buyout (MBO) – a leveraged buyout controlled by the members of the management team of a company or a division. Often an MBO is conducted in partnership with a buyout fund.

Management fee – a fee charged to the limited partners in a fund by the general partner. Management fees in a private equity fund usually range from 0.75% to 3% of capital under management, depending on the type and size of fund. For venture capital funds, 2% is typical.

Management rights – the rights often required by a venture capitalist as part of the agreement to invest in a company. The venture capitalist has the right to consult with management on key operational issues, attend board meetings and review information about the company's financial situation.

Market capitalization – the value of a publicly traded company as determined by multiplying the number of shares outstanding by the current price per share.

MBO – see Management buyout.

Mezzanine – a layer of financing that has intermediate priority (seniority) in the capital structure of a company. For example, mezzanine debt has lower priority than senior debt but usually has a higher interest rate and often includes warrants. In venture capital, a mezzanine round is generally the round of financing that is designed to help a company have enough resources to reach an IPO. See Bridge financing.

Multiples – a valuation methodology that compares public and private companies in terms of a ratio of value to an operations figure such as revenue or net income. For example, if several publicly traded computer hardware companies are valued at approximately 2 times revenues, then it is reasonable to assume that a startup computer hardware company that is growing fast has the potential to achieve a valuation of 2 times its revenues. Before the startup company issues its IPO, it will likely be valued at less than 2 times revenue because of the lack of liquidity of its shares. See Liquidity discount.

Narrow-based weighted average anti-dilution – a type of anti-dilution mechanism. A weighted average anti-dilution method adjusts downward the price per share of the preferred stock of investor A (by issuing new additional shares) due to the issuance of new preferred shares to new investor B at a price lower than the price investor A originally received. Investor A is issued enough preferred stock to replicate a weighed average of investor A's price and investor B's price. A narrow-based anti-dilution uses only common stock outstanding in the denominator of the formula for determining the new weighted average price.

National Venture Capital Association (NVCA) – the trade organization that empowers the next generation of American companies that will fuel the economy of tomorrow. As the voice of the U.S. venture capital and startup community, NVCA advocates for public policy that supports the American entrepreneurial ecosystem. Serving the venture community as the preeminent trade association, NVCA arms the venture community for success, serving as the leading resource for venture capital data, practical education, peer-led initiatives, and networking

NDA – see Non-disclosure agreement.

Non-cumulative dividends – dividends that are payable to owners of preferred stock at a specific point in time only if there is sufficient cash flow available after all company expenses have been paid. If cash flow is insufficient, the owners of the preferred stock will not receive the dividends owed for that time period and will have to wait until the board of directors declares another set of dividends.

Non-disclosure agreement (NDA) – an agreement issued by entrepreneurs to protect the privacy of their ideas when disclosing those ideas to third parties.

Non-interference – an agreement often signed by employees and management whereby they agree not to interfere with the company's relationships with employees, clients, suppliers and sub-contractors within a certain time period after termination of employment.

No-shop clause – a section of an agreement to purchase or invest in a company whereby the seller agrees not to market the company to other potential buyers or investors for a specific time period.

Non-solicitation – an agreement often signed by employees and management whereby they agree not to solicit other employees of the company regarding job opportunities.

NVCA – see National Venture Capital Association.

Offering memorandum – a legal document that provides details of an investment to potential investors. See Private placement memorandum.

Operating cash flow – the cash flow produced from the operation of a business, not from investing activities (such as selling assets) or financing activities (such as issuing debt). Calculated as net operating income (NOI) plus depreciation.

Option pool – a group of options set aside for long term, phased compensation to management and employees.

Outstanding shares – the total amount of common shares of a company, not including treasury stock, convertible preferred stock, warrants and options.

Pay to play – a clause in a financing agreement whereby any investor that does not participate in a future round agrees to suffer significant dilution compared to other investors. The most onerous version of "pay to play" is automatic conversion to common shares, which in essence ends any preferential rights of an investor.

Pari passu – a legal term referring to the equal treatment of two or more parties in an agreement. For example, a venture capitalist may agree to have registration rights that are pari passu with the other investors in a financing round.

Participating dividends – the right of holders of certain preferred stock to receive dividends and participate in additional distributions of cash, stock or other assets.

Participating preferred stock – a unit of ownership composed of preferred stock and common stock. The preferred stock entitles the owner to receive a predetermined sum of cash (usually the original investment plus accrued dividends) if the company is sold or has an IPO. The common stock represents additional continued ownership in the company.

PEIGG – acronym for Private Equity Industry Guidelines Group, an ad hoc group of individuals and firms involved in the private equity industry for the purpose of establishing valuation and reporting guidelines. With the implementation of FAS 157 in 2007, the group's mission was essentially complete. Several of its members then joined IPEV, which is viewed by US VCs as the international successor to PEIGG.

Piggyback rights – rights of an investor to have his or her shares included in a registration of a startup's shares in preparation for an IPO.

PIK dividend – a dividend paid to the holder of a stock, usually preferred stock, in the form of additional stock rather than cash. PIK refers to payment in kind.

PIPEs – see Private investment in public equity.

Placement agent – a company that specializes in finding institutional investors that are willing and able to invest in a private equity fund. Sometimes a private equity fund will hire a placement agent so the fund partners can focus on making and managing investments in companies rather than on raising capital.

Portfolio company – a company that has received an investment from a private equity fund.

Post-money valuation – the valuation of a company including the capital provided by the current round of financing. For example, a venture capitalist may invest $5 million in a company valued at $2 million "pre-money" (before the investment was made). As a result, the startup will have a post-money valuation of $7 million.

PPM – see Private placement memorandum.

Preemptive rights – the rights of shareholders to maintain their percentage ownership of a company by buying shares sold by the company in future financing rounds.

Preference – seniority, usually with respect to dividends and proceeds from a sale or dissolution of a company.

Preferred return – a minimum return per annum that must be generated for limited partners of a private equity fund before the general partner can begin receiving a percentage of profits from investments.

Preferred stock – a type of stock that has certain rights that common stock does not have. These special rights may include dividends, participation, liquidity preference, anti-dilution protection and veto provisions, among others. Private equity investors usually purchase preferred stock when they make investments in companies.

Pre-money valuation – the valuation of a company prior to the current round of financing. For example, a venture capitalist may invest $5 million in a company valued at $2 million pre-money. As a result, the startup will have a "pre-money" valuation of $2 million.

Primary shares – shares sold by a corporation (not by individual shareholders).

American Investment Council (AIC) – an advocacy, communications and research organization for the private equity industry in the United States. Previously known as Private Equity Growth Capital Council (PEGCC).

Private equity – equity investments in non-public companies, usually defined as being made up of venture capital, growth equity and buyout funds. Real estate, oil and gas, and other such partnerships are sometimes included in the definition.

Private investment in public equity (PIPEs) – investments by a private equity fund in a publicly traded company, usually at a discount and in the form of preferred stock.

Private placement – the sale of a security directly to a limited number of institutional and qualified individual investors. If structured correctly, a private placement avoids registration with the Securities and Exchange Commission.

Private placement memorandum (PPM) – a document explaining the details of an investment to potential investors. For example, a private equity fund will issue a PPM when it is raising capital from institutional investors. Also, a startup may issue a PPM when it needs growth capital. Also known as "Offering Memorandum".

Private securities – securities that are not registered with the Securities and Exchange Commission and do not trade on any exchanges. The price per share is negotiated between the buyer and the seller (the "issuer").

Qualified IPO – a public offering of securities valued at or above a total amount specified in a financing agreement. This amount is usually specified to be sufficiently large to guarantee that the IPO shares will trade in a major exchange (NASDAQ or New York Stock Exchange). Usually upon a qualified IPO preferred stock is forced to convert to common stock.

Quartile – one fourth of the data points in a data set. Often, private equity investors are measured by the results of their investments during a particular period of time. Institutional investors often prefer to invest in private equity funds that demonstrate consistent results over time, placing in the upper quartile of the investment results for all funds.

Realization ratio – the ratio of cumulative distributions to paid-in capital. The realization ratio is used as a measure of the distributions from investment results of a private equity partnership compared to the capital under management.

Recapitalization – the reorganization of a company's capital structure.

Red herring – a preliminary prospectus filed with the Securities and Exchange Commission and containing the details of an IPO offering. The name refers to the disclosure warning printed in red letters on the cover of each preliminary prospectus advising potential investors of the risks involved.

Redemption rights – the right of an investor to force the startup company to buy back the shares issued as a result of the investment. In effect, the investor has the right to take back his/her investment and may even negotiate a right to receive an additional sum in excess of the original investment.

Registration – the process whereby shares of a company are registered with the Securities and Exchange Commission under the Securities Act of 1933 in preparation for a sale of the shares to the public.

Regulation D – Often referred to as simply "Reg D," an SEC regulation that governs private placements. Private placements are investment offerings for institutional and accredited individual investors, but not the general public.

Restricted shares – shares that cannot be traded in the public markets.

Return on investment (ROI) – the proceeds from an investment, during a specific time period, calculated as a percentage of the original investment. Also, net profit after taxes divided by average total assets.

Rights offering – an offering of stock to current shareholders that entitles them to purchase the new issue.

Rights of co-sale with founders – a clause in venture capital investment agreements that allows the VC fund to sell shares at the same time that the founders of a startup choose to sell.

Risk-free rate – a term used in finance theory to describe the return from investing in a riskless security. In practice, this is often taken to be the return on US Treasury Bills.

Road show – presentations made in several cities to potential investors and other interested parties. For example, a company will often make a road show to generate interest among institutional investors prior to its IPO.

ROI – see Return on investment.

Rollup – the purchase of relatively smaller companies in a sector by a rapidly growing company in the same sector. The strategy is to create economies of scale. For example, the movie theater industry underwent significant consolidation via rollups in the 1960's and 1970's.

Round – a financing event usually involving several private equity investors.

Royalties – payments made to patent or copyright owners in exchange for the use of their intellectual property.

Rule 144 – a rule of the Securities and Exchange Commission that specifies the conditions under which the holder of shares acquired in a private transaction may sell those shares in the public markets.

S corporation – an ownership structure that limits its number of owners to 100. An S corporation does not pay taxes, rather its owners pay taxes on their proportion of the corporation's profits at their individual tax rates.

SBIC – see Small Business Investment Company.

Scalability – a characteristic of a new business concept that entails the growth of sales and revenues with a much slower growth of organizational complexity and expenses. Venture capitalists look for scalability in the startups they select to finance.

Scale-down – a schedule for phased decreases in management fees for general partners in a limited partnership as the fund reduces its investment activities toward the end of its term.

Scale-up – the process of a company growing quickly while maintaining operational and financial controls in place. Also, a schedule for phased increases in management fees for general partners in a limited partnership as the fund increases its investment activities over time.

Secondary market – a market for the sale of limited partnership interests in private equity funds. Sometimes limited partners chose to sell their interest in a partnership, typically to raise cash or because they cannot meet their obligation to invest more capital according to the takedown schedule. Certain investment companies specialize in buying these partnership interests at a discount.

Secondary shares – shares sold by a shareholder (not by the corporation).

Securities and Exchange Commission (SEC) – the regulatory body that enforces federal securities laws such as the Securities Act of 1933 and the Securities Exchange Act of 1934.

Seed capital – investment provided by professional seed funds, angels and angel groups, and friends and family of the founders of a startup in the seed stage of its development.

Seed round ("Series Seed") - a financing event whereby angels, angel groups, professionally managed Seed funds, and early stage venture capital funds become involved in a young start-up company that was previously financed by founders, their friends and family, and individual angel investors in a friends and family financing. Seed rounds can be priced rounds or can be structured as notes convertible into a "Series A" financing round. The Seed round is now typically the first "institutional" financing of a company. The size of Seed rounds in recent years has grown in recent years to resemble what formerly would have been a small "Series A" round.

Seed stage – the state of a company when it has just been incorporated and its founders are developing their product or service.

Senior debt – a loan that has a higher priority in case of a liquidation of the asset or company.

Seniority – higher priority.

Series A preferred stock – preferred stock issued by a fast growth company in exchange for capital from investors in the "A" round of financing. This preferred stock is usually convertible to common shares upon an IPO.

Shareholder agreement – a contract that sets out the basis on which the company will be operated and the shareholders' rights and obligations. It provides rights and privileges to preferred and major shareholders and protections to minority shareholders.

Sharpe Ratio – a method of calculating the risk-adjusted return of an investment. The Sharpe Ratio is calculated by subtracting the risk-free rate from the return on a specific investment for a time period (usually one year) and then dividing the resulting figure by the standard deviation of the historical (annual) returns for that investment. The higher the Sharpe Ratio, the better.

Small Business Investment Company (SBIC) – a company licensed by the Small Business Administration to receive government capital in the form of debt or equity for use in private equity investing.

Stock option – a right to purchase or sell a share of stock at a specific price within a specific period of time. Stock purchase options are commonly used as long term incentive compensation for employees and management of fast growth companies.

Strategic investor – a relatively large corporation that agrees to invest in a young or a smaller company in order to have access to its proprietary technology, product or service.

Subordinated debt – a loan that has a lower priority than a senior loan in case of a liquidation of the asset or company. Also known as "junior debt".

Sweat equity – ownership of shares in a company resulting primarily from work rather than investment of capital.

Syndicate – a group of investors that agree to participate in a round of funding for a company. Alternatively, a syndicate can refer to a group of investment banks that agree to participate in the sale of stock to the public as part of an IPO.

Synthetic secondary – A popular method of completing a direct secondary transaction in which the buyer becomes a limited partner (LP) in a special purpose vehicle (SPV) or similar entity which has been set up out of the underlying investments in order to create a limited partnership interest. The term arose because of the synthetic nature of the direct purchase through the LP secondary transaction.

Tag-along right – the right of a minority investor to receive the same benefits as a majority investor. Usually applies to a sale of securities by investors. Also known as Co-sale right.

Takedown – a schedule of the transfer of capital in phases in order to complete a commitment of funds. Typically, a takedown is used by a general partner of a private equity fund to plan the transfer of capital from the limited partners.

Tender offer – an offer to public shareholders of a company to purchase their shares.

Term loan – a bank loan for a specific period of time, usually up to ten years in leveraged buyout structures.

Term sheet – a document confirming the intent of an investor to participate in a round of financing for a company. By signing this document, the subject company agrees to begin the legal and due diligence process prior to the closing of the transaction. Also known as "Letter of Intent".

Tranche – a portion of a set of securities. Each tranche may have different rights or risk characteristics. When venture capital firms finance a company, a round may be disbursed in two or three tranches, each of which is paid when the company attains one or more milestones.

Turnaround – a process performed at a struggling company resulting in a substantial increase in a company's revenues, profits and reputation.

Under water option – an option is said to be under water if the current fair market value of a stock is less than the option exercise price.

Underwriter – an investment bank that chooses to be responsible for the process of selling new securities to the public. An underwriter usually chooses to work with a syndicate of investment banks in order to maximize the distribution of the securities.

Venture capital – a segment of the private equity industry which focuses on investing in new companies with high growth potential and accompanying high risk.

Venture capital method – a pricing valuation method whereby an estimate of the future value of a company is discounted by a certain interest rate and adjusted for future anticipated dilution in order to determine the current value. Usually, discount rates for the venture capital method are considerably higher than public stock return rates, representing the fact that venture capitalists must achieve significant returns on investment in order to compensate for the risks they take in funding unproven companies.

Venture Monitor – Officially known as the PitchBook-National Venture Capital Association (NVCA) Venture Monitor. Jointly produced by PitchBook and NVCA, it serves as the authoritative quarterly report on venture capital activity in the entrepreneurial ecosystem. The Venture Monitor provides a complete look at venture capital activity, reporting on fundraising, investments, exits and other relevant industry analysis in one comprehensive report each quarter.

Vesting – a schedule by which employees gain ownership over time of a previously agreed upon amount of retirement funding or stock options.

Vintage – the year that a private equity fund begins making investments. Venture funds are generally benchmarked to funds of the same vintage year.

Voting rights – the rights of holders of preferred and common stock in a company to vote on certain acts affecting the company. These matters may include payment of dividends, issuance of a new class of stock, mergers or liquidation.

Warrant – a security which gives the holder the right to purchase shares in a company at a pre-determined price. A warrant is a long term option, usually valid for several years or indefinitely. Typically, warrants are issued concurrently with preferred stocks or bonds in order to increase the appeal of the stocks or bonds to potential investors.

Washout round – a financing round whereby previous investors, the founders and management suffer significant dilution. Usually as a result of a washout round, the new investor gains majority ownership and control of the company.

Weighted average cost of capital (WACC) – the average of the cost of equity and the after-tax cost of debt. This average is determined using weight factors based on the ratio of equity to debt plus equity and the ratio of debt to debt plus equity.

Weighted average anti-dilution – an anti-dilution protection mechanism whereby the conversion rate of preferred stock is adjusted in order to reduce an investor's loss due to an increase in the number of shares in a company. Without anti-dilution protection, an investor would suffer from a reduction of his or her percentage ownership. Usually as a result of the implementation of a weighted average anti-dilution, company management and employees who own a fixed amount of common shares suffer significant dilution, but not as badly as in the case of a full ratchet.

Write-down – a decrease in the reported value of an asset or a company.

Write-off – a decrease in the reported value of an asset or a company to zero.

Write-up – an increase in the reported value of an asset or a company.

Zombie – a company that has received capital from investors but has only generated sufficient revenues and cash flow to maintain its operations without significant growth. Sometimes referred to as "walking dead." Typically, a venture capitalist has to make a difficult decision as to whether to liquidate a zombie or continue to invest funds in the hopes that the zombie will become a winner.

Data Methodology

Fundraising

We define venture capital funds as pools of capital raised for the purpose of investing in the equity of startup companies. In addition to funds raised by traditional venture capital firms, PitchBook also includes funds raised by any institution with the primary intent stated above. Funds identifying as growth-stage vehicles are classified as PE funds and are not included in this report. A fund's location is determined by the country in which the fund is domiciled, if that information is not explicitly known, the HQ country of the fund's general partner is used. Only funds based in the United States that have held their final close are included in the fundraising numbers. The entirety of a fund's committed capital is attributed to the year of the final close of the fund. Interim close amounts are not recorded in the year of the interim close.

Deals

We include equity investments into startup companies from an outside source. Investment does not necessarily have to be taken from an institutional investor. This can include investment from individual angel investors, angel groups, seed funds, venture capital firms, corporate venture firms, and corporate investors. Investments received as part of an accelerator program are not included, however, if the accelerator continues to invest in follow-on rounds, those further financings are included. All financings are of companies headquartered in the US.

We include equity investments into startup companies from an outside source. Investment does not necessarily have to be taken from an institutional investor. This can include investment from individual angel investors, angel groups, seed funds, venture capital firms, corporate venture firms, and corporate investors. Investments received as part of an accelerator program are not included, however, if the accelerator continues to invest in follow-on rounds, those further financings are included. All financings are of companies headquartered in the US.

Stage Definitions

Angel/seed: We define financings as angel rounds if there are no PE or VC firms involved in the company to date and we cannot determine if any PE or VC firms are participating. In addition, if there is a press release that states the round is an angel round, it is classified as such. Finally, if a news story or press release only mentions individuals making investments in a financing, it is also classified as angel. As for seed, when the investors and/or press release state that a round is a seed financing, or it is for less than $500,000 and is the first round as reported by a government filing, it is classified as such. If angels are the only investors, then a round is only marked as seed if it is explicitly stated.

Early-stage: Rounds are generally classified as Series A or B (which we typically aggregate together as early stage) either by the series of stock issued in the financing or, if that information is unavailable, by a series of factors including: the age of the company, prior financing history, company status, participating investors, and more.

Late-stage: Rounds are generally classified as Series C or D or later (which we typically aggregate together as late stage) either by the series of stock issued in the financing or, if that information is unavailable, by a series of factors including: the age of the company, prior financing history, company status, participating investors, and more.

Growth equity: Rounds must include at least one investor tagged as growth/expansion, while deal size must either be $15 million or more (although rounds of undisclosed size that meet all other criteria are included). In addition, the deal must be classified as growth/expansion or later-stage VC in the PitchBook Platform. If the financing is tagged as late-stage VC it is included regardless of industry. Also, if a company is tagged with any PitchBook vertical, excepting manufacturing and infrastructure, it is kept. Otherwise, the following industries are excluded from growth equity financing calculations: buildings and property, thrifts and mortgage finance, real estate investment trusts, and oil & gas equipment, utilities, exploration, production and refining. Lastly, the company in question must not have had an M&A event, buyout, or IPO completed prior to the round in question.

Corporate venture capital: Financings classified as corporate venture capital include rounds that saw both firms investing via established CVC arms or corporations making equity investments off balance sheets or whatever other non-CVC method actually employed.

Exits

We include the first majority liquidity event for holders of equity securities of venture-backed companies. This includes events where there is a public market for the shares (IPO) or the acquisition of majority of the equity by another entity (corporate or financial acquisition). This does not include secondary sales, further sales after the initial liquidity event, or bankruptcies. M&A value is based on reported or disclosed figures, with no estimation used to assess the value of transactions for which the actual deal size is unknown.

Geographic Definitions

U.S. regions

West Coast:
Alaska, California, Hawaii, Oregon, Washington

Mountain:
Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming

Midwest:
Iowa, Kansas, Missouri, Nebraska, North Dakota, South Dakota

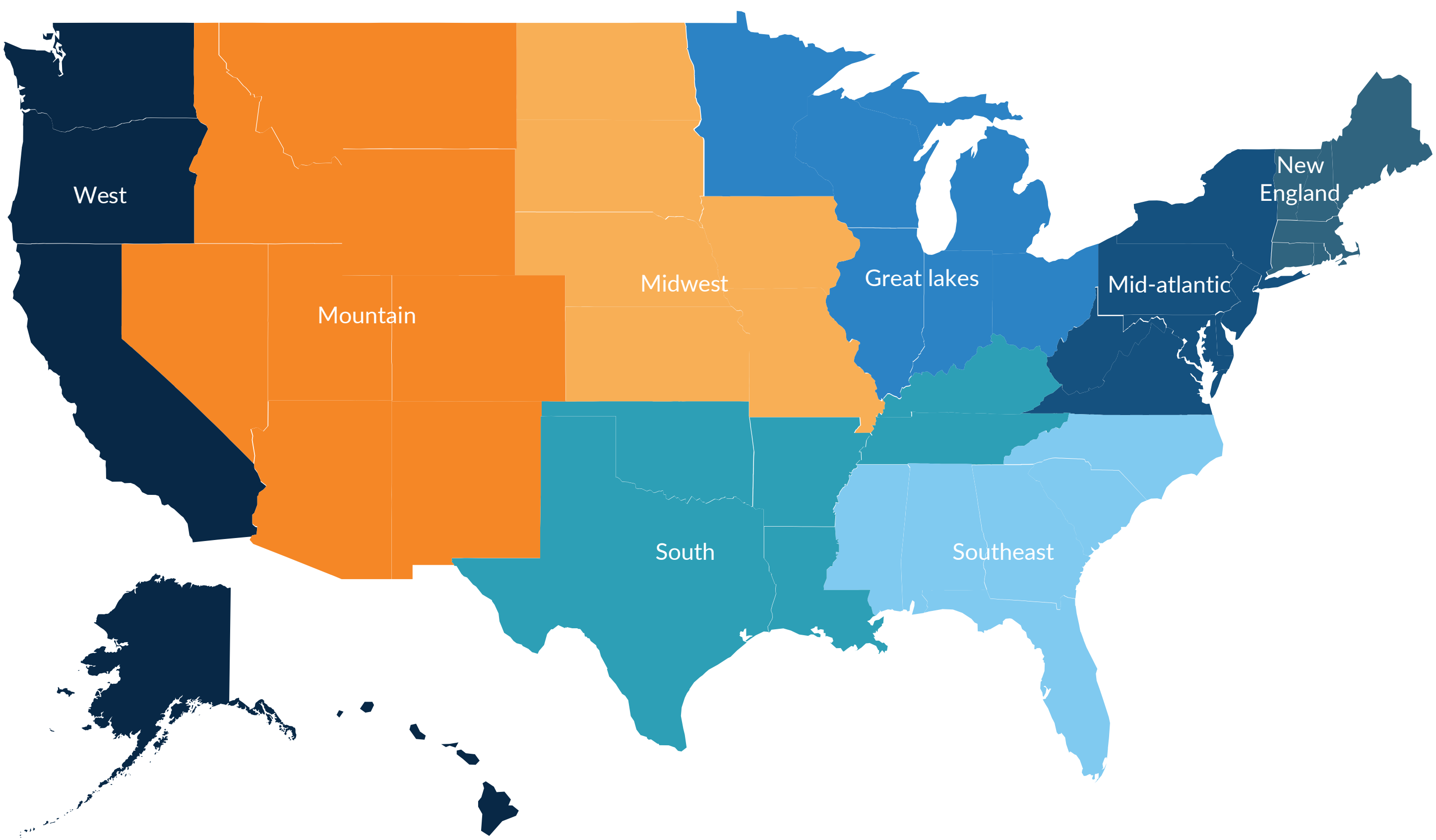
Great Lakes:
Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

New England:
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

Mid-Atlantic:
Delaware, D.C., Maryland, New Jersey, New York, Pennsylvania, Virginia, West Virginia

South:
Arkansas, Kentucky, Louisiana, Oklahoma, Tennessee, Texas

Southeast:
Alabama, Florida, Georgia, Mississippi, North Carolina, Puerto Rico, South Carolina



Industry Code Definitions

Example companies in these definitions do not necessarily mean that those companies are included in the venture dataset included in the Yearbook, but are merely provided for context.

Description	VC Special Industry
Commercial Services	Commercial Services
Apparel and Accessories	Consumer Goods & Recreation
Restaurants, Hotels and Leisure	Consumer Goods & Recreation
Retail	Consumer Goods & Recreation
Energy Equipment	Energy
Exploration, Production and Refining	Energy
Energy Services	Energy
Healthcare Devices and Supplies	HC Devices & Supplies
Healthcare Services	HC Services & Systems
Healthcare Technology Systems	HC Services & Systems
Communications and Networking	IT Hardware
Computer Hardware	IT Hardware
Semiconductors	IT Hardware
Media	Media
Commercial Products	Other
Other Healthcare	Other
IT Services	Other
Other Information Technology	Other
Agriculture	Other
Chemicals and Gases	Other

Description	VC Special Industry
Construction (Non-Wood)	Other
Containers and Packaging	Other
Forestry	Other
Metals, Minerals and Mining	Other
Textiles	Other
Other Materials	Other
Utilities	Other
Other Energy	Other
Capital Markets/Institutions	Other
Commercial Banks	Other
Insurance	Other
Other Financial Services	Other
Services (Non-Financial)	Other
Transportation	Other
Other Consumer Products and Services	Other
Consumer Durables	Other
Consumer Non-Durables	Other
Commercial Transportation	Other
Other Business Products and Services	Other
Pharmaceuticals and Biotechnology	Pharma & Biotech
Software	Software

Note: Life sciences is composed of pharma & biotech and healthcare devices & supplies combined together.

1 Business Products & Services

1.1 Commercial Products

1.1.1 Aerospace and Defense - Manufacturers of equipment, parts or products related to civil or military aerospace and defense. Includes aircraft parts, firearms, and other munitions.

Ex: Boeing, Lockheed Martin, Northrop Grumman

1.1.2 Building Products - Manufacturers and distributors of home improvement and construction products and equipment. Includes drills, saws, windows, doors, and other prefabricated building materials, among others.

Ex: USG, Elk Corporation, Fastenal Company

1.1.3 Distributors/Wholesale - Companies engaged in the sale of bulk goods for resale by a retailer. The goods are sold to industrial, commercial, institutional, or other entities.

Ex: Ferguson Enterprises, W.W. Grainger, Hughes Supply

1.1.4 Electrical Equipment - Manufacturers of electrical equipment and components. Includes a broad range of electrical devices, electrical components, power-generating equipment, and other large electrical systems, among others.

Ex: AO Smith, Exide Technologies, Zoltek Companies

1.1.5 Industrial Supplies and Parts - Manufacturers of intermediate goods. Includes industrial parts and supplies made through injection molding, extrusion, thermoforming, die casting, and metal stamping, among others.

Ex: Advanced Plastics, Precision Urethane and Machine, Lyons Tool and Die

1.1.6 Machinery - Manufacturers of heavy-duty industrial machinery. Includes heavy equipment, hardware, and machine tools, among others.

Ex: Caterpillar, Komatsu, Deere and Company

1.1.7 Other Commercial Products

1.2 Commercial Services

1.2.1 Accounting, Audit and Tax Services - Providers of accounting, audit, and tax services to managers, investors, and tax authorities.

Ex: PricewaterhouseCoopers, Ernst and Young, KPMG, Deloitte

1.2.2 BPO/Outsource Services - Providers of business process outsourcing (BPO) services. BPO is the transmission of processes and operational activities to a third party for the purpose of cost reduction, productivity growth, and innovative capabilities.

Ex: Accenture, Sitel, ARAMARK

1.2.3 Construction and Engineering - Companies engaged in large scale or non-residential construction. Includes building construction, heavy/highway construction, industrial construction, architecture, and civil engineering, among others.

Ex: Turner Construction, Skanska, Tishman Construction

1.2.4 Consulting Services - Providers of specialized consulting services to improve a company's performance. Includes environmental consulting, human resource consulting, management consulting, strategic consulting, and political consulting, among others.

Ex: McKinsey and Company, Boston Consulting Group, Watson Wyatt

1.2.5 Education and Training Services - Providers of specialized education and training services. Includes on-the-job and off-the-job training, among others.

Ex: Apollo Group, Accredited Technical Training, WorldWideLearn

1.2.6 Environmental Services - Providers of environmental services. Includes environmental management, waste management, and pollution control services, among others.

Ex: Environmental Quality Management, Waste Management, Allied Waste Industries

1.2.7 Human Capital Services - Providers of human resource and employment services. Includes recruitment, training, and career development, among others.

Ex: Monster Worldwide, Vault.com, Robert Half Finance and Accounting

1.2.8 Legal Services - Providers of corporate legal services. Includes contract law, tax law, securities law, intellectual property rights, and zoning law, among others.

Ex: DLA Piper, Goodwin Procter, White and Case

1.2.9 Logistics - Providers of supply chain management and logistical support. Includes inventory management, purchasing, organizing transportation, and warehousing, among others.

Ex: Penske Logistics, United Parcel Service, Expeditors International

1.2.10 Media and Information Services - Providers of media and information services to businesses. Includes companies engaged in trade shows, marketing, branding, conducting surveys, market analysis, and audience data interpretations, among others. This includes online marketplaces.

Ex: Arbitron, DST Systems, Interactive Data Corporation

1.2.11 Office Services - Providers of administrative, office management, and personnel services.

Ex: Express Personnel Services, IKON Office Solutions, Snelling Personnel Services

1.2.12 Printing Services - Providers of commercial printing services. Includes printing, copying, binding, and document preparation, among others.

Ex: Kinko's, AlphaGraphics, Sir Speedy

1.2.13 Security Services - Provider of residential and commercial security services. Includes security system installation, monitoring, and staffing services, among others.

Ex: Brinks, AlliedBarton Security Services, Protection One

1.2.14 Other Commercial Services

1.3 Transportation

1.3.1 Air - Providers of products or services related to commercial air transportation. Includes couriers, airfreight, and airplane maintenance, among others.

Ex: Delta Cargo, Pilot Freight Services, Lufthansa Cargo

1.3.2 Marine - Providers of products or services related to commercial water transportation. Includes cargo shipping, manufacturers of ships, and ship components, among others.

Ex: Overseas Shipholding Group, DryShips, Seacor Holdings

1.3.3 Rail - Providers of products or services related to commercial rail transportation. Includes freight trains, manufacturers of trains, and train parts, among others.

Ex: Union Pacific, Canadian National Railway, Norfolk Southern

1.3.4 Road - Providers of products or services related to commercial land transportation. Includes freight trucks, manufacturers of commercial trucks, and truck parts, among others.

Ex: J.B. Hunt Transport Services, Landstar System, Con-way

1.3.5 Infrastructure - Providers of products and services for commercial transportation infrastructure. Includes products and services related to airports, train stations, bus terminals, and highway construction, among others.

Ex: Hubbard Construction, Granite Construction, Mosites Construction

1.3.6 Other Transportation

1.4 Other Business Products and Services

1.4.1 Buildings and Property - Owners of buildings and property. Includes office buildings, factories, farmland, and oil fields, among others.

Ex: The Empire State Building, 175 Fifth Avenue

1.4.2 Conglomerates - Companies engaged in multiple and unrelated industrial sectors.

Ex: Berkshire Hathaway, Altria Group, GE

1.4.3 Government - Providers of products and services to government agencies. Includes consulting, information technology services, and military equipment and support, among others.

Ex: Booz Allen Hamilton, Maximus, Skanska

1.4.4 Other Business Products and Services

2 Consumer Products & Services

2.1 Apparel and Accessories

2.1.1 Accessories - Manufacturers or designers of fashion accessories. Includes jewelry, gloves, handbags, hats, belts, scarves, and sunglasses, among others.

Ex: Ray-Ban, Coach, Citizen Watch Company

2.1.2 Clothing - Manufacturers or designers of clothing.

Ex: Ralph Lauren Polo, Hanes, Columbia Sportswear

2.1.3 Footwear - Manufacturers or designers of footwear. Includes athletic shoes, boots, and sandals, among others.

Ex: Crocs, Sketchers, Timberland

2.1.4 Luxury Goods - Manufacturers or designers of luxury goods. Includes high end clothing, accessories, and footwear, among others.

Ex: Gucci Group, Patek Philippe, Tag Heuer International

2.1.5 Other Apparel

2.2 Consumer Durables

2.2.1 Business Equipment and Supplies - Manufacturers of office supplies and equipment. Includes general office supplies, filing products, and paper shredders, among others.

Ex: Pitney Bowes, Steelcase, 3M

2.2.2 Electronics - Manufacturers of consumer electronics. Includes digital cameras, televisions, and handheld devices, among others.

Ex: Samsung, Sony, Panasonic

2.2.3 Home Furnishings - Manufacturers of home furniture and other decorative accessories. Includes couches, lamps, and draperies, among others.

Ex: Ethan Allen Interior, Furniture Brands International, La-Z-Boy

2.2.4 Household Appliances - Manufacturers of household appliances. Includes microwaves, vacuum cleaners, washers, and dryers, among others.

Ex: Whirlpool, Kenmore, LG

2.2.5 Recreational Goods - Manufacturers of recreational goods. Includes sporting goods and leisure goods, among others.

Ex: Burton, Titleist, Coleman

2.2.6 Other Consumer Durables

2.3 Consumer Non-Durables

2.3.1 Beverages - Producers and distributors of alcoholic and non-alcoholic beverages.

Ex: Coca-Cola, Pepsi, Anheuser-Busch

2.3.2 Food Products - Producers, processors, and distributors of food products. Includes companies engaged in food preparation, and manufacturers of packaged food, among others.

Ex: Kraft Foods, Heinz, Lancaster Colony

2.3.3 Household Products - Manufacturers of household products. Includes cleaning supplies, disposable products, and paper towels, among others.

Ex: Clorox, Dixie, Kleenex

2.3.4 Personal Products - Manufacturers of personal products. Includes cosmetics, perfumes, and hygiene products, among others.

Ex: Old Spice, Gillette, Dove

2.3.5 Other Consumer Non-Durables

2.4 Media

2.4.1 Broadcasting, Radio and Television - Providers of entertainment through radio, television, or the internet. Includes local, national, and international radio and television channels.

Ex: NBC, Telemundo, YouTube

2.4.2 Information Services - Providers of information and content services. Includes political surveys, financial data, and statistics, among others.

Ex: Bloomberg, Interactive Data Corporation, Gallup

2.4.3 Movies, Music and Entertainment - Companies engaged in the production, distribution, and sale of entertainment products and services. Includes movie theaters, production companies, and music labels, among others.

Ex: Lowes Cineplex, Virgin Records, Paramount Pictures

2.4.4 Publishing - Providers of print and internet publishing services. Includes newspapers, magazines, and books, among others.

Ex: Daily Journal, The New York Times Company, The McGraw-Hill Companies

2.4.5 Social Content - Owners and operators of social content websites. Includes social networks, discussion boards, and dating websites, among others.

Ex: Facebook, LinkedIn, Match.com

2.4.6 Other Media

2.5 Restaurants, Hotels and Leisure

2.5.1 Casinos and Gaming - Owners and operators of casinos and other gaming operations.

Ex: MGM Mirage, Boyd Gaming, Monarch Casino

2.5.2 Cruise Lines - Owners and operators of cruise lines. Includes cruise ships, and ocean liners, among others.

Ex: Carnival Cruise Lines, Royal Caribbean Cruise Lines, Crystal Cruises

2.5.3 Hotels and Resorts - Owners and operators of hotels and resorts. Includes vacationing facilities and commercial establishments, among others.

Ex: Four Seasons, Hyatt, Fairmont

2.5.4 Leisure Facilities - Owners and operators of leisure facilities. Includes fitness centers and day spas, among others.

Ex: LA Fitness, 24 Hour Fitness, Aveda Lifestyle Salon and Spa

2.5.5 Restaurants and Bars - Owners and operators of restaurants and bars.

Ex: Applebee's, Chili's, Ruth's Chris Steak House

2.5.6 Other Restaurants, Hotels and Leisure

2.6 Retail

2.6.1 Catalog Retail - Provider of retail services through mail order and TV home shopping.

Ex: QVC, HSN, Jewelry Television

2.6.2 Department Stores - Owners and operators of large stores with a wide variety of products in distinct departments. Includes apparel, furniture, electronics, hardware, and sporting goods, among others.

Ex: Nordstrom, Macy's, Neiman Marcus

2.6.3 Distributors/Wholesale - Companies engaged in the sale of bulk goods to individual consumers.

Ex: Costco, Sam's Club, BJ's Wholesale Club

2.6.4 General Merchandise Stores - Owners and operators of stores offering a wide variety of general merchandise. General merchandise includes personal products, food, film, and prescriptions, among others.

Ex: CVS, RiteAid, Walgreen's

2.6.5 Internet Retail - Providers of retail services primarily through the internet.

Ex: Amazon.com, Overstock.com, Netflix

2.6.6 Specialty Retail - Owners and operators of retail stores specializing in the sale of goods in a particular industry or sector.

Ex: Barnes and Noble, Petsmart, Office Depot

2.6.7 Other Retail

2.7 Services (Non-Financial)

2.7.1 Accounting, Audit and Tax Services - Providers of accounting, audit, and tax services to individuals.

Ex: HandR Block, Jackson Hewitt, Liberty Tax Service

2.7.2 Educational and Training Services - Providers of educational and professional training services. Includes vocational education and exam preparation, among others.

Ex: University of Phoenix, ITT Technical Institute, Princeton Review

2.7.3 Legal Services - Providers of legal services to individuals. Includes criminal law, property law, human rights law, and insurance law, among others.

Ex: DLA Piper, Goodwin Procter, White and Case

2.7.4 Real Estate Services - Providers of real estate services to individuals. Includes real estate brokers and property valuation, among others.

Ex: Century 21, RE/MAX, Coldwell Banker

2.7.5 Other Services (Non-Financial)

2.8 Transportation

2.8.1 Air - Providers of air transportation to consumers. Includes major airlines and charter airlines, among others.

Ex: Northwest Airlines, United Airlines, Alaska Airlines

2.8.2 Automotive - Providers of products and services related to automotives. Includes automotive manufacturers and automotive services, among others.

Ex: Ford, GM, Enterprise Rent-a-Car

2.8.3 Marine - Providers of products and services related to water transportation. Includes leisure boat manufacturers and yacht dealers, among others.

Ex: Viking Yacht Company, Marine Products Corporation, Fountain Powerboat Industries

2.8.4 Rail - Providers of products and services related to rail transportation. Includes passenger trains and express trains, among others.

Ex: Amtrak, Grand Luxe Rail Journeys, Union Pacific Railroad

2.8.5 Other Transportation

2.9 Other Consumer Products and Services

2.9.1 Other Consumer Products and Services

3 Energy

3.1 Equipment

3.1.1 Alternative Energy Equipment - Manufacturers or providers of alternative energy equipment. Includes compressed natural gas, solar, hydroelectric, and wind, among others.

Ex: The Wind Turbine Company, Vestas, Solar Electric Power Company

3.1.2 Coal and Consumable Fuels Equipment - Manufacturers or providers of coal and consumable fuels equipment.

Ex: Joy Mining Machinery, Getman, Peters Equipment Company

3.1.3 Oil and Gas Equipment - Manufacturers or providers of oil and gas equipment. Includes rigs and drilling equipment, among others.

Ex: Weatherford International, Baker Hughes, Cameron International

3.1.4 Other Equipment

3.2 Exploration, Production and Refining

3.2.1 Energy Exploration - Companies engaged in energy exploration. Includes the identification, testing and development of sites for well drilling and wind farms.

Ex: Apache Corporation, Anadarko Petroleum, Hunt Oil

3.2.2 Energy Production - Companies engaged in energy production. Includes wind farming, drilling and removal of crude oil and natural gas.

Ex: Transocean, Diamond Offshore Drilling, Noble Corporation

3.2.3 Energy Refining - Companies engaged in energy refining. Includes the refining of crude oil into gasoline, diesel, kerosene, and fuel oil.

Ex: Sasol, Valero Energy, Imperial Oil

3.3 Services

3.3.1 Energy Marketing - Companies engaged in energy marketing. Includes gas marketing, pipeline analysis, and asset management, among others.

Ex: Marathon Oil, Hess Corporation, Murphy Oil

3.3.2 Energy Storage - Companies engaged in energy storage. Includes commercial and industrial batteries, fuel cells, and capacitors, among others.

Ex: ZBB Energy, Young Gas Storage, Falcon Gas Storage

3.3.3 Energy Traders and Brokers - Companies engaged in energy trading and brokerage services.

Ex: Dynergy, Reliant Energy, El Paso Corporation

3.3.4 Energy Transportation - Companies engaged in energy transportation. Includes tankers, and gathering and transmission pipelines, among others.

Ex: Energy Transfer Equity, Kinder Morgan Energy Partners, Enbridge

3.3.5 Infrastructure - Companies engaged in energy infrastructure. Includes pipelines, transmission lines, generation plants, and refineries, among others.

Ex: Energy Infrastructure Acquisition, Brookfield Infrastructure Partners, Tortoise Energy Infrastructure

3.3.6 Other Energy Services

3.4 Utilities

3.4.1 Electric Utilities - Companies engaged in the generation, transmission, and distribution of energy for sale in the regulated market.

Ex: Southern Company, FPL Group, Dominion Resources

3.4.2 Gas Utilities - Companies engaged in the production, distribution and marketing of natural gas and related services.

Ex: National Grid, Sempra Energy, Equitable Resources

3.4.3 Multi-Utilities - Companies engaged in the generation, transmission, distribution, and sale of water, electricity and natural gas to residential, commercial, industrial, and wholesale customers.

Ex: Exelon Corporation, Public Service Enterprise Group, PGandE

3.4.4 Water Utilities - Companies engaged in providing water or wastewater services.

Ex: Aqua America, California Water Service Group, American States Water Company

3.4.5 Other Utilities

3.5 Other Energy

3.5.1 Other Energy

4 Financial Services

4.1 Capital Markets/Institutions

4.1.1 Asset Management - Financial institutions providing management of various securities to meet specified investment goals for the investors. Investors may be institutions or high net worth individuals.

Ex: Smith Barney, Edward Jones, Ameriprise Financial

4.1.2 Brokerage - Financial Institutions acting as an intermediary between a buyer and seller of securities, usually charging a commission. Includes clearing houses and stock brokerage firms, among others.

Ex: Citigroup, Options Clearing Corporation, LCH.Clearnet

4.1.3 Investment Banks - Financial institutions functioning across all areas of capital markets. Includes raising money by issuing and selling securities, and advisory within mergers and acquisitions, among other financial services.

Ex: Citigroup, Goldman Sachs, Lehman Brothers

4.1.4 Private Equity - Financial institutions engaged in long-term loans with multinational corporations and governments. Includes merchant banks, and private equity firms, among others.

Ex: Blackstone Group, Carlyle Group, Kohlberg Kravis Roberts

4.1.5 Other Capital Markets/Institutions

4.2 Commercial Banks

4.2.1 International Banks - Non-investment commercial banks located in more than one country.

Ex: Deutsche Bank, UBS, Bank of America

4.2.2 National Banks - Non-investment commercial banks located in one country.

Ex: Bank of New York, Citizens Bank, Capital One Bank

4.2.3 Regional Banks - Non-investment commercial banks located in a particular region.

Ex: Sterling Savings Bank, Evergreen Bank, HomeStreet Bank

4.2.4 Thrifts and Mortgage Finance - Financial institutions specializing in originating and/or servicing mortgage loans.

Ex: Accredited Home Lenders, Countrywide, Quicken Loans

4.2.5 Other Commercial Banks

4.3 Insurance

4.3.1 Automotive Insurance - Providers of insurance for cars, trucks, and other vehicles.

Ex: State Farm, All-State, GEICO

4.3.2 Commercial/Professional Insurance - Providers of commercial or professional insurance. Includes medical malpractice and legal malpractice, among others.

Ex: CNA Insurance, Zurich, FM Global

4.3.3 Insurance Brokers - Companies sourcing contracts of insurance on behalf of their customers.

Ex: Marsh and McLennan, Willis Group, Brown and Brown

4.3.4 Life and Health Insurance - Providers of life and health insurance.

Ex: ING, Prudential, MetLife

4.3.5 Multi-line Insurance - Providers of diversified insurance services with multiple interests in life, health, and property insurance.

Ex: AXA, Prudential, Sun Life

4.3.6 Property and Casualty Insurance - Providers of property and casualty risks insurance.

Ex: Allianz, American International Group, Hartford Financial

4.3.7 Re-Insurance - Providers of insurance to insurance companies.

Ex: Berkshire Hathaway, Munich Reinsurance, Hannover Reinsurance

4.3.8 Other insurance

4.4 Other Financial Services

4.4.1 Consumer Finance - Companies engaged in any kind of lending to consumers. Includes sub prime lending, among others.

Ex: HSBC Finance, CIT, CitiFinancial

4.4.2 Holding Companies - Companies that do not produce goods or provide services, but instead own shares of other companies.

Ex: Berkshire Hathaway, UAL Corporation, AMR Corporation

4.4.3 Real Estate Investment Trusts (REITs) - REIT is a tax designation for a corporation investing in real estate. REITs receive special tax reductions and offer high yield investments in real estate.

Ex: AMB Property, Duke Realty, EastGroup Properties

4.4.4 Specialized Finance - Companies engaged in providing specialized finance to both public and private enterprises.

Ex: Latitude Capital Group, Budget Finance Company, Capital Source

4.4.5 Other Financial Services

5 Healthcare

5.1 Devices and Supplies

5.1.1 Diagnostic Equipment - Manufacturers of imaging and non-imaging devices used to assess and diagnose medical conditions. Includes X-ray and MRI machines, otoscopes and stethoscopes, and ultrasound equipment, among others.

Ex: Welch Allyn, Siemens, AFC Industries, SOMA Technology

5.1.2 Medical Supplies - Manufacturers of medical supplies that would be considered non-durable. Includes syringes, diabetes supplies, bandages, and protective wear, among others.

Ex: Frank Healthcare, Johnson and Johnson, Adenna, Cardinal Health, Covidien

5.1.3 Monitoring Equipment - Manufacturers of devices used to collect and monitor vital signs. Includes heart-rate monitors, oxygen saturation monitors, and fetal monitors, among others.

Ex: Phillips Medical Systems, GE Medical Systems, Welch Allyn, SOMA Technology, Datascope

5.1.4 Surgical Devices - Manufacturers of devices and equipment used in a surgical setting. Includes laparoscopy instruments, retractor systems, and positioning devices, among others.

Ex: Lyons, Mediflex, Boston Scientific

5.1.5 Therapeutic Devices - Manufacturers of devices for rehabilitation or therapy. Includes muscle stimulators, light therapy, and pacemakers, among others.

Ex: Medtronic, Boston Scientific, Empi

5.1.6 Other Devices and Supplies

5.2 Services

5.2.1 Clinics/Outpatient Services - Facilities and services for short-term, outpatient care and procedures. Includes rehabilitation, diagnostic testing, and outpatient surgery and exams.

Ex: AmSurg, Physiotherapy Associates, HealthSouth

5.2.2 Distributors - Distributors of healthcare equipment and supplies. Includes all distributors of healthcare products.

Ex: American Medical Supplies and Equipment, AmerisourceBergen, BMP Sunstone, Owens and Minor

5.2.3 Elder and Disabled Care - Facilities and services for the care of senior citizens. Includes assisted living, long term care, hospice care, nursing homes, and home care, among others.

Ex: RehabCare Group, Sunrise Senior Living, AccentCare

5.2.4 Hospitals/Inpatient Services - Facilities and services for long-term care, and inpatient care and procedures. Includes invasive surgical procedures, and emergency services.

Ex: Tenet Healthcare, HCA, Universal Health Services

5.2.5 Laboratory Services - Providers of medical laboratory services. Includes blood and tissue testing.

Ex: Quest Diagnostics, LabCorp, LabOne

5.2.6 Managed Care - Owners and operators of managed health plans. Includes Preferred Provider Organizations (PPOs) and Health Maintenance Organizations (HMOs).

Ex: Aetna, Kaiser Permanente, UnitedHealth Group

5.2.7 Practice Management - Providers of consulting and management services to medical practices. Excludes practice management software, such as billing or medical records software.

Ex: Advantage Medical Claims, Medical Management Associates, Healthcare Facilitators

5.2.8 Other Healthcare Services

5.3 Healthcare Technology Systems

5.3.1 Decision/Risk Analysis - Developers and producers of software or systems used to expedite the medical decision and risk management process. These programs try to assist doctors and nurses in their decision making process.

Ex: HLTH Corporation, Apache Medical Systems, Wellsource

5.3.2 Enterprise Systems - Developers and producers of software and systems that cover multiple areas of the healthcare organization.

Ex: NextGen, Cerner, McKesson Corporation

5.3.3 Medical Records Systems - Developers and producers of software or systems to organize medical records.

Ex: NextGen, McKesson, MediNotes

5.3.4 Outcome Management - Developers and producers of software or systems used to analyze the effectiveness of treatments prescribed by doctors.

Ex: Tri-Analytics, Outcome Concept Systems, Protocol Driven Healthcare

5.3.5 Other Healthcare Technology Systems

5.4 Pharmaceuticals and Biotechnology

5.4.1 Biotechnology - Companies engaged in research, development, and production of biotechnology. Includes embryology, genetics, cell biology, molecular biology, and biochemistry, among others.

Ex: Elan, Genentech, Amgen

5.4.2 Discovery Tools - Researchers and developers of tools used in drug discovery and drug delivery research. Includes compound libraries, enzymes, kinases, and specialized proteins, among others.

Ex: PerkinElmer, Qiagen, Charles River Laboratories

5.4.3 Drug Delivery - Researchers and developers of medication delivery methods. Includes targeted delivery methods, and timed release formulations, among others.

Ex: Elan, Hospira, Nektar Therapeutics

5.4.4 Drug Discovery - Researchers and developers of new drugs. Includes identification, screening, and efficacy testing of drug candidates, among others.

Ex: Bristol-Meyers Squibb, PerkinElmer, Elan

5.4.5 Pharmaceuticals - Manufacturers and distributors of established drugs/ pharmaceuticals. This category includes any large drug company that primarily manufactures medicines; however they may also be engaged in drug research and development.

Ex: Bristol-Meyers Squibb, GlaxoSmithKline, Novartis, Eli Lilly and Company

5.4.6 Other Pharmaceuticals and Biotechnology

5.5 Other Healthcare

5.5.1 Other Healthcare

6 Information Technology

6.1 Communications and Networking

6.1.1 Cable Service Providers - Developers and marketers of television, internet and voice services for cable networks. Includes broadband internet, VoIP, and cable television, among others.

Ex: Comcast, Cox Communications, Adelphia

6.1.2 Connectivity Products - Manufacturers of electronic components used to create networks or link devices. Includes bulk cable, connectors, and adapters, among others.

Ex: Belkin, AMP Inc., Griffin Technology, Molex

6.1.3 Fiberoptic Equipment - Manufacturers of fiber optic and photonics equipment. Includes bulk cable, connectors, lasers, and light emitting diodes (LEDs), among others.

Ex: Oplink Communications, Optical Communication Products, Belden

6.1.4 Internet Service Providers - Providers of dial-up and DSL access to the internet.

Ex: America Online, NetZero, EarthLink, Juno, PeoplePC

6.1.5 Telecommunications Service Providers - Providers of commercial and residential voice and data services. Includes phone service, paging, and voicemail, among others.

Ex: BellSouth, AT&T, Qwest, Vodafone, Airtel

6.1.6 Wireless Communications Equipment - Manufacturers, designers and marketers of wireless communications equipment. Includes wireless handsets, and wireless modems and routers, among others.

Ex: LG, Motorola, Cisco

6.1.7 Wireless Service Providers - Providers of wireless telephone networks. Includes cellular telephone service, and personal communication service (PCS), among others.

Ex: Verizon Wireless, Qualcomm, Nextel Partners

6.1.8 Other Communications and Networking

6.2 Hardware

6.2.1 Computers, Parts and Peripherals - Manufacturers, designers, and distributors of computers and peripherals. Includes monitors, cases, mice, keyboards, and printers, among others.

Ex: Dell, Apple, Hewlett-Packard, Sony, IBM

6.2.2 Electronic Components - Manufacturers, designers, and distributors of electronic parts and components for use in more advanced products. Includes processors, video cards, sound cards, fans, and motherboards, among others.

Ex: Intel, Advanced Micro Devices (AMD), Texas Instruments, NVIDIA

6.2.3 Electronic Equipment and Instruments - Manufacturers, designers, and distributors of electronic equipment and instruments. Includes multimeters, and oscilloscopes, among others. This category is for electronic testing and measurement devices.

Ex: Agilent Technologies, National Instruments, Tektronix, Chase Scientific

6.2.4 Office Electronics - Manufacturers, designers, and distributors of office equipment. Includes copiers and faxes, among others.

Ex: Xerox, Ricoh, Lanier

6.2.5 Storage - Manufacturers, designers, and distributors of electronic storage devices. Includes hard drives, optical drives, and flash memory, among others.

Ex: Seagate Technology, EMC, Western Digital

6.2.6 Other Hardware

6.3 Semiconductors

6.3.1 Application Specific - Manufacturers and designers of application specific semiconductors and integrated circuits.

Ex: First Solar, NVIDIA, Linear Technology

6.3.2 General Purpose - Manufacturers and designers of generic or general purpose semiconductors and integrated circuits.

Ex: Intel, Texas Instruments, STMicroelectronics

6.3.3 Production - Owners and operators of semiconductor foundries. "Foundries" are companies that manufacture semiconductors, but are not involved in their design.

Ex: Taiwan Semiconductor Manufacturing, United Microelectronics, Chartered Semiconductor Manufacturing, SMIC

6.3.4 Other Semiconductors

6.4 Services

6.4.1 Consulting and Outsourcing - Providers of outside consulting, outsourcing, or offshoring services. Includes subcontractors, and business process outsourcers, among others.

Ex: Gartner, Infosys Technologies, Sapient Corporation

6.4.2 Systems and Information - Management Providers of systems and information management services. Includes companies providing IT hosting and data centers, among others.

Ex: Rackspace, Network World, Mosso

6.4.3 Other IT Services

6.5 Software

6.5.1 Application Software - Developers and producers of software for specific tasks or applications. Includes general application software not classified elsewhere.

Ex: Microsoft, Oracle, Adobe

6.5.2 Automation/Workflow Software - Developers and producers of software for automation and workflow management. Includes automation of IT processes, data transferring, FTPs, and scheduling, among others.

Ex: Tethys Solutions, Parallels, Synopsys

6.5.3 Business/Productivity Software - Developers and producers of software for the enterprise where the focus is on process management and automation.

Ex: Salesforce, IBM, Microsoft

6.5.4 Communication Software - Developers and producers of software for communicating electronically through voice, video or text. Includes text and video chat, web conferencing, and web-based presentations, among others.

Ex: America Online, Microsoft, WebEx

6.5.5 Database Software - Developers and producers of software to manage and utilize information in databases. Includes MySQL, Microsoft SQL Server, and Oracle, among others.

Ex: Microsoft, Oracle, IBM, Sun Microsystems

6.5.6 Educational Software - Developers and producers of educational software.

Ex: Renaissance Learning, Scientific Learning Corporation, The Learning Company

6.5.7 Entertainment Software - Developers of consumer-oriented gaming software and applications.

Ex: Zynga, Rovio

6.5.8 Financial Software - Developers and producers of software for managing accounting and financial processes. Also includes various software developed specifically for the financial industry.

Ex: Intuit, CapControls, Merlin Securities, Tally, Finacle

6.5.9 Internet Software - Developers and producers of software for accessing and manipulating internet content. Includes internet browsers, and file transfer protocol (FTP) programs, among others.

Ex: Apple, Microsoft, Mozilla Foundation, Norwegian Opera Software

6.5.10 Multimedia and Design Software - Developers and producers of software for creating and manipulating multimedia content. Includes Computer Aided Design (CAD) software, and video and image editing software, among others.

Ex: Adobe Systems, Quark, Autodesk

6.5.11 Network Management Software - Developers and providers of software and systems for managing and organizing networks and information. Includes network monitoring software, and network security software, among others.

Ex: Altiris, Tivoli, NetIQ

6.5.12 Operating Systems Software - Developers and producers of computer operating systems.

Ex: Apple, Microsoft, Red Hat Software, Novell

6.5.13 Social/Platform Software - Developers and producers of software that facilitates the production, distribution or following of social content. The category also includes online markets.

Ex: Facebook, LinkedIn

6.5.14 Software Development Applications - Developers and producers of software for planning, coding, and debugging of new software. Includes compilers, build tools, debuggers, disassemblers, and documentation generators, among others.

Ex: Eiffel Software, Borland Software, BigFix

6.5.15 Vertical Market Software - Developers and producers of vertical market software. Includes point of sale software, among others. A vertical market is a group of companies that do business in the same industry.

Ex: SAP, Hypercom, Ingenico

6.5.16 Other Software

6.6 Other Information Technology

6.6.1 Other Information Technology

7 Materials & Resources

7.1 Agriculture

7.1.1 Animal Husbandry - Companies that breed, raise, and market livestock.

Ex: Seaboard Corp., Smithfield Foods, Alico

7.1.2 Aquaculture - Companies that cultivate and market aquatic organisms. Includes fish, shrimp, kelp/seaweed and cultured pearls, among others.

Ex: Stolt Sea Farm, D.B. Kenney Fisheries, America's Catch

7.1.3 Cultivation

7.1.4 Horticulture - Companies that cultivate and market grains, fruits, flowers, and vegetables.

Ex: Cargill, Archer Daniels Midland, The Andersons, Inc.

7.1.5 Other Agriculture

7.2 Chemicals and Gases

7.2.1 Agricultural Chemicals - Producers of chemicals used primarily in an agricultural setting. Includes diammonium phosphate (DAP), anhydrous ammonia (NH3), and potassium chloride (KCl), among others.

Ex: Monsanto, Mosaic, CF Industries Holdings

7.2.2 Commodity Chemicals - Producers of chemicals that are sold in bulk due to their low cost. Includes methane, hydrochloric acid, chlorine, and sodium chloride, among others.

Ex: Mitsubishi Chemical, Terra Nitrogen, ExxonMobil

7.2.3 Industrial Chemicals - Producers of chemicals used primarily in industrial applications. Includes plastics, biocides, coolants, and polyglycols, among others.

Ex: Celanese, FMC Corp., Archer Daniels Midland

7.2.4 Multi-line Chemicals - Producers of diversified chemicals.

Ex: Dow Chemical, Air Products and Chemicals, FMC Corp., DuPont

7.2.5 Specialty Chemicals - Producers of proprietary or advanced chemical compounds. Includes food additives, and polymers, among others.

Ex: Sigma-Aldrich, Lubrizol, Cytec Industries

7.2.6 Other Chemicals and Gases

7.3 Construction (Non-Wood)

7.3.1 Raw Materials (Non-Wood) - Harvesters or producers of non-wood construction materials. Includes stone, gravel, sand, cement, and bricks, among others. Finished construction products are classified under Building Products.

Ex: Texas Industries, Eagle Materials, Hanson Aggregates North America

7.4 Containers and Packaging

7.4.1 Metal - Producers of metal containers and packaging materials.

Ex: Ball Corporation, Greif Inc., Silgan Holdings

7.4.2 Paper - Producers of paper containers and packaging materials.

Ex: Packaging Corporation of America, International Paper, Georgia-Pacific

7.4.3 Plastic - Producers of plastic containers and packaging materials.

Ex: Ball Corporation, Sonoco, Silgan Holdings

7.4.4 Wood - Producers of wood containers and packaging materials.

Ex: Greif Inc., Berry Industrial Group, Universal Forest Products

7.4.5 Other Containers and Packaging

7.5 Forestry

7.5.1 Forestry Development/Harvesting - Companies engaged in developing and harvesting forested areas.

Ex: Weyerhaeuser, Deltic Timber, MAXXAM

7.5.2 Forestry Processing - Companies engaged in converting raw forest products into marketable materials. Includes lumber, woodchips, engineered wood products, and paper products, among others.

Ex: Weyerhaeuser, Louisiana-Pacific, Stimson Lumber, Pope and Talbot, Georgia-Pacific, Boise Cascade, Temple-Inland Forest Products

7.5.3 Paper/Soft Products

7.5.4 Wood/Hard Products

7.5.5 Other Forestry

7.6 Metals, Minerals and Mining

7.6.1 Aluminum - Miners, producers and marketers of aluminum. Includes aluminum ore, and rolled aluminum, among others.

Ex: Alcoa, Kaiser Aluminum, Alcan

7.6.2 Coal - Miners, producers and marketers of coal. Includes lignite coal, bituminous coal, anthracite coal, and coke, among others.

Ex: Peabody Energy, CONSOL Energy, Drummond Company

7.6.3 Gold - Miners, producers and marketers of gold.

Ex: Newmont Mining, AngloGold Ashanti, Gold Fields Limited

7.6.4 Iron and Steel - Miners, producers and marketers of iron and steel.

Ex: Nucor, Olympic Steel, ArcelorMittal

7.6.5 Multi-line - Miners, producers and marketers of diversified metals and minerals.

Ex: BHP Billiton, Rio Tinto, Teck Cominco

7.6.6 Precious Metals and Minerals - Miners, producers and marketers of precious metals and minerals. Includes platinum, silver, and palladium, among others.

Ex: Coeur d'Alene Mines, Stillwater Mining, Metalor

7.6.7 Other Metals, Minerals and Mining

7.7 Textiles

7.7.1 Animal - Manufacturers of animal-based textiles. Includes wool, cashmere and silk, among others.

Ex: Buckskin Fur and Leather, J. Hewit and Sons

7.7.2 Plant- Manufacturers of plant-based textiles. Includes hemp and cotton, among others.

Ex: Parkdale Mills, Boston Felt Company, Aetna Felt Corporation

7.7.3 Mineral - Manufacturers of mineral-based textiles. Includes asbestos, glass fiber, and metal fiber, among others.

Ex: Roxul, Potter and Soar, Central Glass

7.7.4 Synthetic - Manufacturers of synthetic textiles. Includes polyester, aramid, nylon and spandex, among others.

Ex: Huitong Chemical, Unifi, DuPont-Akra Polyester

7.7.5 Other Textiles

7.8 Other Materials

7.8.1 Other Materials