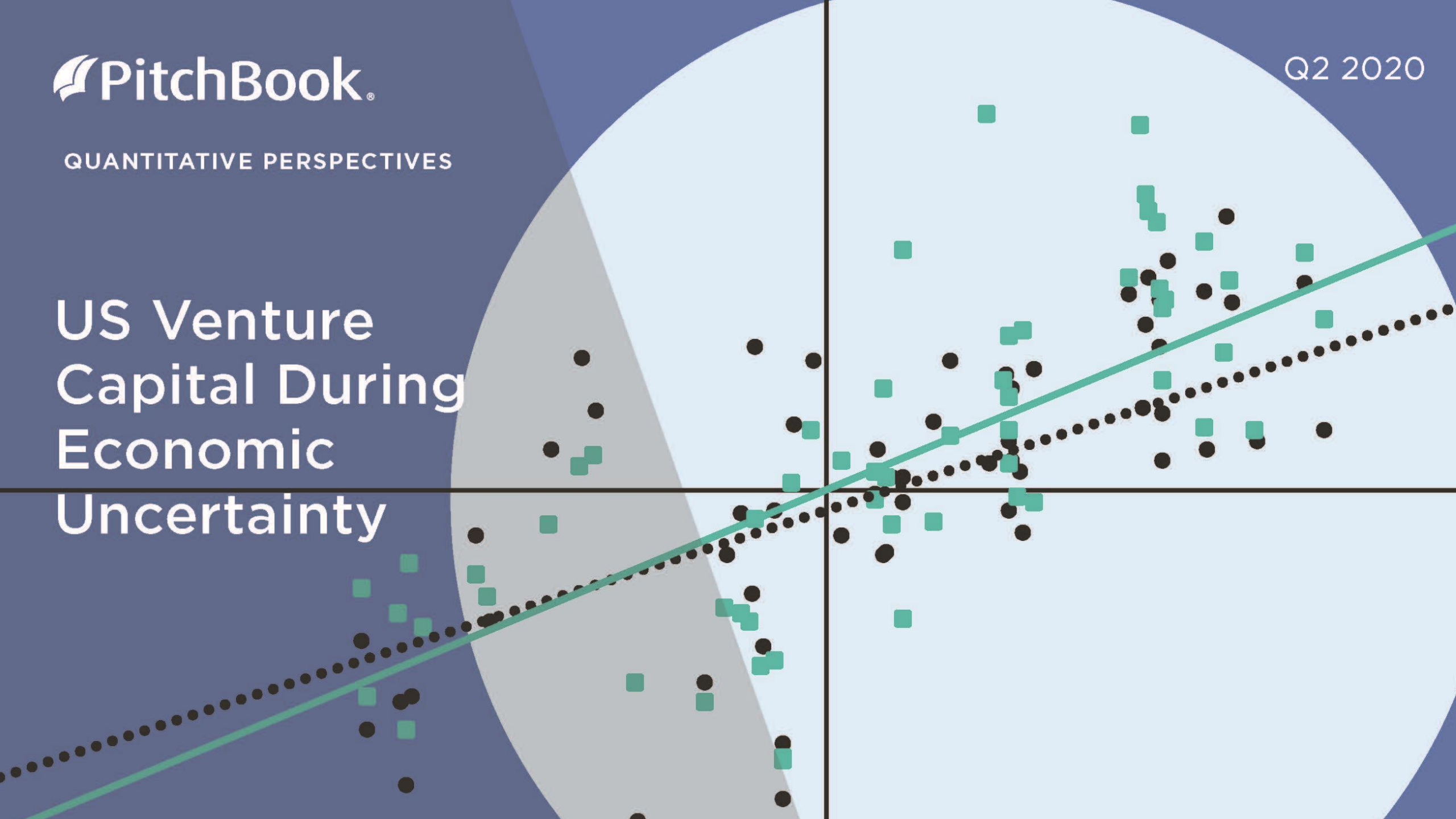


US Venture Capital During Economic Uncertainty



US venture capital during economic uncertainty

The first half of 2020 has redefined the venture landscape. Though calls for social reform have dominated headlines of late, the global pandemic continues to be the driving force of economic turmoil. It has led to the highest levels of unemployment in recent history, resulting in nosedives in consumer and business confidence. Though public markets have been surprisingly resilient, a second wave of the virus may interrupt that optimism. With that backdrop in mind, institutional investors in alternative assets need information and data to inform their decision making and investment strategies. In this report, we provide a quantitative retrospective of the US venture capital landscape during the previous recession, as well as a forward-looking assessment of what we expect to occur during the coming one. The current crisis will present opportunities for pioneering entrepreneurs and investors alike, though investors must be diligent as they identify areas of opportunity and deploy capital at valuation levels that are congruent with their return profiles.

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US venture capital during economic uncertainty

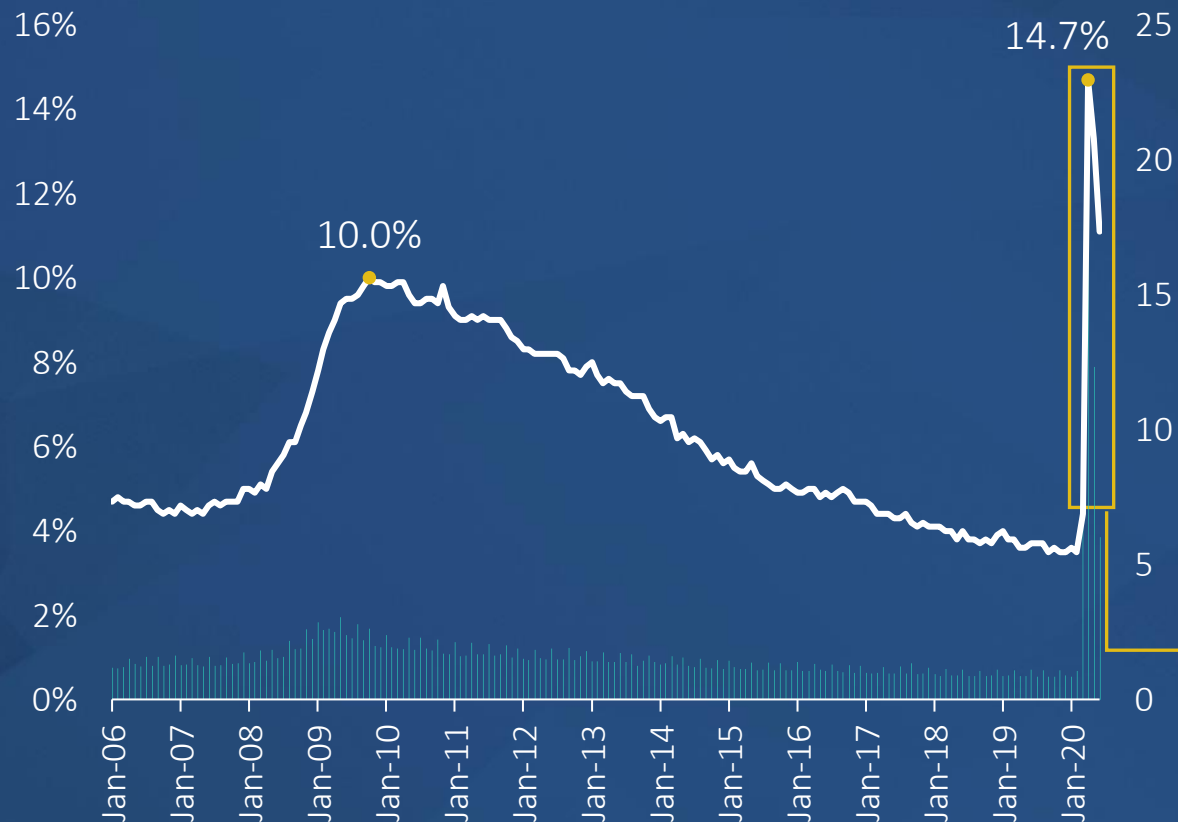
Key takeaways

- As angel & seed investing has matured since the global financial crisis (GFC), we expect drops in activity to resemble those seen at the early-stage level during the last downturn. Early-stage and late-stage deal flow will also slow, as deals are harder to facilitate during the pandemic.
- Companies may turn to debt financing as an alternative to traditional equity rounds, as they attempt to avoid down rounds, dilution, and unfavorable terms.
- A pullback in activity from nontraditional venture investors could have a major effect on deal flow in the near term, as these investors have accounted for an increasing share of deals over the past decade.
- IPOs may be more tenable than was the case during the GFC, as public markets have been surprisingly resilient, though a second wave of COVID-19 could play spoiler.
- M&A will continue to make up the lion's share of exit activity, though often at depressed valuations.
- Despite strong fundraising in H1 2020, we expect a slowdown in H2 as fundraising processes are more difficult to facilitate remotely.

The macro environment

US unemployment claims

In just 15 weeks, there have been 48.7 million jobless claims ...



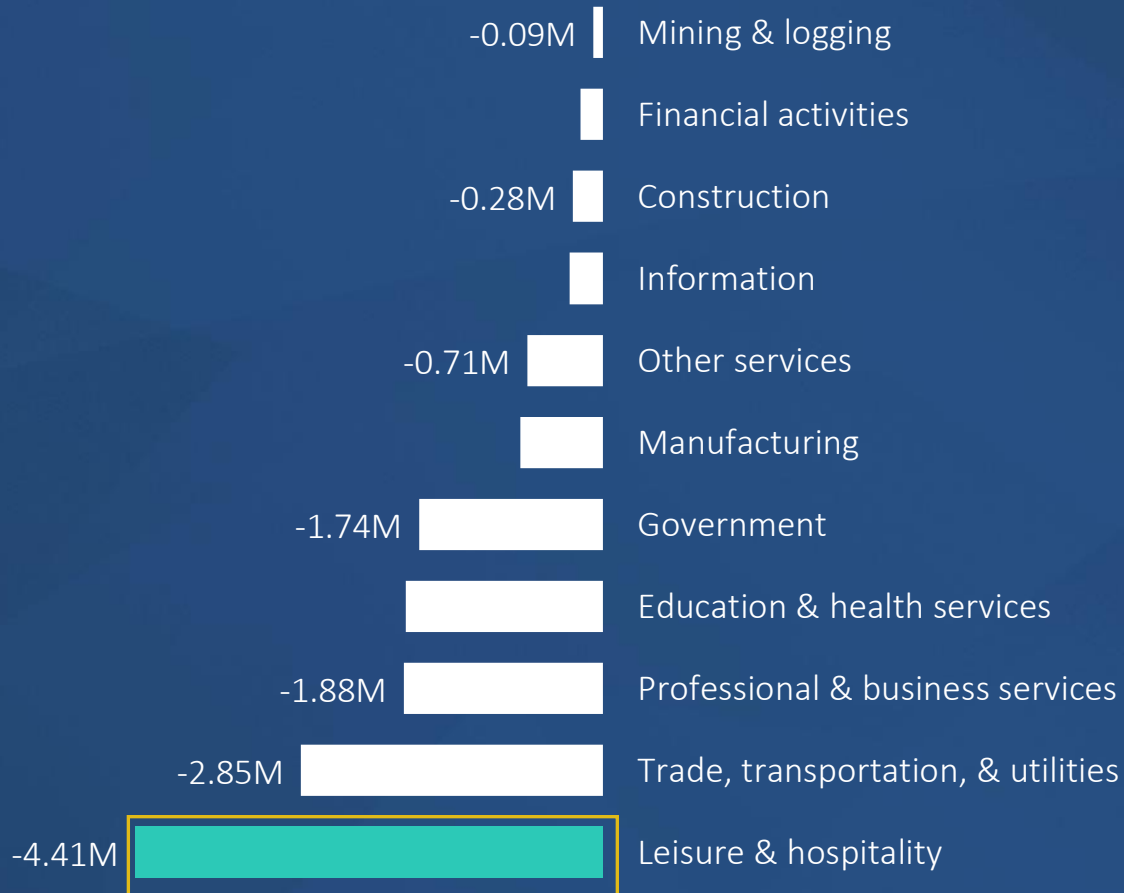
Monthly seasonally adjusted unemployment claims (millions)

Unemployment rate

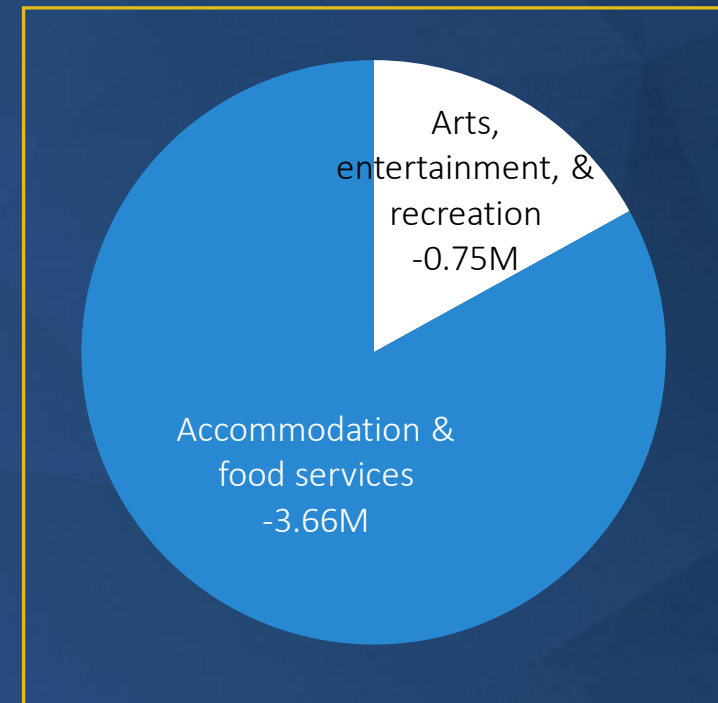
Source: Bureau of Labor Statistics
As of June 26, 2020

US job losses by industry

... with 29% of job loss in 2020 concentrated in the leisure & hospitality space.

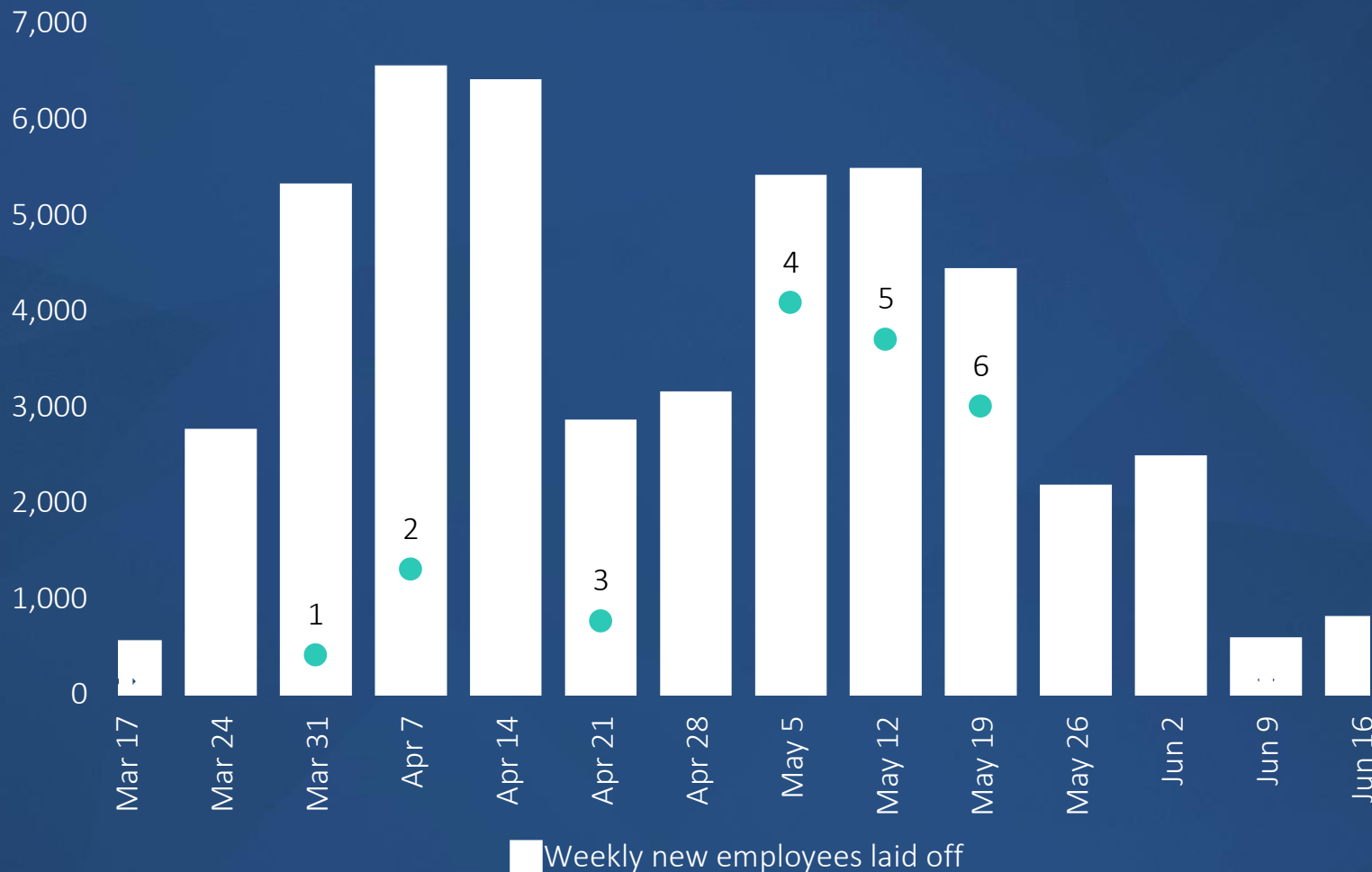


Restaurants & hotels hit especially hard



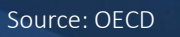
US VC layoffs

As a result, 44,900 employees across 372 VC-backed companies have been laid off since March 11.



1. Bird announces 406-employee layoff via two-minute zoom.
2. Toast cuts 50% of its workforce.
3. Opendoor lays off 600 employees; Carta cuts 35% of workforce.
4. Lyft and WeWork collectively lay off 1,282 employees; Airbnb lays off 1,900 employees; and Juul restructures via 900 employee reduction.
5. Uber cuts 3,700 employees.
6. Uber cuts an additional 3,000 employees.

Meanwhile, as seen during the GFC, business and consumer confidence have both fallen sharply.



Deal activity

US angel & seed deal activity

Angel & seed deal activity during the GFC was relatively unaffected, as it was still in its nascency ...



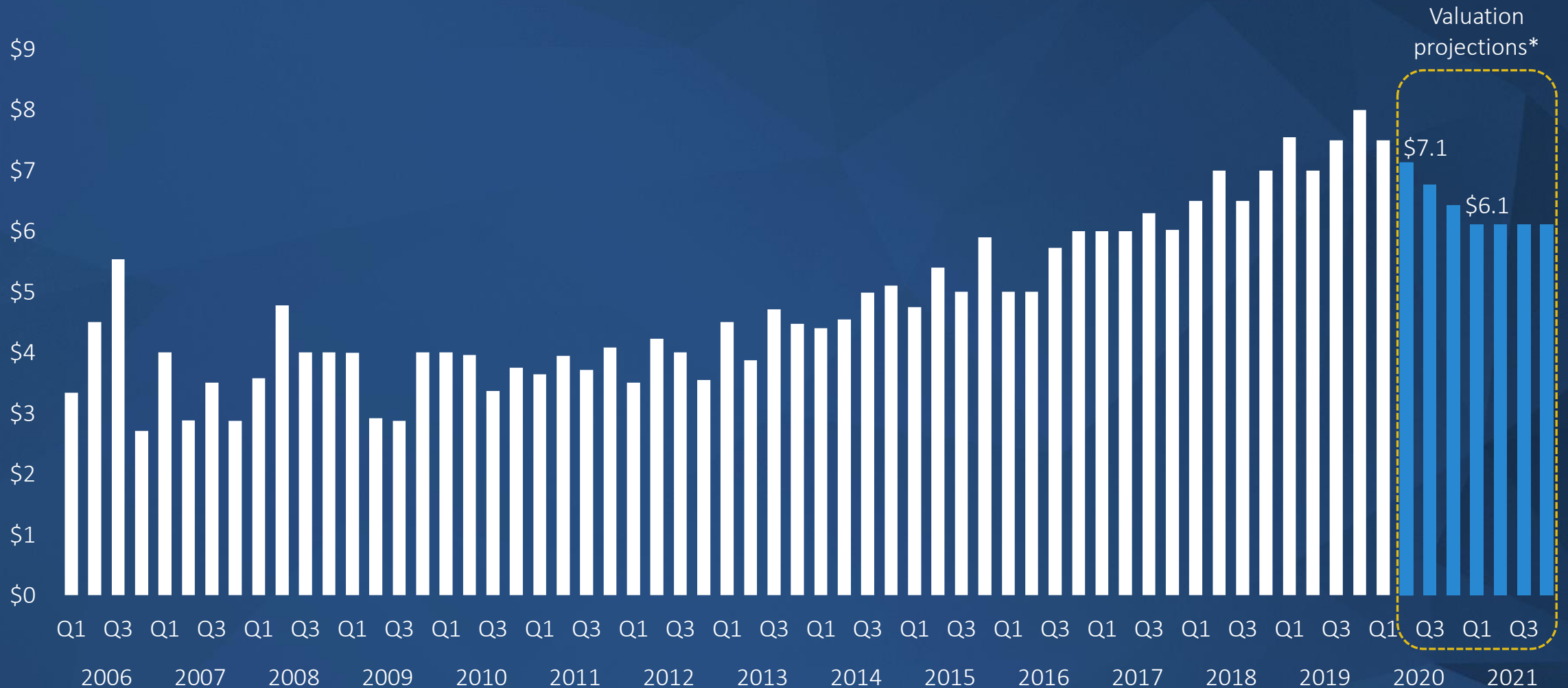
US angel & seed deal activity

... while today's ecosystem more closely resembles early-stage investing during the GFC. Because of this, we expect declining deal activity ...



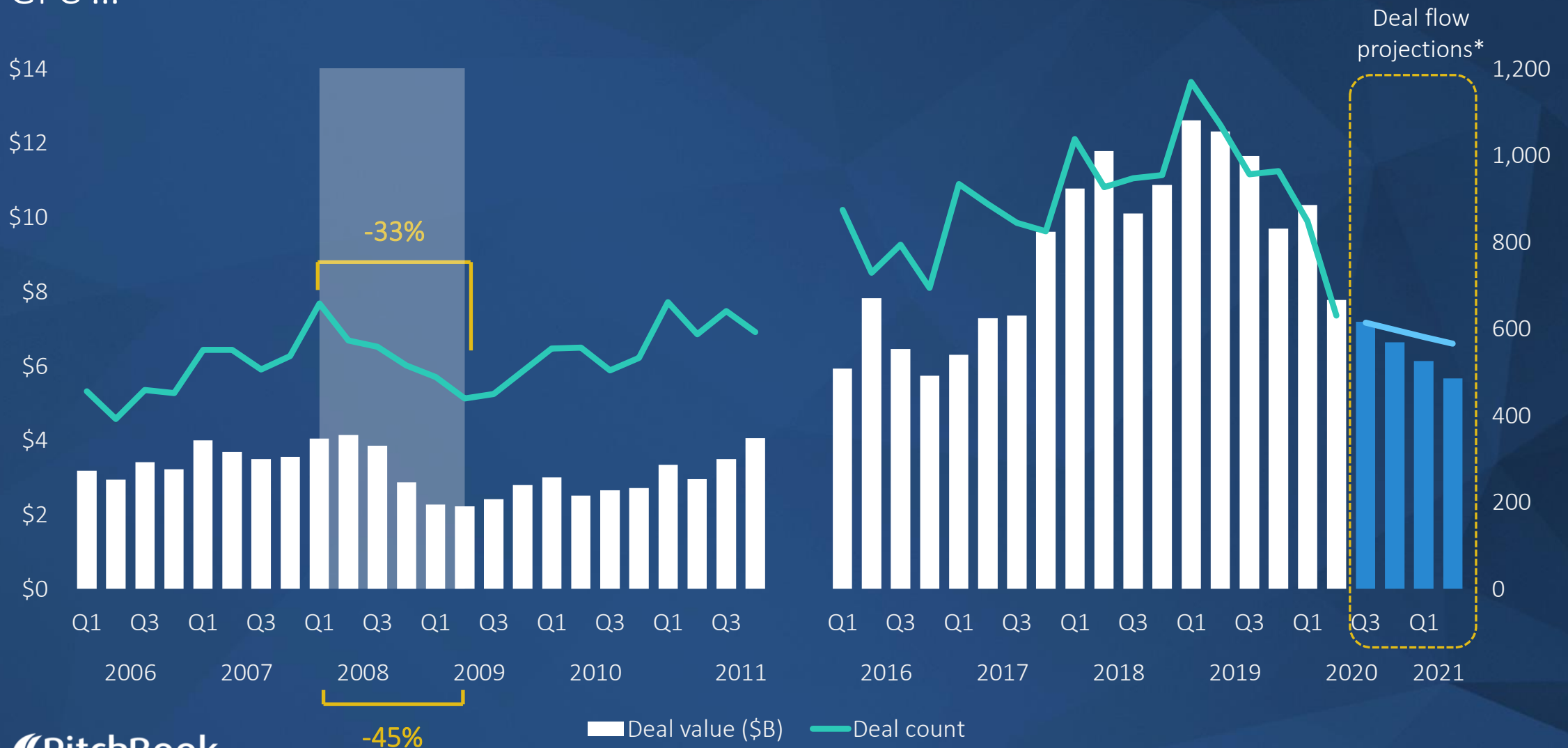
Quarterly median angel & seed pre-money valuations (\$M)

... and valuations are poised to decline, as investors focus on stronger fundamentals.



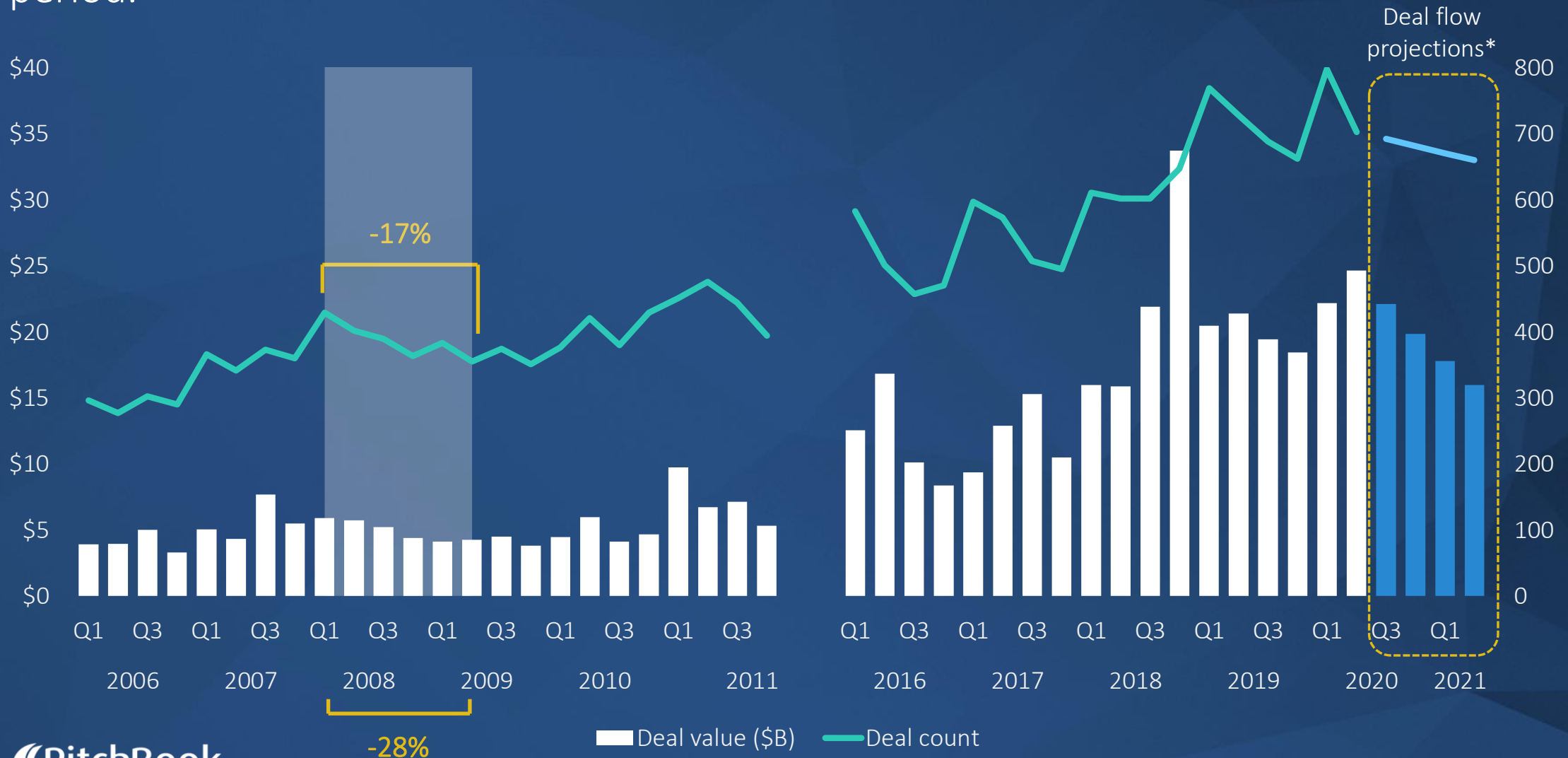
US VC early-stage deal activity

Early-stage deals registered a 33% drop in volume and 45% drop in value during the GFC ...



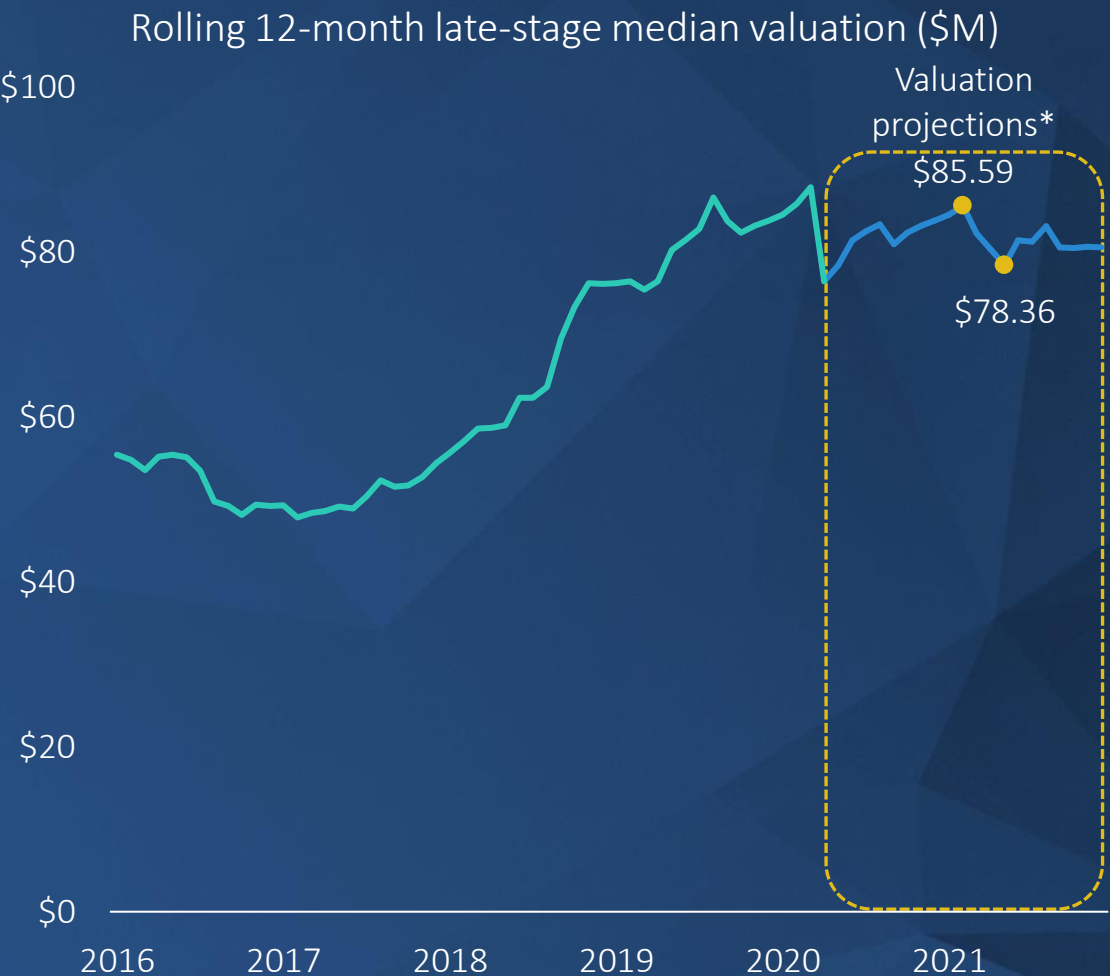
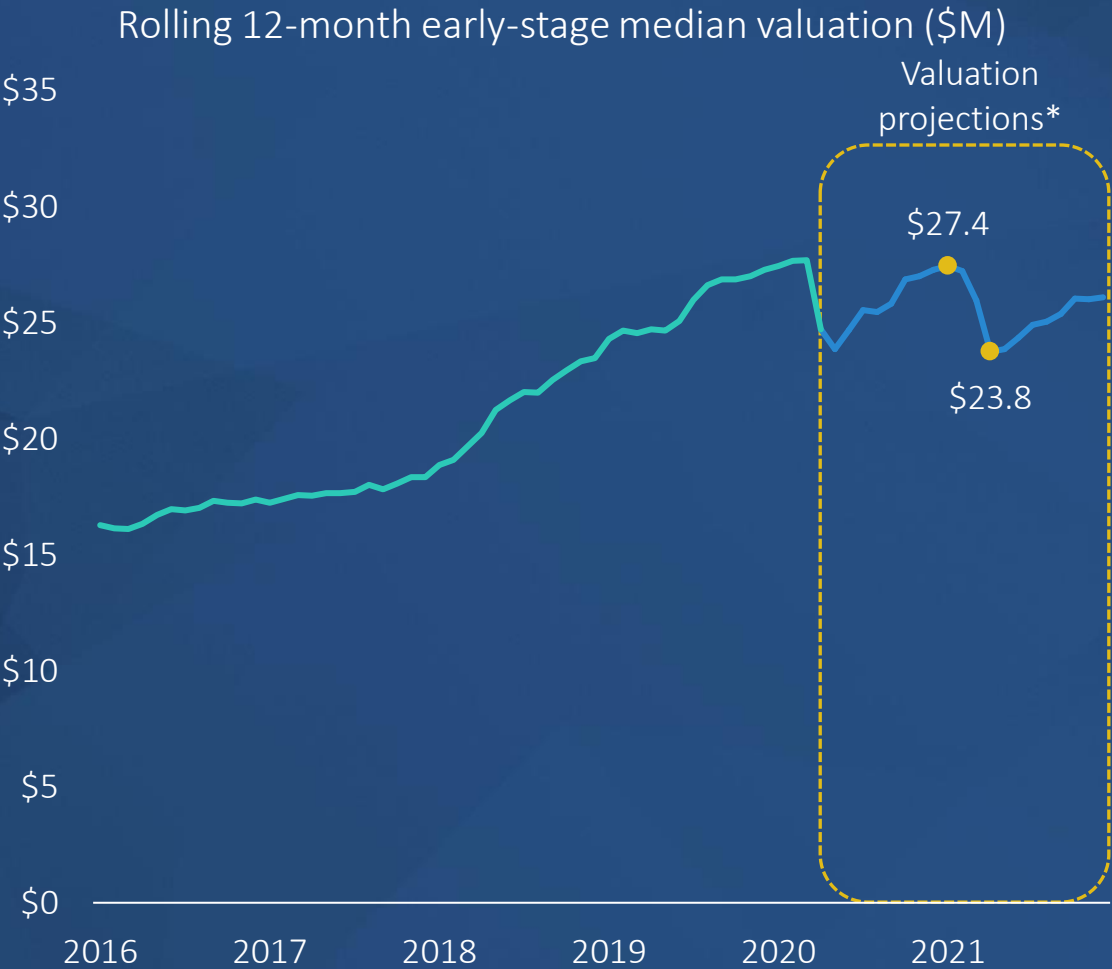
US VC late-stage deal activity

... while late-stage deals dropped 17% in volume and 28% in value over the same period.



Rolling early & late-stage median valuations

As valuations were already starting to plateau, we expect to see continued downward pressure on pricing.



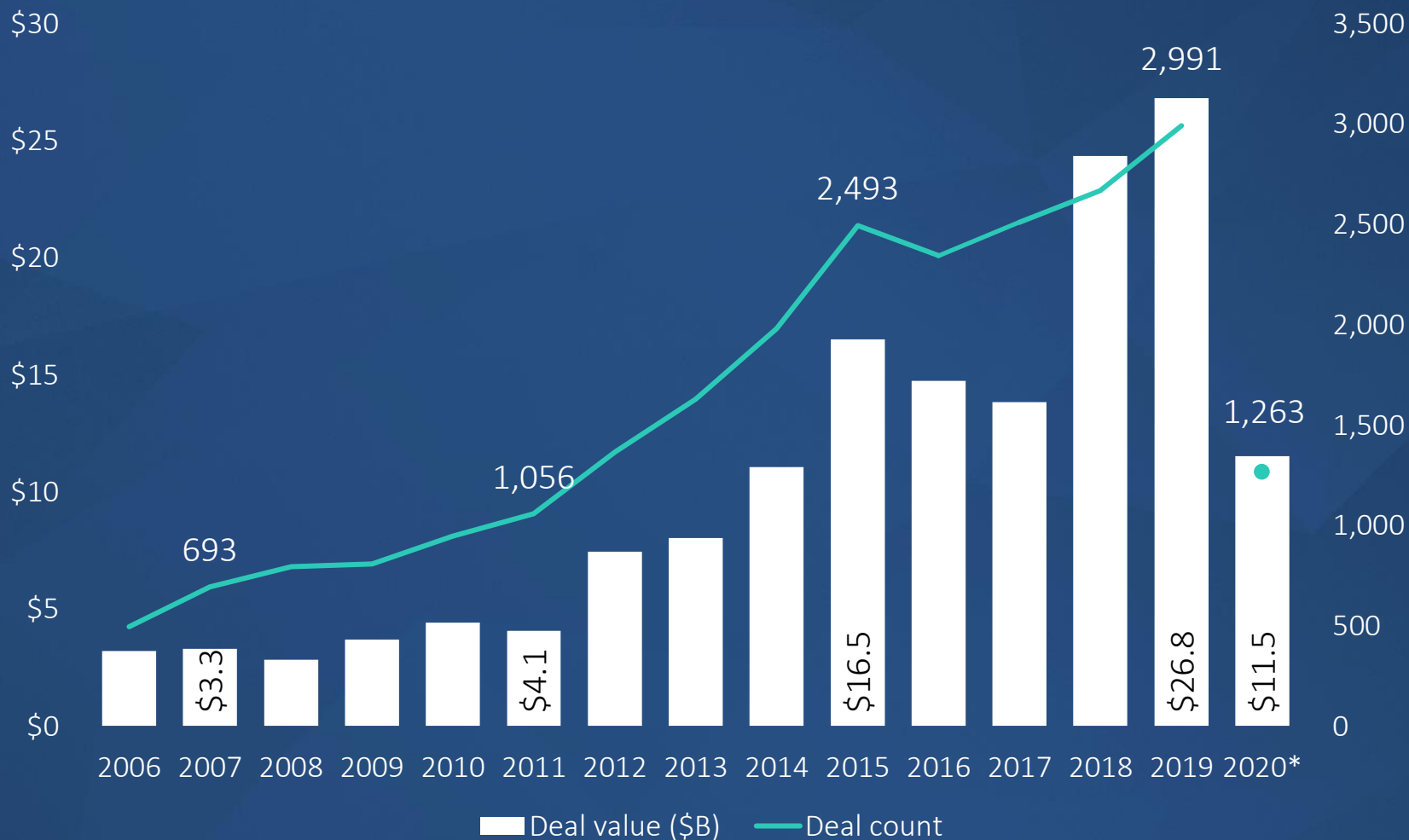
Valuation step-ups

Companies able to raise funding should expect to do so at smaller valuation step-ups than those to which they have become accustomed ...



Venture debt financing

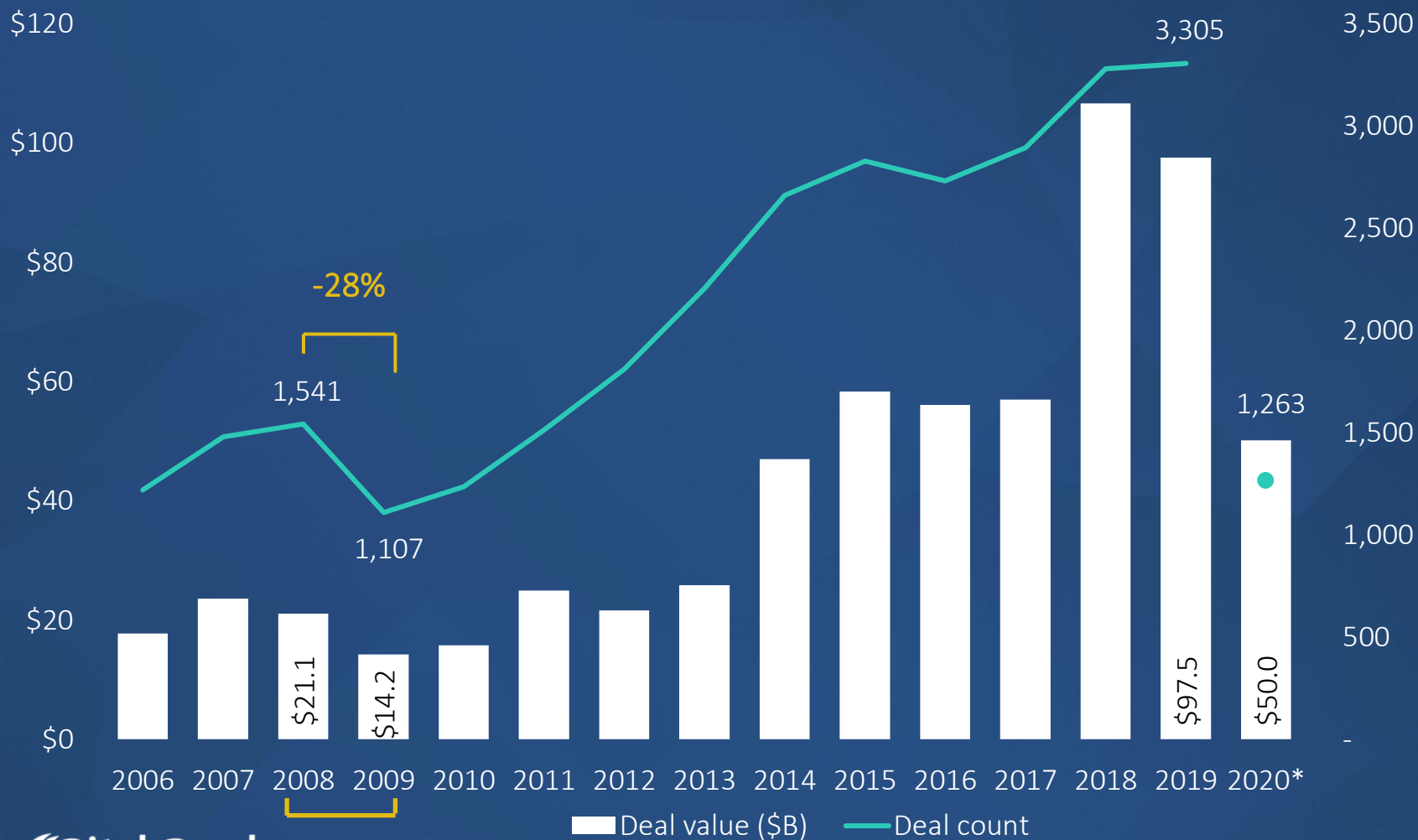
... which may encourage companies to pursue debt financing to avoid down rounds.



Historically low interest rates and the desire to avoid unfavorable terms and dilution through traditional financing may lead financially sound VC-backed companies to raise debt.

Nontraditional Investors

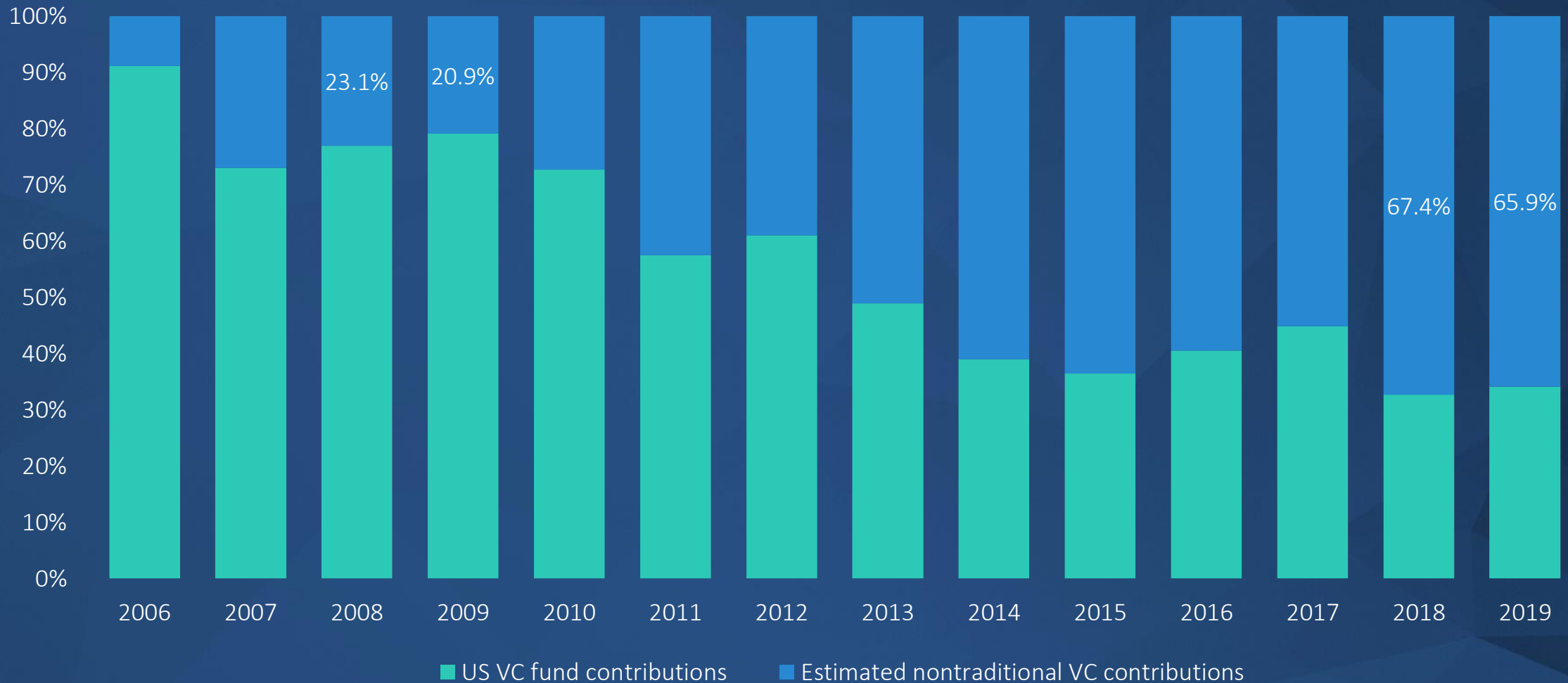
The rise of CVC and other nontraditional investors has been a driving force in the VC industry over the past decade.



Nontraditional investors have become a major source of capital for venture-backed companies since the GFC. As many will likely refocus internally during this crisis, we expect to see the supply of capital from these investors taper off.

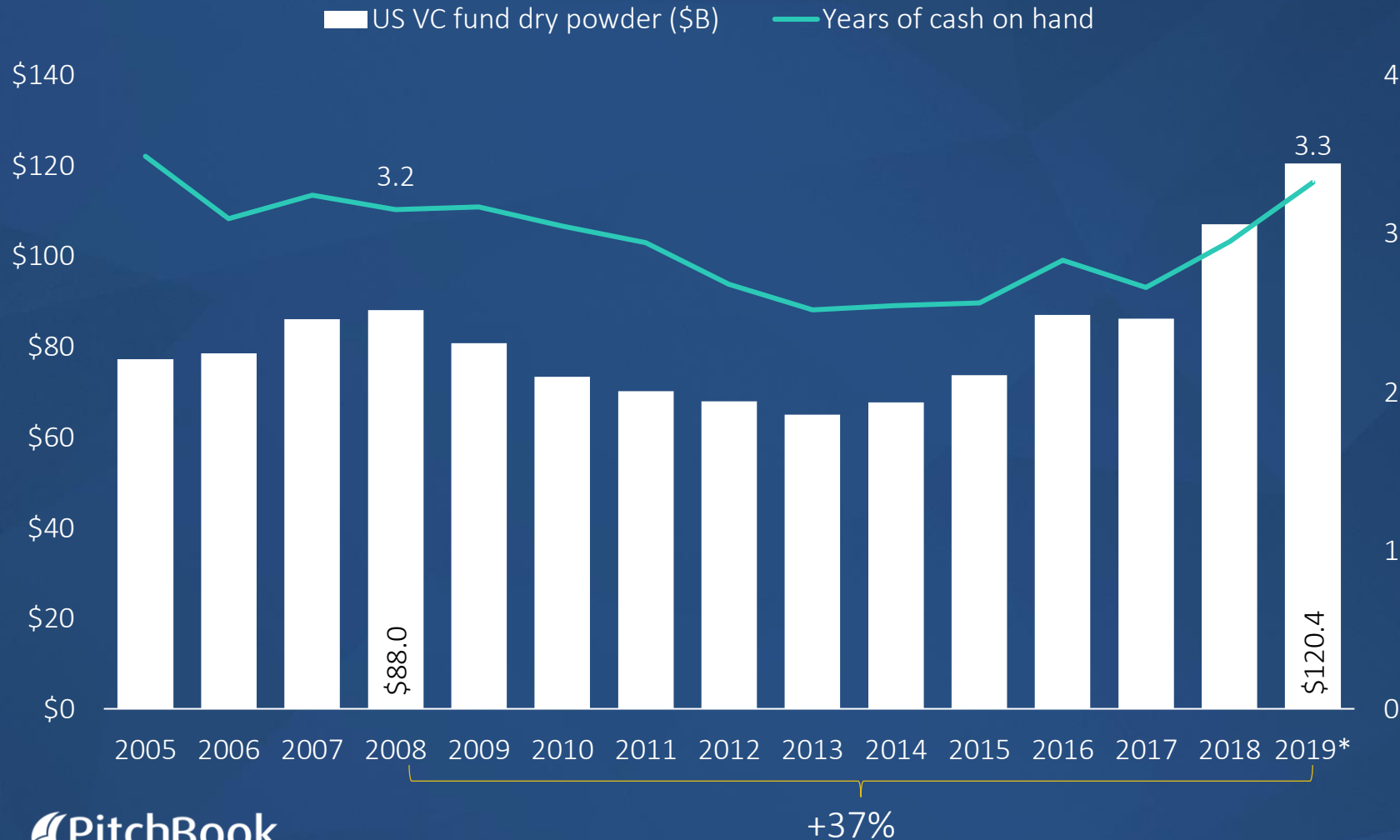
US nontraditional capital contribution estimation

Their contribution to overall VC invested has grown from nearly 21% in 2009 to nearly 66% in 2019.



US VC dry powder and years of cash on hand

Even if a pullback from nontraditional investors occurs, VC firms still have ample cash on hand. The question is how it is deployed.



VC dry powder has increased 37% since 2008, and current levels represent 3.3 years of deal activity potential.

Whether that capital will be used in support of current portfolio companies or slated for new investments is yet to be seen.

*As of Q3 2019

Note: Cash on hand = dry powder/average three-year contribution

US VC-backed unicorns

We expect investors to target companies with multiple sources of revenue and varied industry exposure to provide a buffer to financial instability ...

Focused revenue stream & positive/neutral COVID-19 impact



Diversified revenue stream & positive/neutral COVID-19 impact



Focused revenue stream & negative COVID-19 impact



Diversified revenue stream & negative COVID-19 impact

... as well as companies with competitive advantages in the digitization & automation space.

Digitization & automation market map

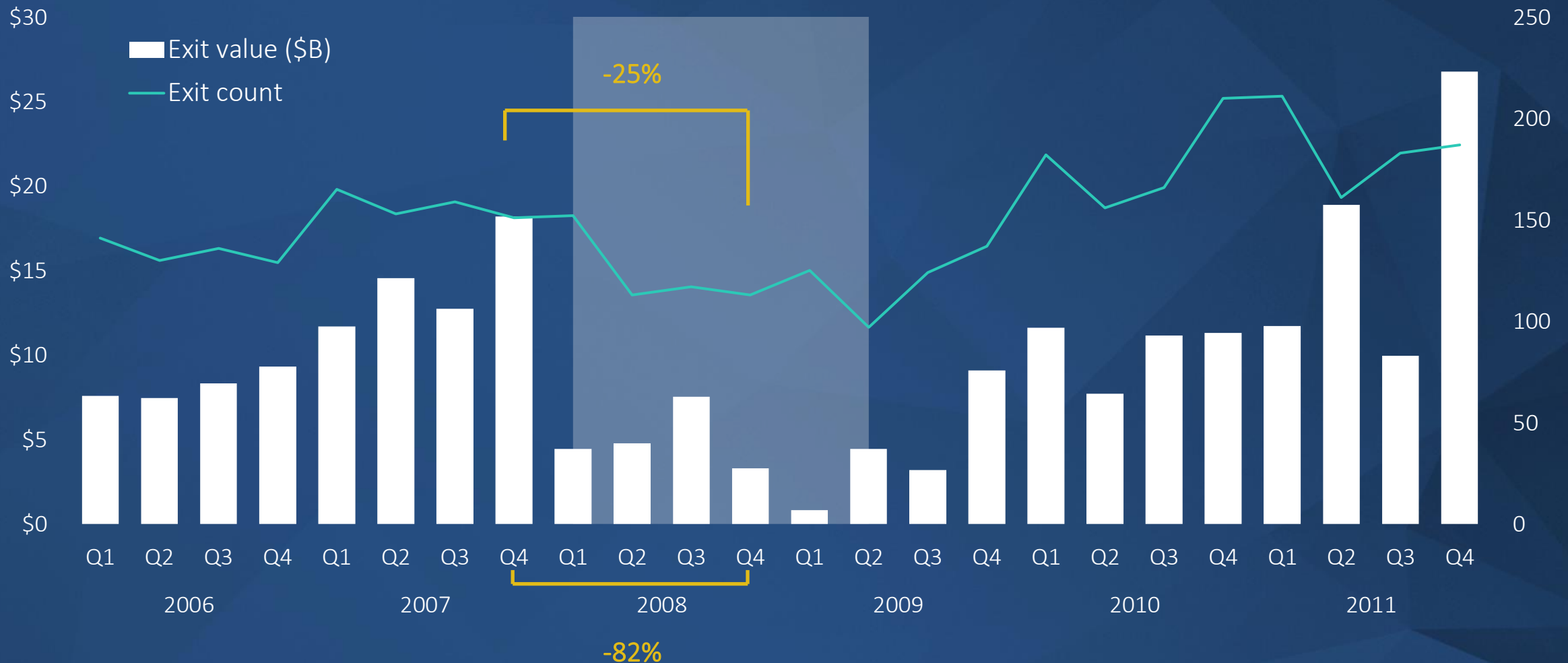


Source: Market map created by Caroline Suttie, featured in "PitchBook Analyst Note: Accelerating History: Pandemic-Driven Tech Opportunities" by Ryan Vaswani (published on June 23; available on the PitchBook Platform)

Exit activity

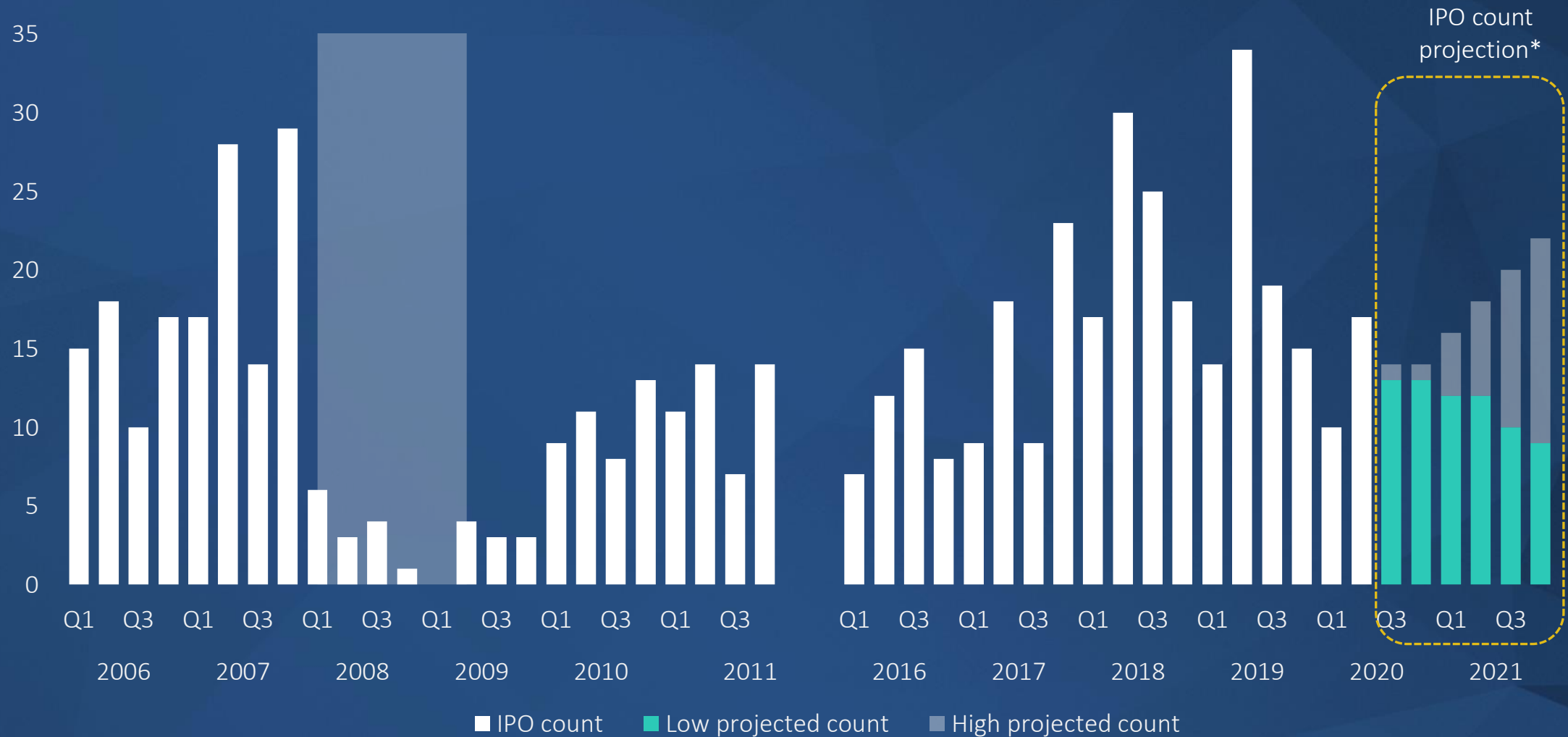
US VC exit activity

Exit value cratered during the GFC, though exit volume saw more modest drops.



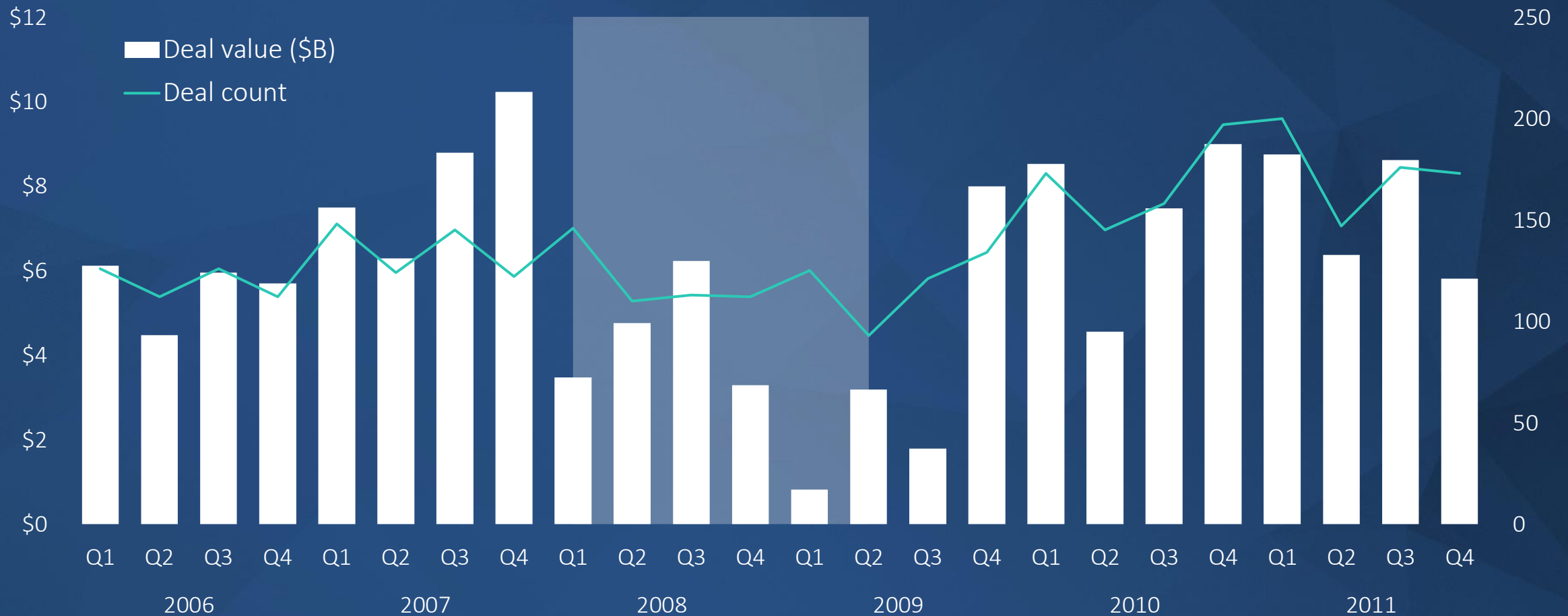
US VC-backed IPOs

IPOs experienced a sharp decrease in volume.



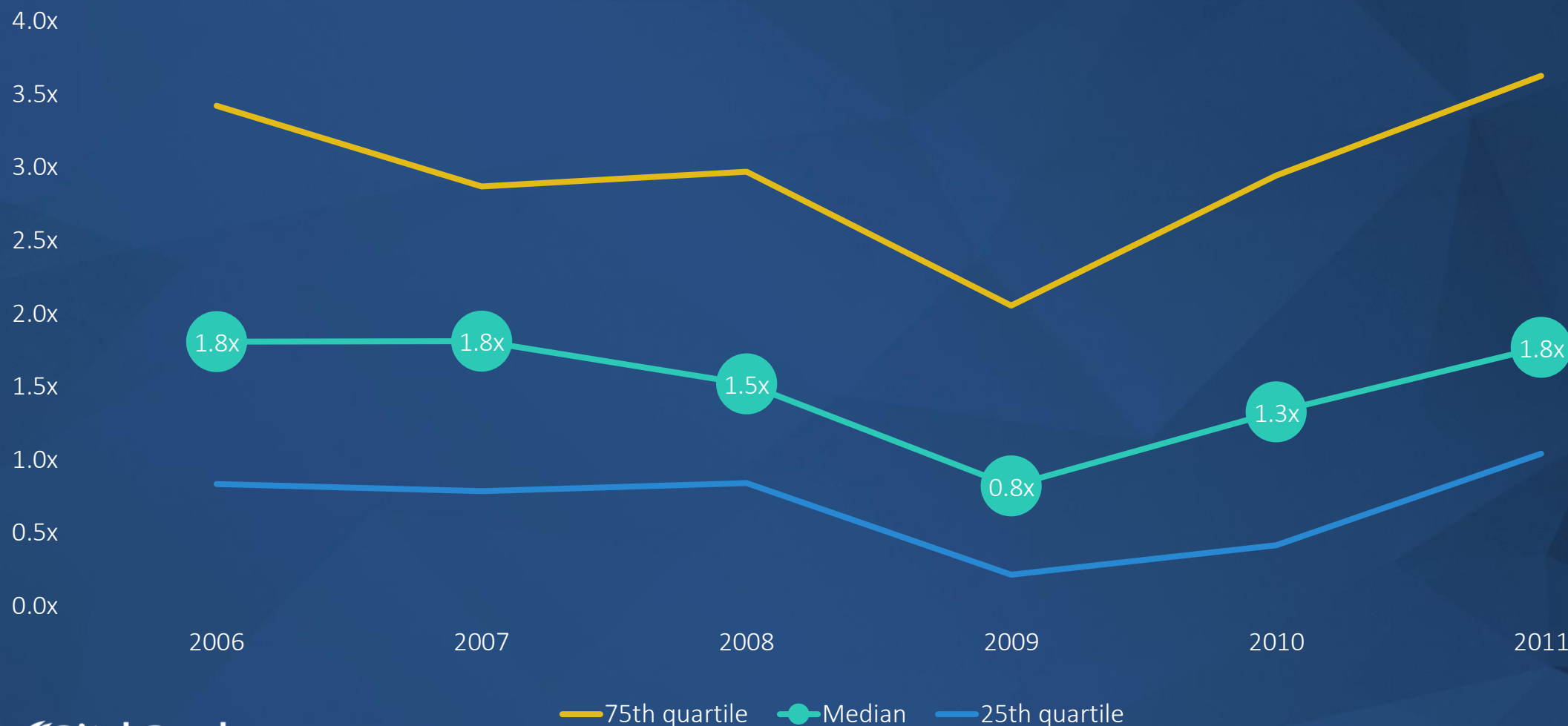
US VC-backed acquisition exits

The more common exit route, M&A, showed a much smaller decline in volume, but a major decrease in value ...



US VC acquisition exit valuation step-up compared to last financing

... as valuations for acquisition targets moved sharply downward, often below the valuation of the last financing round.



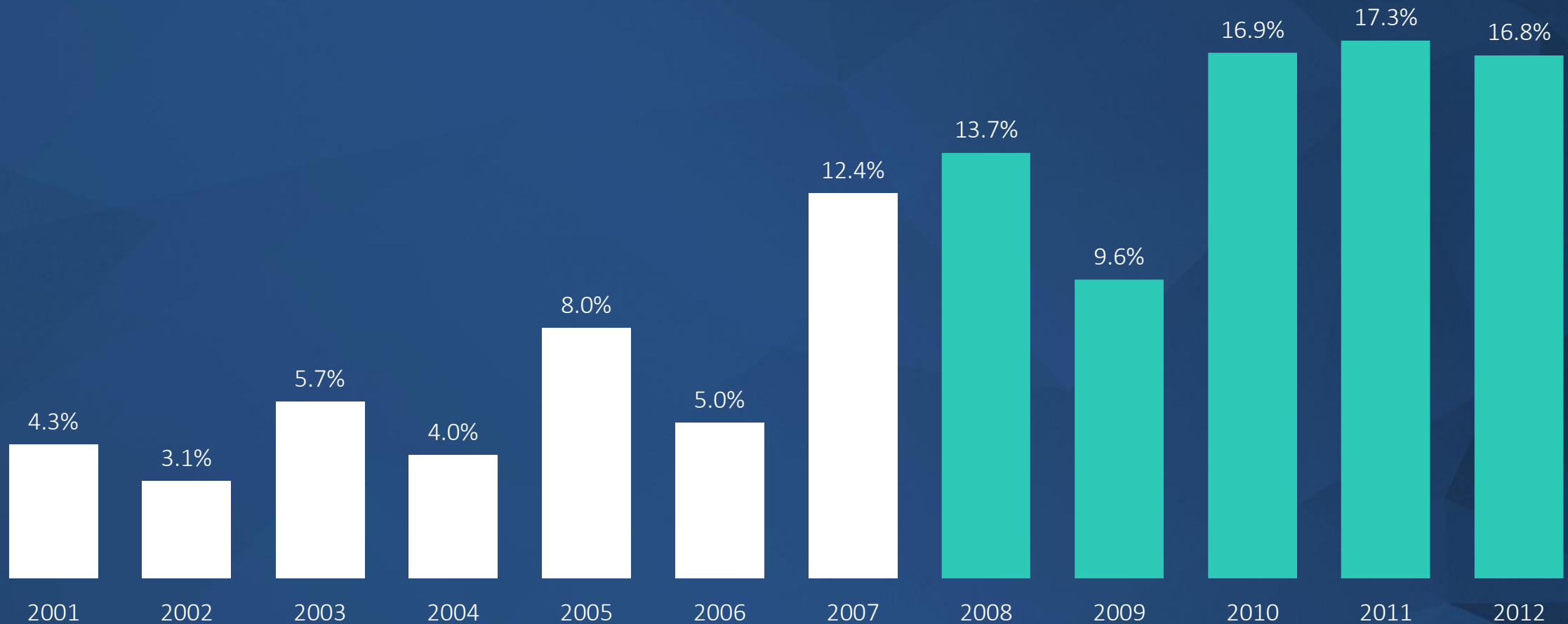
US VC median exit multiple of invested capital (MOIC)

Because of this, exits during the GFC produced significantly smaller returns per dollar invested.



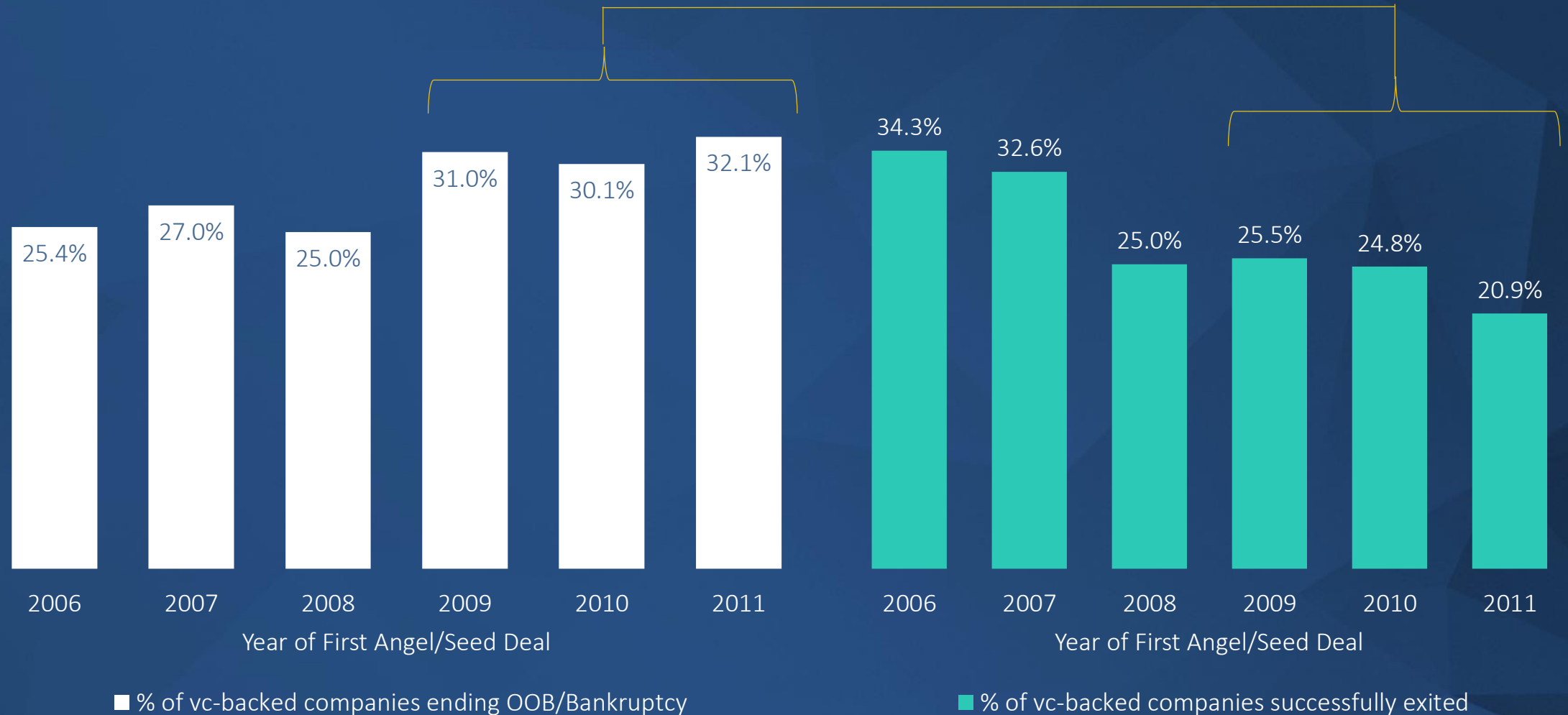
US VC fund pooled IRR by vintage

However, investors who were able to take advantage by investing at lower prices following the GFC have seen outsized returns ...



US VC outcomes

... though many companies struggled to find a path to exit at that time, illustrating the outsized impact of “home run” exits on overall fund performance.



Fundraising

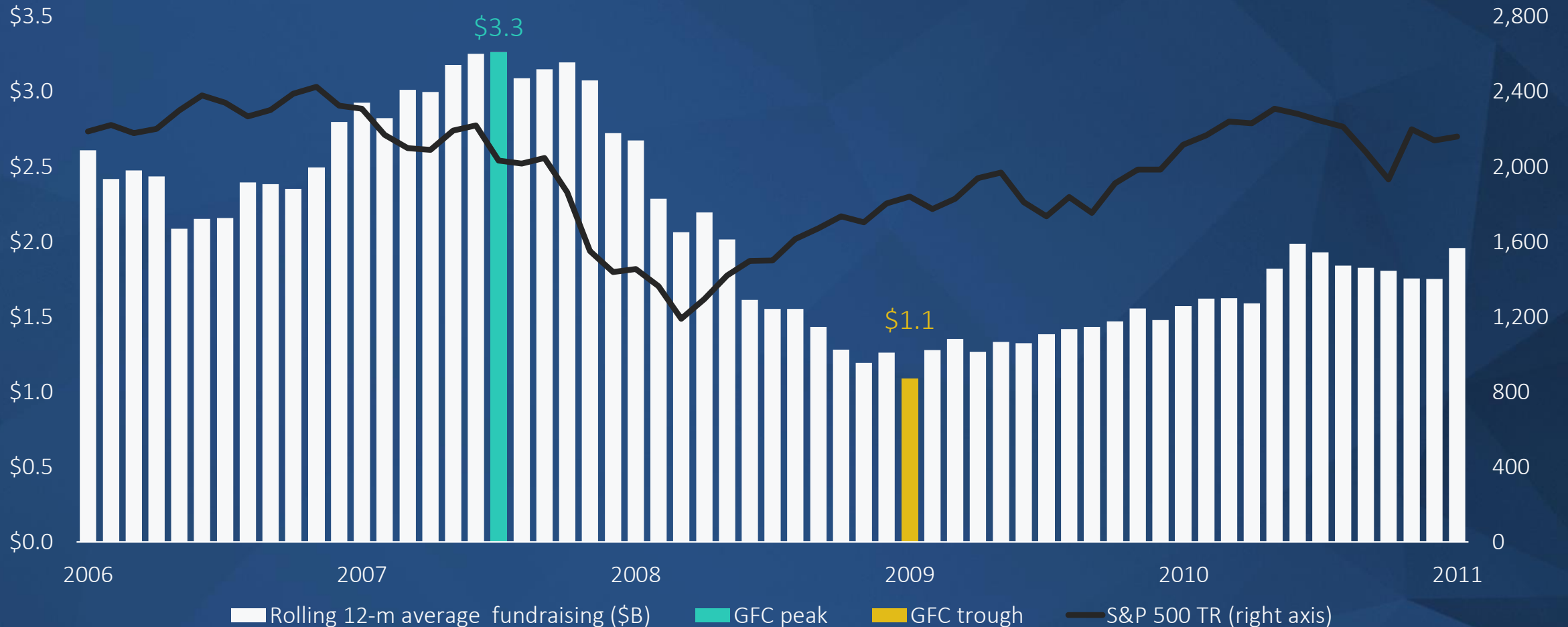
US VC fundraising activity

Fundraising took a substantial hit during the GFC, and though 2020 has proved a relatively rich year for fundraising to date ...



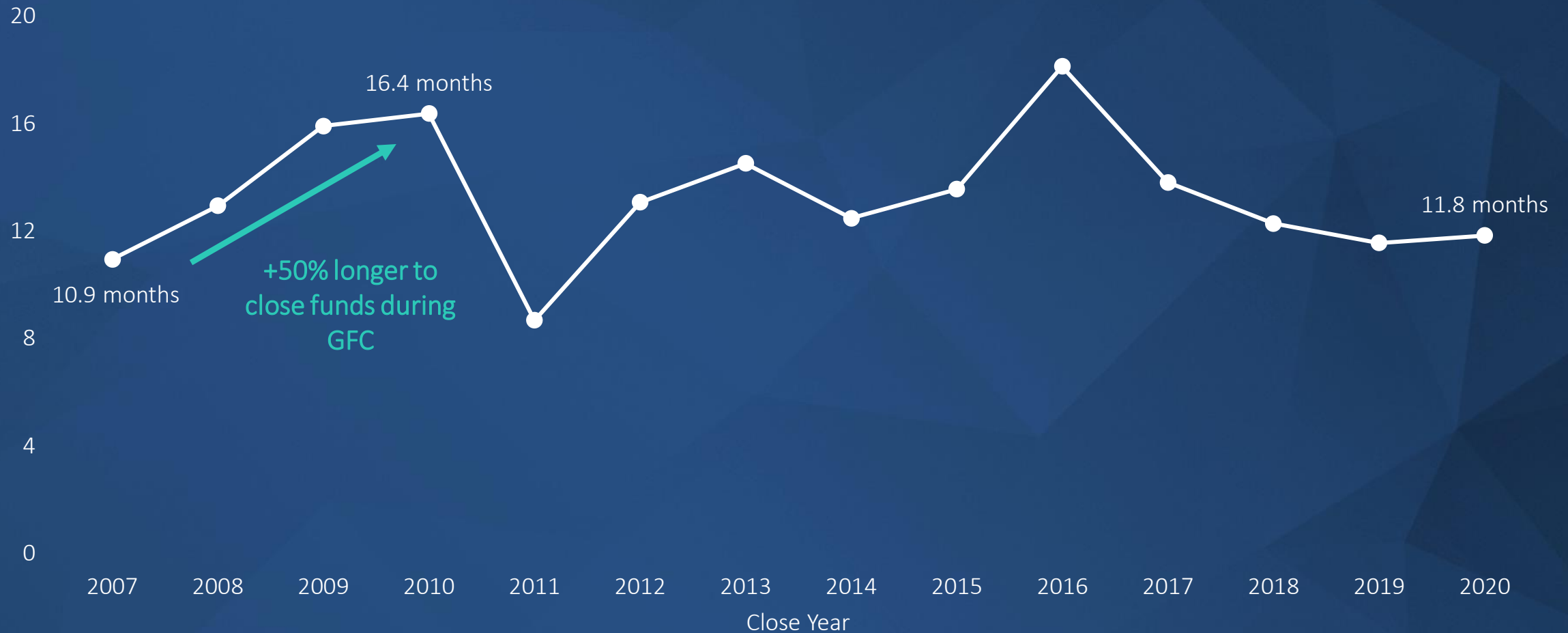
US VC fundraising activity

... we expect the drop in momentum to lag the broader downturn, as evidenced through the GFC.



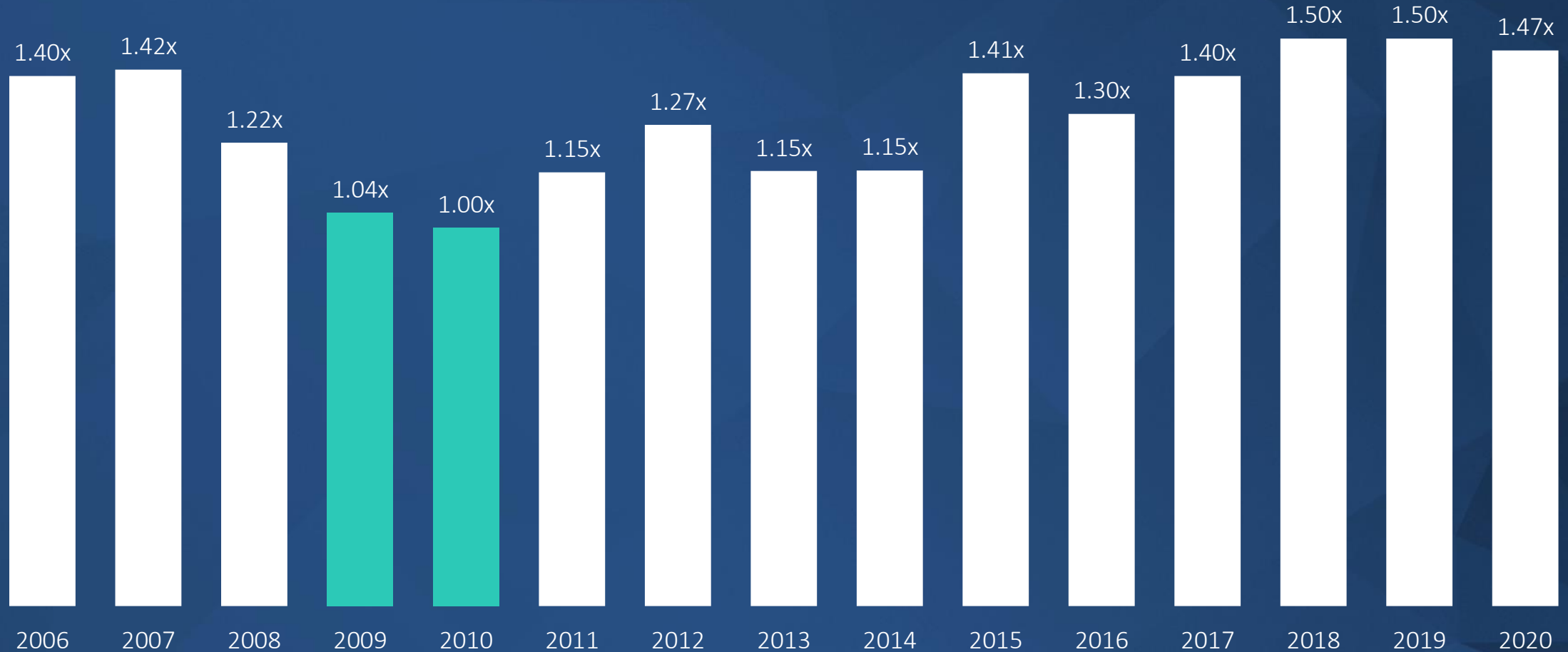
Median months to close US VC funds

Fundraising momentum may slow significantly, as in-person LP meetings become more difficult ...



Median VC fund size step-up

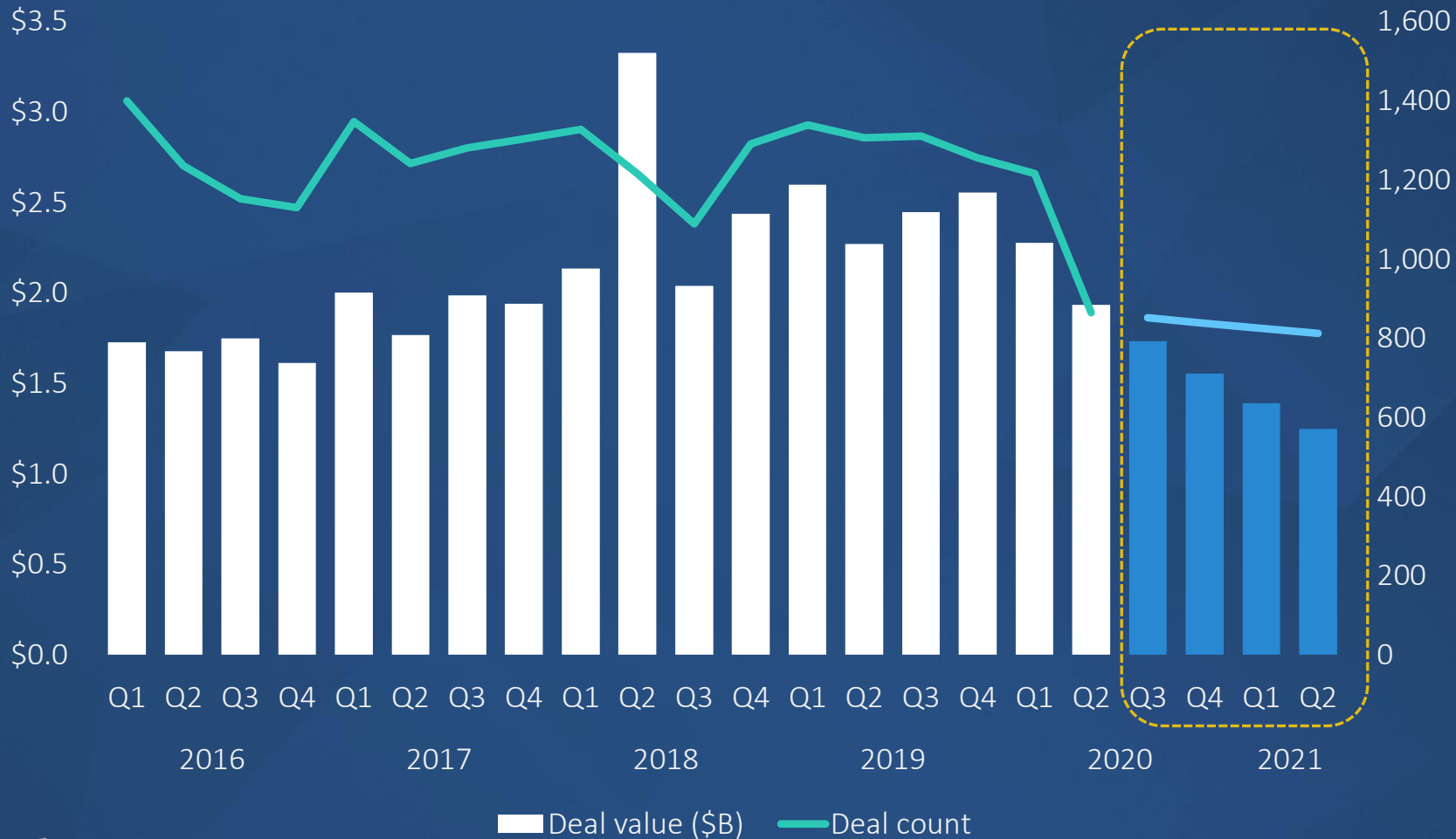
... and firms may struggle to increase fund sizes compared to their prior vehicles.



Appendix

Appendix

Projecting angel & seed deal flow



During the GFC, seed deals were a relatively new phenomenon. The series materialized as the traditional Series A grew in deal size and valuation, thus seed rounds emerged to take their place. Angel investing has also seen a massive upswing in the wake of the GFC, as venture investing has gained cachet and individuals have sought to enter the arena.

As such, we felt it was most appropriate to model angel & seed activity after early-stage activity during the GFC by applying similar drops in volume and value.

Appendix

Projecting angel & seed valuations

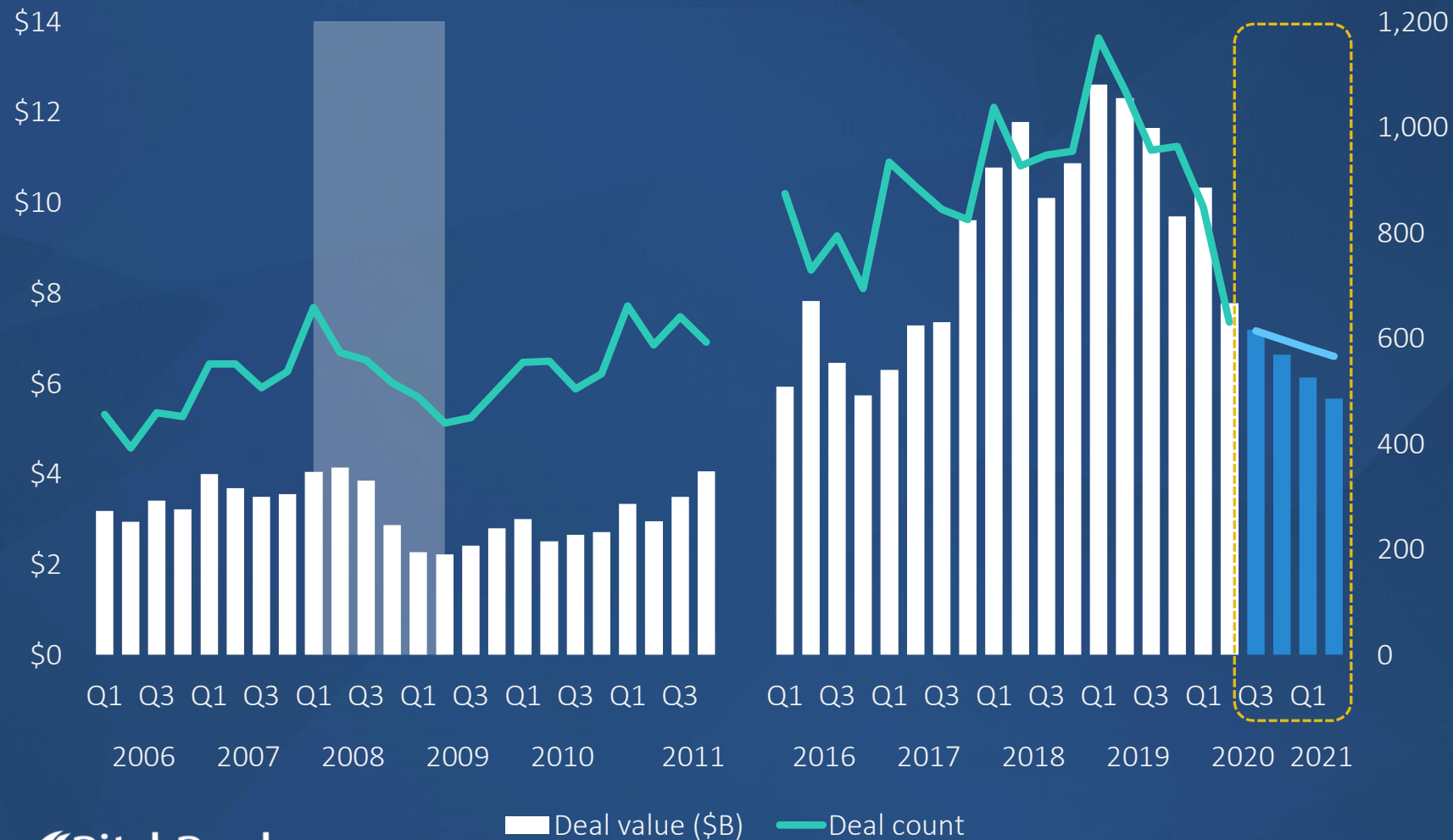


As we expect angel & seed deals to behave like early-stage VC from the GFC, we used the changes in early-stage VC valuations from the GFC to project the changes in angel & seed valuations over the coming quarters.

We believe this approach is reasonable given that we expect supply of capital to dry up at this stage, due to investors being more selective in picking their investments, as well as the relative difficulty of securing an initial meeting with investors. On the other hand, we don't expect median angel & seed valuations to experience a sharper decrease as the capital invested is small enough and the potential returns are higher than early and late-stage VC.

Appendix

Projecting deal count

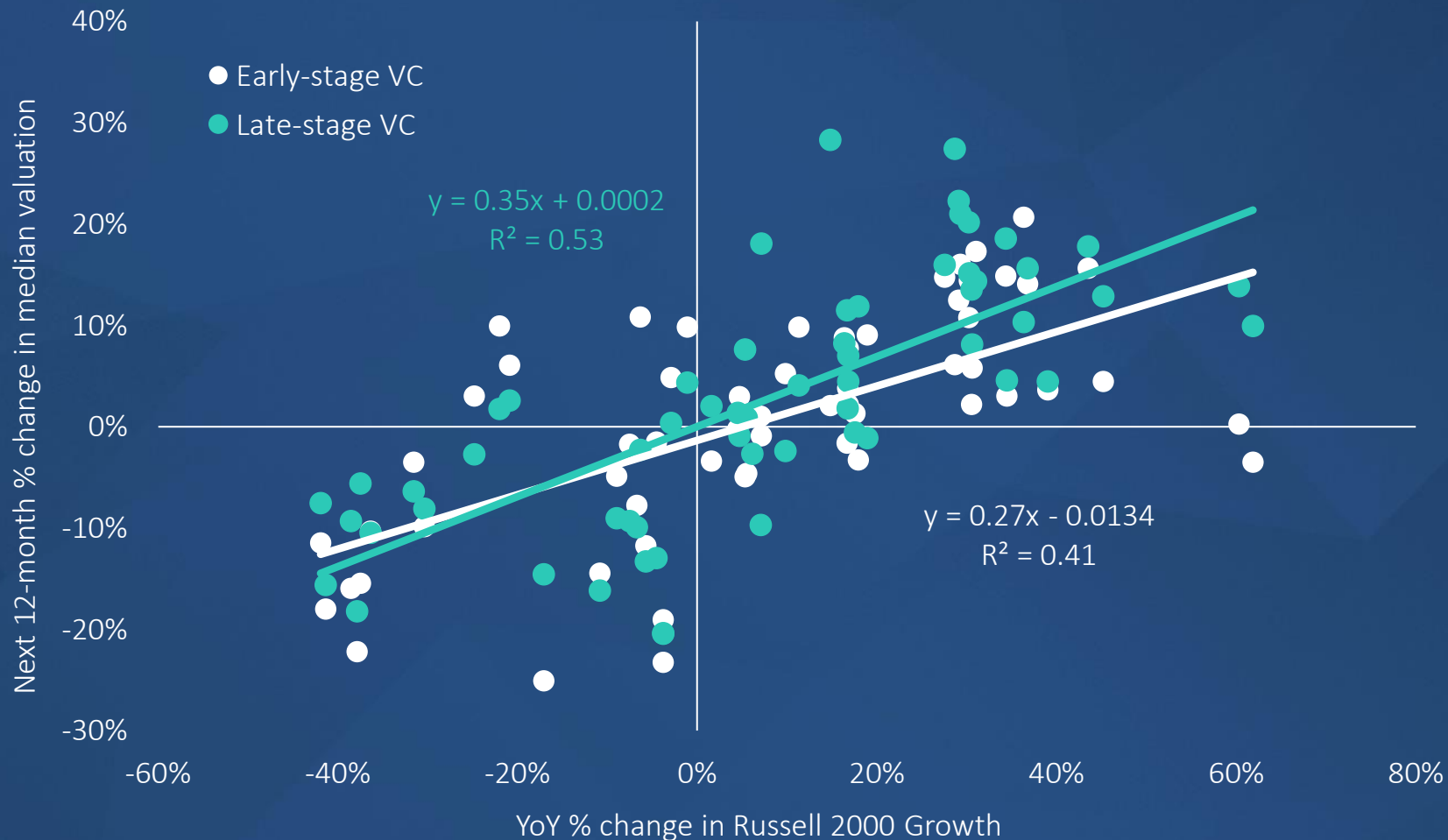


VC investing activity is difficult to predict, given that it is less tied to business fundamentals and more focused on growth potential and novel technologies. There is a strong supply-and-demand relationship with respect to deal activity. We have seen a massive increase in the supply of capital since the GFC, as VC firms have raised record amounts of capital. Nontraditional investors have also entered the arena, cutting massive checks to a small group of ultra-funded companies, while also placing bets in earlier-stage companies, hoping to capture outsized returns.

We expect some pullback from nontraditional investors, as they refocus internally to weather the turmoil. However, the war chest of investible capital in VC funds remains substantial. As such, we chose to model scenarios for both early stage and late stage, that resemble the downturn experienced during the GFC, though we recognize the comparison is far from perfect.

Appendix

Projecting median valuations: YoY % change in Russell 2000 Growth Index versus subsequent change in valuations



We examined the relationship between public market index values and private market valuations during times leading up to and following the GFC. This approach aimed to examine what effect the index performance might have on pricing.

We found a correlation between the YoY % change in the Russell 2000 Growth index compared to the next 12-month change in median pre-money valuations for early-stage and late-stage financings, which show R^2 values of 0.41 and 0.53, respectively.

This indicates that public market performance of small-cap stocks may inform investors as they decide how to price deals, though it is clearly far from the only factor being considered.

Appendix

Projecting IPOs: rolling 12-month change in S&P 500 PR index versus four-quarter rolling average change in IPO count



Public markets have traditionally been a prized exit route for some of the VC industries' highest-valued portfolio companies. Given the volatility that markets may experience during an economic shock, we have seen companies (whether VC-backed or not) turn away from the public markets in a crisis and delay listings until more normal conditions resume.

This historical pattern offers a helpful guide to what might be expected during this current downturn. We find that the trailing 12-month average % change in the S&P 500 is a useful indicator of the four-quarter average % change in completed US IPOs ($R^2=0.62$).

We then combine the median S&P 500 analyst forecast (2020 year-end) with the above model for VC-backed floats to arrive at an estimate of IPO activity VC firms may be looking to undertake going forward.



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