

Dispersion in private markets: Manager selection unlocks the premium

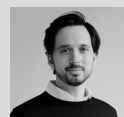
Moonfare research



Our research shows that outperformance in private markets still persists, while the spread between best managers and the rest keeps growing.

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Key takeaways

The best and worst managers are worlds apart.

The spread between top and bottom-quartile private market managers far exceeds anything seen in public markets. Industry studies find a 19.2% interquartile return gap in PE, versus just 2.9% in large-cap equities.

The return gap compounds with every vintage.

In long-duration assets, differences in annual performance compound. Our analysis suggests top-quartile funds can return roughly twice the capital of median funds over a ten-year hold.

Manager selection is more than guesswork.

Dispersion in private markets only matters if performance carries forward. Top-quartile funds remained top quartile 34% of the time, confirming performance is not purely random.

The best funds are closed to most investors.

Identifying top managers is only half the challenge. The best funds are structurally oversubscribed, meaning the ability to secure allocations is itself an advantage that analysis alone cannot provide.

Why dispersion matters in private markets

By Mike O'Sullivan,
Moonfare's Chief Economist

Unlike public markets, where returns cluster tightly around a benchmark, private market returns are widely dispersed across managers, vintages and strategies.

Investing in private markets is not a matter of buying 'the market', as one might through an index such as the S&P 500, but of committing capital to specific funds. Two investors allocating to the same asset class and vintage can therefore see markedly different outcomes, determined largely by manager selection.

Dispersion matters even more today, given the enormous size of the private equity industry (there are apparently more PE funds than McDonalds outlets in the USA¹), and in the context of proposals by policymakers on both sides of the Atlantic to allow pension funds and 'retail' investors to invest in private assets. Our concern is that without the ability to select high quality funds, and the access to them, many investors may be disappointed with the eventual returns from their private investments.

In that context, understanding both the magnitude and persistence of dispersion, and then being able to select and access quality funds, is critical in constructing a private markets portfolio. In our previous white paper 'Cycles, Shocks and Diversification' we outlined the contribution of private equity to a broad portfolio. Here, we detail the importance of fund selection.

This paper examines the nature of return dispersion in private markets, drawing on academic literature, industry research and empirical analysis of private equity and venture capital data by PitchBook. It explores the magnitude and persistence of dispersion, the structural factors that sustain it and how dispersion compounds over time.

Finally, the paper considers the implications for investors and outlines how disciplined manager selection and portfolio construction, exemplified by Moonfare's investment approach, can help navigate the structural realities of private markets.



The magnitude of return dispersion



Return gaps between private market managers
are wide, persistent and far larger than anything
seen in public markets.

Academic research consistently documents substantial dispersion in private market returns. A research paper from 2023 finds that the average US private equity buyout fund across 1984 to 2015 vintages returned a 14% net internal rate of return (IRR) and a net multiple on invested capital (MOIC) of 1.8x.²

However, these averages conceal wide variation across funds. Top-quartile funds achieve much higher outcomes, while bottom-quartile funds generate materially lower returns and capital multiples. In their sample, top-quartile buyout funds delivered average returns of 30.6% net IRR and 2.74x MOIC, compared

with -1.4% net IRR and 1.00x MOIC averages for bottom-quartile funds.³ This implies an interquartile spread of 32 percentage points in IRR and 1.74x in MOIC, underscoring the extent of manager-level performance dispersion in private equity buyouts.

At the extreme ends, the return gap between top- and bottom-quartile private equity funds is substantial and far exceeds the dispersion observed in public equity markets.⁴ Similar patterns emerge across buyout and venture capital strategies, reinforcing the conclusion that dispersion is not an anomaly but a structural characteristic of private markets.

Structural reasons for dispersion

One important factor driving return dispersion is the presence of what academics call GP fixed effects – the structural advantages specific to certain managers, such as proprietary deal pipelines. Persistent differences in sourcing ability, operational expertise and decision-making quality explain a meaningful share of return variation across funds.

A recent research note from the consulting firm BCG shows that greater granularity of manager performance data makes it easier to discern good from weaker managers, to understand the drivers of this performance and to understand how to run manager selection processes.⁵

Access to high-quality deal flow further amplifies dispersion. Established managers with strong reputations benefit from preferential access to the most attractive opportunities, reinforcing performance advantages over time.

At the same time, capital allocation dynamics introduce a concave relationship between performance and fund size. Managers that improve from poor to average performance can raise significantly larger funds, while those moving from very good to exceptional face natural constraints on growth. These capacity limits restrict investor access to the very best performers and contribute to the persistence of dispersion, as top managers remain selective across vintages while less capable ones continue to compete for the capital that flows down to them.



Industry research

Industry reports corroborate academic findings using more recent and broader datasets. Over the past decade, private equity returns have varied by as much as 1,900 basis points across managers. Dispersion also differs across market segments, with small and lower-middle-market funds historically delivering higher net returns than large buyout funds, albeit with greater variability.

In venture capital, median returns remain more modest, while top-quartile funds typically generate higher outcomes and bottom-quartile funds often deliver negative returns.

As illustrated in Figure 1, dispersion in private markets is materially wider than in traditional public assets.⁶ While large-cap equities and bonds exhibit relatively narrow spreads between the 25th and 75th percentiles, private equity and venture capital show substantially larger gaps, with top-quartile outcomes exceeding median returns by a wide margin and bottom-quartile outcomes often falling close to or below zero.

For example, between 2016 and 2026 the difference in annual returns between the top and bottom quartiles of private equity funds was 19.2 percentage points. Similarly, this figure reached 19 percentage points for venture funds. These figures are significant, especially when contrasted with traditional assets such as large cap equities and bonds, with relative interquartile dispersions of 2.9 and 1.9 percentage points respectively.

Wide dispersion of returns underscore that manager selection is a much more critical driver of performance in private markets than in traditional asset classes.

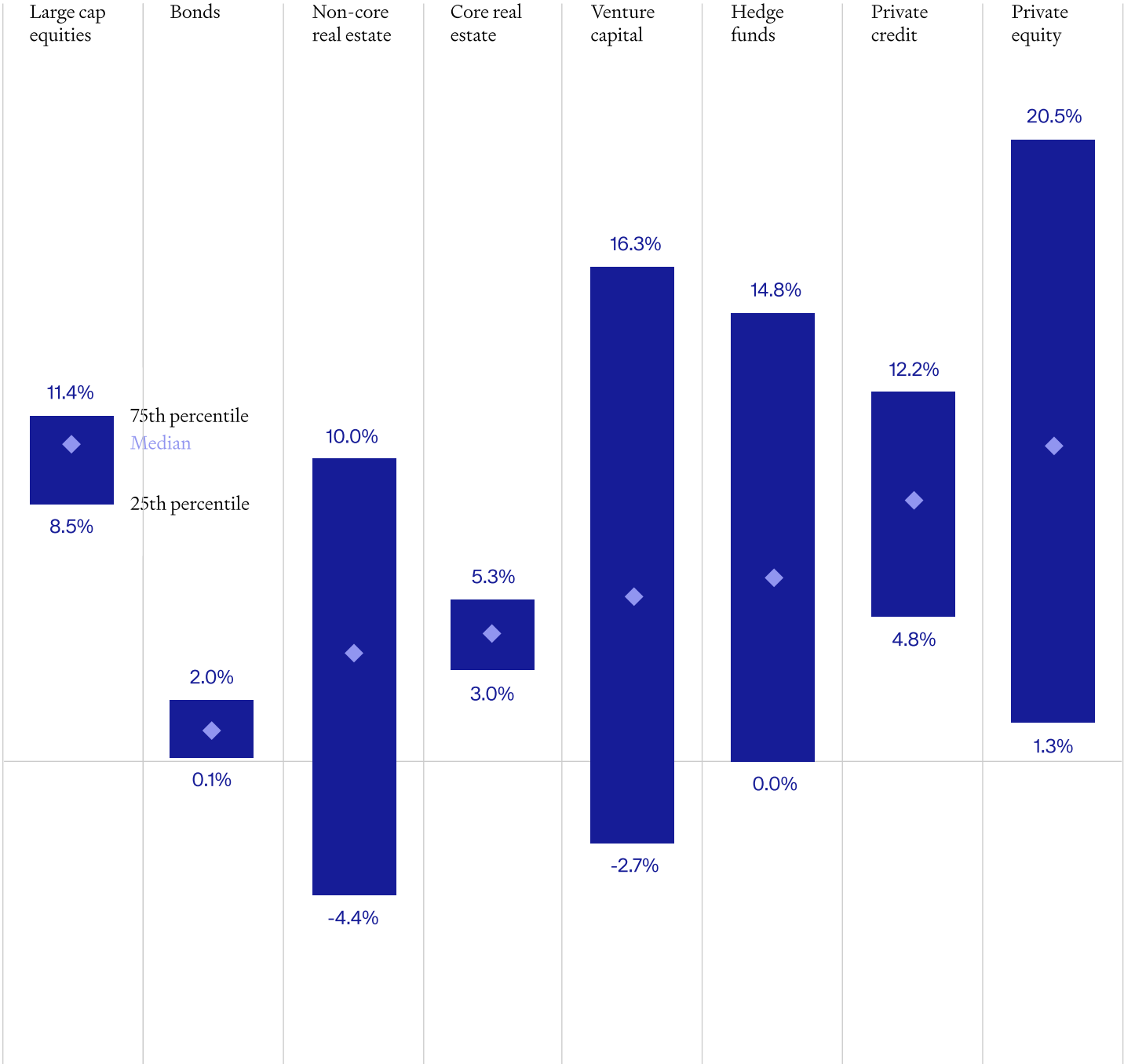
Manager selection matters more in private markets than in public ones.



Differences in return dispersion across asset classes are stark

Figure 1

Public and private manager return dispersion, Q1 2016-Q1 2026



Source: J.P.Morgan Asset Management, 2026
 Note: Past performance does not indicate future outcomes. Data as of April 30, 2026.

Measuring the gap between managers



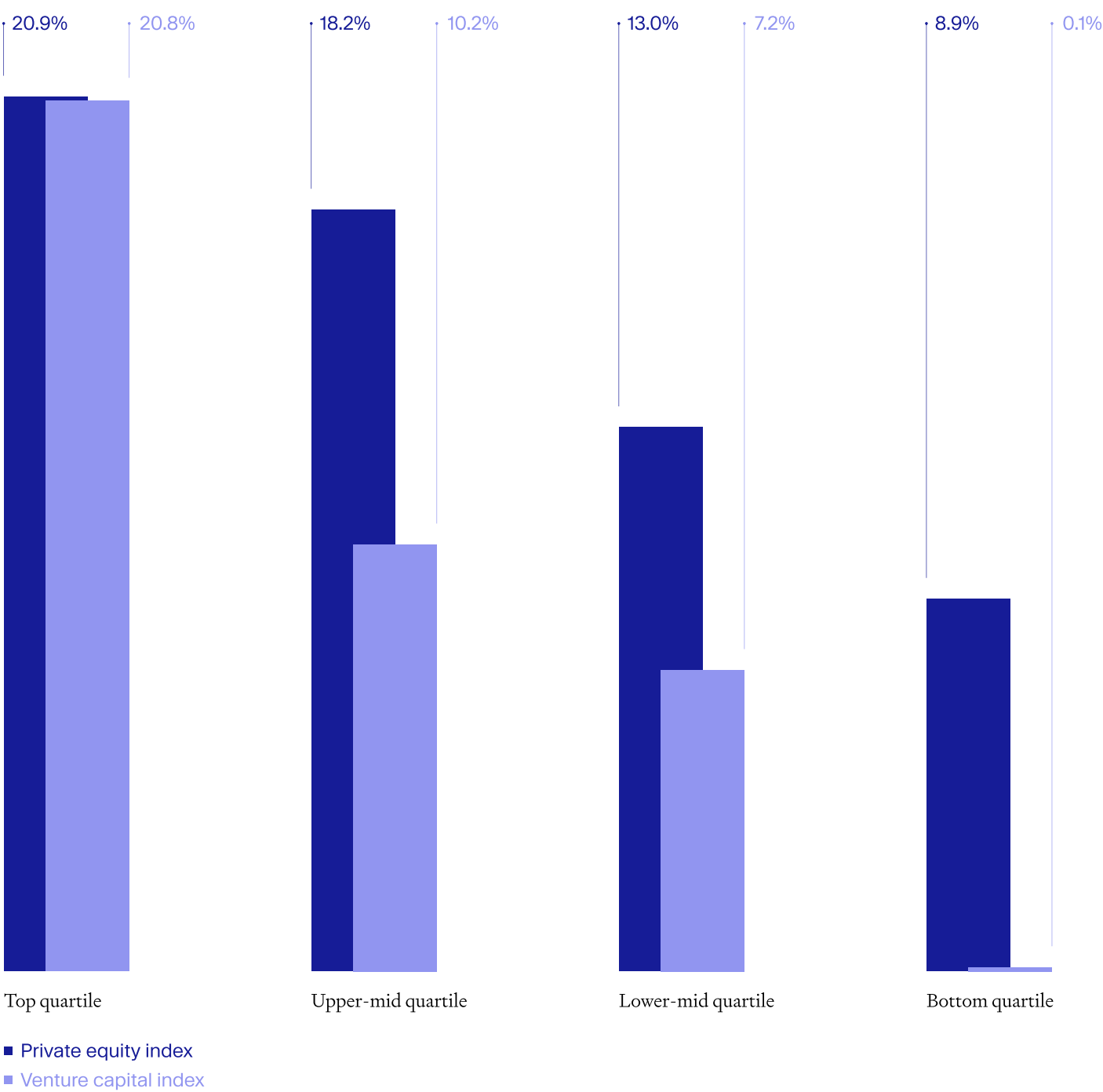
The gap between top and bottom managers is not only large but compounds significantly over a fund's lifetime, our research shows.

To illustrate how return dispersion compounds over time, this research looks at PitchBook index data^{7 8} across private equity and venture capital strategies. The indices track five-year rolling returns by fund quartile, starting from the same baseline value, so that cumulative returns can be compared on an equal footing.

The data highlights how relatively small differences in annual performance translate into substantial gaps in cumulative value over longer horizons. Top-quartile funds compound meaningfully faster than median and bottom-quartile peers, leading to widening performance differentials over time. These effects are particularly pronounced in venture capital, where dispersion remains large and persistent across market cycles (Figure 2).

Top quartile buyout and VC funds deliver alike while bottom ones tell a different story

Annualised quartile returns, 2020-2025



Source: Pitchbook, Moonfare, 2026
Note: Figures are derived from index values published in PitchBook's Q2 2025 Private Capital Indexes summary. CAGRs for private equity and venture capital were calculated from these index values over the period 2020–2025. Past performance does not indicate future outcomes.

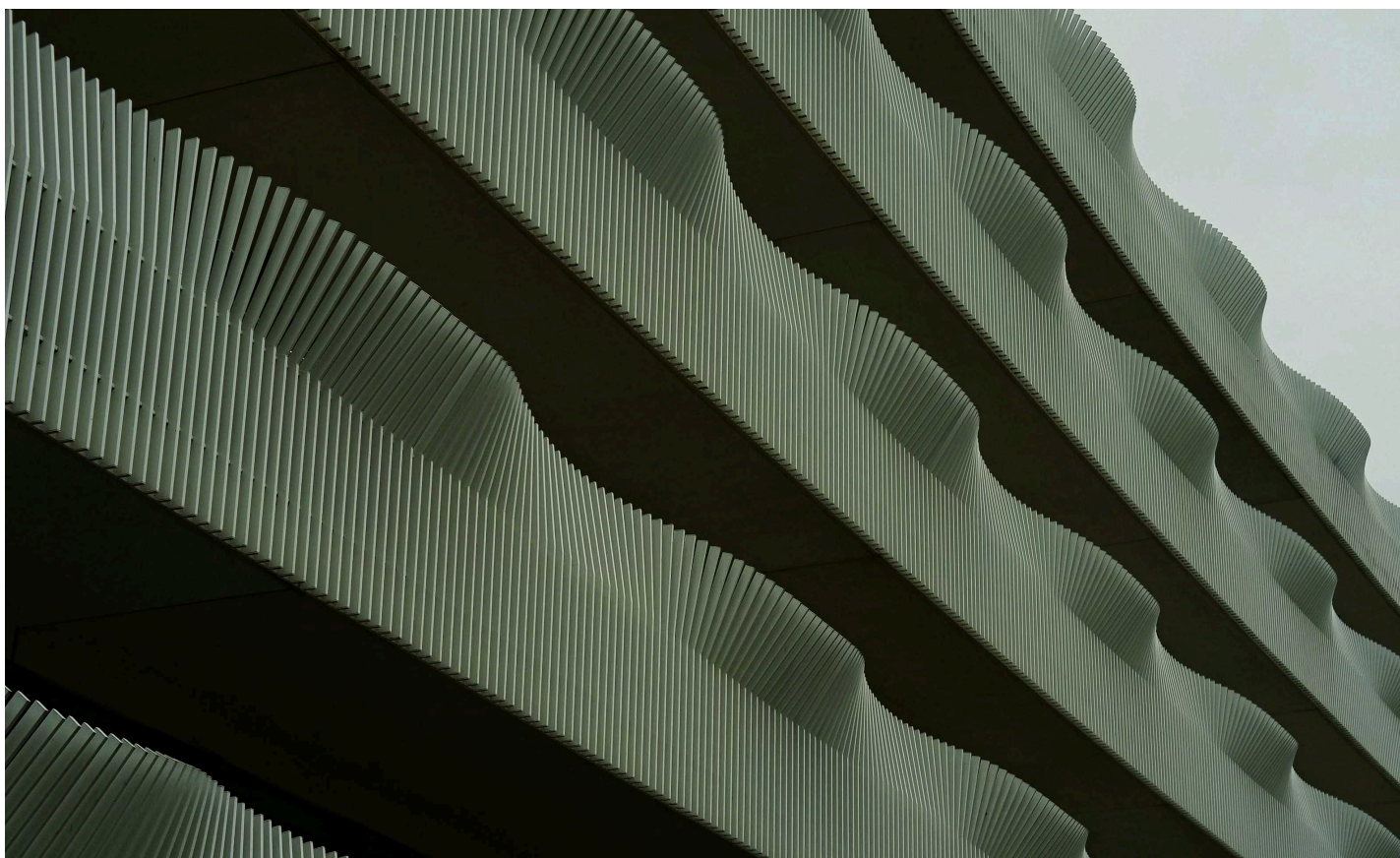
The compounding effect

Since private markets are long-term asset classes, manager selection has an outsized impact on investor outcomes. Small differences in annual performance can compound into very large gaps in ending value over a typical fund life.

As a result, choosing a top-quartile manager rather than an average one is not a marginal improvement and it can materially change the amount of capital returned to investors. A simple exercise of forward-compounding top quartile (versus median) returns, while not quite reflective of how PE fund investing works in practice, nonetheless helps to show how return differences accumulate in portfolios over time. Our illustrative analysis suggests top-quartile private equity funds can return roughly twice the capital of median funds over a ten-year hold (see footnote for methodology).

While manager selection matters throughout private equity, the skew of venture capital outcomes makes the downside more severe: bottom-decile venture funds have historically failed to return invested capital. In 21 vintages, top-quartile venture funds returned more than twice the median on average over a ten-year hold. The gap widens further at the extremes: top-decile funds returned many multiples of bottom-decile funds, where investors did not get their capital back over a ten-year hold.

Dispersion of this width means the choice of manager, rather than the choice of asset class, determines the outcome — more so in venture than in buyout.



Notes: Returns are net of fees. Analysis covers 2000–2023 vintages. Underlying IRR figures are sourced from PitchBook Benchmarks (Q2 2026, including preliminary Q3 data) and compounded at a constant annual rate over a 10-year holding period to derive theoretical MOIC. Figures shown therefore represent modelled outcomes based on average annual IRR, not observed or realized MOIC, for any vintage. For 2017 and later vintages, the 10-year holding period has not yet elapsed. Figures for these vintages are interim estimates derived from current NAV and an assumed constant IRR, and do not reflect realized fund outcomes. They remain subject to change as funds mature. Past performance is not indicative of future results.

The implications for investors

High and persistent dispersion fundamentally makes the nature of private market investing more challenging. Achieving average market exposure is insufficient, as median outcomes often fall well short of top-quartile performance. At the same time, exposure to bottom-quartile managers can permanently impair portfolio outcomes.

For investors, the challenge is therefore twofold: securing access to high-quality managers while systematically avoiding persistently weak performers. Given information asymmetries, capacity constraints and signalling effects, achieving this outcome requires specialist expertise and deep market access.

This challenge becomes even more acute during periods of market stress. Preliminary evidence suggests that dispersion tends to widen following downturns, as stronger managers are better positioned to deploy capital opportunistically and acquire assets at attractive valuations. This reinforces the importance of manager quality during times of market stress, when the long-term consequences of selection decisions are magnified.

Investors need access to strong managers and the judgment to avoid weak ones.



The lasting power of top-quartile returns

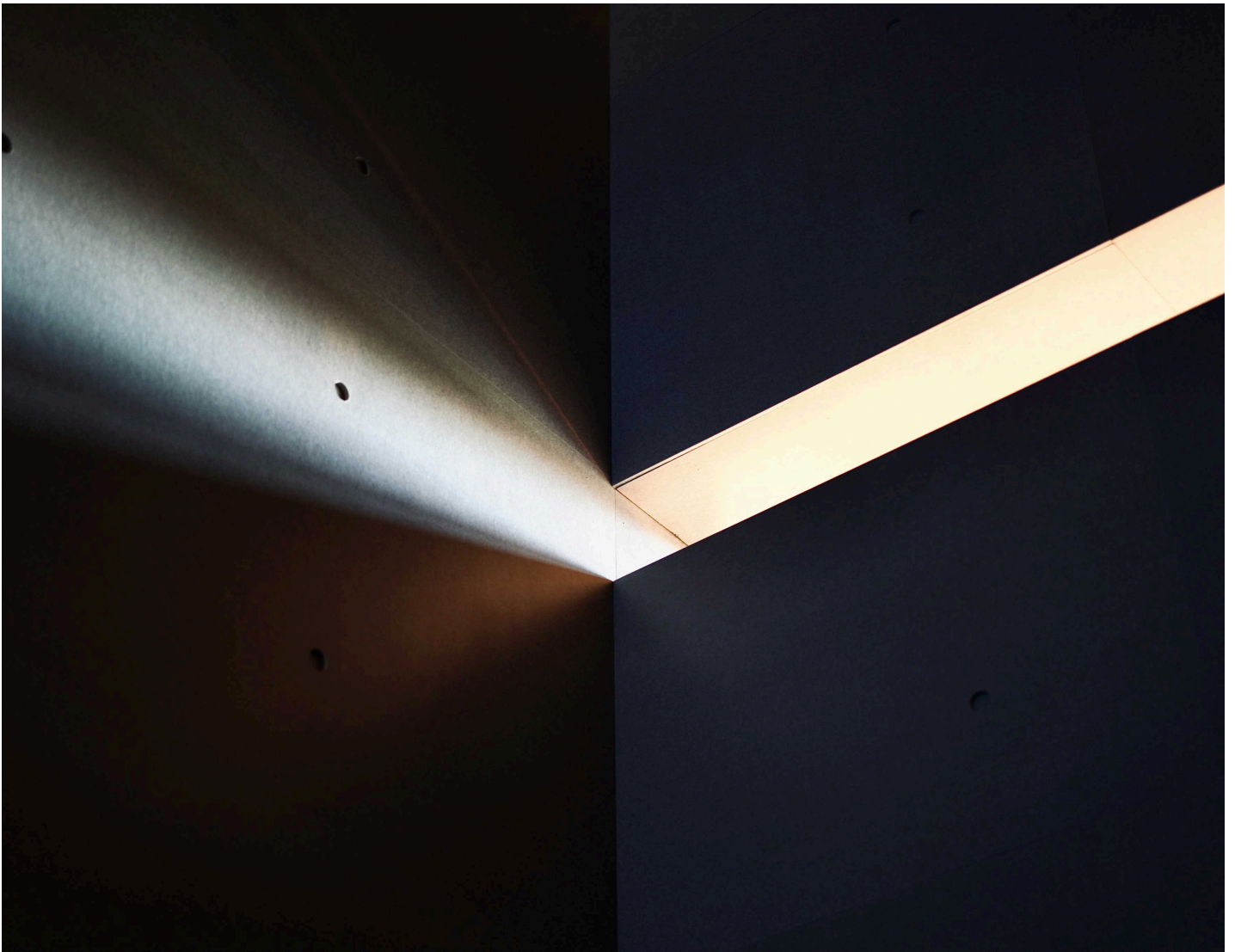


Private market performance is neither random nor consistent. Our data shows persistence exists, is strongest in smaller funds and makes track record a useful yet imperfect selection guide.

Beyond the level of dispersion, a key question for investors is whether performance persists.

If fund outcomes were effectively random from one vehicle to the next, manager selection would have limited value beyond broad diversification. But if prior performance contains information about future outcomes, then selecting the right managers, and avoiding the wrong ones, can materially influence long-term portfolio results.

Dispersion shows that outcomes differ across managers; persistence determines whether those differences are informative for future fund selection. In that sense, dispersion creates the stakes, while persistence creates the case for selection.



Persistence exists but it is asymmetric

Academic evidence suggests that persistence exists, but in a nuanced and strategy-dependent manner. Funds whose prior vehicle ranked in the top quartile have historically achieved subsequent net internal rates of return in the range of 17 to 18 percent, with multiples close to 2.0x. By contrast, funds following bottom-quartile predecessors have delivered materially weaker outcomes, with net IRRs closer to nine percent and multiples nearer to 1.45x.⁹

Importantly, top performance is difficult to repeat. A fund whose previous vehicle was top quartile achieves top-quartile status again only roughly one-third of the time.¹⁰ However, underperformers are more consistent, and poor fund performance is more persistent. Funds whose predecessors ranked in the bottom quartile remain bottom quartile in close to 40 percent of cases.¹¹ This asymmetry implies that while identifying future top performers is challenging, avoiding persistently weak managers may be more feasible and equally important.

Measuring persistence through quartile transitions

To assess persistence empirically, we analysed fund-level PitchBook data across closed, finite-life, drawdown buyout funds with vintages from 2000 to 2018. Each fund was linked to the next chronological fund raised by the same manager. We then measured how likely each manager's next fund was to land in the same, or a different, quartile as their previous one.

This transition-based approach provides a more complete picture than a single repeat-rate statistic. It allows us to observe not only whether top-quartile funds are followed by other top-quartile funds, but also whether underperformance persists and how often managers move across quartiles over time.

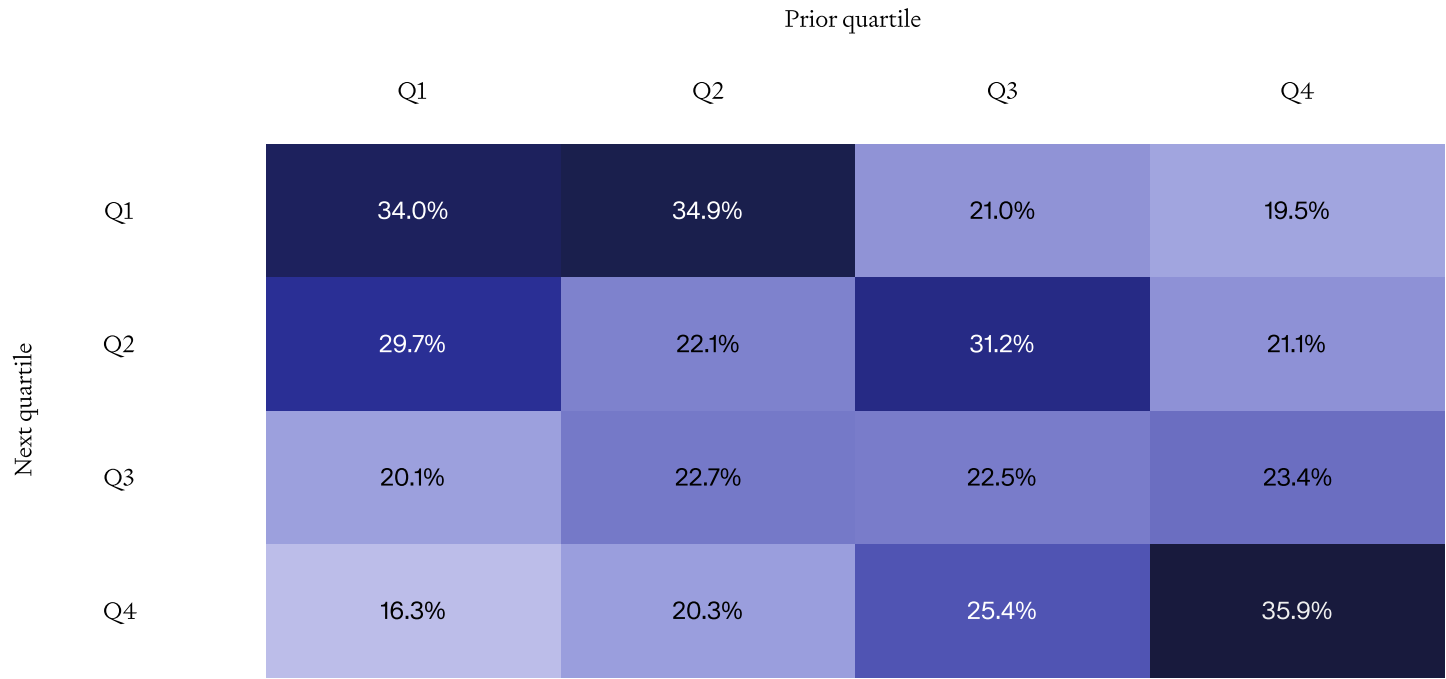
Two caveats apply. Persistence can only be measured on funds with observed quartile rankings, and coverage tends to be better for larger, more institutionalised managers. These findings should therefore be read as evidence that persistence exists within the observable buyout market, not as a complete statement about every fund in the asset class.

The analysis is shown for the full sample and separately by fund size bucket: \$250mn-\$999mn, \$1bn-\$4.99bn, and \$5bn+. Across the full sample, we observe 647 usable fund-to-fund transitions, including 209 starting from Q1, 172 from Q2, 138 from Q3 and 128 from Q4.

Prior fund quartile is a meaningful predictor of the next one

Figure 3

Quartile transitions between successive funds, all sizes



Source: Pitchbook, Moonfare, 2026
Note: Past performance does not indicate future outcomes.



The overall results suggest that performance is persistent enough to matter, but not so persistent that selection is easy.

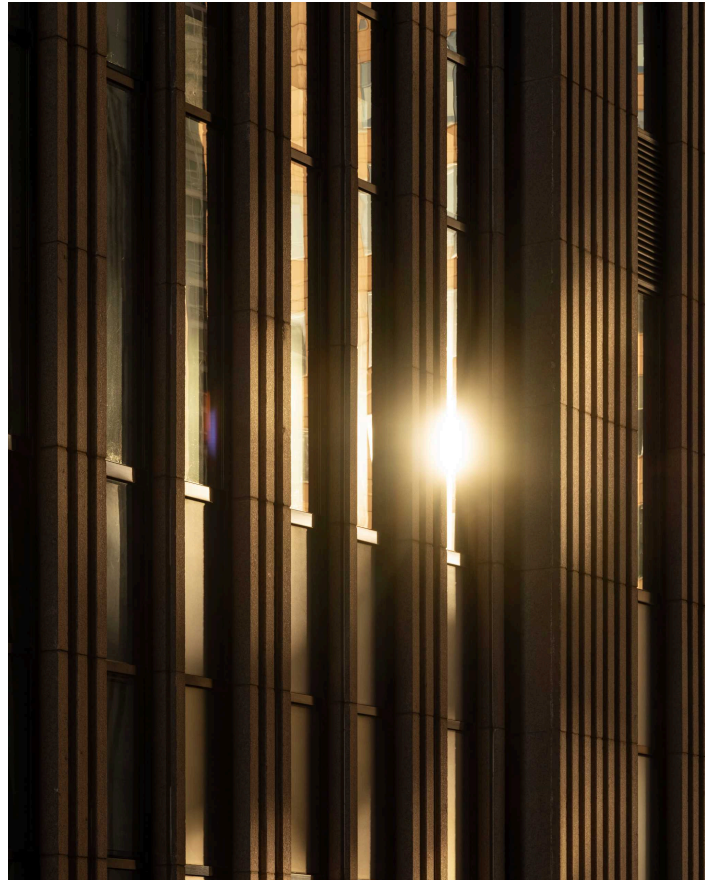
Analysis has found that buyout performance is neither fully random nor fully stable. Across the full sample, a top-quartile fund was followed by another top-quartile fund 34% of the time. That is materially above a naive random benchmark of 25%, indicating that prior outperformance contains meaningful signals about future results. At the same time, persistence is far from deterministic: top-quartile managers still saw 29.7% of next funds land in Q2, 20.1% in Q3, and 16.3% in Q4.

Persistence is also visible at the bottom end of the market. Bottom-quartile funds were followed by another bottom-quartile fund 35.9% of the time, again above the random benchmark. This suggests that underperformance, like outperformance, is not purely transitory. For investors, that is an important result: avoiding persistently weak managers may be as valuable as identifying repeat top performers.

Taken together, the full-sample transition matrix points to a market in which prior quartile rank contains information, but not certainty. Manager selection matters because outcomes are not random; it remains difficult because even strong prior performance does not reliably repeat in every cycle.

Return dispersion creates the stakes,
while persistence creates the case
for selection.

Strongest persistence in smaller PE funds



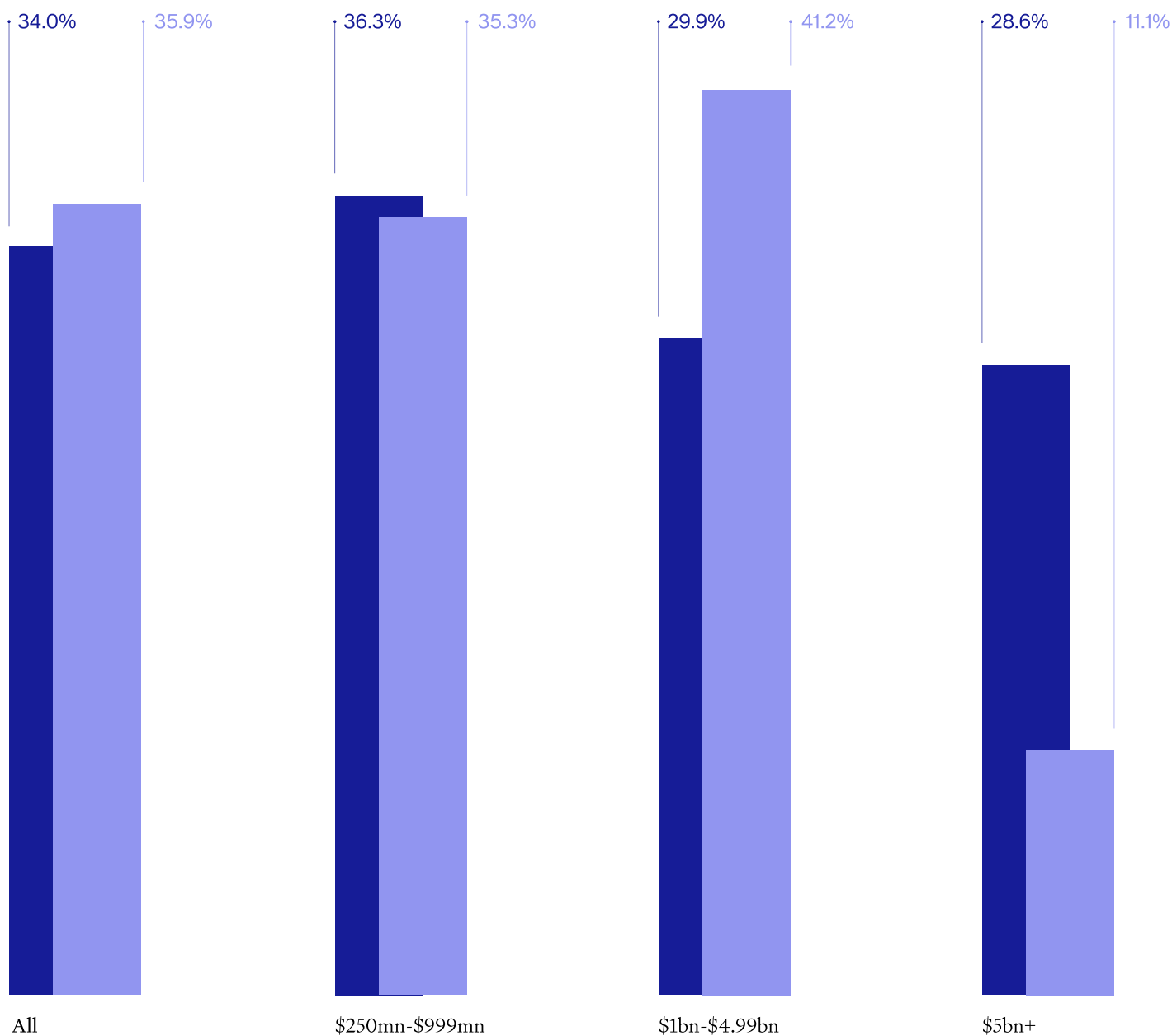
The clearest evidence of top-end persistence appears in the \$250mn-\$999mn segment (see Figure 4). In this bucket, Q1 funds were followed by another Q1 fund 36.3% of the time, while the probability of falling all the way to Q4 was just 12.6%. This is the strongest combination of positive top-quartile persistence and limited cross-extreme reversal across the size buckets.

This pattern suggests that manager-specific advantages may be more repeatable in smaller buyout funds, where sourcing, underwriting discipline, portfolio construction and operational execution may remain more differentiated. For investors, it implies that manager selection may be particularly valuable in segments where wide dispersion is paired with clearer persistence.

Persistence levels vary across fund sizes

Figure 4

Probability of Q1 to Q1 and Q4 to Q4 transitions in successive funds, by fund size



- Q1 to Q1
- Q4 to Q4

Source: Pitchbook, Moonfare, 2026

Note: Past performance does not indicate future outcomes.

Mid-sized funds show stronger downside stickiness

In the \$1bn-\$4.99bn segment, top-quartile persistence is less pronounced. Q1 funds repeated as Q1 only 29.9% of the time, while they moved to Q2 even more often, at 34.3%. By contrast, bottom-quartile persistence is stronger: Q4 funds remained in Q4 41.2% of the time, while only 13.7% moved all the way to Q1.

This suggests a different persistence profile in the mid-sized market, likely reflecting the increased competition for deals and the greater difficulty of maintaining the sourcing advantages that drive repeatable outperformance at scale. Prior success remains somewhat informative, but appears less durable than in smaller funds, while prior weakness is more persistent. In practical terms, the value of manager selection in this segment may lie as much in avoiding structurally weak managers as in identifying repeat top performers.

Mega-fund outcomes are only directionally informative

The \$5bn+ bucket contains only 36 usable transitions, so the results should be interpreted with caution. Within that smaller sample, top-quartile funds repeated as Q1 28.6% of the time, while bottom-quartile funds remained in Q4 only 11.1% of the time. The pattern points to limited top-end persistence among the largest funds, but the small number of observations means these findings are better treated as directional than definitive.

Even so, the mega-fund results are notable in one respect: scale does not appear to eliminate dispersion or guarantee stable top-end outcomes. Manager selection remains relevant even in the largest and most institutionalised part of the buyout market. As above we don't have an exhaustive set of data to test this hypothesis, but our sense is that the impressive performance of megacap funds is indicative of the rise of private capital ecosystems - where these very large entities can dominant deal flow ecosystems, investor labour markets and may well be first mover investors in new technologies like AI.



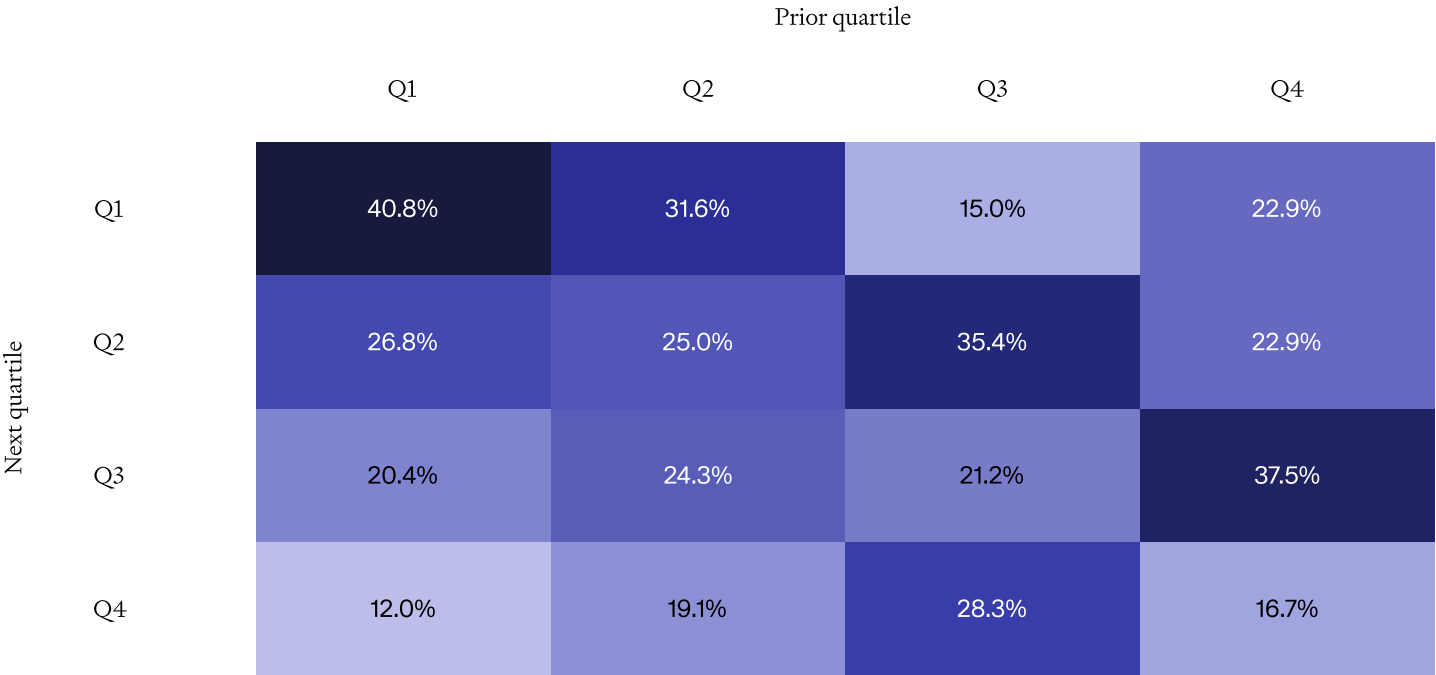
Persistence in venture capital

Applying the same transition-based methodology to venture capital funds reveals a notably different persistence profile. Across the full VC sample, top-quartile funds were followed by another top-quartile fund 40.8% of the time, meaningfully higher than the 34.0% observed in buyout and well above the 25% random benchmark (Figure 5). This stronger top-end persistence is consistent with the power-law dynamics of venture capital, where access to the best deals, founder networks and follow-on rights tend to compound within established franchises rather than dissipate across cycles.

Top-quartile persistence in VC is stronger than in buyout

Figure 5

Quartile transitions between successive funds, all sizes

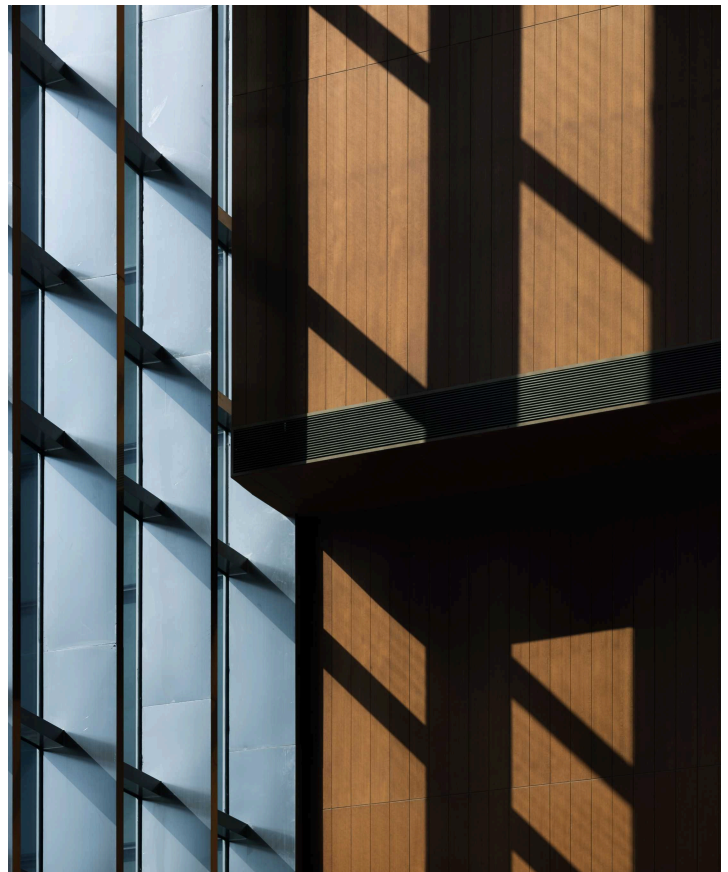


Source: Pitchbook, Moonfare, 2026
Note: Past performance does not indicate future outcomes.

Bottom-end persistence, however, tells a different story. Q4 VC funds repeated as Q4 only 16.7% of the time, well below the 35.9% observed in buyout and below the random benchmark. Prior weakness in VC appears far less sticky than in PE, with bottom-quartile managers more likely to either disappear from the sample entirely (funds that fail to raise a successor) or experience meaningful dispersion in their next fund's outcome. This asymmetry, persistent winners but less persistent losers, is a defining feature of the VC market and a key methodological consideration when interpreting persistence in this asset class.

The size-bucket analysis reinforces these dynamics, though smaller sample sizes warrant caution (Figure 6). In the \$1bn-\$4.99bn segment, Q1 funds repeated as Q1 53.8% of the time, the highest top-end persistence across any size bucket in either asset class. The \$250mn-\$999mn segment shows more moderate top-end persistence at 35.6%, paired with very low bottom-end persistence of 10.8%. The \$5bn+ bucket contains too few transitions to be reliable, and the 100% Q4→Q4 figure almost certainly reflects a single observation rather than a meaningful trend.

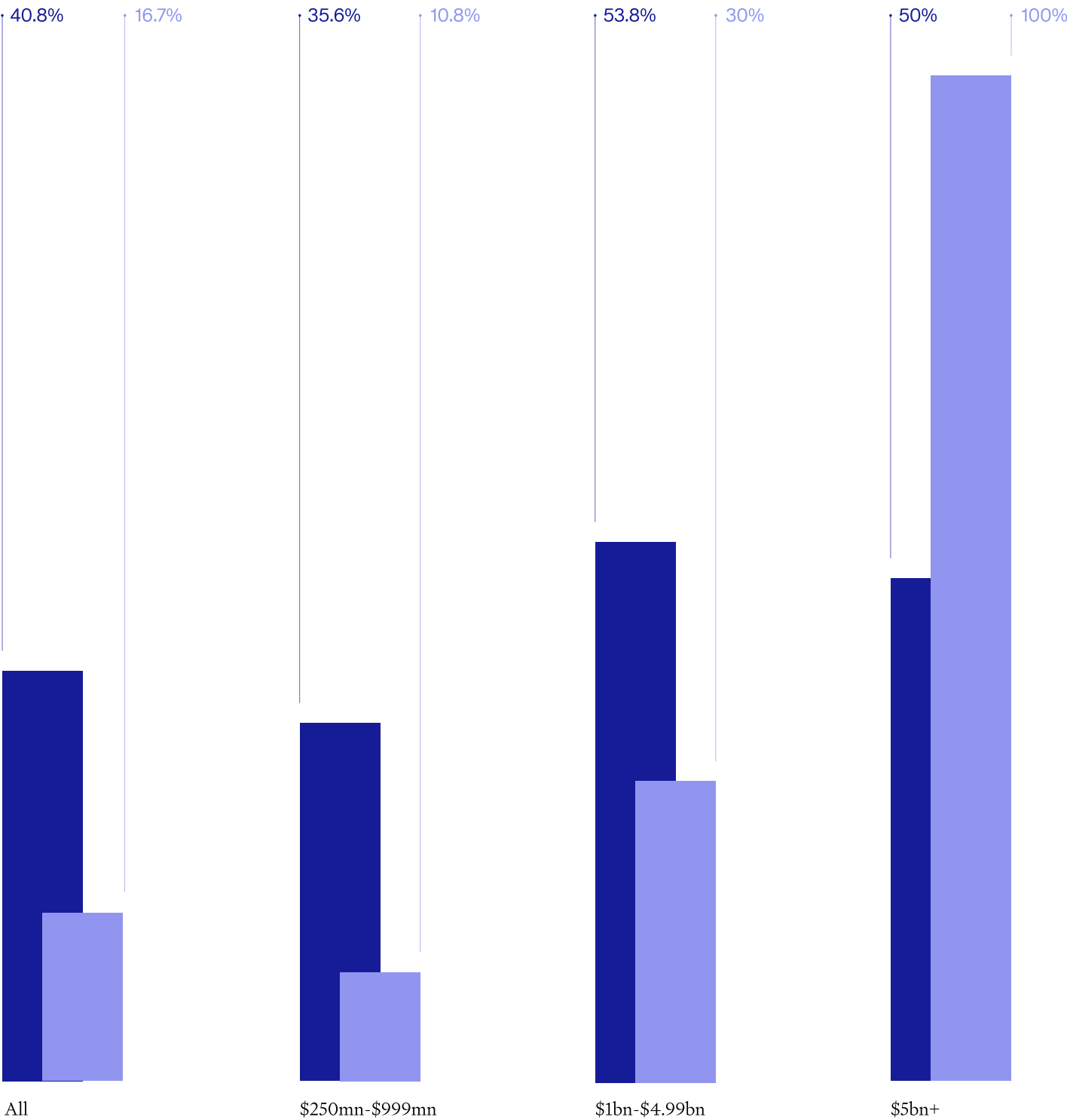
Taken together, the VC transition data points to a market in which prior top-quartile status is a stronger signal than in buyout, particularly among larger, more established franchises. For investors, this strengthens the case that manager selection in venture capital is not only consequential, given the dispersion documented earlier, but also more actionable than in other private market segments, since prior performance carries more predictive weight at the top end.



Top-end VC persistence strengthens with fund size

Figure 6

Probability of Q1 to Q1 and Q4 to Q4 transitions in successive funds, by fund size



- Q1 to Q1
- Q4 to Q4

Source: Pitchbook, Moonfare, 2026
Note: Past performance does not indicate future outcomes.

The implications for investors

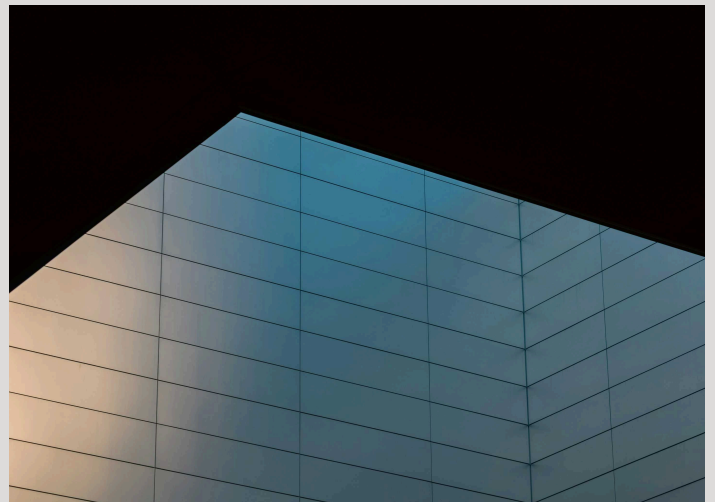


The broader implication is that fund performance shows enough persistence to make manager selection meaningful, but not enough to make it mechanical. Past quartile rank improves the odds of future relative success, particularly at the top and bottom ends of the market, yet outcomes remain probabilistic and vary across fund size segments.

This matters because dispersion and persistence work together. Dispersion means manager outcomes differ materially; persistence means those differences are not purely random. Where both are present, fund selection becomes central to portfolio construction.

Prior performance contains useful signals, but interpreting that signal still requires careful judgment rather than simple extrapolation.

Selection and access are what separate outcomes



Return dispersion is a structural and enduring feature of private markets. Evidence from academic research, industry data and our analysis of PitchBook indices all point to the same conclusion: manager selection is the dominant driver of investor outcomes. In an environment where the difference between top- and bottom-quartile performance can span many years of wealth creation, disciplined access and rigorous selection are essential.

However, we want to note that access matters as much as judgement. The best managers are structurally oversubscribed, making the ability to secure allocations a competitive advantage in itself. We believe that investors with privileged access are best positioned to capture the return premium private markets can offer.

Moonfare’s approach to manager selection

A dual challenge of accessing the best managers while avoiding the worst is what Moonfare's investment approach is built to address.

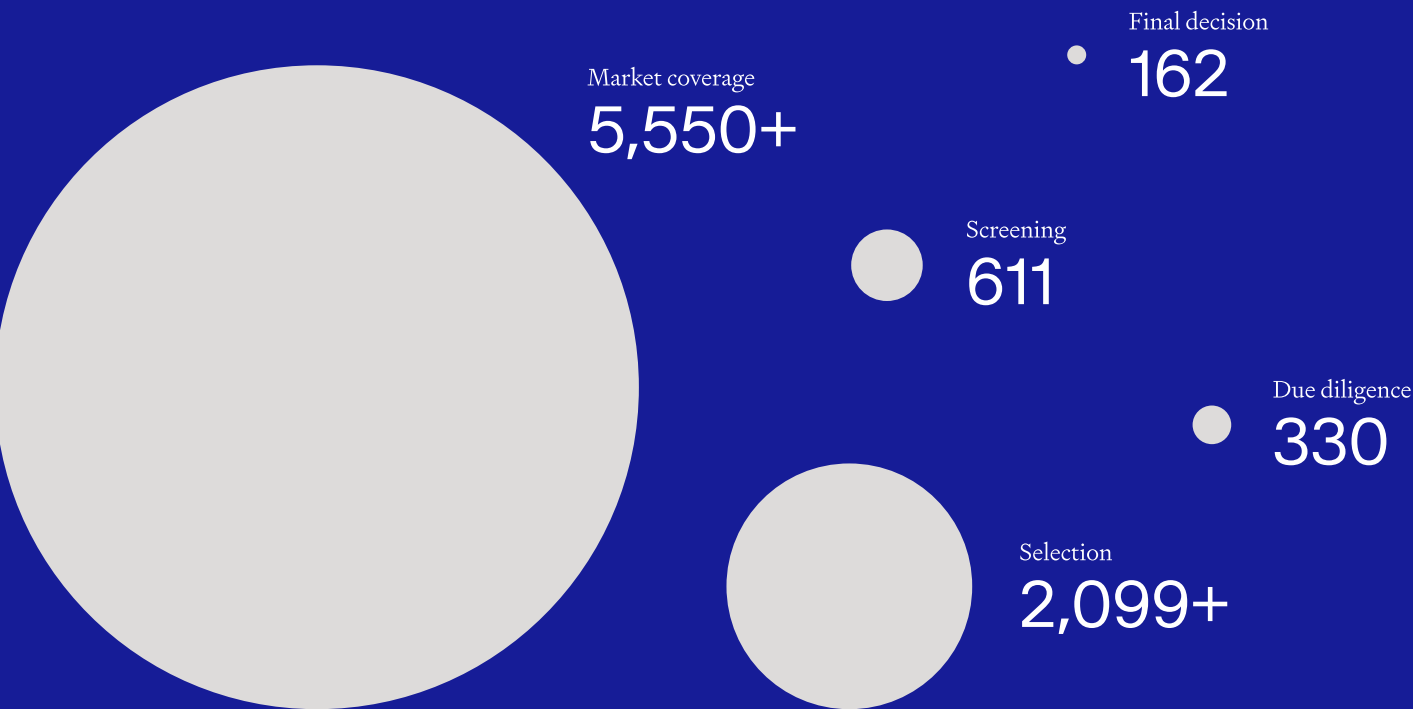
Moonfare is designed to help investors navigate the structural dispersion that defines private markets. Through rigorous due diligence and long-standing GP relationships, the firm seeks to provide access to high-quality, capacity-constrained funds that are difficult to reach through traditional channels. By focusing on selection, access and portfolio construction, Moonfare aims to mitigate the downside risks of dispersion while positioning portfolios for long-term outperformance.

This philosophy is operationalised through a structured, multi-stage selection process combining broad sourcing with disciplined filtering. Opportunities are progressively narrowed through selection, screening, due diligence and Investment Committee approval.

We believe this reflects a central implication of private markets: outcomes depend less on market exposure and more on selecting the right managers.

Moonfare’s rigorous selection process

Number of companies at each stage of Moonfare’s fund selection funnel, since inception



Endnotes

¹ CNBC. 2025

² ScienceDirect / Journal of Corporate Finance. Harris, Jenkinson, Kaplan, Stucke, 2023

³ see 2

⁴ J.P. Morgan. Guide to alternatives, 2026

⁵ BCG. Harris, Khalil, Harte, Glugla, Carter, Claerhout, 2026

⁶ J.P. Morgan. Guide to alternatives, 2026

⁷ PitchBook. Ostroff, Carmean, 2025

⁸ PitchBook. Ostroff, Carmean, 2026

⁹ see 2

¹⁰ see 2

¹¹ see 2

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