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Trading Places: Mapping the Impact of Alts in a Traditional Portfolio

December 2022



KEY TAKEAWAYS

- Historical analysis shows that an addition of 20% alternative investments (alts) to a classic 60% equity/40% bond allocation would have lifted annualized returns more than an entire percentage point over the last 15 years, while reducing volatility.
- Our analysis of adding alts to a traditional 60/40 portfolio found improved returns in 98.7% of modeled scenarios.
- Alts outperformed a 60/40 portfolio most strongly during weaker markets, strengthening the case for incorporating alts should returns from traditional public portfolios continue to slow from historically strong levels.

As the recent era of easy money draws to a close and economies globally reel from the impact of inflation, slower growth, and geopolitical disruptions, a traditional 60%

equity/40% bond allocation has come under stress. Year-to-date, a basic 60/40 allocation would have returned -18.8%, and there are signs that the recent historical paradigm of negative correlation between stocks and bonds may be reversing, as stocks (-21.1%) and bonds (-15.7%) have moved downward in lockstep this year.¹ Furthermore, over the 12 months to October 31, 2022, the fixed income component of a 60/40 portfolio contributed 15% of portfolio volatility, versus just 4% since the beginning of 2000.²

If equities and bonds no longer provide an appropriate hedge against each other, then the need to find alternatives that can become even more pressing. However, as our detailed analysis in this paper will demonstrate, even before this apparent shift in the stock-bond correlation, building alts exposure into portfolios was already valuable. According to historical data, a model 20% portfolio allocation to alts would have both improved overall returns and reduced drawdowns in times of market stress.³ Furthermore, a simulation of outcomes, based upon historical performance data, suggests that downside risk reduction and higher returns are persistent benefits of adding alts to a portfolio.⁴

HISTORY DOESN'T REPEAT ITSELF, BUT IT OFTEN RHYMES

Hindsight - as the saying goes - is 20:20. And hindsight shows that a small allocation to a combination of alternative asset classes and strategies would have notably improved portfolio performance over the last 15 years - which is the full time period in which there is historical data covering all the asset classes in our model portfolio (See Exhibit 1).⁵ The model portfolio in our analysis assumes an allocation of 20% to alts by reallocating proportionately from equity and fixed income.⁶ The alts component is composed of 8% private equity, 8% private credit, 2% private real estate, and 2% hedge funds. For a full breakdown of how we arrived at this allocation, please see the Methodology section at the end of this paper.

As Exhibit 1 shows, an investment of \$1 million in the third quarter in 2007 would have returned nearly \$2.3 million with a 20% allocation to alts—over \$340,000 more than a classic 60/40 approach.⁷ It is noteworthy that the model alts allocation on its own would have returned more than \$4.1 million, or more than double the return from the traditional portfolio.⁸ Put another way, adding alts to a 60/40 portfolio

increased the total return by nearly 20%, translating to annualized returns more than a whole percentage point higher.⁹

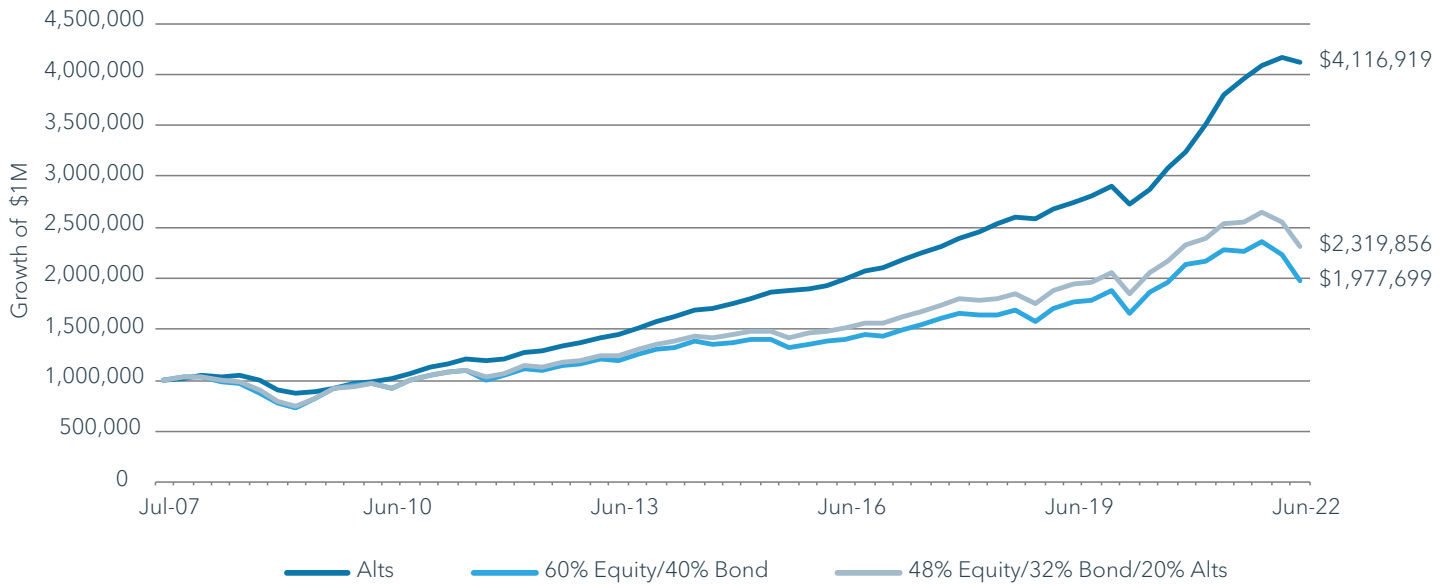
Just as importantly, the addition of alts simultaneously reduced volatility.¹⁰ While volatility and risk are not necessarily the same thing - the former is simply a measure of the magnitude of movements in both directions over time - lower volatility often contributes to a reduction in measures of risk, such as drawdowns or maximum loss. Alts have several attributes that can allow them to reduce volatility.¹¹

Exhibit 2 highlights how, in isolation, the alts component of our model portfolio performed during drawdowns in a 60/40 portfolio.¹²

Alts' ability to provide downside protection is reflected in the fact that they have, on average, captured only 27% of declines of traditional stock and bond portfolios over the drawdown periods in Exhibit 2, excluding the one still currently unfolding.¹³ Those benefits are notable when integrating a 20% alts allocation into a traditional portfolio.

Exhibit 1: An allocation to alts would have improved outcomes for a 60/40 portfolio since 2007

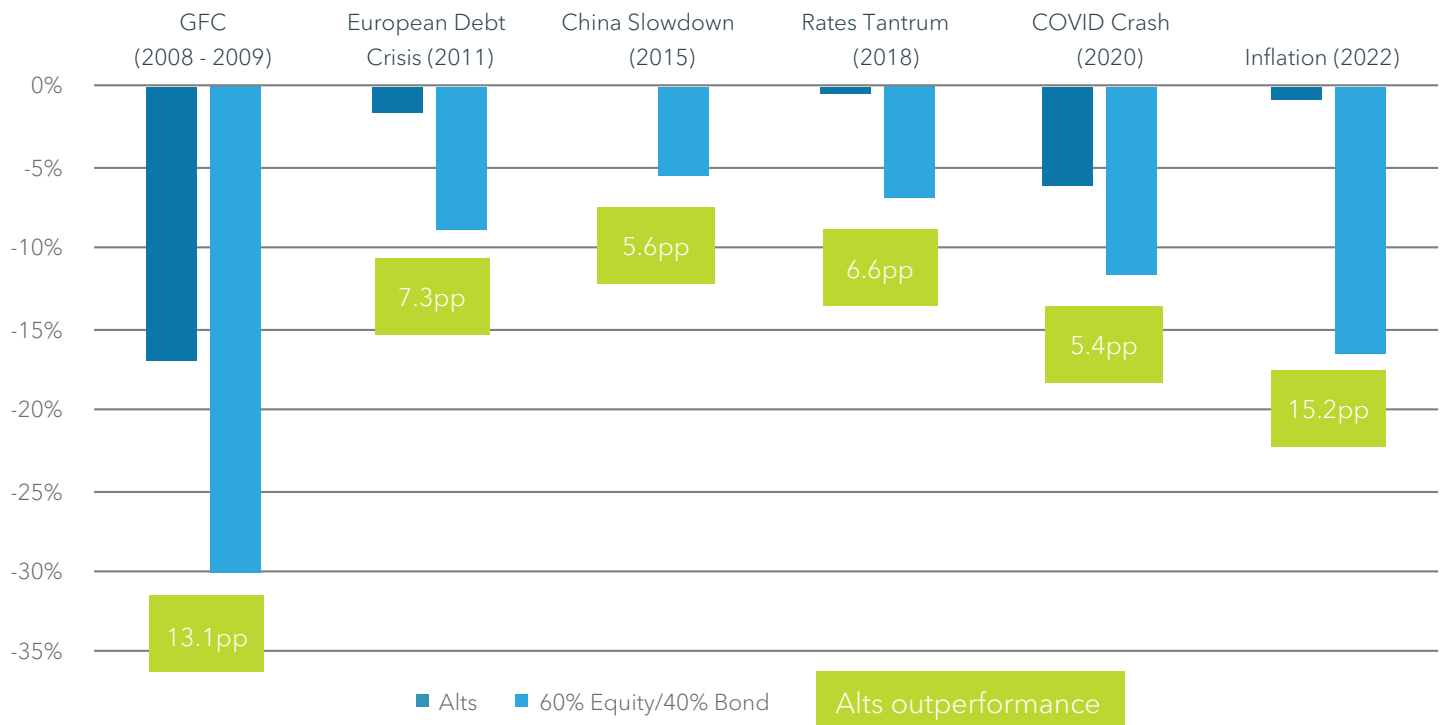
Growth of \$1 million from different modeled portfolio allocations, Q3 2007 - Q2 2022



Source: iCapital, based on quarterly index data from PitchBook, Cliffwater, MSCI, Bloomberg, NCREIF and HFRI, as of June 30, 2022. Past performance is not indicative of future results. For more details on the construction of the portfolios and performance methodology see the end of the paper. For illustrative purposes only.

Exhibit 2: Alts have performed well when a 60/40 portfolio has fallen

Maximum drawdown of a diversified alts portfolio during 60/40 drawdowns, Q3 2007 - Q2 2022, with alts outperformance (pp)



Source: iCapital, based on quarterly index data from PitchBook, Cliffwater, MSCI, Bloomberg, NCREIF and HFRI, as of June 30, 2022. Past performance is not indicative of future results. Future results are not guaranteed. For more details on the construction of the portfolios and performance methodology see the end of the paper. For illustrative purposes only.

Incorporating alts would have reduced portfolio losses by approximately 20%, on average, during periods of public market decline - an almost one-for-one reduction for each percentage allocation to alts.¹⁴

A PERENNIAL ALTERNATIVE TO A 60/40

While it is clearly powerful to show how alts could have improved portfolio performance in the past, we wanted to more firmly establish that alts are additive irrespective of the market environment or performance of the traditional portfolio.

To do so, we used a Monte Carlo simulation to examine the relative performance of our model portfolio (with 20% alts) across thousands of theoretical return paths. This involved randomly and repeatedly selecting a quarter from our historical data and finding the actual returns during each of those periods for both a traditional 60/40 portfolio and our 48/32/20 model portfolio. The Monte Carlo simulation then repeats the process 10,000 times to create, in effect, 10,000 different 15-year potential alternate return scenarios for our

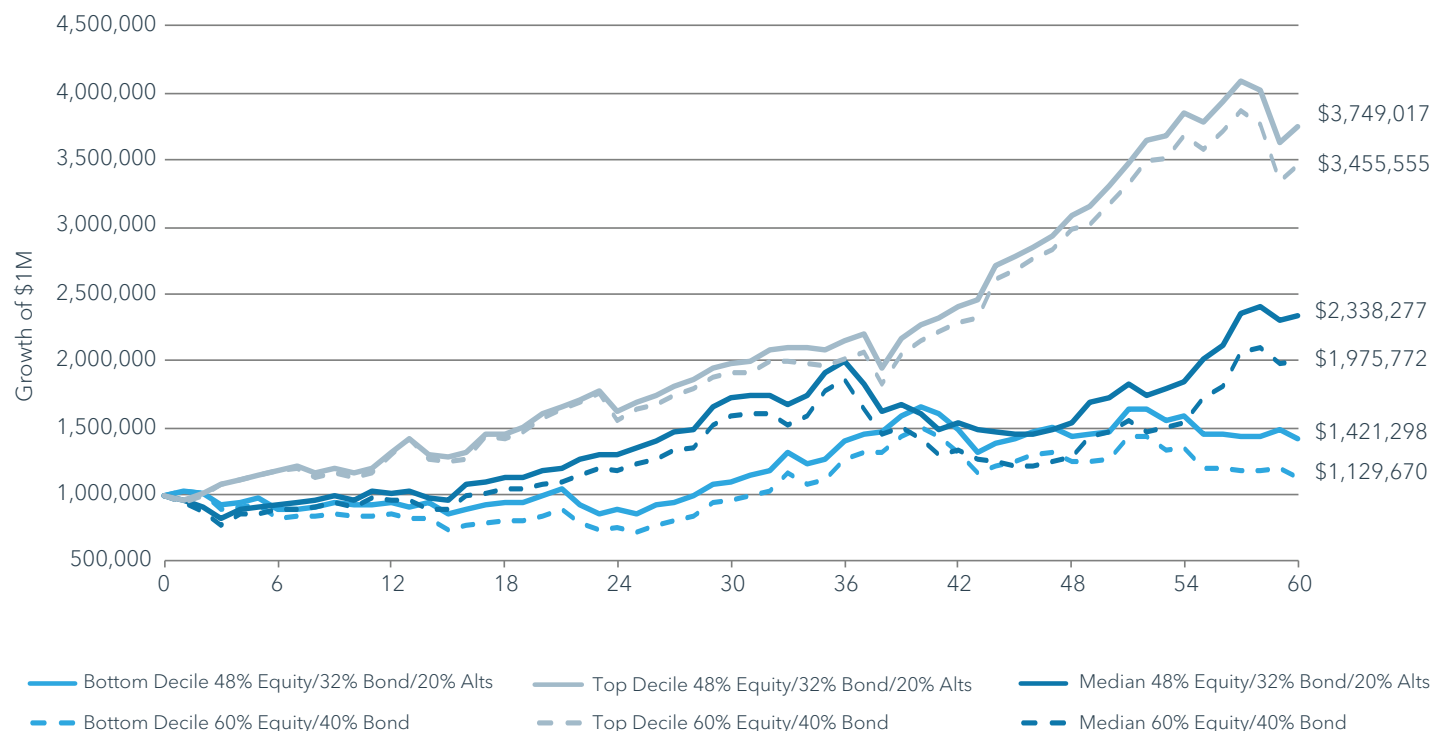
portfolios. These scenarios range from the very good (8.6% top decile annualized 60/40 portfolio returns) to the very bad (0.8% bottom decile annualized returns). The median 15-year return of a 60/40 allocation in our simulation was 4.7%, which is identical to the actual historical return.¹⁵

This type of simulation allows us to analyze the impact of alts on a 60/40 portfolio in a wide range of market environments. While the outcomes are hypothetical, it is important to reiterate that the performance data is built from actual historical returns for both traditional and alternative assets. The Monte Carlo simulation found that the model portfolio with a 20% allocation to alts outperformed a classic 60/40 portfolio in all but 128 out of 10,000 runs, i.e., 98.7% of the time (See Exhibit 3).¹⁶

Exhibit 3 compares the simulated outcomes of the model and traditional portfolios at several major percentile levels. Looking at these specific levels allows us to better understand the impact of alts in both bull and bear markets. The model portfolio would have cumulatively produced 8.5% higher returns after 60 quarters at the top decile level,

Exhibit 3: A portfolio with alts outperformed a 60/40 in almost all simulated scenarios

Simulated growth of \$1 million in a 60/40 portfolio and a portfolio with 20% alts over 60 quarters



Source: iCapital, based on quarterly index data from PitchBook, Cliffwater, MSCI, Bloomberg, NCREIF and HFRI, as of June 30, 2022. Past performance is not indicative of future results. Future results are not guaranteed. For more details on the construction of the portfolios and performance methodology see the end of the paper. For illustrative purposes only.

17.1% higher returns at the median level, and 25.8% higher returns at the bottom decile level.¹⁷ While the inclusion of alts was beneficial to a 60/40 portfolio across the board, the greater outperformance at the lower end of the outcome range plainly underscores the protection alts can offer in more difficult environments. Exhibit 4 summarizes what this translates to in terms of annualized returns, volatility, and overall portfolio risk-return. In simple terms, the 48/32/20 model portfolio created improvements – “deltas” – on each of these metrics across the simulated performance levels.¹⁸

The addition of 20% alts boosted returns by 111 basis points (bps) annually in the median outcome, and by as much as 156 bps at the bottom decile level.¹⁹ Moreover, the higher returns were not associated with higher risk. Rather, volatility decreased by 200 bps at the median level, and by similar amounts at other levels. A combination of higher returns and lower volatility are reflected in an improvement in the Sharpe ratio for the model alts portfolio at all major percentile levels. The Sharpe ratio measures the expected return relative to risk and is an important consideration in portfolio construction.

The Monte Carlo simulations show us that, whether a 60/40 portfolio performed strongly or poorly, an allocation to alts would have made that performance better.

History suggests that traditional 60/40 investors will be unable to perpetually rely on a market environment as positive as we have seen in recent years. From the end of the Global Financial Crisis when the market turned upward in the second quarter of 2009, through the end of June 2022, a 60/40 portfolio returned an annualized 7.9%.²⁰ By comparison, since the turn of the millennium, the annual return from a 60/40 portfolio has been 4.8%.²¹

The performance boost from alts has been greatest in the traditional 60/40 portfolio’s times of weakness. So, if you believe that returns from a traditional stock and bond portfolio will slow – and even a reversion to the mean would be a significant step down – the argument for incorporating alts becomes even stronger.

Exhibit 4: Addition of alts to a 60/40 improved metrics across the board in our simulation

Metrics from simulated performance of a 60/40 portfolio and a portfolio with 20% alts over 60 quarters

| | | BOTTOM DECILE | BOTTOM QUARTILE | MEDIAN | TOP QUARTILE | TOP DECILE |
|---------------|---------------|---------------|-----------------|---------|--------------|------------|
| Returns | 60/40 | 0.82% | 2.68% | 4.72% | 6.74% | 8.62% |
| | With 20% Alts | 2.37% | 4.32% | 5.83% | 7.66% | 9.21% |
| | Delta | 156bps | 164bps | 111bps | 92bps | 59bps |
| Volatility | 60/40 | 12.30% | 12.03% | 12.05% | 9.79% | 10.40% |
| | With 20% Alts | 10.60% | 10.22% | 10.06% | 8.46% | 8.88% |
| | Delta | -170bps | -181bps | -200bps | -133bps | -152bps |
| Sharpe ratio* | 60/40 | 0.01 | 0.16 | 0.33 | 0.62 | 0.76 |
| | With 20% Alts | 0.16 | 0.35 | 0.51 | 0.82 | 0.96 |
| | Delta | 0.15 | 0.19 | 0.18 | 0.21 | 0.20 |

Source: iCapital, based on quarterly index data from PitchBook, Cliffwater, MSCI, Bloomberg, NCREIF and HFRI, as of June 30, 2022. Past performance is not indicative of future results. Future results are not guaranteed. For more details on the construction of the portfolios and performance methodology see the end of the paper. *The Sharpe Ratio is a measure of the risk-adjusted return (or return per unit of excess risk assumed) of a security or portfolio. It is calculated by looking at the standard deviation of returns relative to the performance of a “risk-free” asset.

ALTERNATIVE, BUT NO LONGER NICHE

The obvious next question that stems from this analysis is how to go about adding alts exposure. The very name – alternatives – creates a sense that these asset classes are exotic and may conjure up images of opaque, pricey products with high minimums and burdensome administration.

But in today's individual investor market, steep investment thresholds and administrative complexity should not be reasons to avoid allocating to alts. Ongoing product and technological innovation in the high-net-worth (HNW) investor space has helped simplify various investment processes, with platforms that provide education, streamline administration, and automate reporting. Further, these innovations have, in a virtuous cycle with rising competition, driven the entry of a wider selection of high-caliber managers into the individual investor alternatives space, and placed downward pressure on fees.²²

As a result, roughly 30% of HNW investors and more than 80% of ultra-HNW investors – with more than \$30 million in assets – now allocate to alts, potentially benefiting from the portfolio improvements we have demonstrated in this paper.²³

While they may be called alternative, alts are no longer exclusive or niche: Private market assets are currently valued at \$23 trillion.²⁴ These investments will likely, and necessarily, become ubiquitous components of a well-balanced portfolio.

METHODOLOGY

Data used in this paper was collected from PitchBook, Cliffwater, MSCI, Bloomberg, NCREIF, and HFR, as of June 30, 2022. Past performance is not indicative of future results. Future results are not guaranteed. Quarterly total returns data taken from:

Traditional 60/40 Portfolio

Public equities (60%): MSCI ACWI (All Country World Index), which is designed to represent performance of the full opportunity set of large- and mid-cap stocks across 23 developed and 24 emerging markets.

Bonds (40%): Bloomberg US Aggregate Bond Index, which is a broad base, market capitalization-weighted bond market index. The index includes Treasury securities,

government agency bonds, mortgage-backed bonds, corporate bonds, and several foreign bonds traded in the United States.

Diversified Alts Portfolio

Private equity (40%): PitchBook Global PE quarterly return index, which consists of those funds within PitchBook's database that fall within one of the following private equity categories: buyout, growth/ expansion, restructuring/ turnaround, and diversified PE.

Private credit (40%): Cliffwater Direct Lending Index, which is an asset-weighted index of over 10,000 directly originated middle market loans totaling \$247 billion as of June 30, 2022.

Real Estate (10%): A modified NCREIF-ODCE (Open End Diversified Core Equity) Index, which is a capitalization-weighted, gross of fee, time-weighted return index for real estate investments. Modified with a higher return, greater risk profile to better reflect the nature of private real estate investments, which have greater exposure to the core-plus segment of the market.

Hedge Funds (10%): HFRI Fund Weighted Composite Index, which is a global index comprised of single-manager funds that report to HFR Database, weighted according to the AUM reported by each fund for the prior month.

Model Portfolio

Indices as above, with allocation of 48% public equities, 32% bonds, 8% private equity, 8% private credit, 2% real estate, and 2% hedge funds.

iCapital determined the alts portfolio asset class weightings based on Mean-Variance Optimization (MVO). MVO identifies the optimal portfolio weights to minimize risk for a given return or maximize return per unit of risk. iCapital ran the model with six portfolio components: stocks, bonds, private equity, private credit, real estate, and hedge funds. The stock and bond allocations were fixed at 48% and 32%, respectively, while the alts components (20% in aggregate) were constrained to 8% maximum and 2% minimum individual weightings. The optimal portfolio resulted in an allocation of 48% stocks, 32% bonds, 8% private equity, 8% private credit, 2% real estate, and 2% hedge funds.

Monte Carlo Simulation

A Monte Carlo simulation is a statistical technique used to estimate possible outcomes of events. For our Monte Carlo simulation, we utilized a bootstrapping methodology. The bootstrap is a type of non-parametric Monte Carlo Simulation approach that resamples from a single dataset to create many simulated samples (versus parametric approaches that simulate samples from defined parameters). The advantage of bootstrapping is that it makes no assumptions about the underlying distribution or

its properties. Because bootstrapping involves resampling from known data, future paths will have the same basic historical return realizations that have been experienced in the past. For example, if the historical data does not have a 20% down month, bootstrapping cannot generate one. Bootstrapping typically involves resampling with replacement i.e., all values in the dataset have an equal probability of being selected, which means a value can be selected multiple times.

END NOTES

1. Source: eVestment, based on monthly returns, as of October 31, 2022.
2. Ibid.
3. See Exhibits 1, 2, and 3 in this paper.
4. See Exhibits 4 and 5 in this paper.
5. Source: iCapital, based on quarterly index data from PitchBook, Cliffwater, MSCI, Bloomberg, NCREIF and HFRI, as of June 30, 2022. For more details on the construction of the portfolios and performance methodology see the end of the paper.
6. This results in an allocation of 48% to stocks, 32% to bonds, and 20% to alts. The 20% allocation to alts is purely illustrative. Optimal individual allocations will vary based upon resources, specific goals, risk tolerance, liquidity needs, and other factors.
7. Source: iCapital, based on quarterly index data from PitchBook, Cliffwater, MSCI, Bloomberg, NCREIF and HFRI, as of March 31, 2022. For more details on the construction of the portfolios and performance methodology see the end of the paper.
8. Ibid.
9. Ibid.
10. Ibid.
11. Source: iCapital, "What are alternative investments?".
12. Source: iCapital, based on quarterly index data from PitchBook, Cliffwater, MSCI, Bloomberg, NCREIF and HFRI, as of June 30, 2022. For more details on the construction of the portfolios and performance methodology see the end of the paper.
13. Ibid.
14. Ibid.
15. Source: eVestment, based on monthly returns, as of October 31, 2022.
16. Source: iCapital, based on quarterly index data from PitchBook, Cliffwater, MSCI, Bloomberg, NCREIF and HFRI, as of June 30, 2022. For more details on the construction of the portfolios and performance methodology see the end of the paper.
17. Ibid.
18. Ibid.
19. Ibid.
20. Source: eVestment, based on quarterly returns, as of June 30, 2022.
21. Ibid.
22. Source: AI Insight.
23. Source: EY, "2021 EY Global Wealth Research Report." High net worth defined as \$1 million to \$4.9 million in assets. Ultra-high net worth defined as \$30 million-plus in assets.
24. Source: PitchBook, as of June 30, 2022.

COMPOSED BY



Kunal Shah

Managing Director,
Head of Private Equity
Solutions, Co-Head
of Research



Shan Hasnat

Senior Vice President,
Research and Education



Rob Alldian

Assistant Vice President,
Research and Education



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60 East 42nd Street, 26th Floor
New York, NY 10165
212.994.7400

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