PitchBook

Q3 2020

QUANTITATIVE PERSPECTIVES

Navigating a Private Capital Portfolio in a Storm

Introduction

Private capital markets have continued to grow since the depths of the GFC. For LPs that have ever-rising allocations to closed-end funds, that means more cash to manage in the backdrop of a global health crisis that has caused historic damage to the economy. Now, months into the crisis, waters are still murky. In this report, we dive into our benchmarks and private fund cash flow data to provide allocators with insights into how one should think about cash flow needs and potential capital at risk during a crisis. Looking specifically at PE, VC, real estate, and private debt, this report provides a framework that highlights the lessons of the last recession to provide context around the present one.

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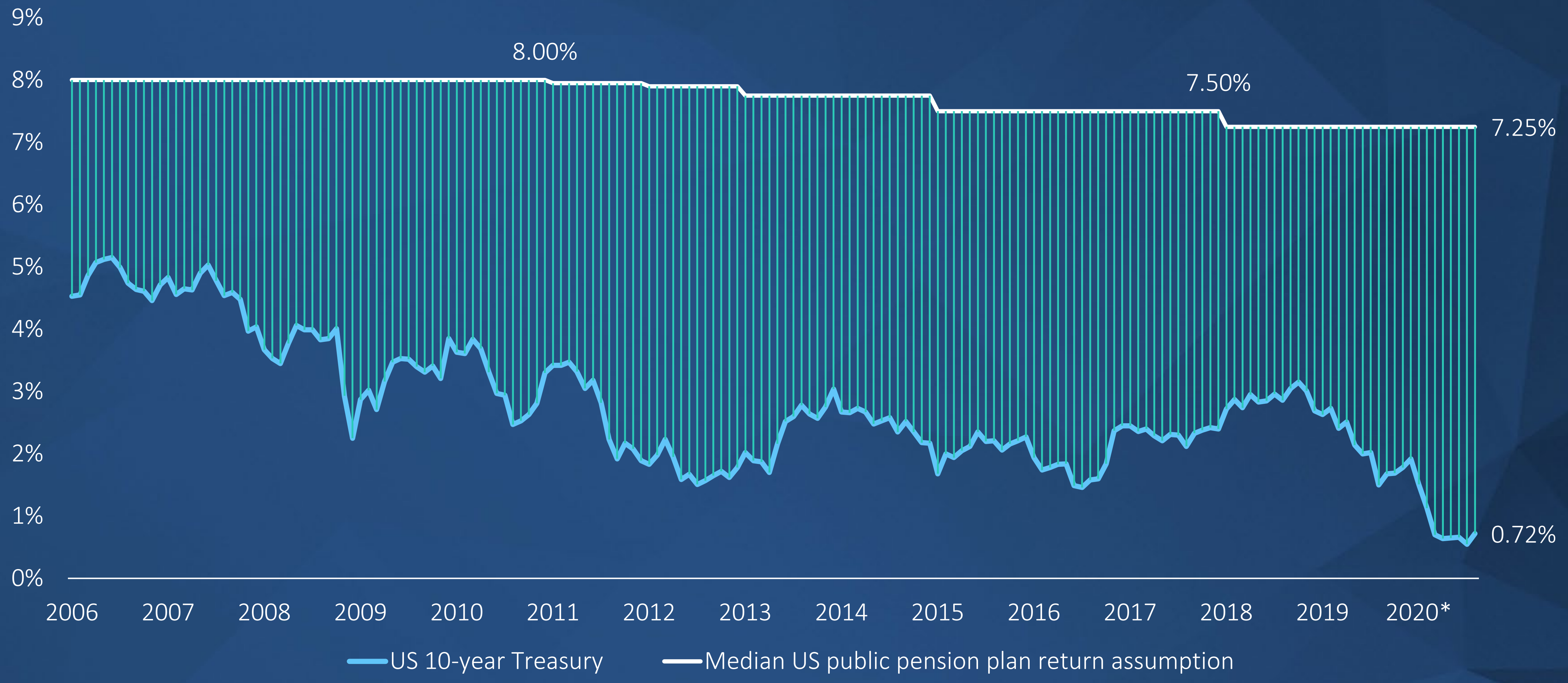
Key takeaways

- Private capital AUM was at all-time highs going into the COVID-19 crisis, magnifying the need for allocators to better manage cash flow requirements for their commitments.
- LPs managing their commitments will likely see capital calls outstripping distributions from funds as the crisis continues.
- With quarterly cash flows tilting negative, LPs must also worry about active portfolio holdings losing unrealized value; LPs overallocated to VC are especially exposed.
- Rising permanent layoffs and a surge in bankruptcies suggest the real economy is still struggling, which may portend a sluggish recovery for private markets, particularly for those assets acquired prior to the crisis at peak prices.
- Evidence from pre-GFC vintage funds suggests that the GPs who will struggle most are those who entered the crisis with much of their capital called down and with little in realized distributions.
- Preliminary cash flow data for 2020 suggests that private fund valuations have fallen materially for many vintages, though strategy differences are apparent.

Managing cash flows

The hunt for yield is increasingly challenging as interest rates continue a secular decline, while pension funds have only recently started to adjust return expectations.



*As of August 31, 2020

Source: National Association of State Retirement Administrators, Federal Reserve System | Geography: US

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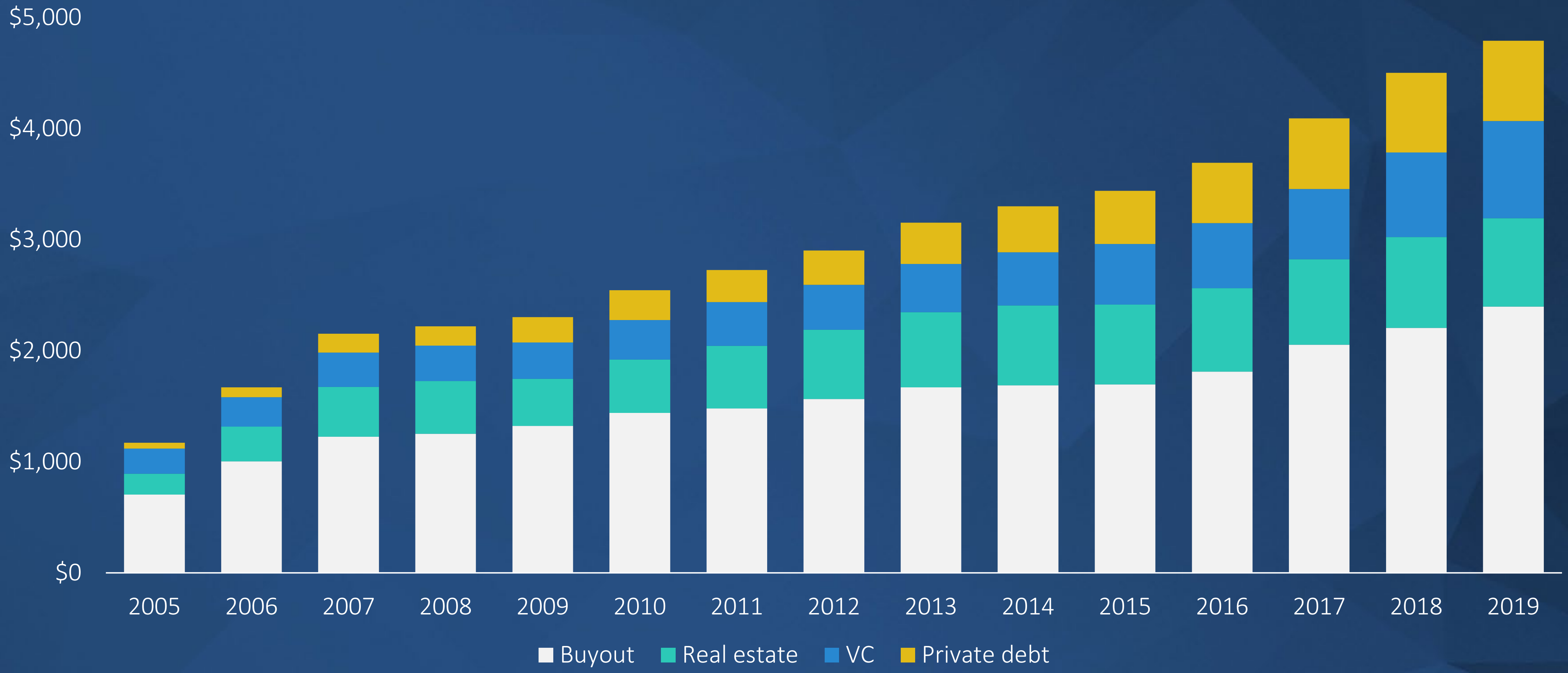
Private capital AUM ($B) by strategy

To keep up with targeted returns, LPs have boosted allocations to risk assets, leading to year-over-year records in total AUM sitting in private capital funds.



Source: PitchBook | Geography: Global

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Global PE buyout deal value and capital calls

Growth in private market allocations has led to record-level buyout activity; LPs must manage the capital call needs of their private fund investments.

*As of June 30, 2020;
2020 capital calls are estimated using average ratio with deal value
Source: PitchBook | Geography: Global

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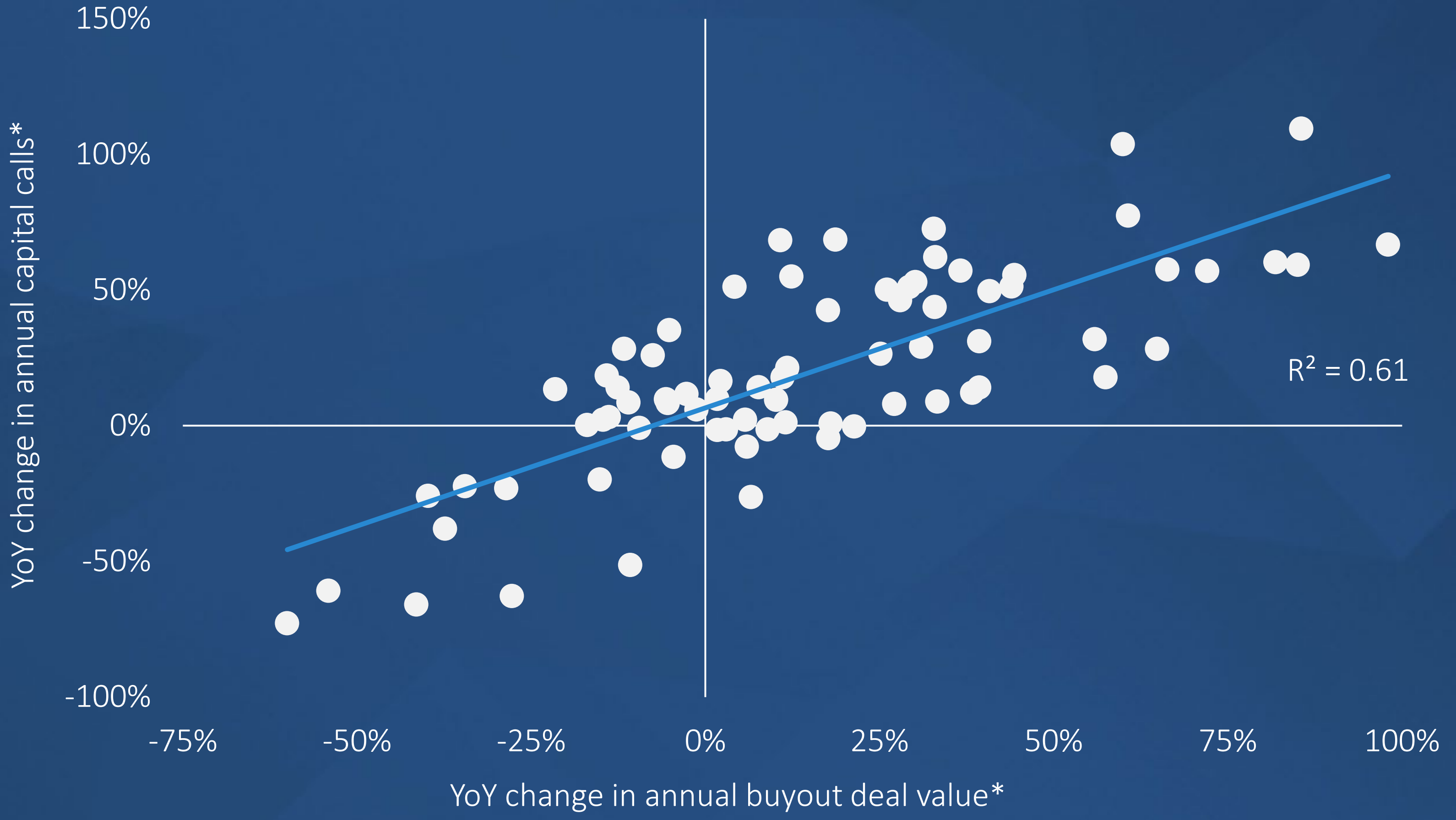
Global PE buyout deal value and capital calls

The strong relationship between transaction activity and capital calls offers a guide to LPs managing cash flow expectations.



Based on this relationship, hypothetically if deal value falls by 50% over the next year (similar to 2007-2008), our data suggests that overall buyout fund contributions will fall by 40%. The relationship is not 1-for-1 for several reasons—notably GPs will use cash to prop up existing assets in distress and find investment opportunities in distressed targets.

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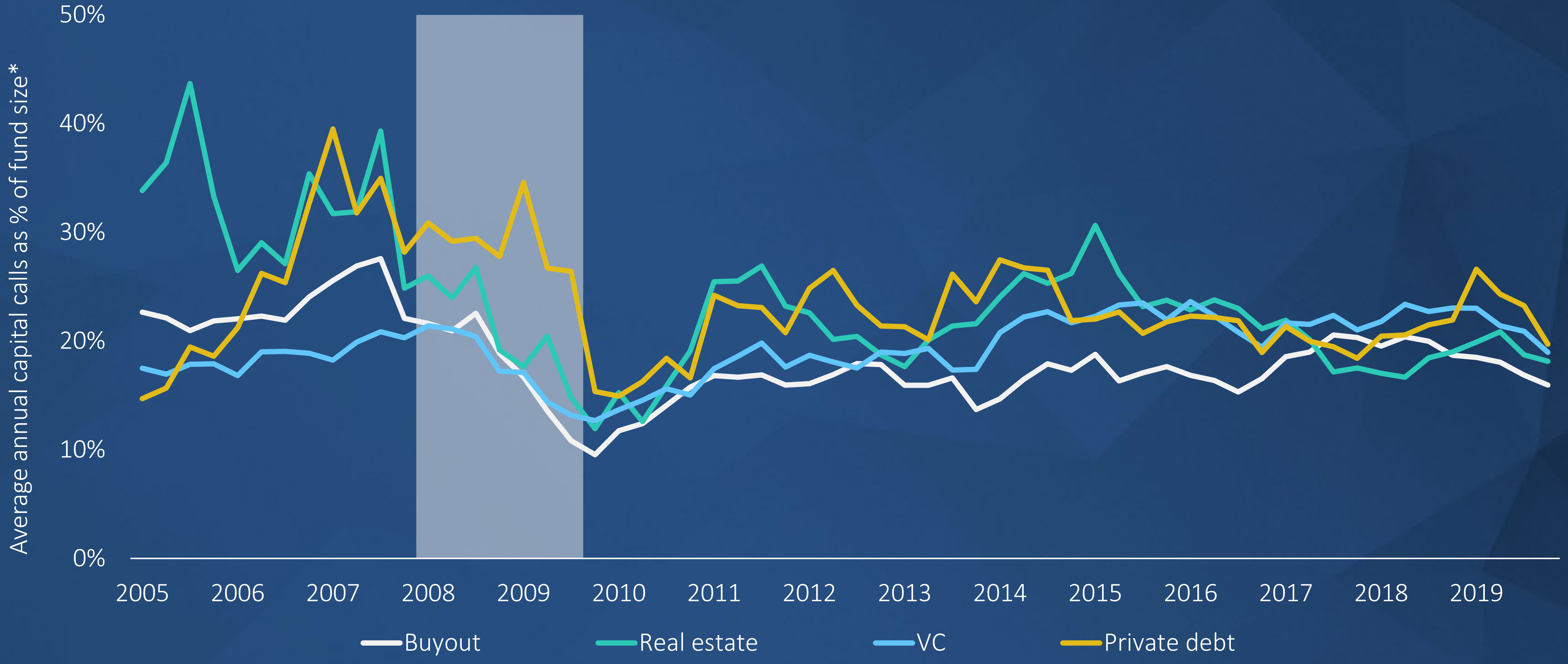
*From Q1 2001 to Q4 2019
Source: PitchBook | Geography: Global

Capital call rates

Capital call rates were steady during the 2010s relative to the pre-GFC exuberance; a smaller drop in call rates is expected as GPs are comparatively better capitalized now.



*Fund ages 0-4 years
Source: PitchBook | Geography: Global

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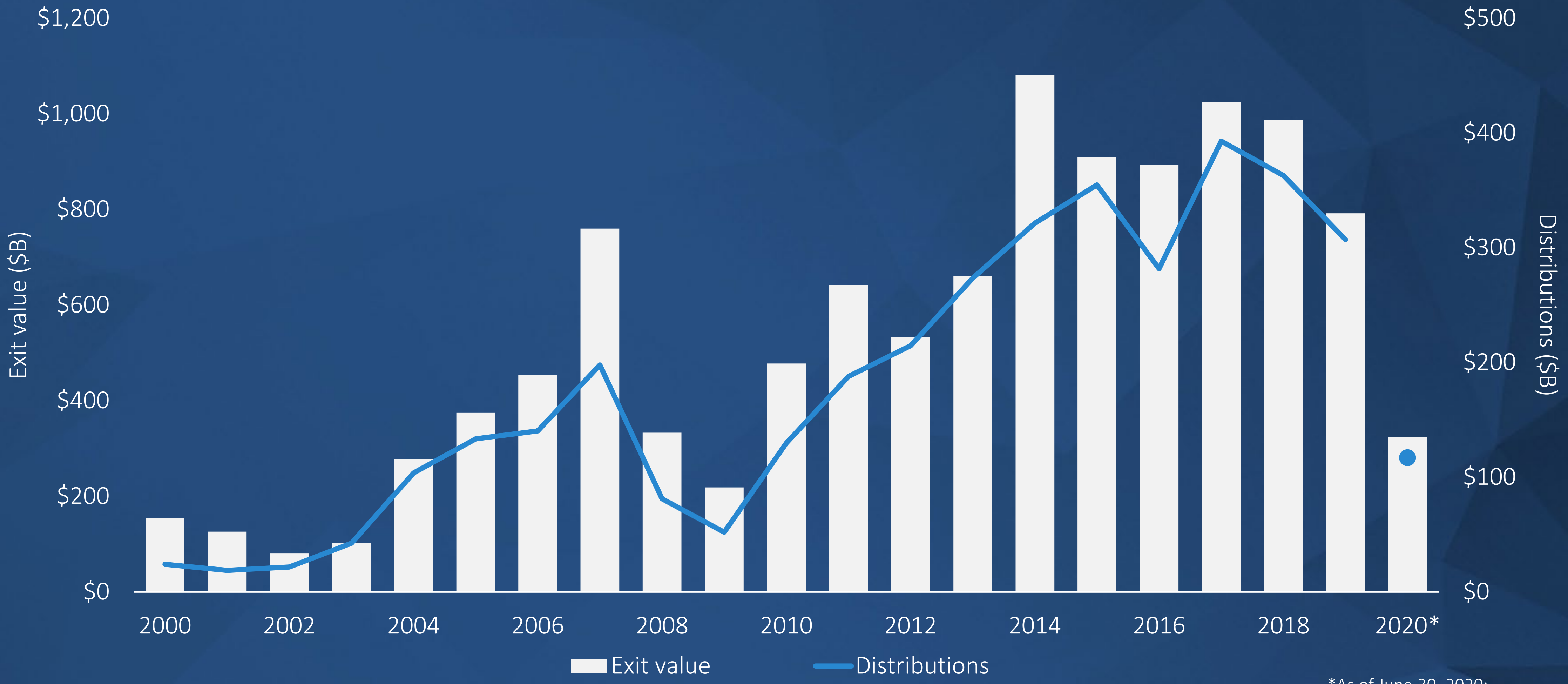
Global PE exit value and distributions

On the distribution side, the strong exit market since the GFC has fueled realized returns to LPs from their closed-end funds.



*As of June 30, 2020;
2020 capital calls are estimated using average ratio with deal value
Source: PitchBook | Geography: Global

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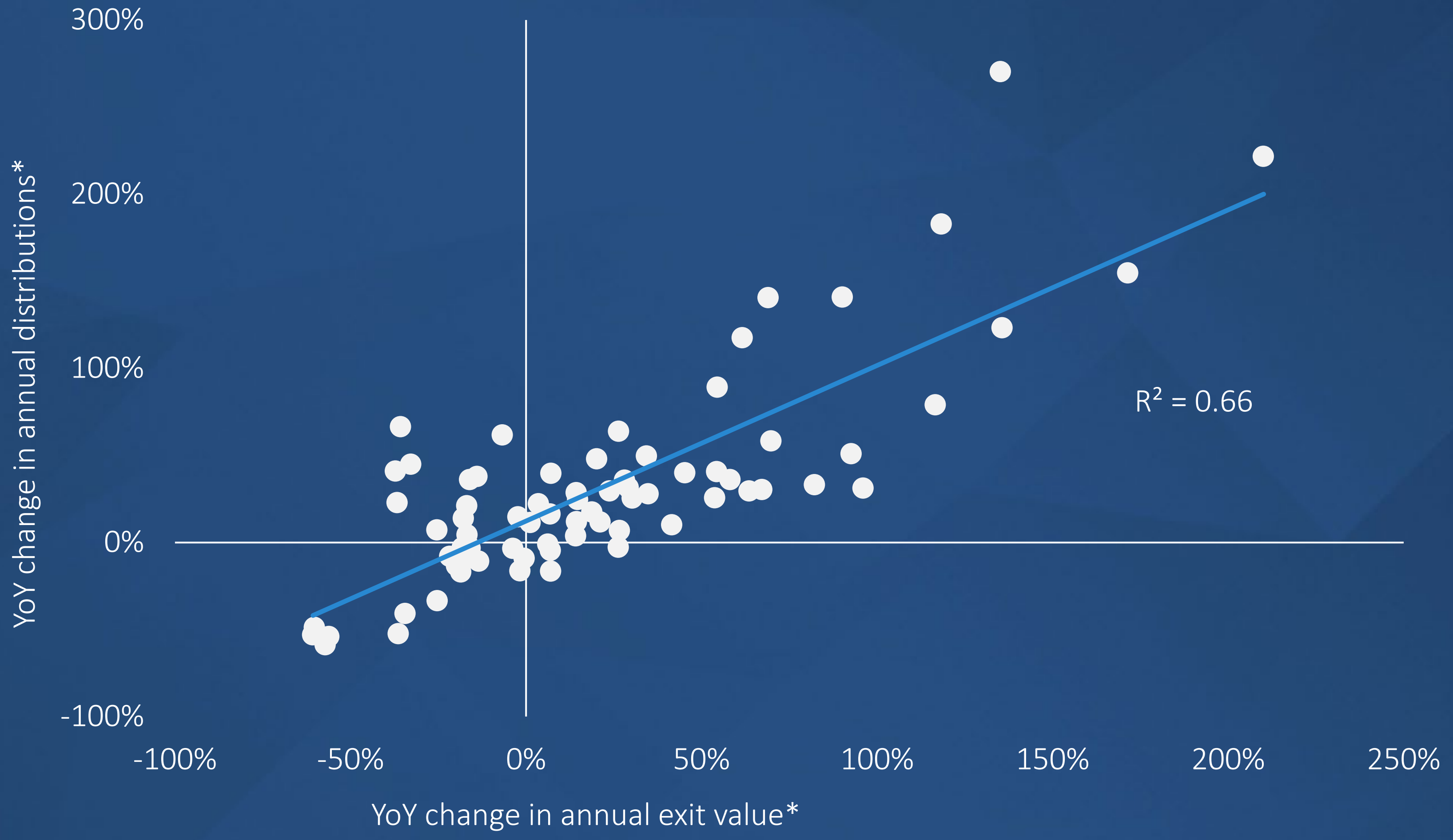
Global PE exit value and distributions

The relationship between exit activity and buyout fund distributions provides a framework to model expectations.



Annual distributions during the GFC fell by more than 50% as exit activity plummeted. We expect the exit market to remain subdued as participants play a wait-and-see approach to marking valuations. However, the IPO market has been one bright spot for exits so far in 2020.

*From Q1 2004 to Q4 2019

Source: PitchBook | Geography: Global

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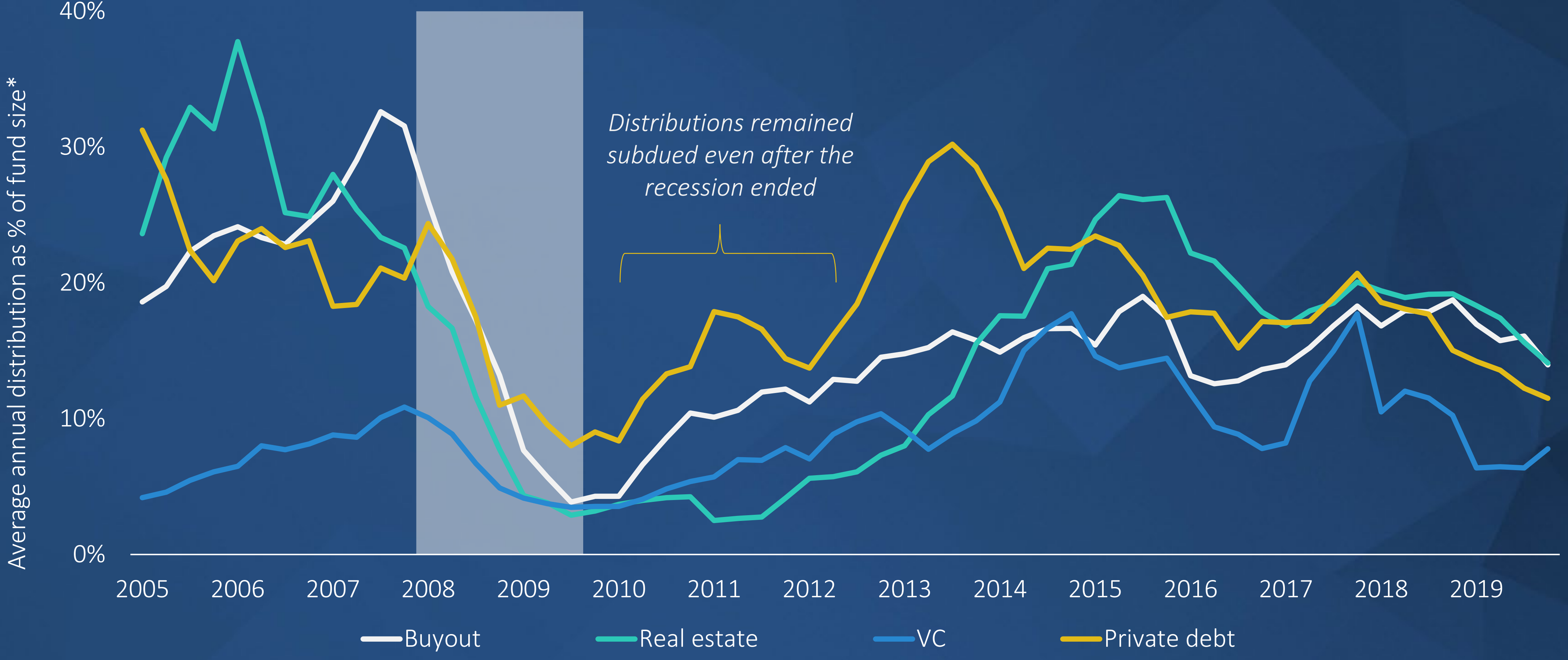
Distribution rates were already falling in 2019; the shock to exit markets will continue that trend into 2020, but—relative to the GFC—average distributions have less to fall.



*Fund ages 4-8 years
Source: PitchBook | Geography: Global

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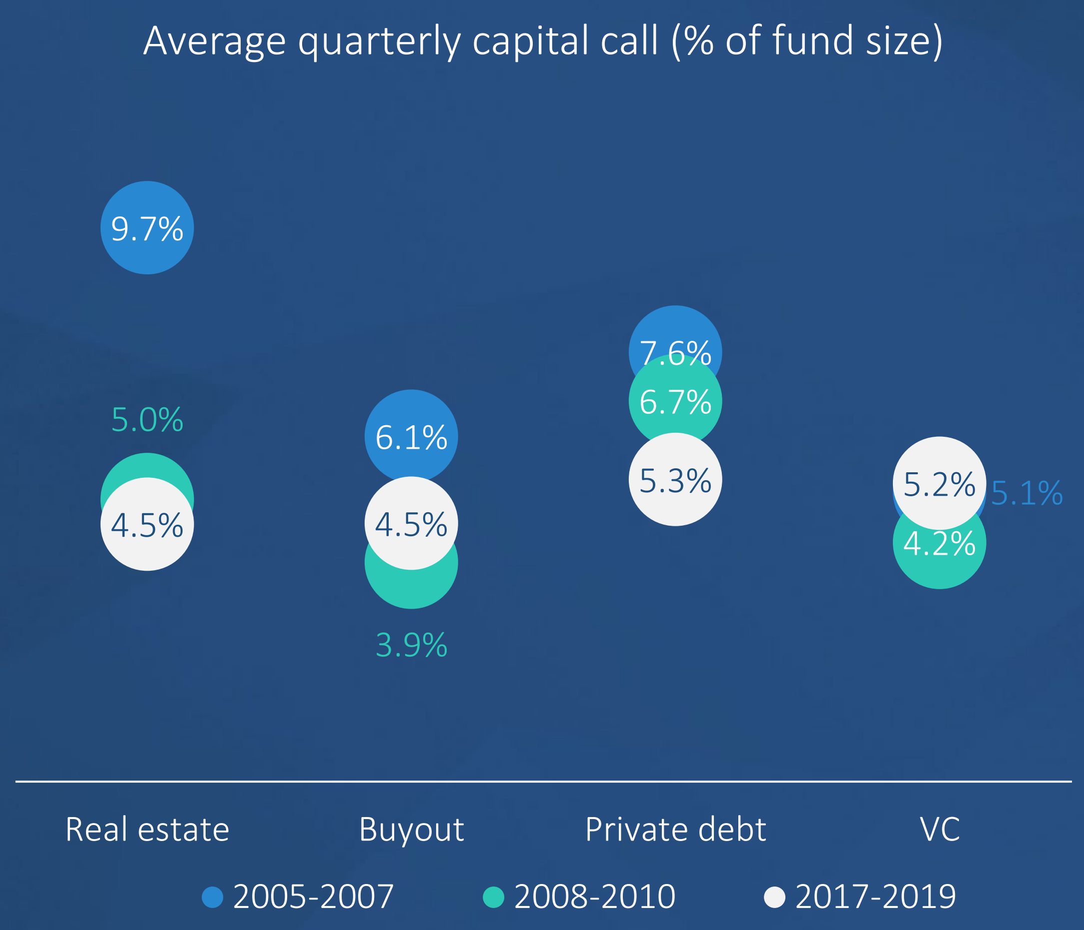
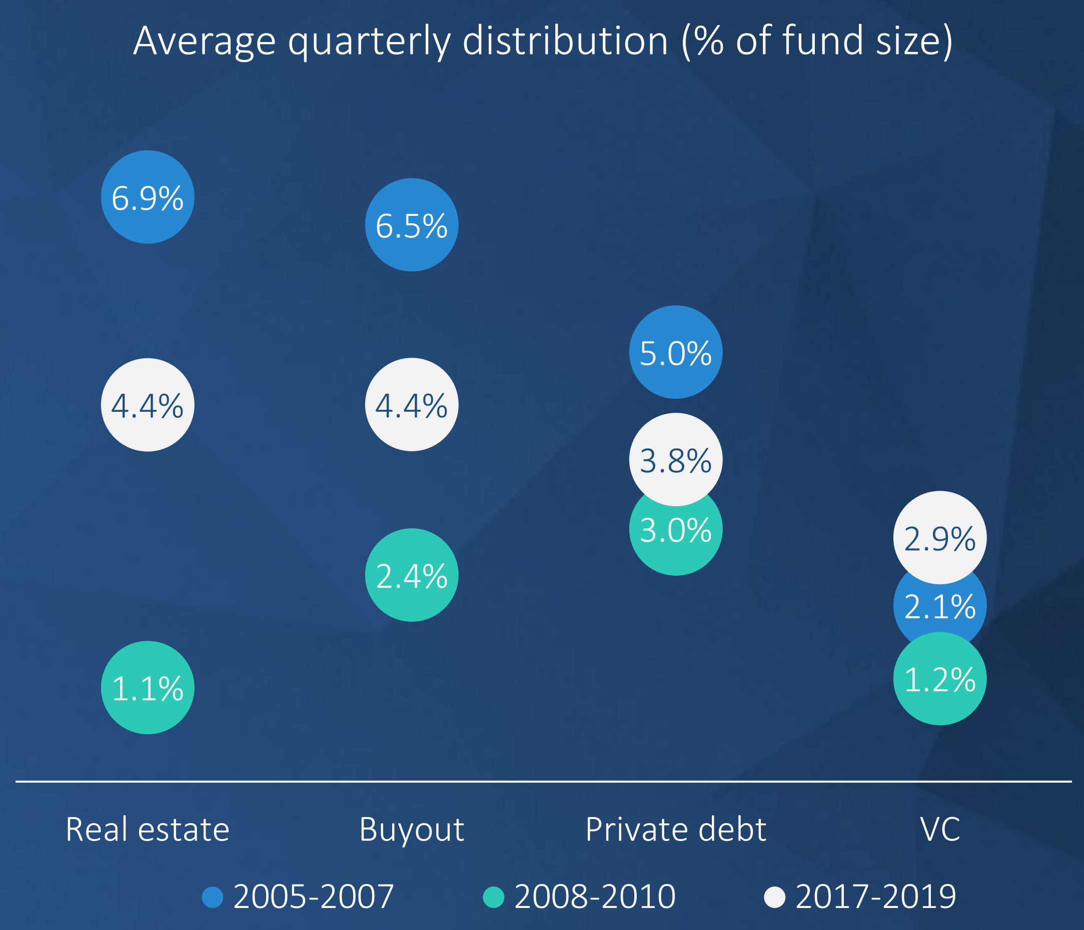
Average quarterly cash flows

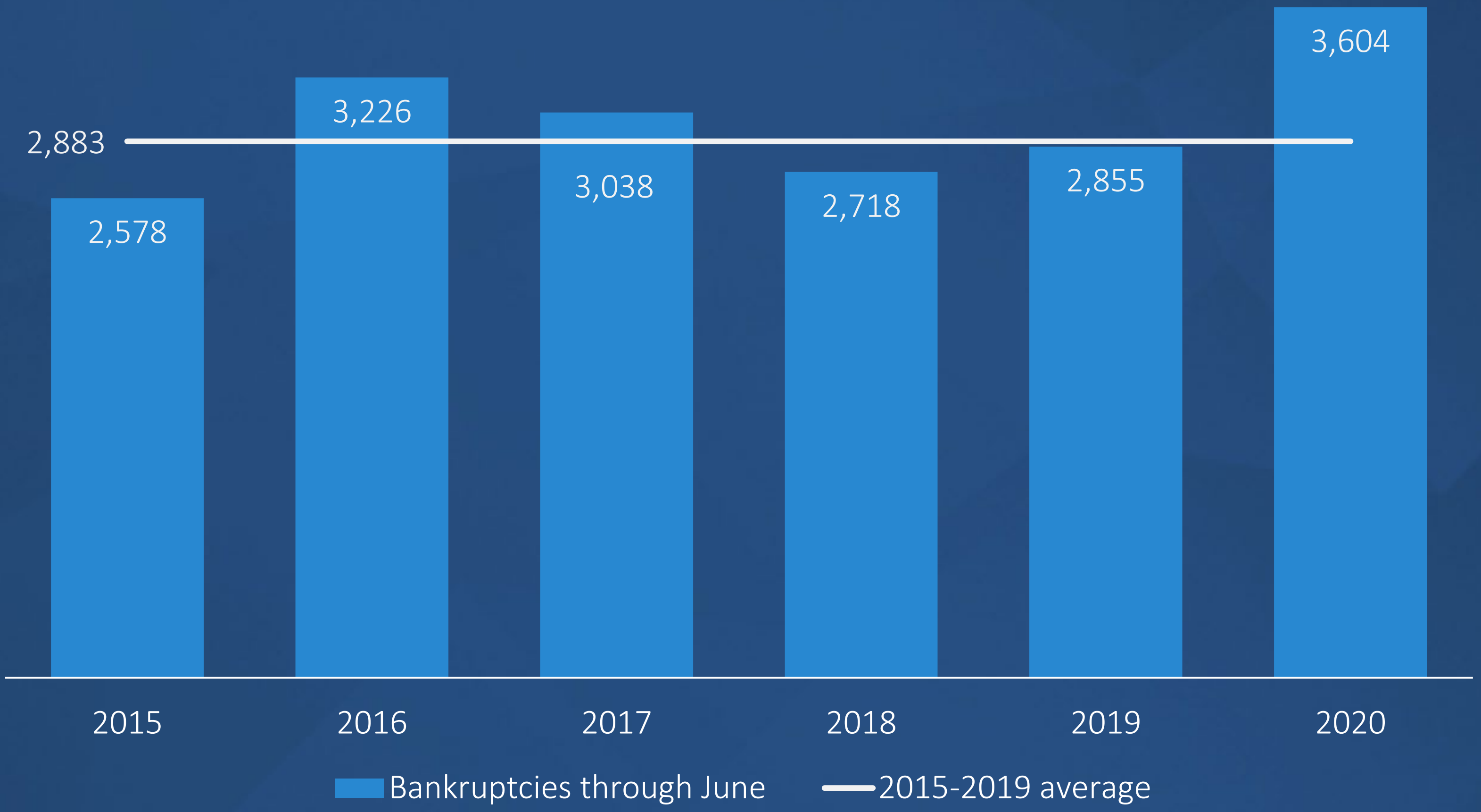
Average quarterly distributions tend to drop more than capital calls during crises …





Source: PitchBook | Geography: Global
Note: distributions consider fund ages 4-8 years, capital calls 0-4 years

… as financial distress hinders distributions and foretells capital calls by GPs looking to invest opportunistically and support troubled assets. A spike in bankruptcies has begun …



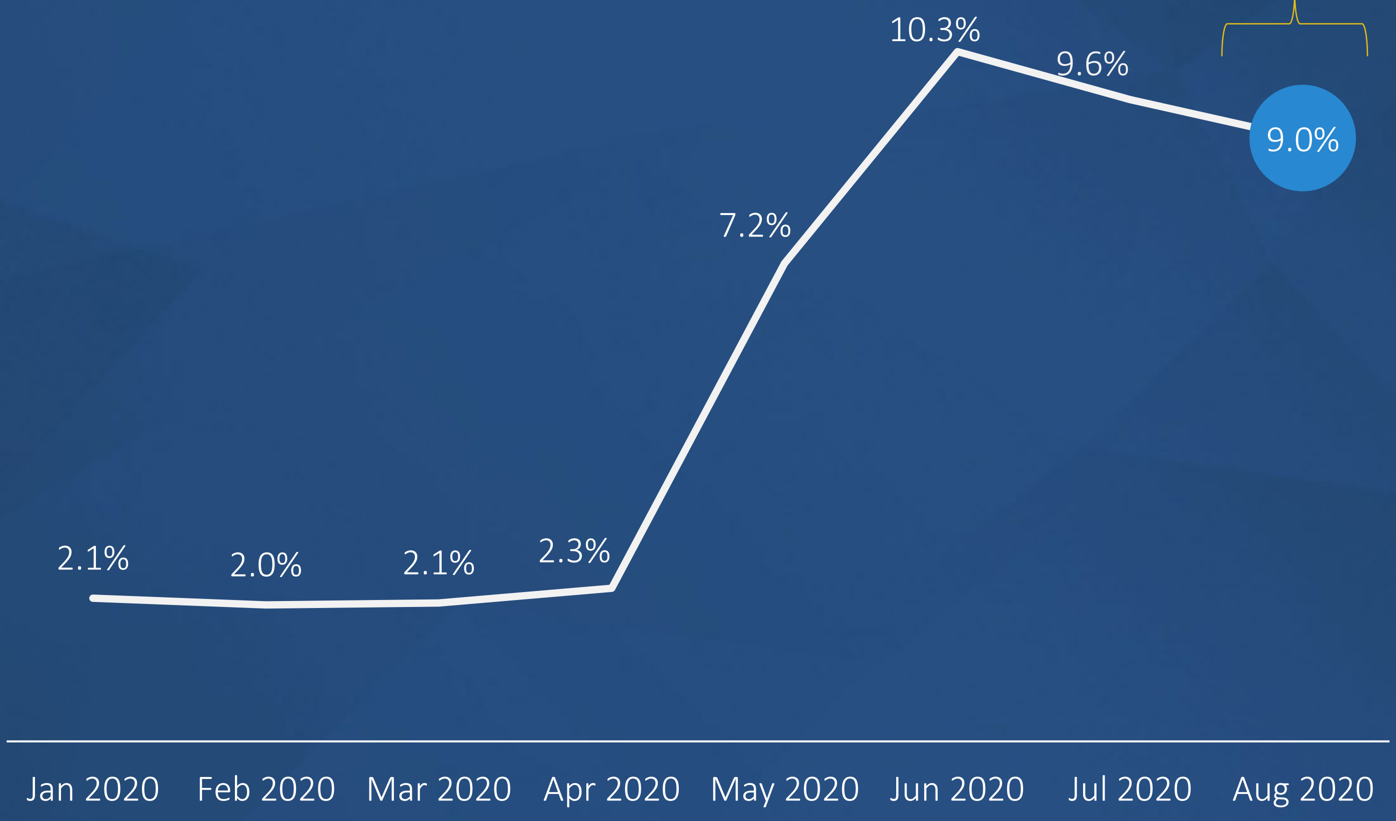
Chapter 11 bankruptcy filings this year are 25% above the previous 5-year average.*

Source: Epiq AACER Bankruptcy Statistics and Trends | Geography: US

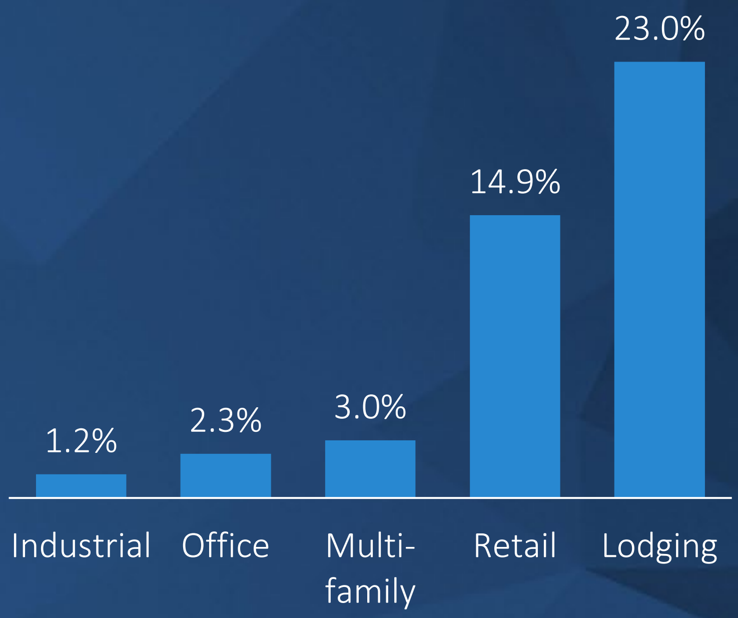
CMBS delinquencies

… and commercial property markets show signs of stress, evidenced by the jump in the percentage of commercial mortgages in delinquency, driven by retail and lodging.

Proportion of CMBS 30+ days delinquent*

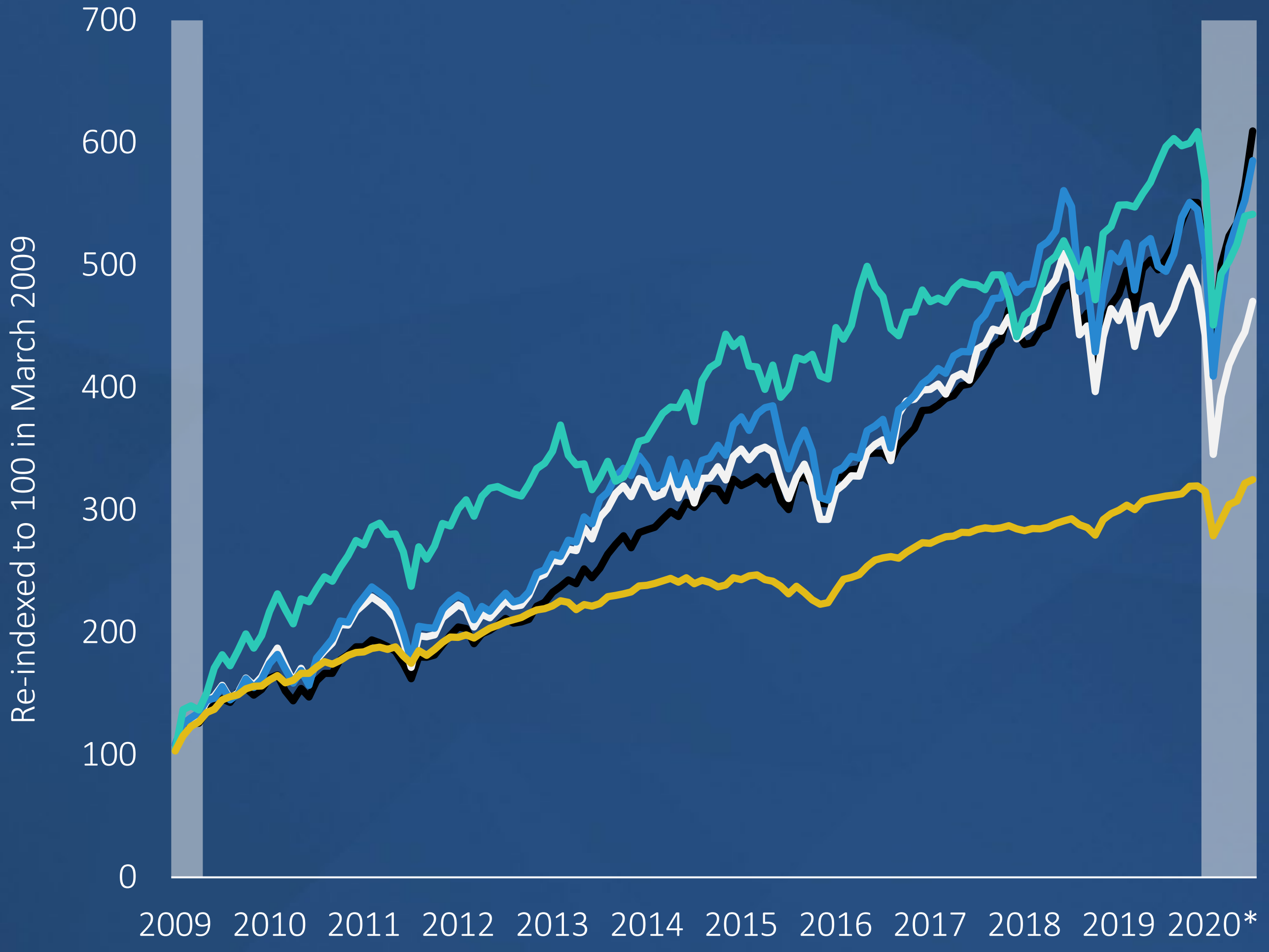


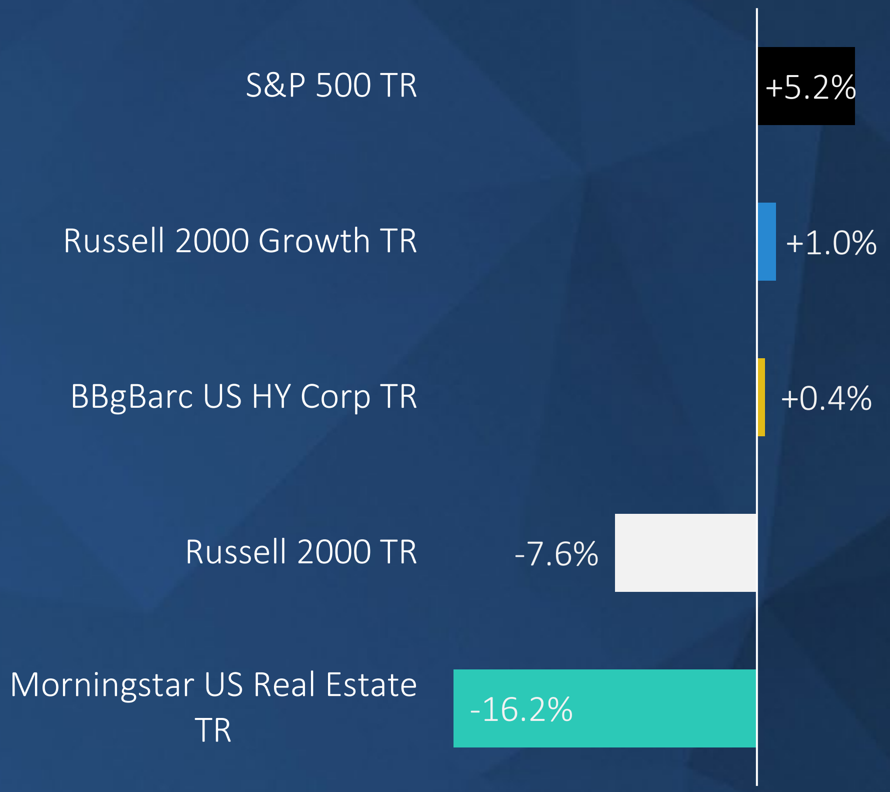
August 2020 by property type



Source: Trepp CMBS Delinquency Rates | Geography: US

However, public market prices have bounced quickly from their troughs. A V-shaped recovery seems to be expected …





Index change from pre-lockdown peak to August 31

*As of Augst 31, 2020
Source: PitchBook | Geography: Global

Gross PE fund returns

… and financial disclosures from public GPs offer a glimpse at PE performance that suggests the recovery is already underway, at least on paper.

Source: Public financial disclosures | Geography: Global

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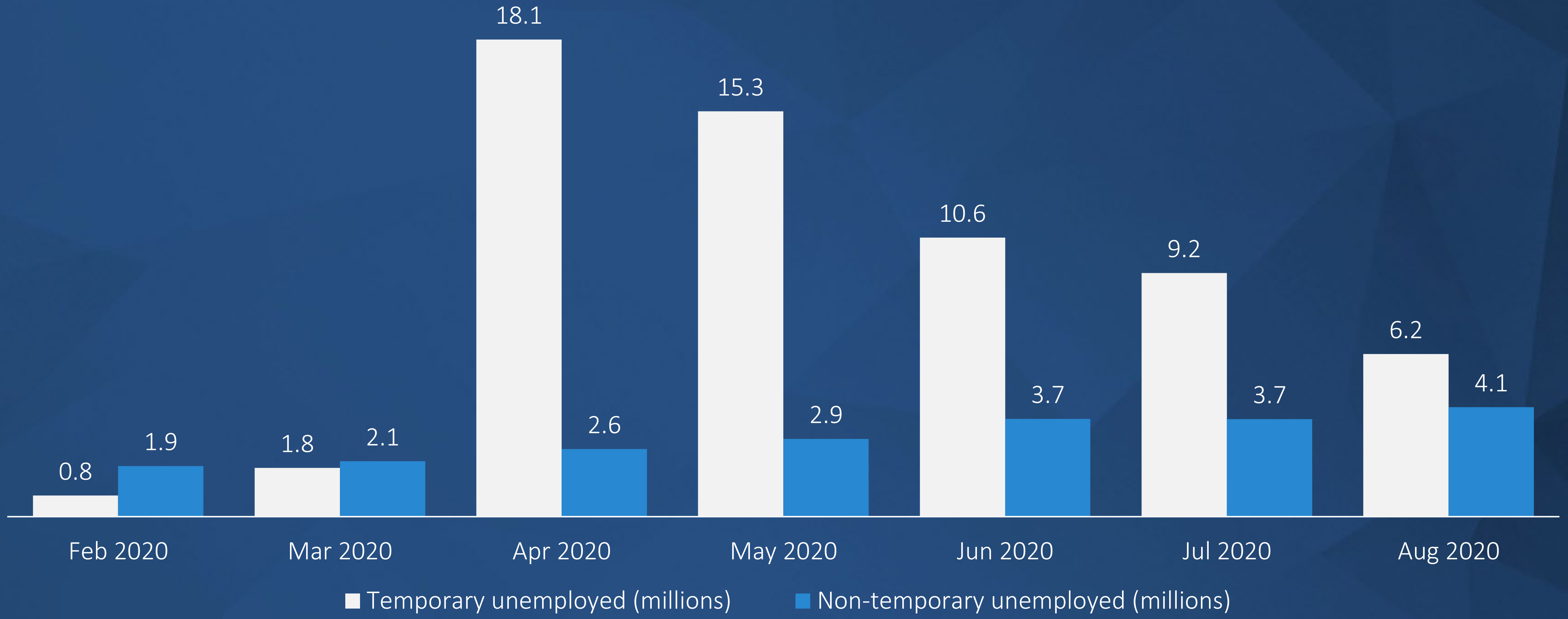
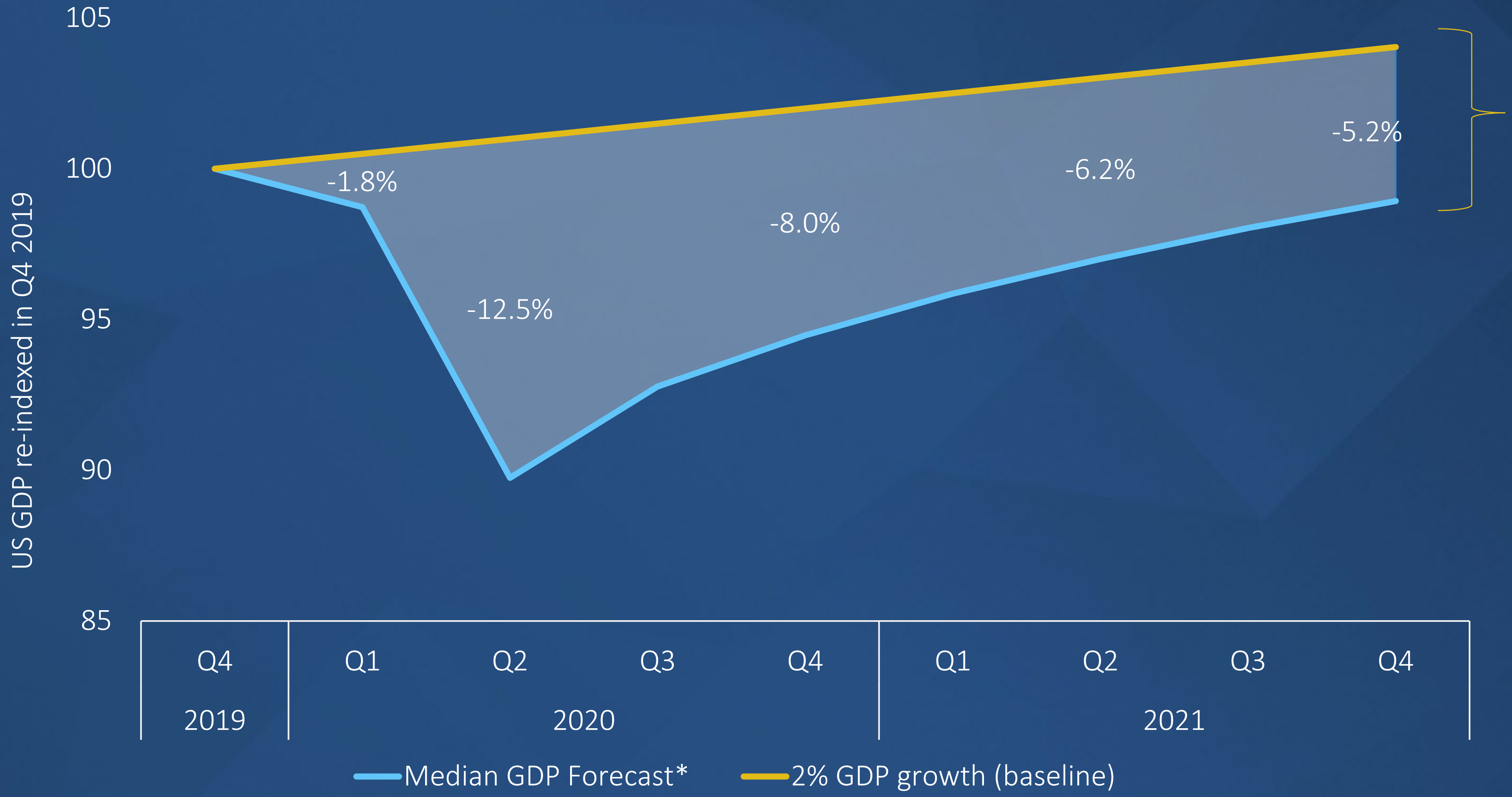
Additionally, recent job gains have been impressive, but underneath the promising headlines, the data reveals a troubling trend of increasing permanent unemployment …



Source: US Bureau of Labor Statistics (seasonally adjusted) | Geography: US

… and GDP forecasts suggest a sluggish return to normalcy, meaning deals underwritten prior to the pandemic risk underperforming expectations.



The output gap measures the difference between what US GDP would be under normal circumstances versus revised estimates due to COVID-19.

Source: Wall Street Journal Economic Forecasting Survey | Geography: US
Note: Q1 and Q2 2020 figures are actual

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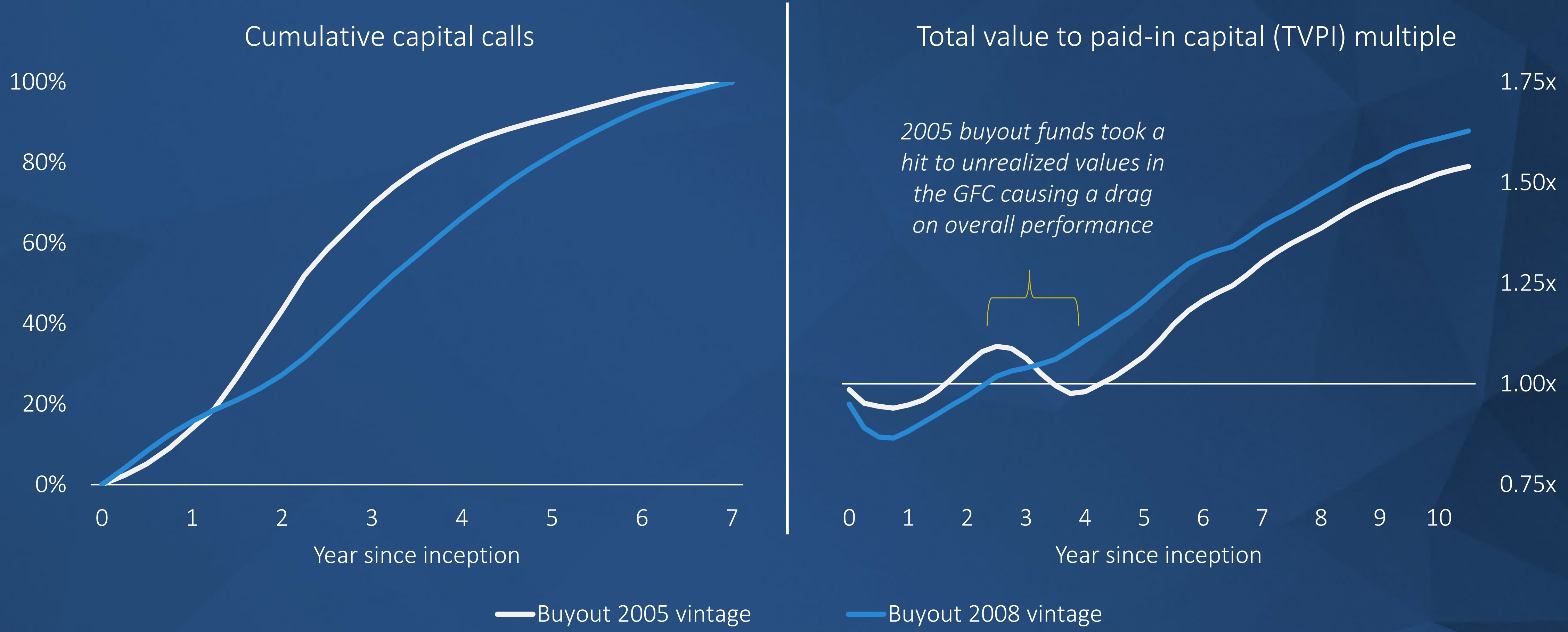
Capital at risk

The cyclicality of fund performance is important to consider; PitchBook's cash flow modeling toolkit allows us to analyze the effect of inopportune capital call pacing.



Source: PitchBook | Geography: Global

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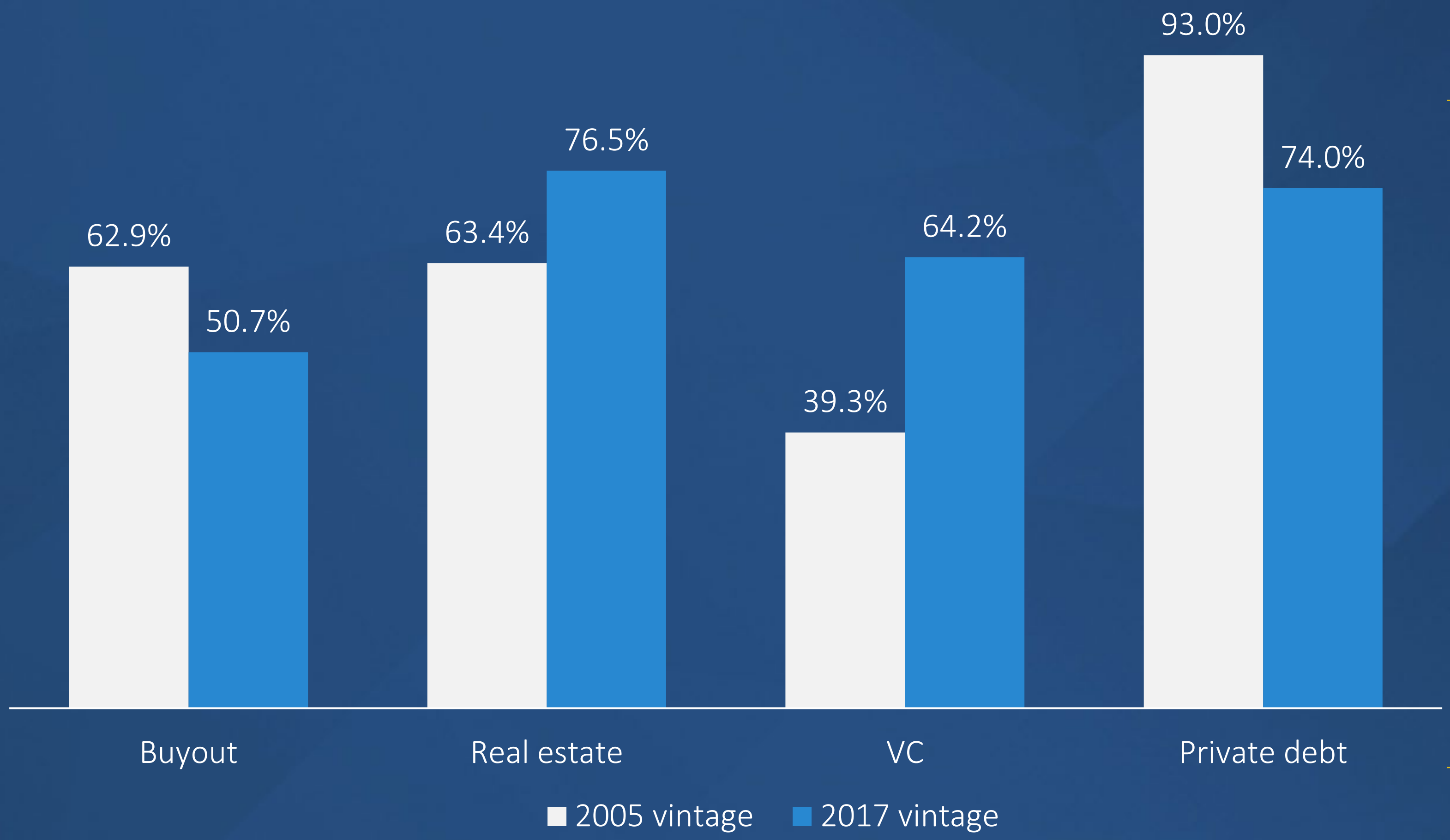
Cumulative capital called at peak of cycle

Evaluating how much capital has been called down is a key starting point, comparing similarly aged vintage years can provide interesting insights.



This analysis allows us to compare vintage years of similar age at the end of their respective cycles. An allocator can compare the pooled benchmark call down rates versus their own portfolio's pace in order to evaluate risk on a relative basis. A complete vintage year comparison is available in the appendix.

*2005 vintages as of Q3 2007; 2017 vintages as of Q4 2019
Source: PitchBook | Geography: Global

PitchBook

Allocators ultimately care about how much of their investments could be at risk to markdowns and underperformance. We start with a traditional TVPI framework:

$$\underbrace{\frac{\text{Distributions from fund}}{\text{Capital calls}}}_{\text{Distributions to paid-in-capital = DPI}} + \underbrace{\frac{\text{Remaining value in fund}}{\text{Capital calls}}}_{\text{Remaining value to paid-in-capital = RVPI}} = \underbrace{\frac{\text{Total value}}{\text{Capital calls}}}_{\text{Total value to paid-in-capital = TVPI}}$$

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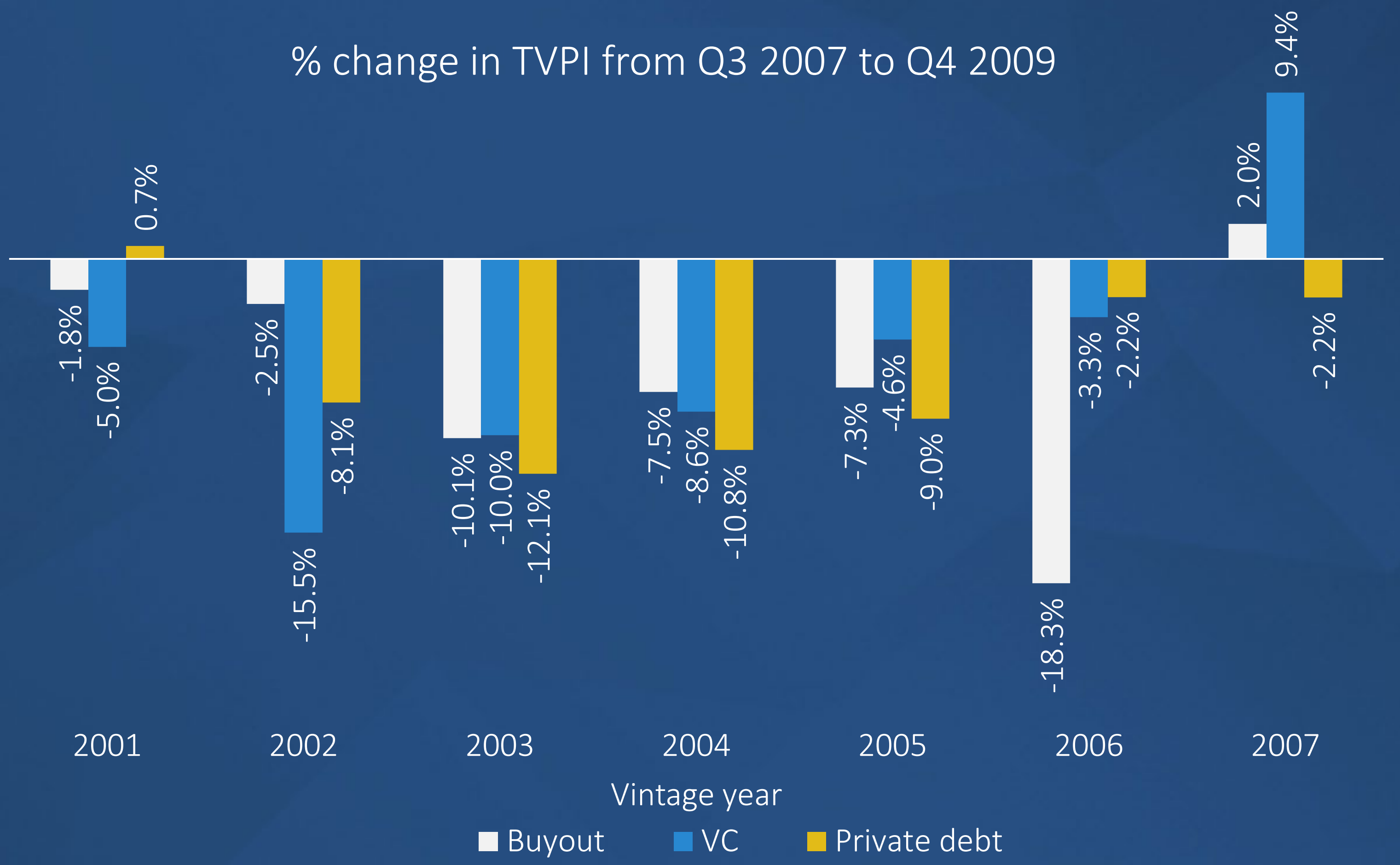
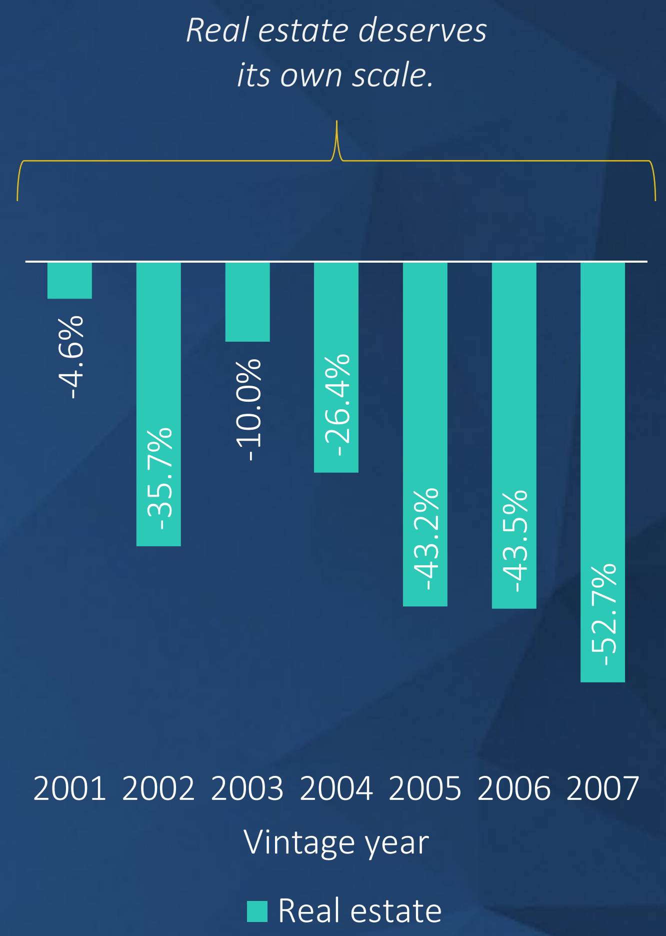
Source: PitchBook

Change in TVPI (pre-crisis vintages)

Many private capital vintages had sizable unrealized gains prior to the GFC, which were subject to material markdowns during the recession; real estate was a notable outlier.

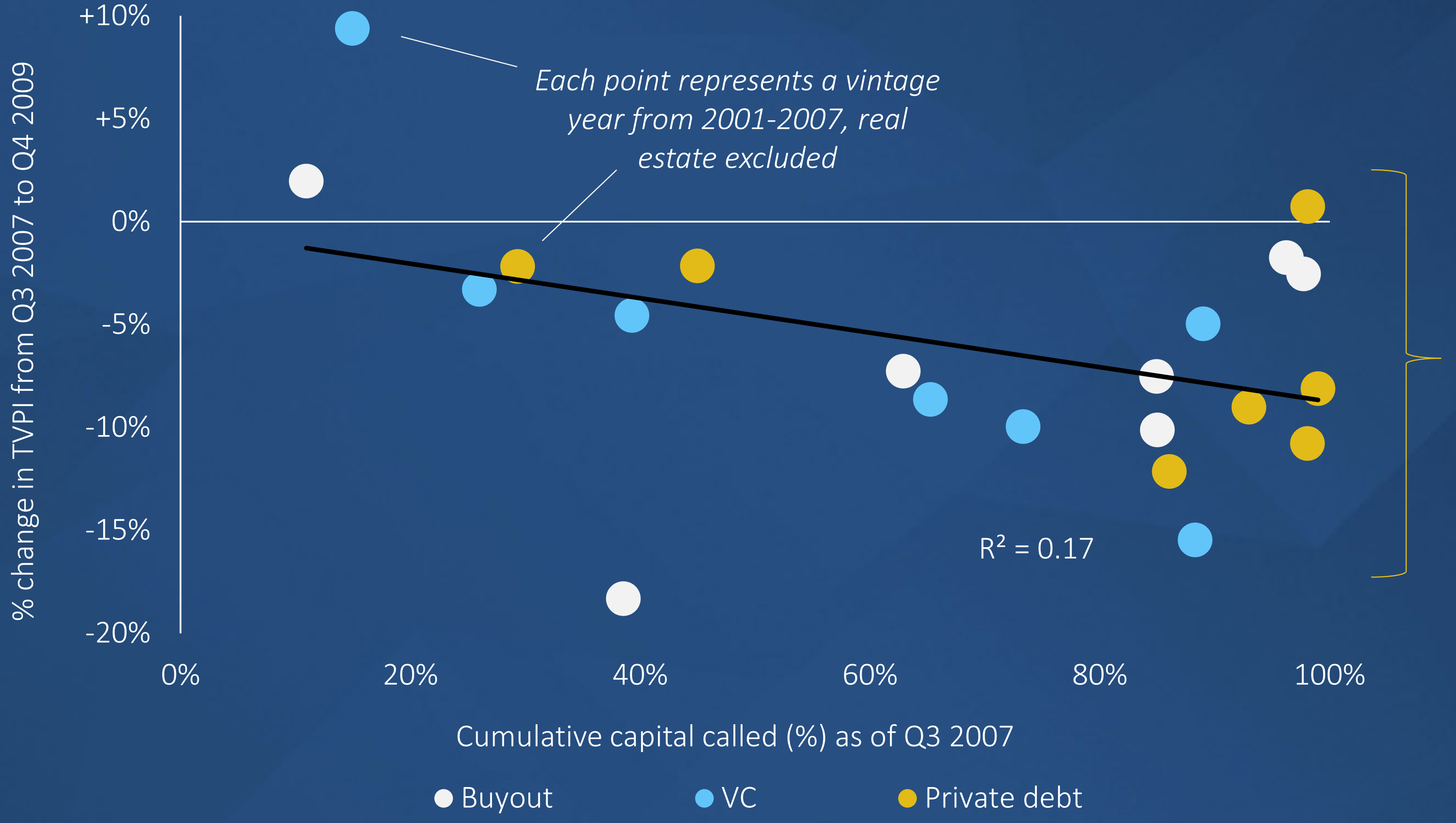




Source: PitchBook | Geography: Global

PitchBook

Looking at cumulative capital called is helpful, but it is an insufficient proxy for capital at risk. Similarly called down vintages had much different TVPI declines in the GFC.



Vintages with a small amount of dry powder as of Q3 2007 all struggled in the subsequent recession, but the differences in outcomes suggests that just looking at cumulative capital called is only a piece of the puzzle.

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Source: PitchBook | Geography: Global

Proportion of allocation at risk

Rearranging the TVPI metrics, we can estimate, at a given point in time, the proportion of total capital that is "at risk" in active holdings (i.e., sitting in remaining value).

$$\frac{\text{Remaining value in fund}}{\text{Remaining value in fund} + \text{Distributions from fund} + \text{Uncalled capital}} = \text{Proportion of total capital in active holdings}$$

Active portion of total capital (at-risk)

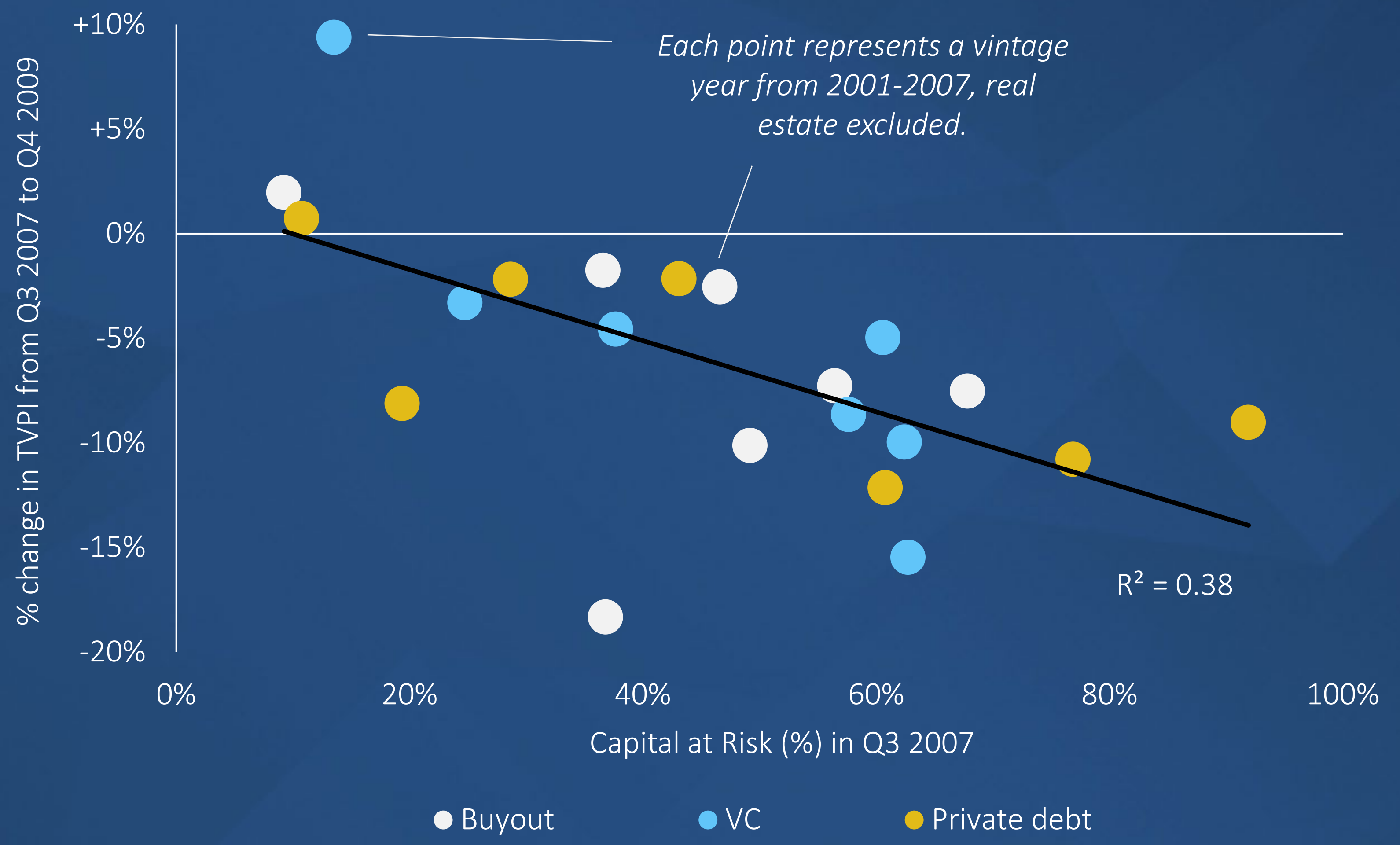
Inactive portion of total capital (not at-risk)

Capital at risk (%)

Source: PitchBook

Change in TVPI (pre-crisis vintages)

Vintages with more capital in active holdings saw larger drops in TVPI, showing a stronger relationship than capital called alone.



Source: PitchBook | Geography: Global

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This analysis shows how performance is affected by capital at risk and is an improvement on just looking at cumulative capital calls or remaining value in isolation. If a fund has largely been called down but hasn't returned much in distributions yet, any unrealized gains can quickly evaporate and will be tough to recuperate as we saw in the 2005 versus 2008 buyout fund example.

As an example, we can look at an LP that allocated $100 to a strategy and see what the potential hit to TVPI would be based on assumptions around the cash flow profile.

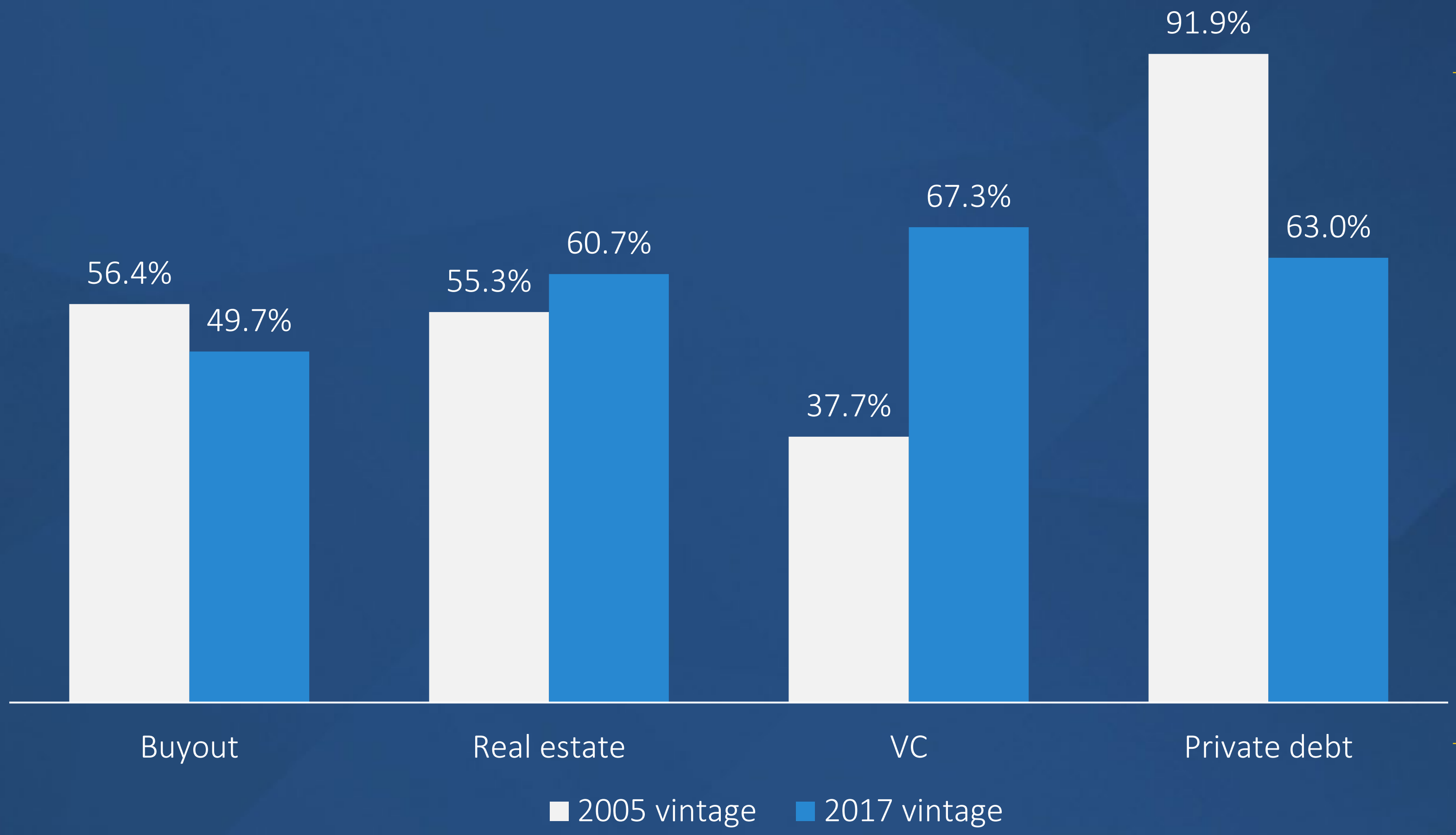
$$\frac{\$105 \text{ Remaining value}}{\$105 \text{ Remaining value} + \$25 \text{ Distributions} + \$20 \text{ Uncalled capital}} = 70\% \text{ capital at risk (CaR)} \rightarrow 1.63\text{x TVPI}$$

Assuming the relationship between capital at risk (CaR) and the peak-to-trough change in TVPI holds, we use the following regression equation:

$$\Delta_{TVPI} = (-17.0\% * CaR) + 1.7\% \rightarrow -10\% \text{ change in TVPI} \rightarrow 1.46\text{x TVPI}$$

Source: PitchBook

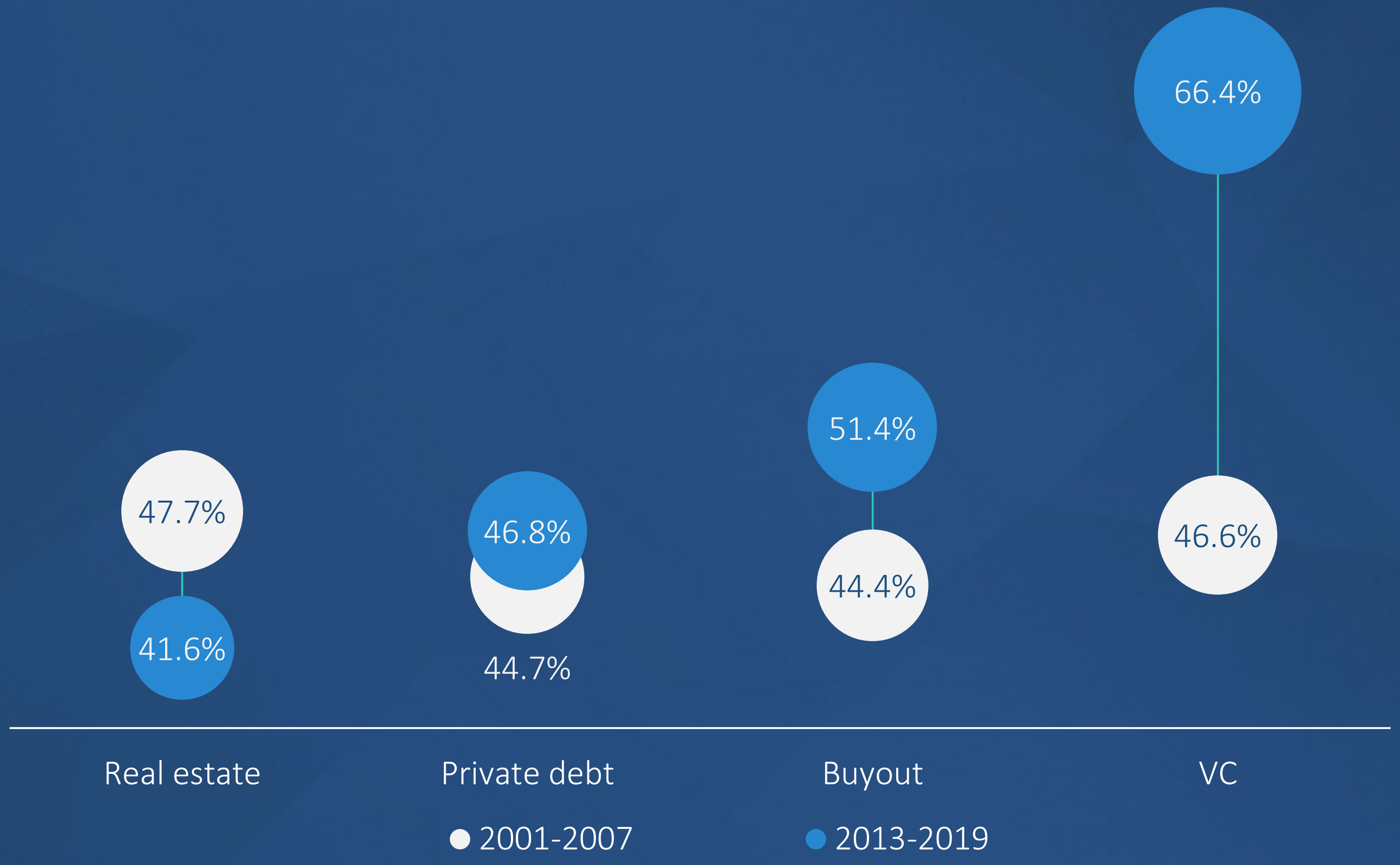
With that framework, we can evaluate an LP portfolio for how much capital may be at risk in active holdings in post-GFC vintages compared to pre-GFC vintages* …



This analysis allows us to compare vintage years of similar age at the end of their respective cycles. An allocator can compare the proportion of total capital that is in active holdings for the benchmark relative to their own portfolio. A complete vintage year comparison is available in the appendix.

*2005 vintages as of Q3 2007; 2017 vintages as of Q4 2019
Source: PitchBook | Geography: Global

Combining those results, we can see how the level of capital at risk* compares when rolling up vintages in the 4 strategies …

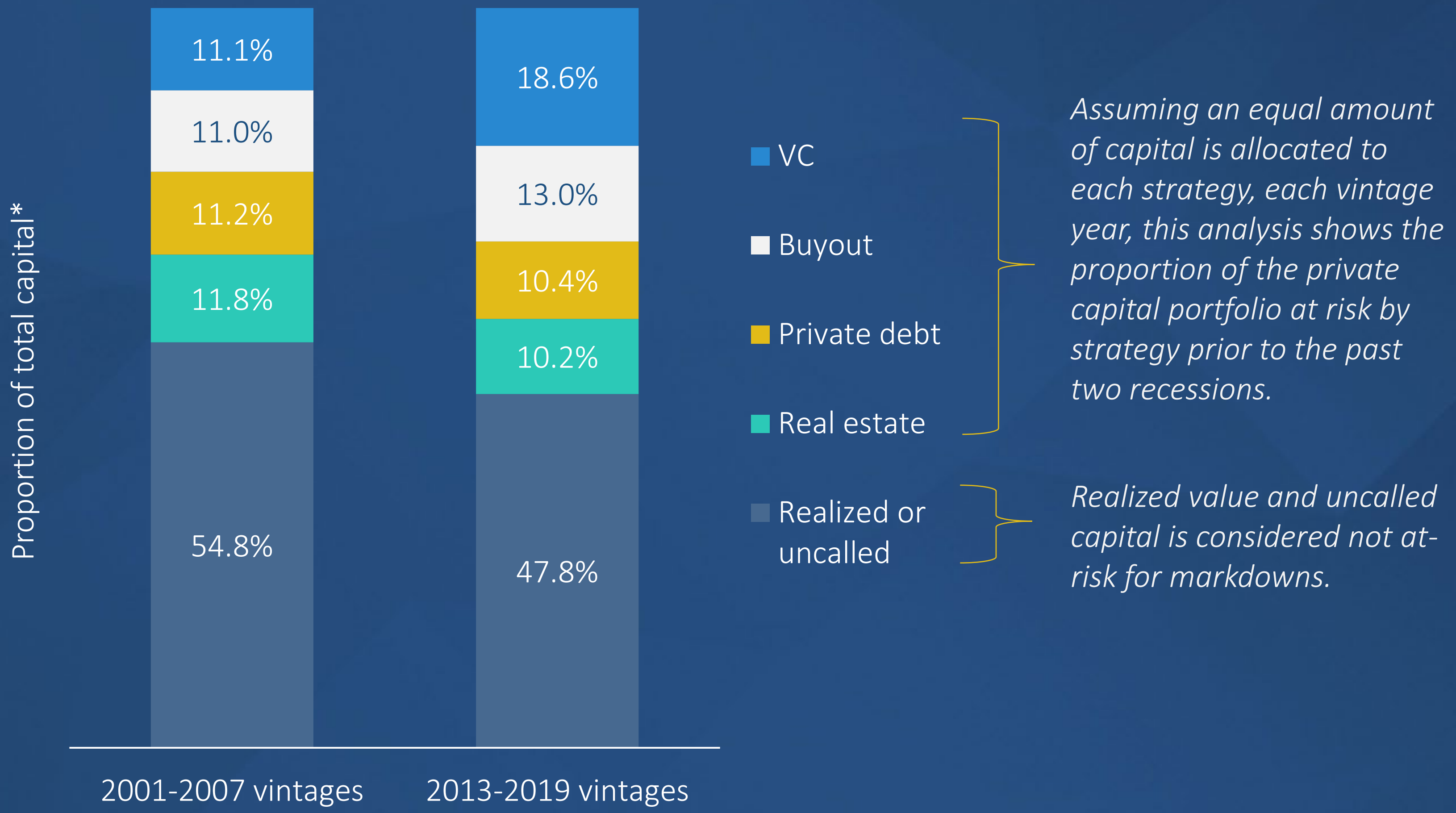


*2001-2007 vintages as of Q3 2007; 2013-2019 vintages as of Q4 2019
Source: PitchBook | Geography: Global

Assuming an equal amount of capital is committed to each vintage year, this analysis shows the proportion of capital that's in active holdings prior to the last two recessions in a hypothetical portfolio. For three of the four strategies analyzed, extended holding times have resulted in more capital at risk at the end of this upcycle compared to last.

Capital at risk for hypothetical portfolio

… and when aggregating the hypothetical LP, capital at risk is a higher proportion of total capital than pre-GFC.



*2001-2007 vintages as of Q3 2007; 2013-2019 vintages as of Q4 2019

Source: PitchBook | Geography: Global

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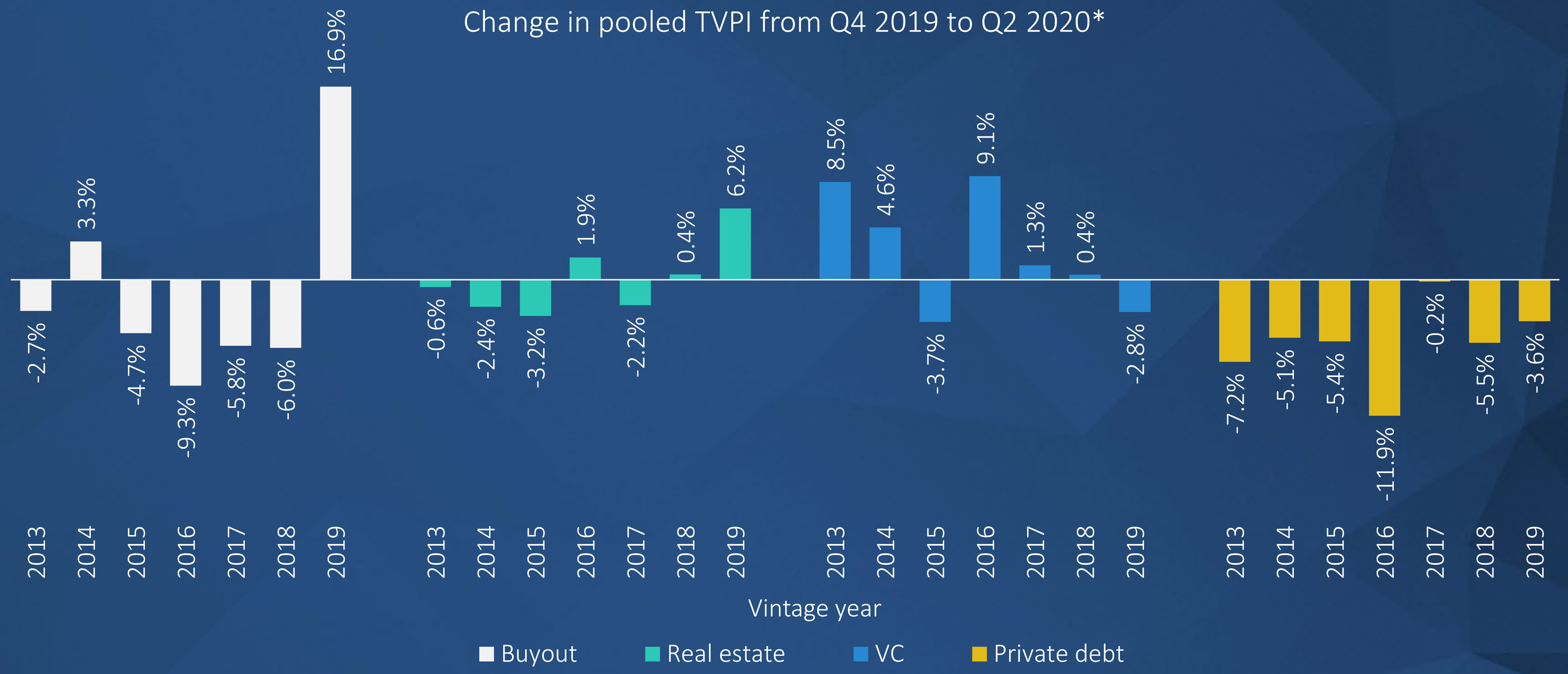
Significant valuation step-ups for VC-backed companies have left sizable unrealized valuations at risk of markdowns as the health crisis plays out. Overall, this hypothetical LP would have more value at-risk in 2019 as a proportion of total value compared to the pre-GFC period.

Finally, preliminary data shows that TVPIs have fallen for many vintages in 2020, though buoyant public markets have likely supported valuations in many instances for now.

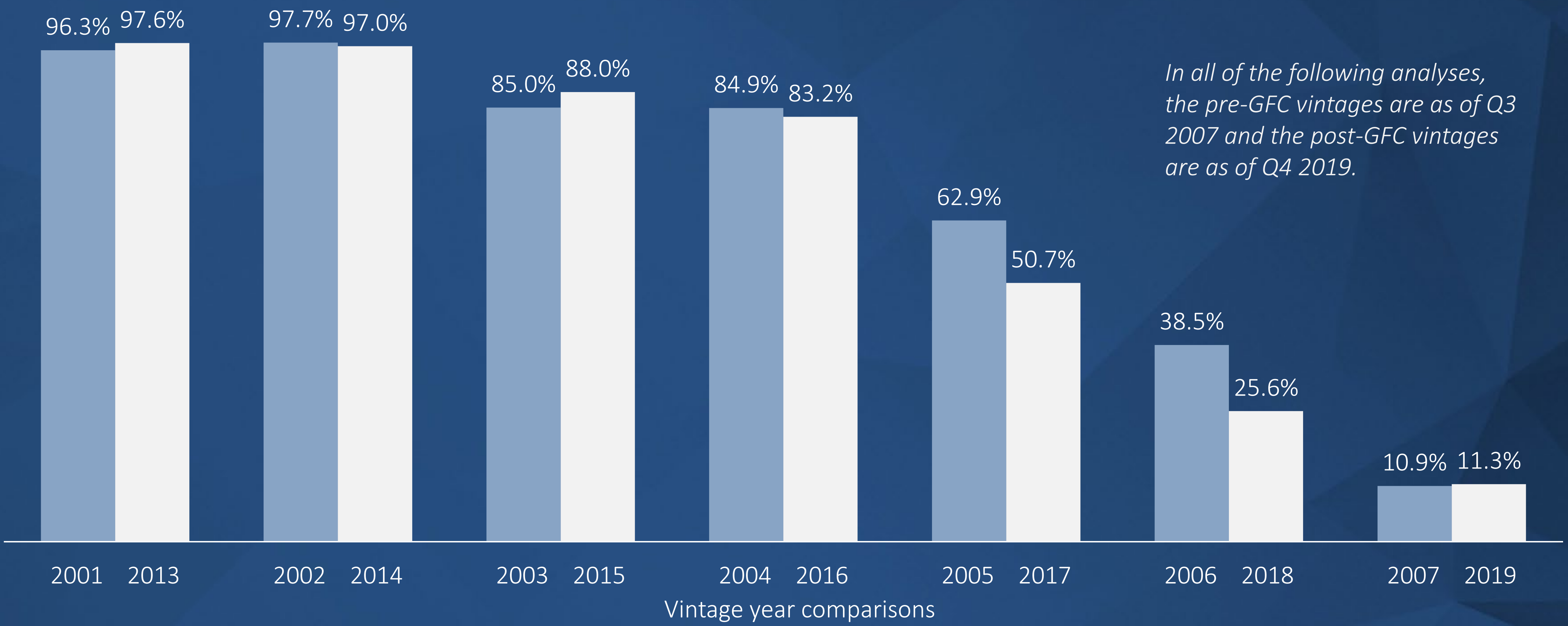


*Preliminary data can be subject to substantial changes as we gather more data
Source: PitchBook | Geography: Global

Appendix

Cumulative capital called for buyout funds by vintage

Capital calls into this cycle's buyout funds have not been as aggressive on average as pre-GFC vintages, suggesting that GPs have more flexibility in this crisis.



In all of the following analyses, the pre-GFC vintages are as of Q3 2007 and the post-GFC vintages are as of Q4 2019.

Source: PitchBook | Geography: Global

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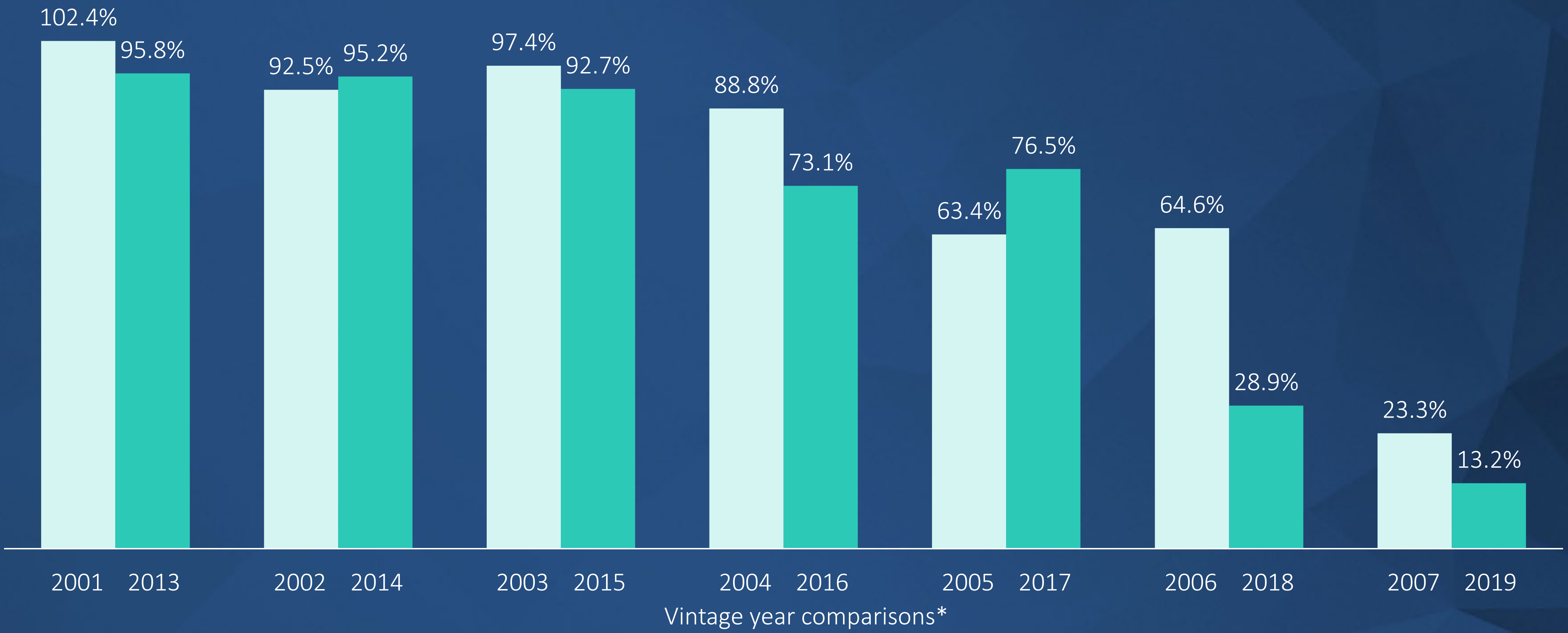
Cumulative capital called for real estate funds by vintage

A similar result holds for real estate funds, with the 2018 vintage being particularly better off compared to its 2006 comparison.



*2001-2007 vintages as of Q3 2007; 2013-2019 vintages as of Q4 2019

Source: PitchBook | Geography: Global

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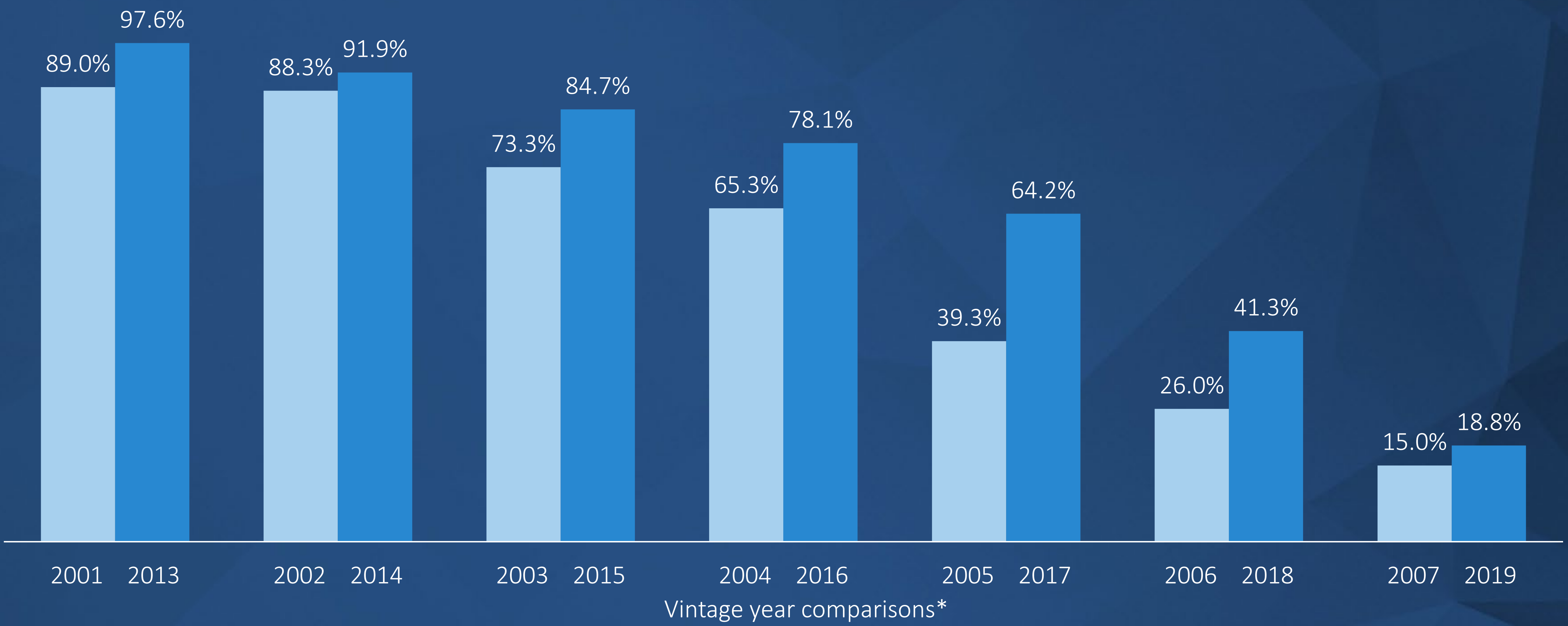
On the other hand, VC has seen a large uptick in popularity this cycle, which has put pressure on GPs to put capital to work.

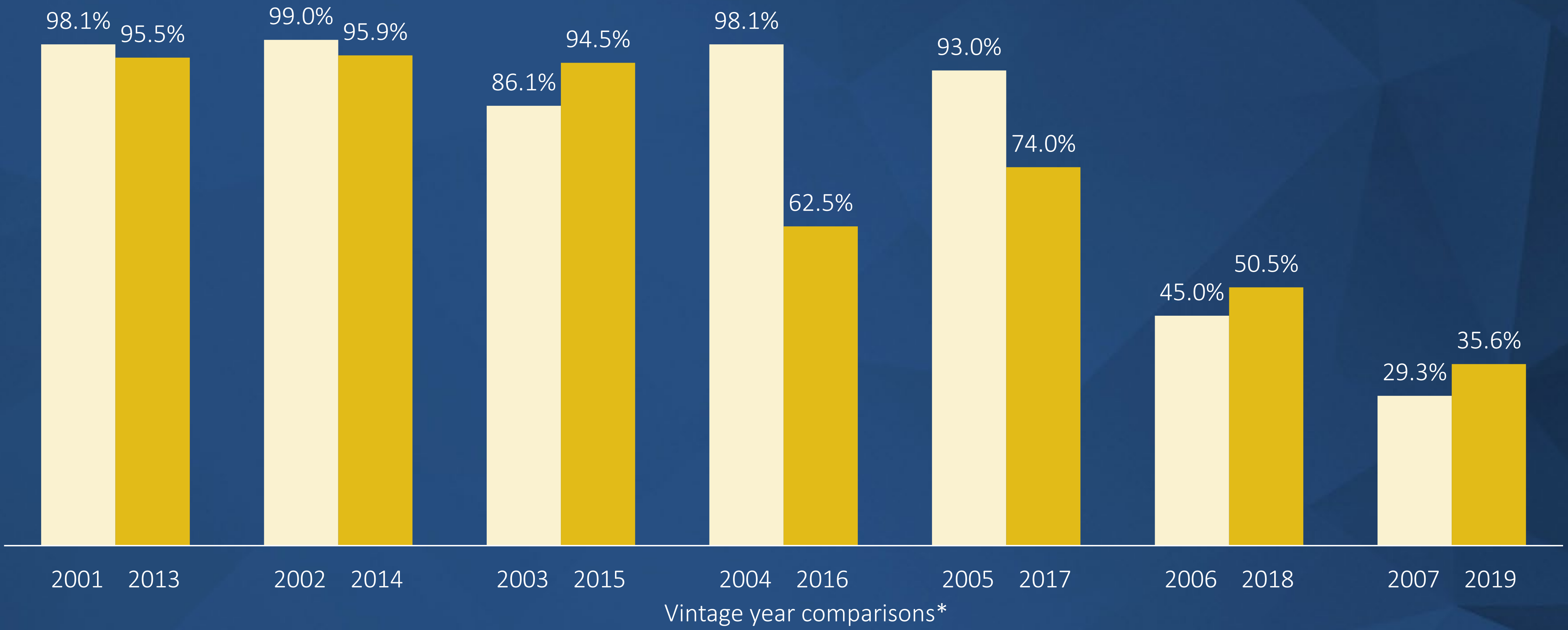


*2001-2007 vintages as of Q3 2007; 2013-2019 vintages as of Q4 2019

Source: PitchBook | Geography: Global

Cumulative capital called for private debt funds by vintage

The private debt market is more of a mixed bag. Alternative lenders have become much more popular recently; many will be experiencing their first downturn.



*2001-2007 vintages as of Q3 2007; 2013-2019 vintages as of Q4 2019

Source: PitchBook | Geography: Global

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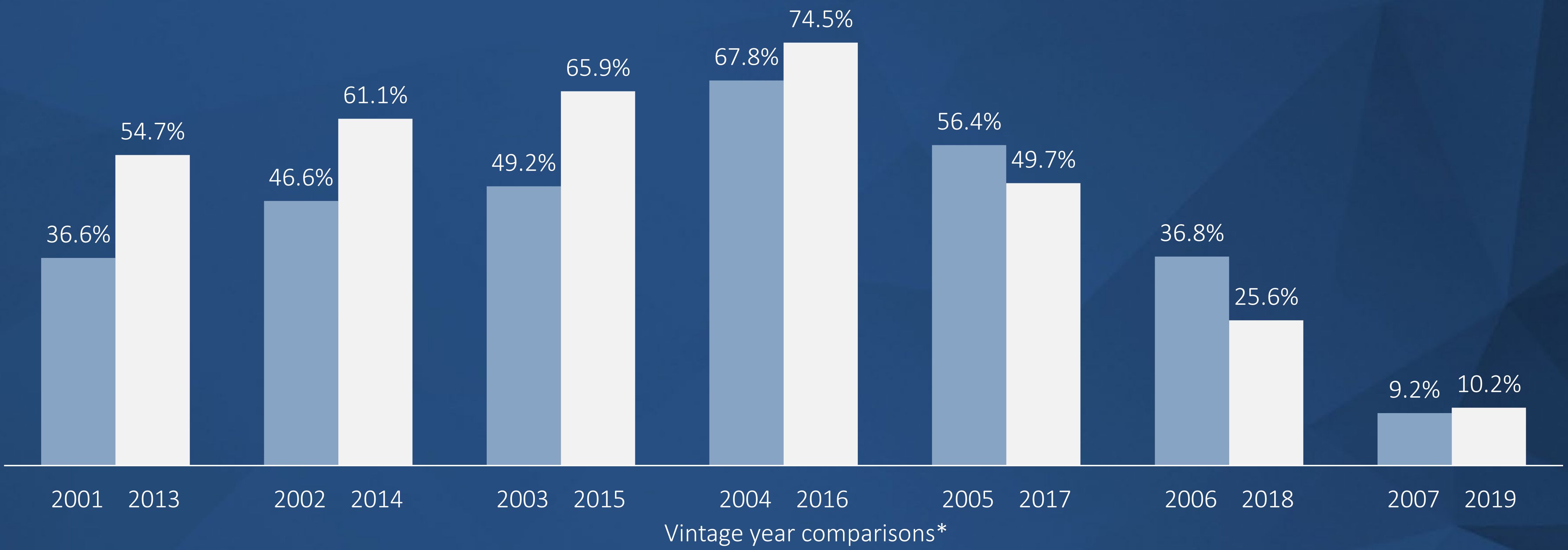
Capital at risk for buyout funds by vintage

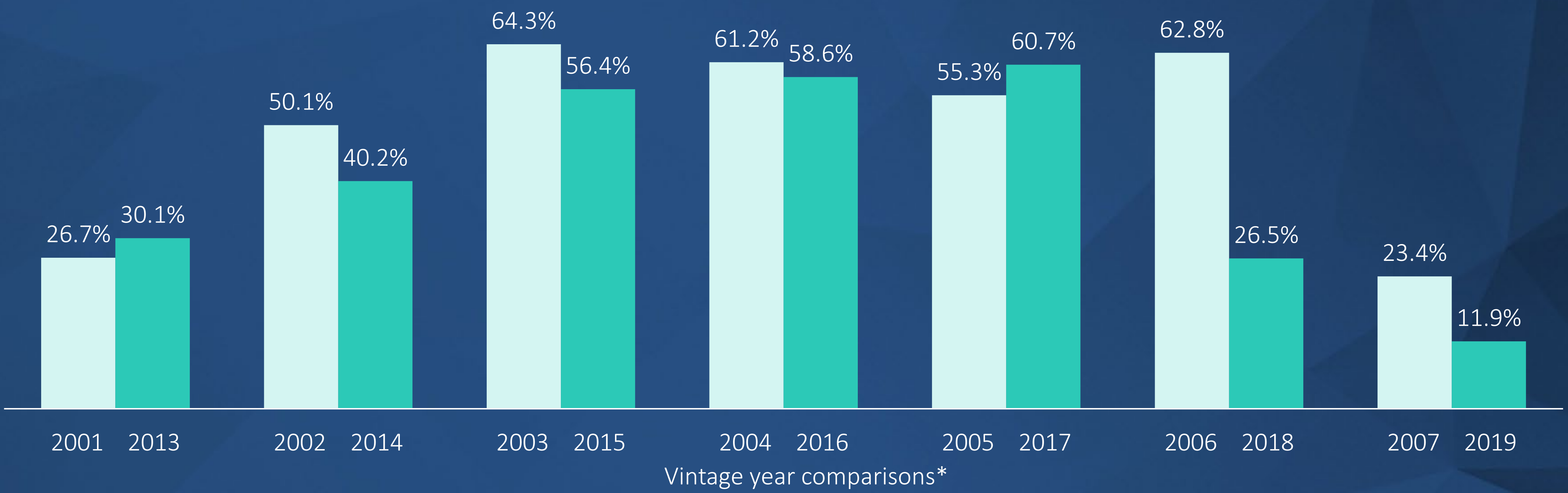
We can use the capital-at-risk framework to compare vintages once again. Pre-2017 buyout funds tend to have more capital at risk relative to their pre-GFC comparisons.



*2001-2007 vintages as of Q3 2007; 2013-2019 vintages as of Q4 2019
Source: PitchBook | Geography: Global

Capital at risk for real estate funds by vintage

Meanwhile, real estate funds tend to be in relatively better shape—unsurprising given the nature of the GFC—though property sector exposure is a key consideration.



*2001-2007 vintages as of Q3 2007; 2013-2019 vintages as of Q4 2019
Source: PitchBook | Geography: Global

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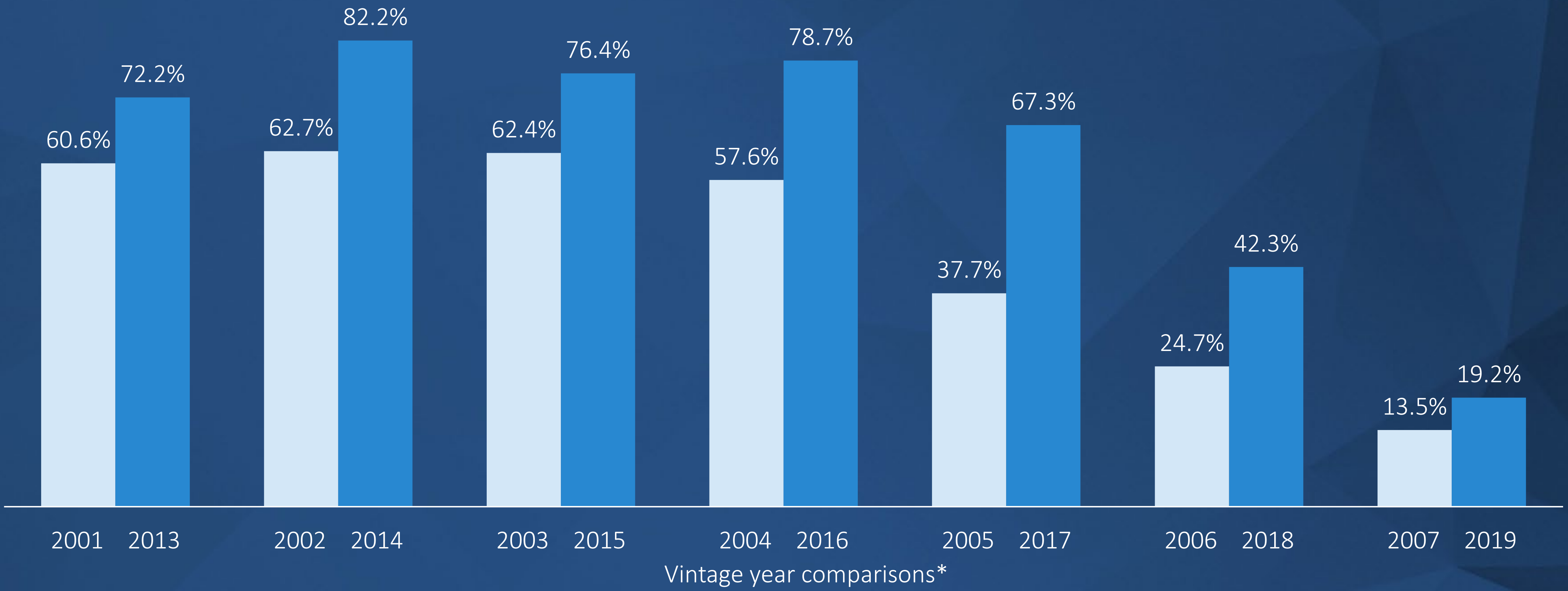
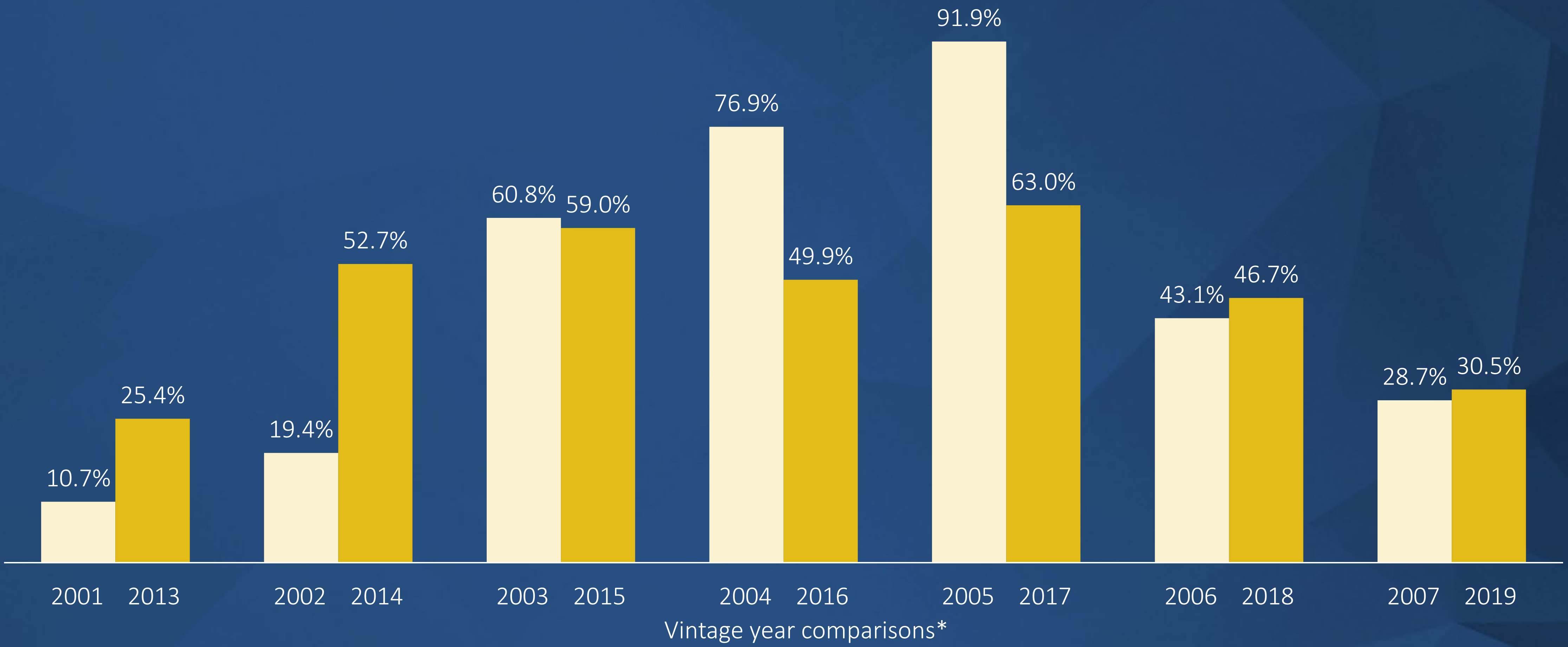
Recent VC funds on the other hand show quite a bit of exposure in active holdings compared to pre-GFC vintages.



*2001-2007 vintages as of Q3 2007; 2013-2019 vintages as of Q4 2019
Source: PitchBook | Geography: Global

Capital at risk for private debt funds by vintage

Finally, debt funds’ capital at risk among the seven vintage year comparisons is more varied.



*2001-2007 vintages as of Q3 2007; 2013-2019 vintages as of Q4 2019
Source: PitchBook | Geography: Global

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