Startup Ecosystem Faces Capital Crunch over Coming Months

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Things are moving fast in the COVID-19 crisis, including the crisis itself and the government's response. The National Venture Capital Association (NVCA) is working to better understand the impact of the COVID-19 economic crisis on the startup ecosystem, and to explain the role and limitations of venture capital during this time. This white paper also outlines what we believe the industry may look like over the coming months as this crisis evolves.

Summary

Fasten your seatbelts, it's going to be a bumpy ride. The U.S. startup ecosystem has rapidly entered a new chapter of what will be a turbulent period over at least the next several quarters. The U.S. economy has essentially shut down, leaving many venture-backed startups living in a state of uncertainty far beyond the normal challenges of launching a successful business. Companies are scrambling to maintain operations, customers, projects, and their workforce.

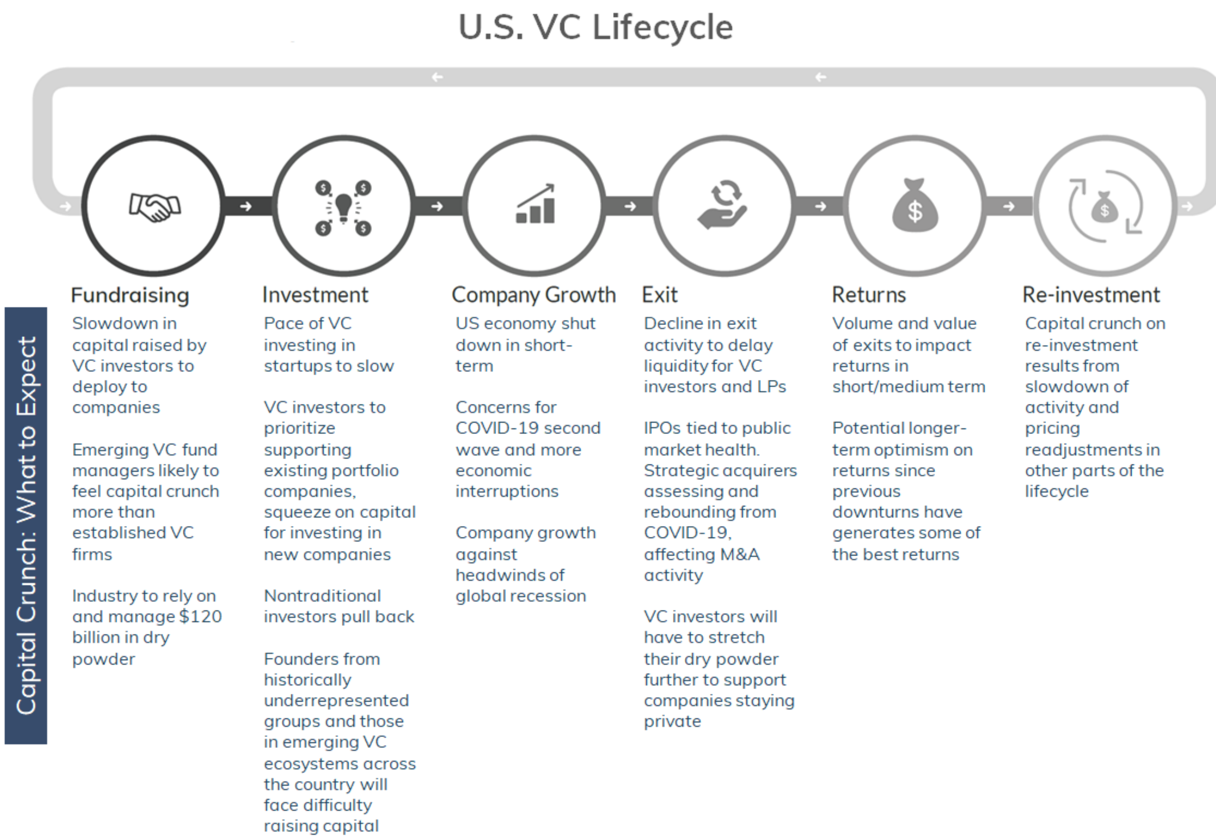
Investment in the startup ecosystem is expected to drop significantly. A significant amount of the capital deployed in 2019 came from nontraditional startup investors (i.e., those that are not traditional VC investors raising VC funds, such as corporate venture capital groups, private equity investors, asset managers, and sovereign wealth funds) who are likely to rebalance investment away from these high-risk and illiquid companies. As data below clearly shows, existing capital reserves by venture capital (VC) investment funds will not be nearly enough to sustain operations in the startup ecosystem. Many startups are having challenges accessing federal business support programs due to various rules for which the

unique startup business model are not suited (see our COVID-19 resource page for a list). Most are looking to other means of cutting costs and finding capital in a suddenly scarce environment. The reality is that companies will shut down—at a higher rate than what is inherent to this risky industry—and there will be waves of layoffs.

Since March 11, 2020, about 300 U.S. startups have laid off about 30,000 employees across the country. This is likely just the tip of the iceberg for what will be tough times for startups over the coming months. One VC predicts 80% of startups will cut 10% to 50% of employees over the next two to four quarters. Like we said before, fasten your seatbelts.

The startup ecosystem has traditionally ebbed and flowed with previous cycles and has weathered economic storms in the past. In fact, some of the most innovative and notable companies were born during downturns. However, the sheer force and speed of the COVID-19 crisis and its uncertain impact and duration is not comparable to past downturns.

The goal of this report is to take a realistic view of the bumpy ride that the startup ecosystem will face over the coming months. It is important to attempt to quantify the impact of the crisis on one of the most critical sectors of the economy. Investment will drop at a time when the country needs it most for company and job creation to fuel economic recovery from the global pandemic. While capital will dry up, entrepreneurs with big ideas looking for funding will not. Aiming for more of a soft landing rather than a hard crash for the startup ecosystem over the next 12-24 months will have a major impact on the country's economic recovery and the future of innovation and jobs. And as countries across the world face the new reality of a post-COVID global economy, those whose startup and innovation ecosystems come out the other side the most intact will have a tremendous head start on global economic leadership.



$120 billion VC dry powder – what this does and does not mean

The U.S. VC industry started the year with about $120 billion in dry powder, i.e., capital available to VC investors to deploy to startups. While this represents a record amount of dry powder and is a strong position for the industry to enter a downturn, this capital will not be nearly enough to blunt the negative impact of the COVID-19 crisis.

For several reasons, the $120 billion is not capital that investors can deploy immediately to startups.

- New vs. existing companies: VC investors must allocate capital not only to support existing portfolio companies but also to finance new companies, and VCs must manage the capital accordingly. About 35,000 companies in the U.S. have raised venture funding since 2015, of which about 15,000 raised their first round of funding from a VC investor (i.e., new companies). A large portion of the $120 billion dry powder is already reserved for the next generation of companies. IT-focused investors typically reserve $1 for follow-on investments in existing companies for every initial $1 invested in an early-stage company, while investors in life science companies, which tend to be more capital intensive, usually reserve $2 for every initial $1 invested.

A VC firm raises capital into specific funds (e.g., ABC Ventures I, ABC Ventures II, etc.), and a new fund is typically raised every three to five years. The aggregate dry powder of the industry combines reserves set aside in older funds to support existing portfolio companies (i.e., the actual dry powder available to support them) plus capital in new funds that are principally focused on making new investments. VC investors are typically precluded in their Limited Partner (LP)[1] Agreements from investing across funds, meaning capital in a new fund cannot be used to support companies in prior funds.

- Long-term investors: VC investors raise capital with the intention of deploying those funds over a period of years (average life span of a VC fund exceeds ten years). Startups are young, and they require multiple rounds of financing over a number of years to grow their businesses. Venture funds aim to invest larger sums in each round in order to finance new growth goals, as well as to protect their ownership shares from being wiped out or greatly reduced.

- Equity investment: The investment from a VC fund into a company is an equity investment. A company on a growth trajectory looking for capital infusion must sell an equity stake in the company to a VC investor with the goal of the investment rising in value as the company grows. Giving up percentage ownership in a company that could be used to attract capital in an IPO or finance further long-term growth versus subsidizing existing operations in an economic crisis will often accurately be viewed as a poor management decision by the LPs in the venture fund.

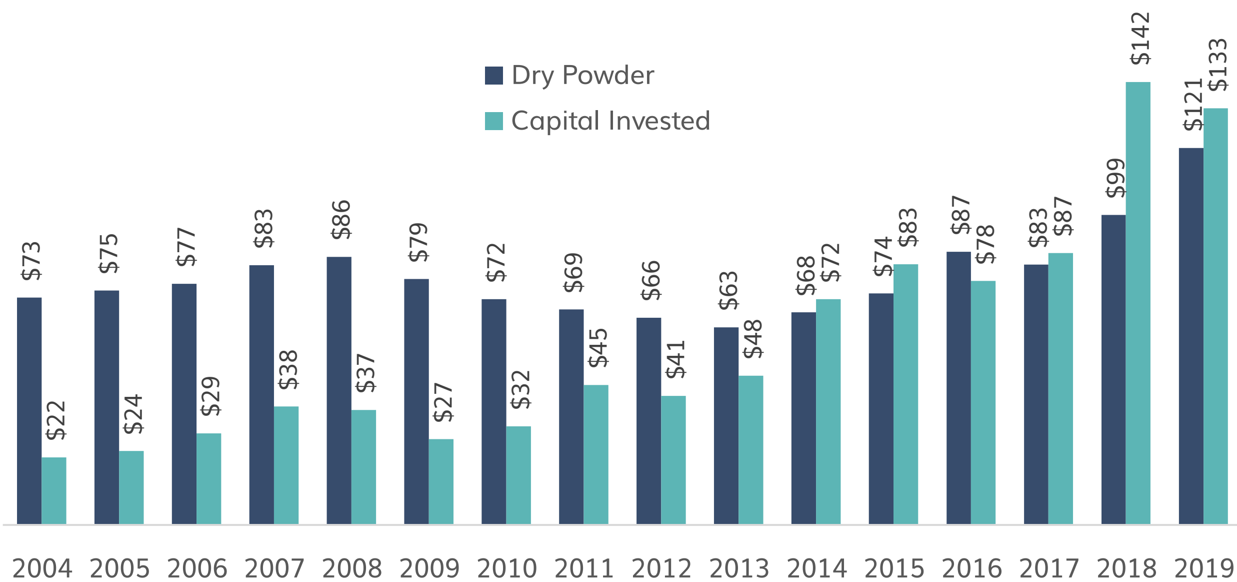
[1] A VC firm creates a limited partnership (a legal entity) with the investors as LPs and the firm itself as the general partner. The general partner is liable for the actions of the partnership while the LPs are generally protected from legal actions and any losses beyond their original investment. Each VC fund is a separate partnership. Examples of LPs include public pension funds, corporate pension funds, insurance companies, family offices, endowments, and foundations.

Furthermore, it's important to note that since VC investors are managers of third-party capital from institutional investors (LPs) such as pension funds, endowments, and foundations, they must adhere to shared long-term goals as prescribed in their agreements with these investors. The portfolios of these LPs are allocated across several asset classes, of which VC plays the role of often being the riskiest and most illiquid but also with the highest return potential. The notion that VCs can simply pour all of their dry powder into portfolio companies over a short period of time and without any perspective on long-term company growth would in many cases present a divergence in previously-agreed upon investment strategy between VC investors and their LPs that have allocated this capital as part of their fiduciary duty to constituents and institutions. Moreover, if capital from venture funds is used to prevent job loss without growth, returns to LPs will suffer and would depress future LP commitments to the VC asset class, creating a longer-term access to capital challenge for U.S. startups.

Other types of capital a company could look to for maintaining operations and headcount is debt financing or a bridge loan. These are different products than VC funds, and the industry will likely see more in the coming months, though likely not nearly enough to sustain operations. However, venture debt providers face another set of hurdles. Uncertainty in the market now has made it difficult for VC investors to price equity, which is freezing equity investments in new and existing companies. In some cases, VC investors are offering convertible debt to support portfolio companies but are limited in the amount of capital they can deploy to avoid being deemed a lender, which would require a lending license. All this uncertainty also makes it difficult for venture debt providers to assess risk in this environment, which is likely to chill that market for some period. Furthermore, lenders as a solution to fill the gap is very risky to startups. Even if available, the cost of repayment can put a heavy burden on a company at a later point in time when it needs capital to fuel growth.

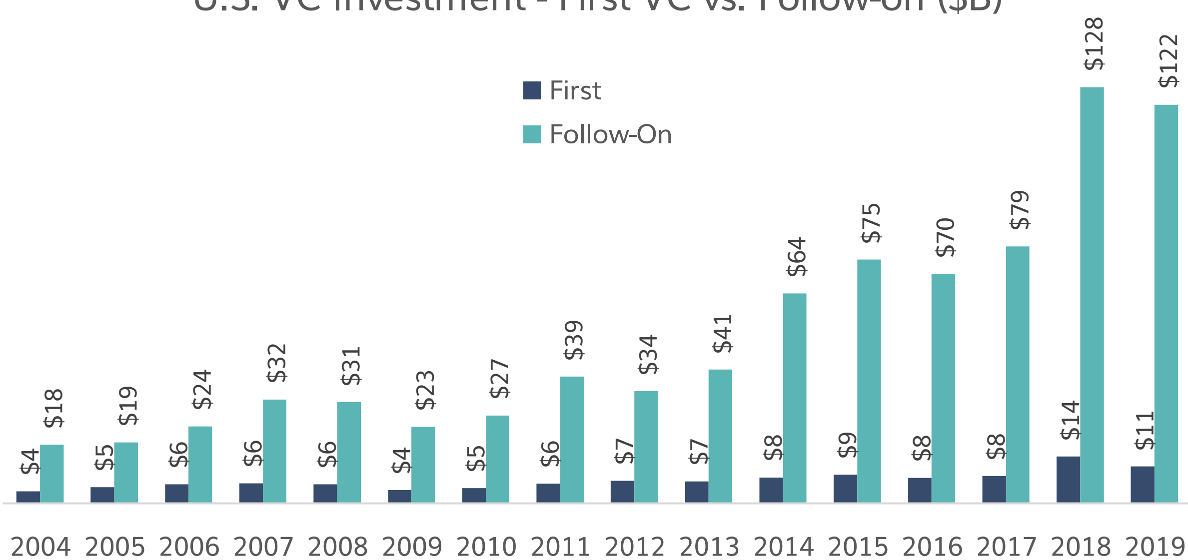
Even if VC investors could deploy the $120 billion to startups today, it may not meet the demand. To put this into context, U.S. venture-backed startups raised $133 billion in 2019. One VC investor's analysis estimates that VC firms have about half of the available dry powder earmarked for existing portfolio companies and half for new investments. If VC firms continue to invest at their recent pace, the dry powder reserves will last four quarters.

U.S. VC Dry Powder vs. Capital Invested ($B)



Source: NVCA 2020 Yearbook. Data provided by PitchBook.

U.S. VC Investment - First VC vs. Follow-on ($B)



Source: NVCA 2020 Yearbook. Data provided by PitchBook.

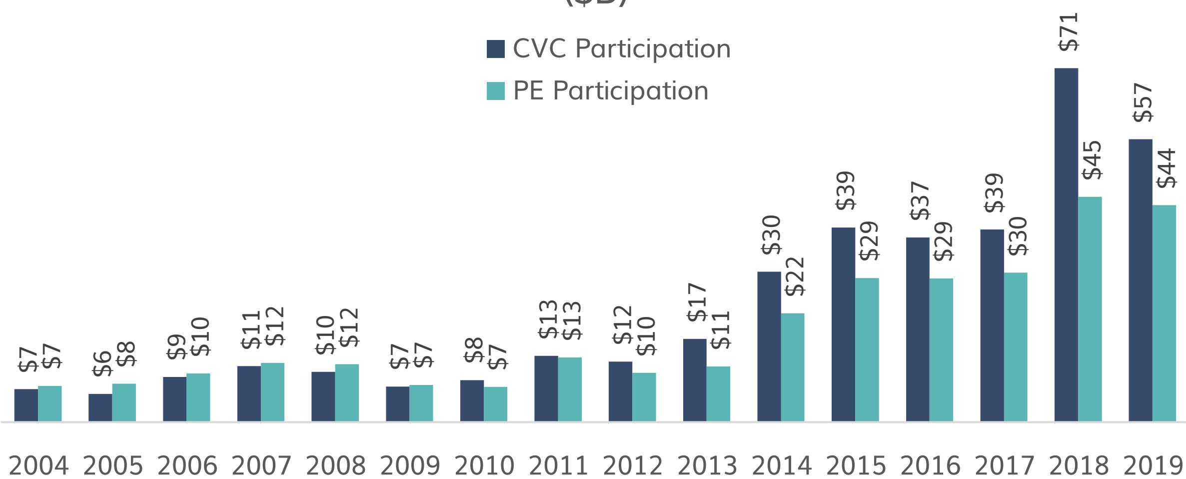
"First" refers to first round of equity funding in a startup by an institutional venture investor.

Beyond VC funds: pull back expected from other sources of capital for startups

U.S. VC funds raised $50 billion last year; however, U.S. VC-backed startups raised $133 billion from investors. A significant portion of this difference in capital raised by VC firms versus capital deployed to startups comes from nontraditional VC investors like corporate venture capital (CVC) groups, private equity (PE) firms, and asset managers. These nontraditional investors have become an increasingly important source of capital for startups in recent years.

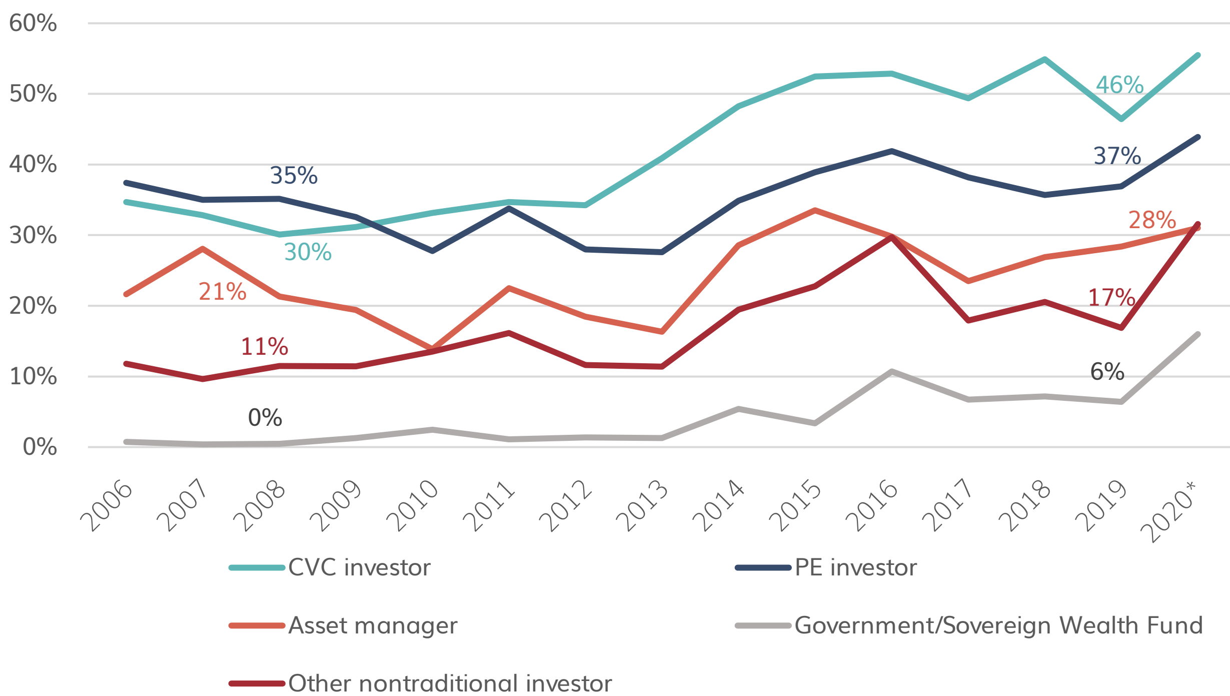
Last year, investments with CVC participation accounted for 46% of total deal value, and those with private equity firm participation accounted for 37%. Given the disruption in the economy overall, many nontraditional investors are likely to follow economic trends in recessions of moving capital from high-risk illiquid assets to lower-risk liquid assets. This means a significant pull back in overall capital flowing to the startup ecosystem, in line with the trends seen after the last global financial crisis. For context, total deal value for investments with CVC participation or PE firm participation fell by 29% and 36%, respectively, from 2008 to 2009.

U.S. VC Investment - Deals with CVC or PE Participation ($B)



Source: NVCA 2020 Yearbook. Data provided by PitchBook.

Deals with Nontraditional Investor Participation as Proportion of Overall US VC Deals ($)

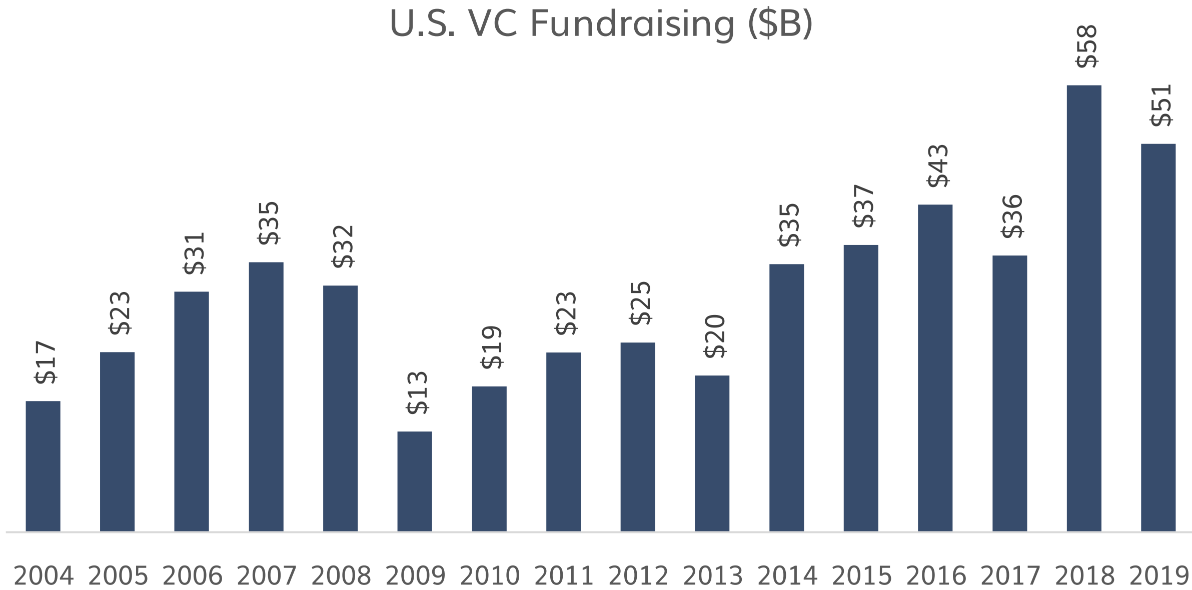


Source: Q1 2020 PitchBook-NVCA Venture Monitor
*As of 3/31/2020

New capital for VC investors will slow, translating to less capital to deploy to promising startups

The record $120 billion in dry powder in the U.S. VC industry is thanks to the strong fundraising environment over the past six years. Since 2014, VC funds have raised $35 billion or more annually. However, most expect this pace to drop significantly as investors tend to flee from high-risk illiquid assets into safe liquid assets to ride out the crisis. In addition, many LPs will have to rebalance their portfolios to reduce their exposure to private markets. LP portfolios are allocated across asset classes, including a large portion in public equities. Given the turbulent public markets, these portfolios are now over-weighted in private markets, creating a denominator effect. Another near-term challenge facing the flow of capital between an LP and VC investor are capital calls (i.e., when a VC investor calls capital from an LP to make an investment in a startup). An LP may find itself in a difficult position to fulfill a capital call if the LP has to sell public stock to do so, or even worse, an LP might default on the capital call altogether. As a result, LPs are taking a cautious approach to their expected fund commitments to see how the COVID-19 crisis impact shakes out.

If the hit VC funds took after the last global financial crisis is any indication of what to expect, it may be a drastic drop. VC fundraising fell by nearly 60% from 2008 to 2009. While the $120 billion in VC dry powder will help, it simply will not be nearly enough to meet demand to finance the current operations of startups.



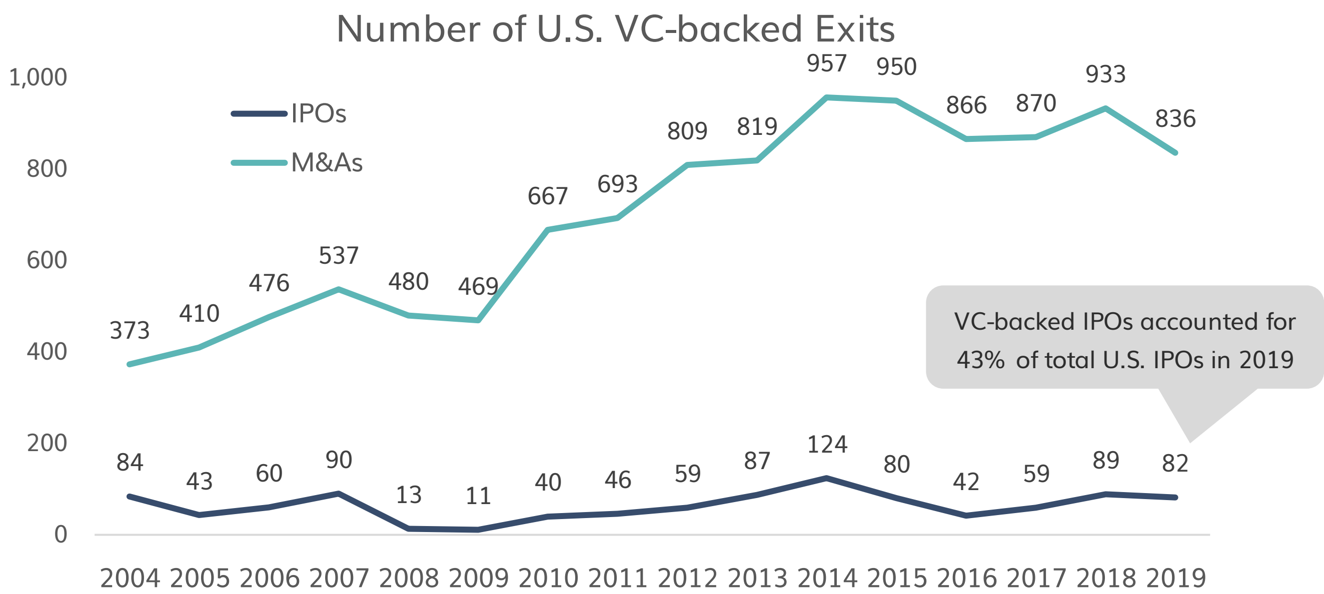
Source: NVCA 2020 Yearbook. Data provided by PitchBook.

Decline in exit activity will delay liquidity in the VC lifecycle and place additional demand on VC dry powder

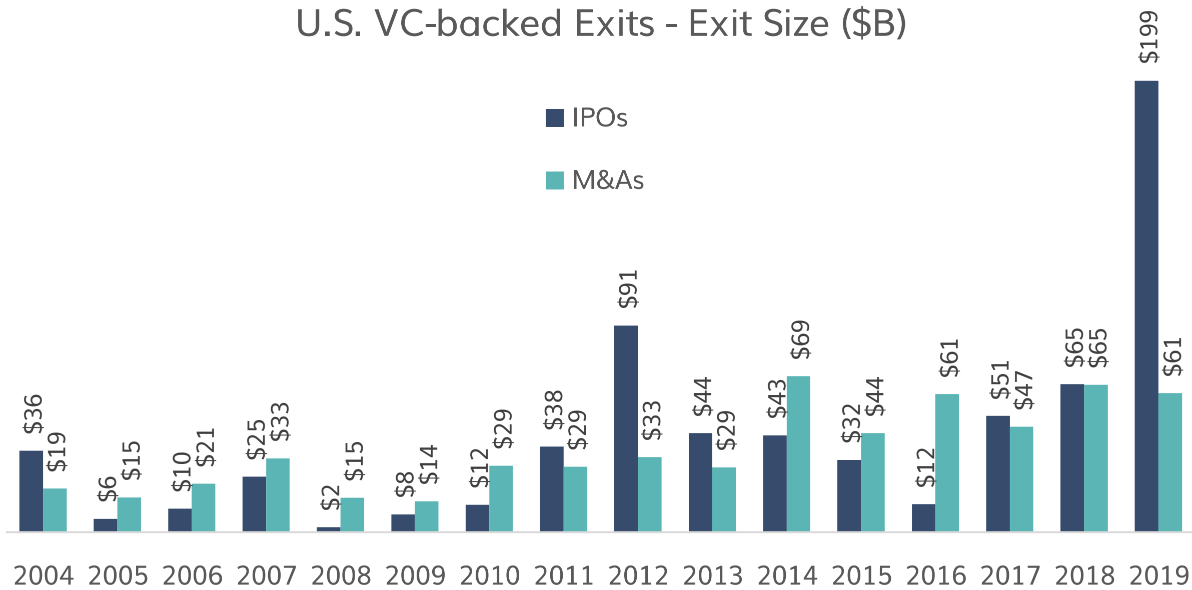
In addition to the capital crunch being felt in the fundraising and investment segments of the VC lifecycle, exit activity will take a big hit. Exit events are not only a major milestone for a company's growth, they also serve as the ultimate measures of value of the activities of the company. The exit also allows the VC investor to distribute proceeds to the LPs, raise a new fund, and invest in new companies, thus fulfilling the lifecycle of the startup ecosystem.

The window for VC-backed IPOs is interconnected with the strength of the public markets, which have seen record drops. VC-backed companies are also facing challenges in the M&A environment, which is expected to slow considerably since strategic acquirers are also having to reassess strategies and cash reserves due to the COVID-19 crisis. For context, 2007 saw 90 VC-backed companies go public. That fell to 13 VC-backed IPOs in 2008 and 11 in 2009. And disclosed M&A value in 2008 and 2009 fell by more than 50% compared with 2007.

Delayed exits will make liquidity harder to come by for VC investors and their LPs, requiring VCs to stretch their dry powder further and putting additional strain on the VC lifecycle.



Source: NVCA 2020 Yearbook. Data provided by PitchBook.



Source: NVCA 2020 Yearbook. Data provided by PitchBook.

New barriers to accessing capital for historically underrepresented groups and emerging ecosystems

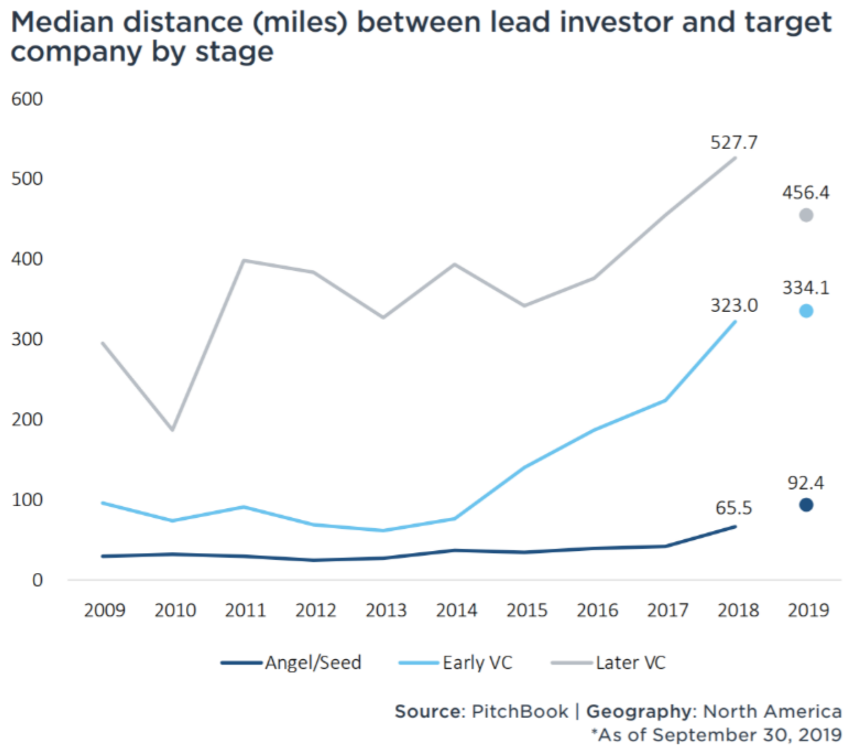
The capital crunch in the industry will be felt across the board, but perhaps most acutely by founders and investors in historically underrepresented groups, in emerging venture ecosystems, and smaller (<$100 million) and new venture fund managers. As overall capital retracts and lack of exits dry up the next generation of angel investors, less local capital will be available. Investors will have to prioritize existing portfolio companies amid shelter-in-place orders and restrictions affecting travel and in-person meetings, among other issues. This all means that underrepresented groups and geographies will face new barriers to access capital.

Because venture capital is such a hands-on business, interactions between founders and investors throughout the VC lifecycle include numerous in-person meetings. With travel restrictions and public health fears around meetings, some investors will likely fall back on existing relationships, potentially reversing the positive momentum the industry has seen recently outside of geographies and demographics where VC has historically been concentrated.

VC activity for female and other historically underrepresented founders has seen some progress in recent years, but it remains far from parity. Historically, investors have heavily relied on network effects and pattern-matching to make investment decisions. In recent years, some VC investors have focused on expanding networks and removing bias from investment decisions, while initiatives like Venture Forward, BLCK VC, Latinx VC, and All Raise have placed a priority on advancing a more diverse and inclusive ecosystem. However, with investors turning their attention to existing portfolio companies and less likely to travel or hold in-person meetings, it will bring new challenges to founders who do not already have relationships with VC investors.

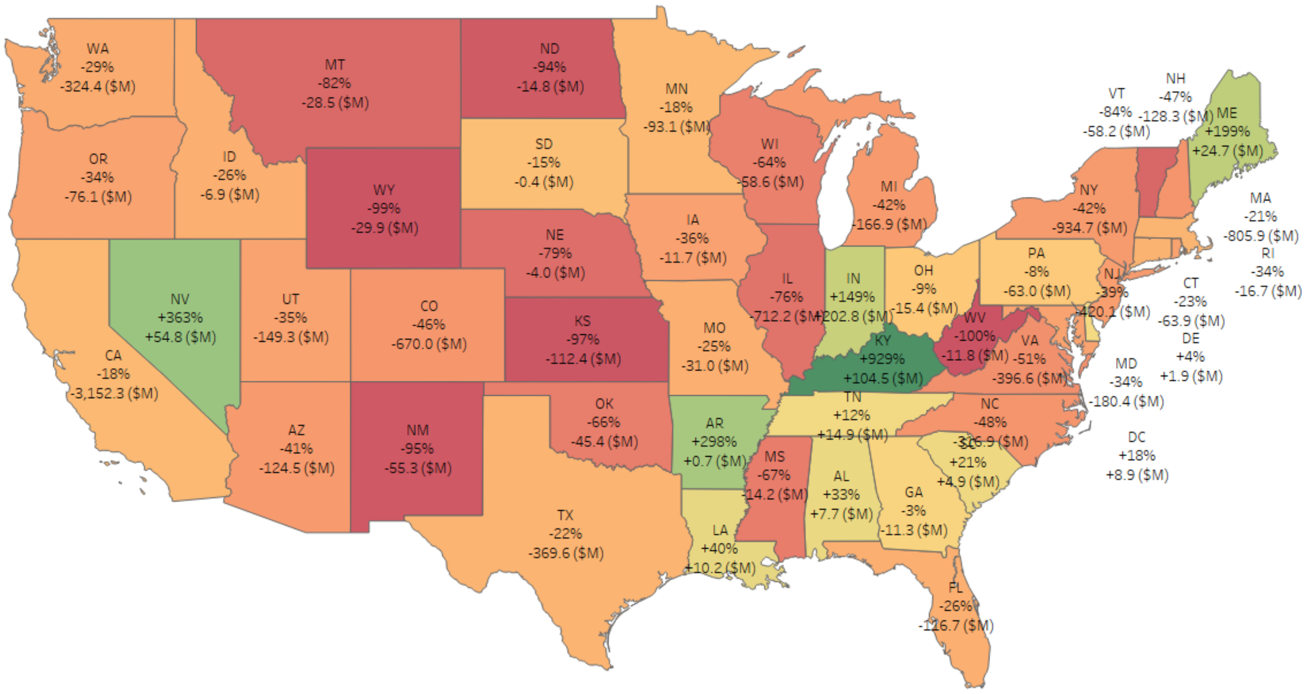
Barriers also will arise for founders in emerging ecosystems, who must rely on a combination of local capital and capital from other geographies for growth. California, Massachusetts, and New York together account for 84% of total U.S. VC assets under management and are major sources of capital for startup ecosystems across the country. The COVID-19 crisis will impact how often and how far capital managed by investors based in the traditional VC hubs will be able to travel.

A recent PitchBook report found that the median distance between a target company and lead investor for late-stage deals in the U.S. was more than 450 miles, which indicates an even bigger capital squeeze for later-stage startups in the middle of the country. Though many states across the country have seen a growth in VC activity and VC assets under management over the past decade, the widespread slowdown of capital will likely affect most parts of the country—particularly emerging ecosystems—and VC activity over the next year.



The year-over-year percent change in VC investment by state from 2008 to 2009 shows only a handful of states were spared from immediate and significant dips in capital invested in the last downturn.

U.S. VC Investment by State by Year-over-year Percent Change & Change in Capital Invested ($M), 2008 vs. 2009

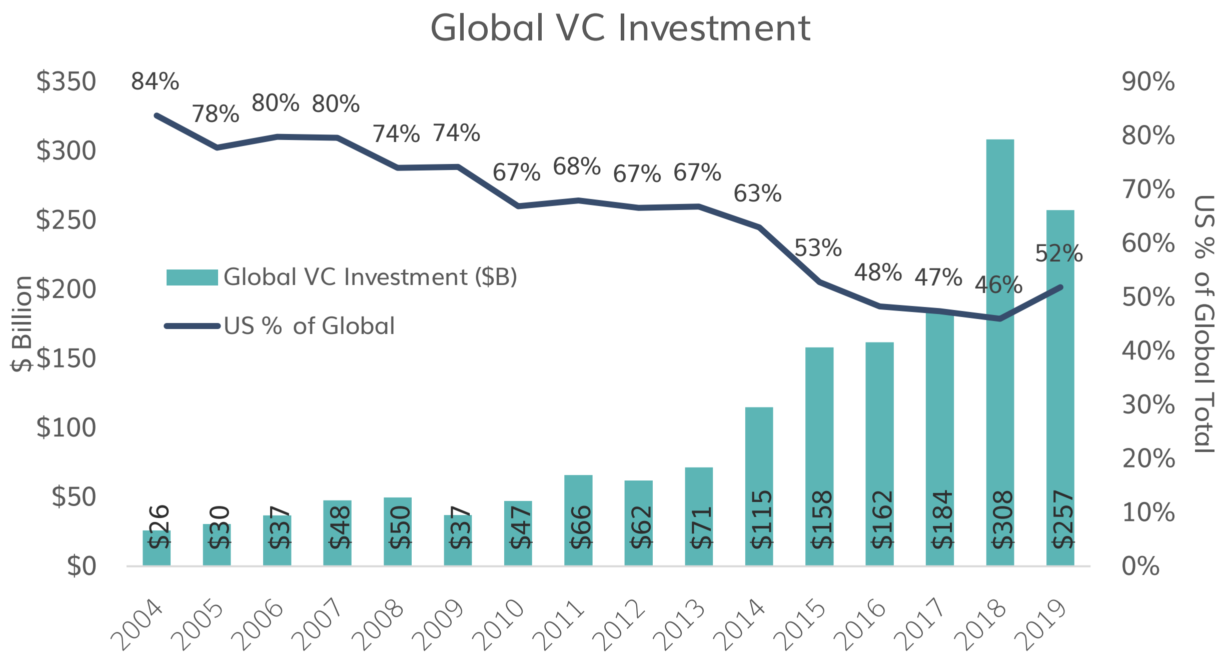


AK: +1982%, +$6.0M; HI: -47%, -$24.7M

Source: NVCA 2020 Yearbook. Data provided by PitchBook.

U.S. share of global VC investment at risk to slip to new lows

Finally, on a global scale, there are broader implications of the slowdown in U.S. venture activity. In the 1990s, U.S. startups accounted for 90%+ of annual global VC investment. In 2004, the U.S. share was 84%, and it has steadily declined since then to 52% last year (though some ground was recovered from the 46% share in 2018). The most notable slide during that period was between 2007 and 2010, when the U.S. lost 13 percentage points of the global share.



Source: NVCA 2020 Yearbook. Data provided by PitchBook.

Like the last downturn, the COVID-19 crisis is also global in scale. All countries are in a similar boat of dealing with unprecedented pressures on broad swaths of public and private sector activity, including employment, education and health systems, business operations, and government budgets. As a result, startup ecosystems across the world are also undergoing a period of transition before uncertain and uneven roads to recovery. But those countries that can err more on the side of a soft landing versus a hard crash will fare the best when we come out the other side.

Some countries are taking an aggressive approach and focusing portions of economic relief towards their startup ecosystems. For instance, France has created a $4.3 billion relief package, while Germany has pledged $2.2 billion in aid. Given the relative size of the U.S. startup ecosystem where nearly 35,000 companies raised venture funding since 2015, a comparable package would be roughly $40 billion to $60 billion.[2]

[2] France, Germany, and U.S. company data pulled from PitchBook Platform on April 23, 2020. Company count calculated as number of companies that raised a venture round of financing since

How the U.S. ecosystem works to keep startups afloat, maintain jobs, and fund new technologies will factor into whether the U.S. maintains (or even gains) its ground on the global VC level, or if other countries that rebound faster will continue to close the gap.

NVCA stands ready to assist policymakers in any way that can be helpful to weathering this crisis while maintaining our traditional leadership positions in innovation and entrepreneurship.

Notes:

Unless otherwise noted, all data is sourced from the NVCA 2020 Yearbook (with data provided by PitchBook).

Our partners at PitchBook released a very good Analyst Note on COVID-19's influence on venture capital that we recommend checking out.

Engage with NVCA:

1. *Contact us at research@nvca.org with additional thoughts on your outlook for the industry.*
2. *View the latest updates and resources on the NVCA COVID-19 page.*
3. *If your portfolio/company has had layoffs or is expecting to, please let us know here.*

January 1, 2015. Corresponding company counts: 2,524 for France, 1,884 for Germany, and 35,061 for the U.S.