Crossing Over Into Venture A look at crossover investors' impact on US VC dealmaking

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Contents

| Key takeaways | 1 |
|----------------------------------------|------|
| Introduction | 2 |
| Crossover investors | 2-3 |
| Companies seeking crossover capital | 3-6 |
| Impact on exits and IPOs | 6-8 |
| Outlook | 8-10 |
| Appendix: Methodology | 10 |

Key takeaways

- Participation from crossover investors in US VC deals has exploded in the past decade. As companies wait longer to go public, investment firms traditionally focused on public markets are increasingly crossing over to the private markets to prevent losing out by waiting for an IPO. Nearly \$60 billion of capital allocated in 2020 included crossover investor participation, which accounts for for an outsized 36.0% of total VC deal value. This represents a 57.7% YoY increase over 2019's deal value and a sharp increase from earlier in the decade when deal value with crossover investor participation barely broke the double digits.
- Crossover rounds are larger than traditional venture financings for two reasons: They tend to be late-stage VC deals with greater capital burn, and the company has already validated early technical or commercial risks to satisfy public market investors' risk appetites. The median and average crossover round size in 2020 reached \$57.6 million and \$98.6 million, respectively—which starkly contrasts with the median and average round size without crossover investor participation of \$2.9 million and \$11.1 million, respectively.
- Crossover investors have become ubiquitous in the cap tables of VCbacked companies that end up going public. 74% of 2020's IPOs by count and 77% by value included crossover investment in pre-IPO rounds. Crossover capital helps companies grow and mature beyond the VC stage and prepares them for an IPO. A crossover financing round with public market investors provides a tangible valuation for the company, brings credibility and prestige to the cap table, and increases capital available to company founders.
- Crossover capital benefits VC-backed companies in capital-intensive industries such as biotech & pharma, electric vehicles, air taxis, and climate technology, among others. Special purpose acquisition company (SPAC) investors that view business combinations as moreefficient fundraising methods also target these industries. Typically, these companies are in a high-growth phase and are pre-revenue or unprofitable by choice, focusing instead on scaling research & development (R&D) efforts, building complex infrastructure, or acquiring a critical mass of end users.

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Introduction

Since 2018, financing rounds within US venture capital have ballooned significantly. Our data indicates that more than \$165 billion poured into venture-backed companies in 2020—a record level and an 18.8% YoY increase over 2019. Further, an abundance of outsized financing rounds pushed the average deal size and valuation to new heights in 2020, with many rivaling the levels of capital raised in traditional IPO rounds. However, some of this capital wasn't allocated by strictly venture investors.

Nontraditional investors such as mutual funds, hedge funds, corporate venture arms, and other large asset managers are increasing their presence within venture. 2020 notched a record \$124.7 billion of deal activity from VC deals with nontraditional investor participation. One subset of nontraditional investors that has drawn much attention recently is the crossover investor.

Crossover investors are typically buy-side public equity asset managers that also invest in privately backed companies. By incorporating private companies into their investment strategy, crossover investors can invest earlier in the company life cycle, thereby acquiring larger equity stakes in promising startups with the hope of seeking venture-level returns.

In this note, we break down the ways crossover investors within venture have affected dealmaking. We discuss the motivations for the crossover financing round—particularly by pre-revenue, high-burn companies—and how these investors affect VC exits and IPOs. Lastly, we examine whether crossover investors have staying power within venture.

Crossover investors

Contemporary markets are seeing fewer publicly listed companies than in prior decades. In 1996, the US equities market peaked, with more than 8,000 listed companies. Each year since the global financial crisis (GFC), fewer than 4,500 public US companies have existed. Concurrently, the amount of capital chasing these listings has grown since 2008, which has, in turn, crowded the public markets as investors search for alpha and growth opportunities.

By capturing the amount that would have been missed by waiting until an IPO, investing in high-growth private companies increases potential returns for crossover investors. Analysis performed by the US Securities and Exchange Commission (SEC) found that, in 2018, registered offerings accounted for \$1.4 trillion of new capital compared with the estimated \$2.9 trillion that was raised through private channels.¹

As companies wait longer to go public, investment firms traditionally focused on public markets are increasingly crossing over to the private markets to prevent losing out by waiting for an IPO. Crossover investors search for companies that have a clear path to profitability and possess superior growth prospects relative to public market opportunities. Crossover investors also see these investable companies as prime IPO targets and view participating in the private round(s) prior to public listing as an advantage to generate returns over simply participating only in the IPO round. As opposed to an M&A transaction wherein investors are forcibly cashed out, crossover investors seek privately backed companies that are primed to exit via public listings and capable of high growth— especially given that most will hold their positions for a few years after the company goes public.

2020's flurry of high-profile IPOs—including Airbnb (NASDAQ: ABNB), Palantir (NYSE: PLTR), DoorDash (NYSE: DASH), and Unity (NYSE: U), among others—alongside consistent upsizing and massive first-day pops, renewed interest and spurred deal activity from crossover investors, as they recognize the rapid valuation growth within these late-stage companies.

Whereas VCs tend to view other VCs as direct competitors on deals, crossover investors differ somewhat. Crossover investors manage enormous pools of capital, with typical AUM dwarfing that of traditional venture investors. This access to capital, coupled with their hands-off management style and desire to propel companies to the next level, allows for interplay and syndication between crossover investors and traditional VCs. Further, crossover investors tend to be more willing to pay a premium for their positions in private companies, especially given that the alternative is to wait for an allocation during the IPO underwriting and sale process.

Companies seeking crossover capital

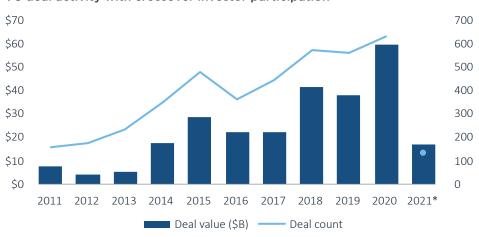
VC deal activity with crossover investor participation has exploded in the past decade, with nearly \$60 billion of capital allocated in 2020 accounting for an outsized 36.0% of total deal value.² This represents a 57.7% YoY increase over 2019's deal value and a sharp increase from earlier in the decade when deal value with crossover investor participation barely broke the double digits. Of the 11,893 VC deals conducted in 2020, however, only 633 deals—5.3% of total deals—had participation from a crossover investor.

Crossover rounds are larger than traditional venture financings for two reasons: They tend to be late-stage VC deals with greater capital burn, and the company has already validated early technical or commercial risks to satisfy public market investors' risk appetites. The median and average crossover round size in 2020 reached \$57.6 million and \$98.6 million, respectively which starkly contrasts with the median and average round size without crossover investor participation of \$2.9 million and \$11.1 million, respectively.

Crossover capital helps companies grow and mature beyond the VC stage and prepares them for an IPO. For companies with a path to profitability, crossover investor participation can provide strategic valuation, marketing, and financial benefits. A crossover financing round with public market investors provides a tangible valuation for the company, brings credibility

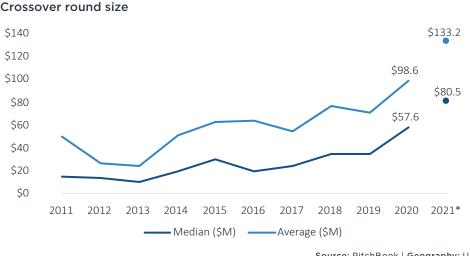
2: Based on our methodology (see Appendix), we identified a total of 127 crossover investors. Our criteria included a subset of nontraditional investors—specifically hedge funds, mutual funds, sovereign wealth funds, and general asset managers—that have participated in at least 10 VC deals in the US since January 1, 2015. We omitted corporate VC (CVC) firms from our search due to their lack of public market investing.

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VC deal activity with crossover investor participation

Source: PitchBook | Geography: US *As of March 8, 2021

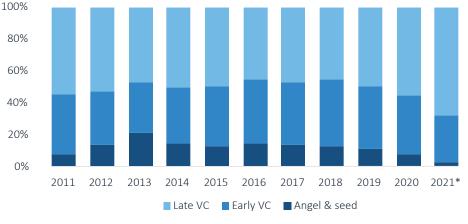


Source: PitchBook | Geography: US *As of March 8, 2021

and prestige to the cap table, and increases capital available to company founders. It also streamlines the path to going public, as founders can leverage the public market expertise and network of crossover investors when they are appointed as board members or strategic advisors. Considering that crossover investors tend to double down on their positions during the IPO round, crossover investor participation also lends credibility and validation as companies begin testing the IPO waters.

For capital-intensive companies without a clear path to profitability, crossover rounds act as large capital raises. Generally, these companies are in a high-growth phase and are pre-revenue or unprofitable by choice. Either internal strategy or the nature of the industry prevents them from chasing revenue; instead, they focus on scaling R&D efforts, building complex infrastructure, or acquiring a critical mass of end users. Typically, companies that can sustain themselves through revenue and small-scale equity/debt financings do not raise crossover rounds, as these founders will unlikely see the benefit of giving up large equity percentages to a crossover investor. As such, a mold of companies tends to gain the most from raising capital via crossover investors.

Crossover capital benefits VC-backed companies in capital-intensive industries such as biotech & pharma, electric vehicles, air taxis, and climate technology, among others. SPAC investors that view business combinations as more-efficient fundraising methods also target these industries. These industry groups possess high barriers to entry, long runways to market, and long paths to profitability. Raising capital from strictly traditional venture investors tends to prove inadequate for companies' budgets and financial needs.



VC deal activity (#) with crossover investor participation

For example, within biotech & pharma, many companies are precommercial and thus require significant capital to push products through the drug development cycle. Capital from VC firms helps companies at the seed and early stages with initial R&D validation, but as companies develop multiple drugs assets and push from Phase 1 into Phase 2 trials and beyond, the need for expansion capital arises.³ Crossover investor participation acts as the lifeblood for many of these companies, particularly those that are achieving rapid growth and require substantial capital to run multiple clinical trials in tandem.

Furthermore, rounds with crossover investor participation—particularly the final private round before an IPO—act as a form of due diligence for other IPO investors.⁴ Because forward guidance and future earnings forecasts are forbidden during IPO roadshows and in S-1 prospectuses, crossover investor participation in large late-stage rounds immediately pre-IPO signals to public

Source: PitchBook | Geography: US *As of March 8, 2021

^{3:} Phase 2 trials cost \$13 million on average and take roughly 32 months from enrollment to final data readout. Phase 3 trials cost \$20 million on average and span roughly 30 months. These costs and timelines are discussed in more detail here.

^{4:} While crossover investor participation can occur at any financing stage of a VC-backed company, many investors denote the crossover or mezzanine round as the last private financing round before the IPO.

market investors that the technology and earnings projections are sound. Particularly for companies that possess complicated intellectual property (IP) that could expose investors to highly technical risks, the time restrictions of the typical IPO sales process often leave little time for institutional investors to perform thorough due diligence. As such, many public investors rely on crossover investor participation as a vote of confidence.

Impact on exits and IPOs

The exit is the stage in a VC-backed company's life cycle wherein crossover investors should provide value as a sign of third-party validation of the business model. Given that most crossover investors invest primarily in the public markets, the ability to have an existing shareholder participate in the IPO sends a positive signal to the market, which should assist the company in building out the IPO book. Additionally, given that crossover rounds occur in the private markets, companies have more power over which investors can participate, thereby allowing them to select for traits such as locking in long-term shareholders instead of funds looking for a quick flip. These long-term shareholders can provide stock price stability for the newly public businesses—which, though a more passive support than the kind VC investors provide, can be just as impactful. By accepting the investment risks, crossover investors are rewarded with the ability to purchase significant ownership in these growing businesses during the pre-IPO round—and typically at a discount to the eventual IPO price.



VC IPO exit size (\$) with crossover investor participation

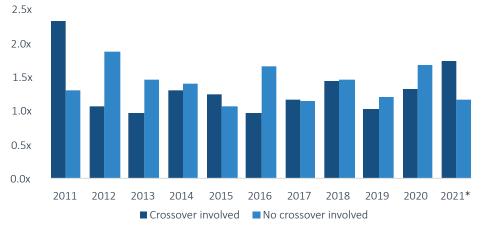
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VC IPO exits (#) with crossover investor participation

That said, crossover investors have become ubiquitous in the cap tables of VC-backed companies that end up going public. 74% of 2020's IPOs by count and 77% by value included crossover investment in pre-IPO rounds. Since 2010, crossover investor participation has spiked, paralleling the growth of nontraditional investor involvement in VC. Given that most companies that IPO receive crossover funding, IPO step-ups for companies with crossover backers mirrored the aggregate market at a median of 1.3x in 2020. However, when compared with step-ups for IPOs without crossover investor participation, we see slight underperformance from the cohort receiving external validation during the ten-year period ended 2020. This is partly due to crossover-backed IPOs skewing toward the top of the market. These IPOs typically see lower step-ups, especially given higher private market valuations that are difficult to increase on a percentage basis. Further, the time between final crossover round and IPO has trended downward to a median of around six months, which leaves little time to increase valuation.



Median step-up at IPO by crossover status

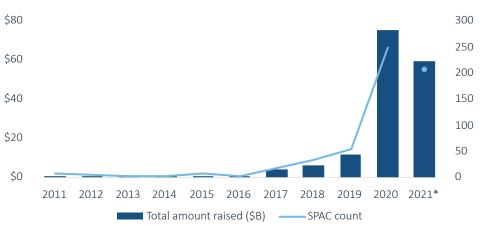
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The current market climate places a premium on growth opportunities, which have driven significant capital into the private markets—and growthstage VC in particular. In the past year, SPACs have emerged as a new source of capital, providing an alternative to the crossover round and traditional IPO. As discussed in past research, while not ideal for all VCbacked businesses, SPACs are a viable option for startups wanting the exposure or liquidity provided by going public. Given that the strategy has raised over \$134 billion in the past 14 months, SPACs have proven competitive with crossover investors looking to back private companies.

However, crossover investors aren't eliminated from a deal's equation just because a company agrees to merge with a SPAC. Most SPAC combinations include a PIPE deal, which offers an opportunity for crossover investors to participate and gain material ownership of the operating company. Capital-intensive businesses tend to be good fits for SPAC combinations, thus portending opportunities for significant PIPE implementation going forward.

In the case of a large crossover VC round and traditional IPO, by combining with a SPAC with a concurrent PIPE, a company can go public with third-party validation in one step rather than two. Besides the potential opportunity to limit dilution by choosing a SPAC, this approach may also trim time spent fundraising for the VC-backed business' executives.



SPAC IPO activity

Source: PitchBook | Geography: US *As of March 8, 2021

Outlook

From 2010 to 2015, crossover investor activity in VC exploded by 4.5x, ultimately reaching 481 completed deals in 2015. Coupled with crossover firms' perceived interest solely in unicorns, this burst of VC interest led to these institutions and other nontraditional VC investors to be dubbed "tourist investors." However, as crossover investment grew from 2015 to 2020, this moniker became increasingly misleading. As crossover and nontraditional investment continues to rise, their strategies have evolved toward raising specialized, venture-focused funds with investment teams bolstering their private capital sophistication. Some analysts worried that the pandemic would push these investors back toward their core strategies; instead, they doubled down on venture.

In 2020, crossover investors led or solely funded a record 235 venture rounds—50 more than the next-highest year in our dataset—and have already led 68 deals through the first two months of 2021. The increase in deals highlights these firms' strong commitment to venture, which is one reason we believe that these investors will continue to grow their private market presence. Of course, macroeconomic shifts could result in crossover strategies pulling back from VC deals. However, barring a major economic catastrophe, it might not be an economic downturn such as the one we saw associated with the COVID-19 pandemic that curtails crossover investment.

VC deal size (\$) with crossover investor participation



Source: PitchBook | Geography: US *As of March 8, 2021



VC deal count (#) with crossover investor participation

Source: PitchBook | Geography: US *As of March 8, 2021

Over the past decade, the venture industry has evolved. As part of this evolution, startups are staying private longer. Beyond considering this trend in terms of years spent private, a more important factor is valuation growth now realizing prior to public listing. During each of the past three years, the top-quartile public listing has notched at least \$1.5 billion, with 2020's figure reaching \$3.1 billion. Just twice between 2006 and 2016 did this figure surpass \$800 million, while the average during that period was just \$629.4 million.

With more growth occurring in private markets, prudent crossover investors are participating in venture deals and capturing portions of that growth for their LPs.

These days, many crossover investors' LPs likely expect exposure to private, high-growth companies. Creating alpha—or at least perceived alpha—from continuing private investments can keep capital inflows coming. These market factors have bolstered demand for private investments for crossover investors and will continue to fuel their venture activity for the foreseeable future.

Appendix: Methodology

A list of crossover investors included in this note's analysis can be found here.

Top 25 crossover investors by deal count since 2015*

| Investor | Deal count |
|--------------------------------|------------|
| OrbiMed | 168 |
| Tiger Global Management | 160 |
| RA Capital Management | 135 |
| T. Rowe Price | 132 |
| Deerfield Management | 130 |
| Coatue Management | 123 |
| Cormorant Asset Management | 121 |
| Cota Capital | 115 |
| Fidelity Management & Research | 107 |
| Perceptive Advisors | 105 |
| Wellington Management | 103 |
| Casdin Capital | 100 |
| Acequia Capital | 97 |
| Fidelity Investments | 95 |
| Temasek Holdings | 95 |
| Viking Global Investors | 74 |
| Baillie Gifford | 68 |
| Pantera Capital | 66 |
| Rock Springs Capital | 66 |
| Redmile Group | 65 |
| Adams Street Partners | 64 |
| Franklin Templeton Investments | 64 |
| EcoR1 Capital | 58 |
| Peterson Partners | 57 |
| TriplePoint Venture Growth | 57 |

Source: PitchBook | Geography: US *As of March 8, 2021