

# Seeking an Alternative

Understanding and Allocating  
to Alternative Investments



---

# Summary

In this paper we look at some of the forces driving individual investors to incorporate “alternative” investments in their portfolios. We then offer some general allocation suggestions on how they may do so.

We think there are several compelling reasons why investors are considering “alts.” While the century is young, we’ve already had three severe market declines. The result is considerable uncertainty, and the feeling that traditional investment options alone may not suffice.

We believe some investors are seeking alternative investments to find yield, some for higher returns, and some as a haven against market volatility—or any combination of the above. Because there is no generally accepted approach or “style box” to guide investors on reaching their goals with alternative investments, we offer up a framework to address this gap.

---

# Investor PTSD: Laboring to Forget the Turbulent “Aughts”

Let’s look at some of the realities of investing today that are driving investors to consider “alts.”

First, volatility has changed—and has changed us. During the previous decade, we had far more frequent occurrences of extreme (or “fat-tail”) moves in the equity markets, which deeply scarred many investors.

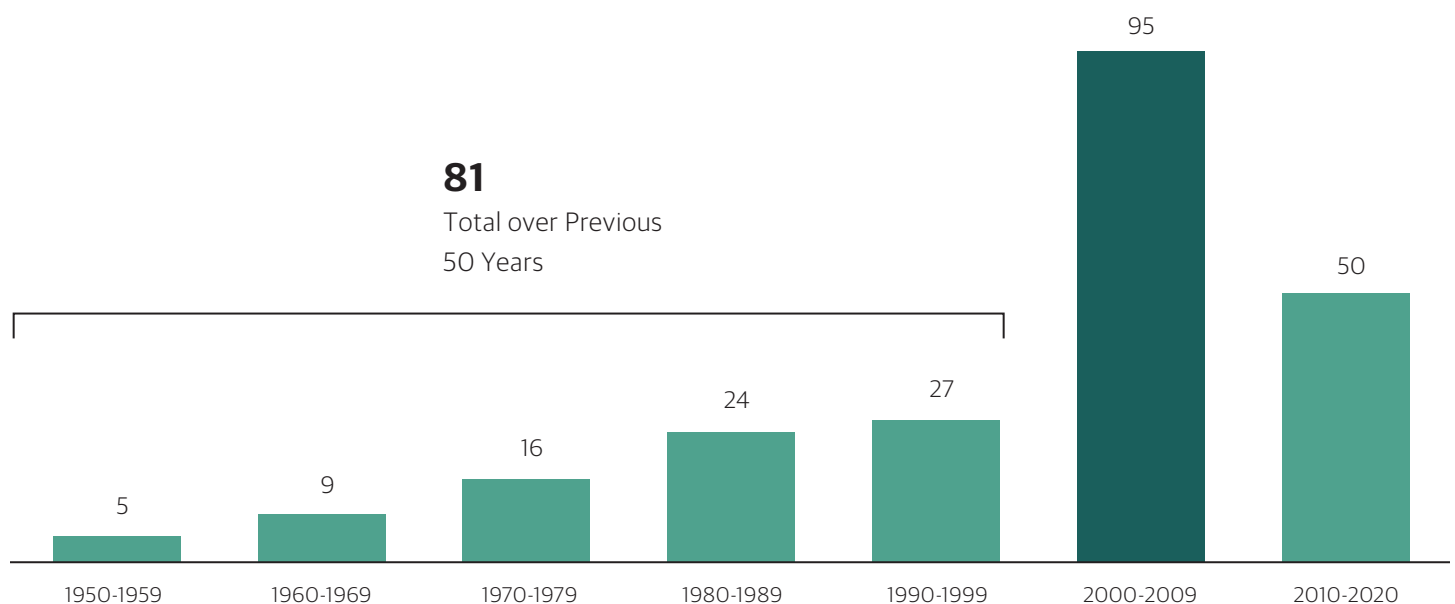
Technically speaking, a fat-tail event is three standard deviations (“three sigma”) away from the mean and has only a 0.1% probability of happening—that is, statistically it should occur only once in every 1,000 periods under analysis. But in reality these “low probability” events occur far more frequently, as they did during the 2008 credit crisis (Display 1).

The display shows that, for U.S. equities, the number of days when markets moved 3% or more reached a peak of 95 in the last decade (the tall dark green bar), versus 81 episodes in the previous 50 years all together. More important, we’re still living with the emotional repercussions of that experience.

In the last several years, with the flood of central bank accommodation across developed markets acting as a kind of shock absorber, volatility tapered off. However, with volatility on the rise again, investor PTSD is beginning to manifest itself in the form of higher sensitivity to market gyrations.

## DISPLAY 1: EXTREME VOLATILITY LEAVES DEEP SCARS

Number of 3% Daily S&P 500 Moves by Decade



Source: Morningstar Direct through 3/31/20. Data covering 2010-2020 spans 1/1/10-3/31/20, to include the latest data available as of publication.

# True Diversification Is Harder to Come By

Another post-crisis reality is the rise in correlations across many asset classes, which challenges efforts to truly diversify portfolios.

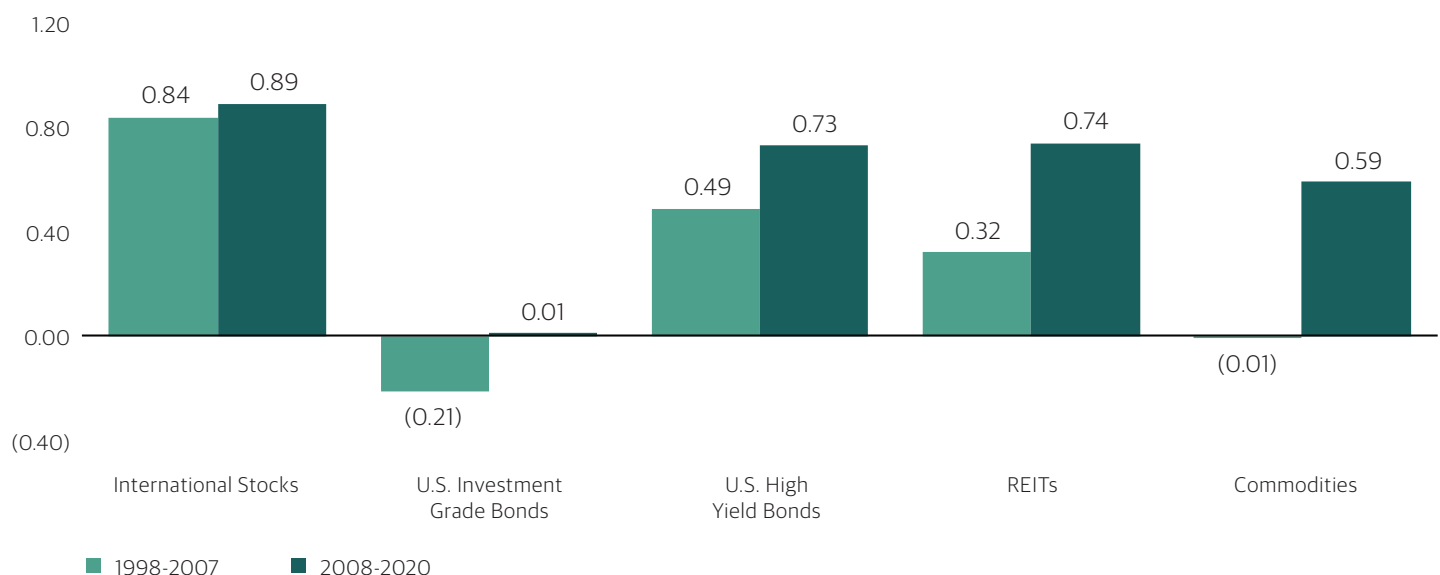
In the decade prior to the financial crisis, investors were able to diversify their equity portfolios by allocating, for example, to non-U.S. Stocks, High Yield Bonds, REITs or Commodities—most with correlations below 0.5 relative to the S&P 500 (as shown in the light green bars in Display 2).

But since the crisis, correlations across these assets have risen (the dark green bars). The data suggest that today only investment grade fixed income remains a compelling diversifier to equities.

But that's cold comfort for most investors today because the role of bonds as the traditional anchor to windward for equities is shifting.

## DISPLAY 2: HIGHER CORRELATIONS LEAVE NOWHERE TO HIDE

Correlation of Key Asset Classes with the S&P 500 Index



Source: Morningstar Direct through 3/31/20. The correlations presented are based on the following indices: For International Stocks: MSCI ACWI ex-U.S.; for U.S. Investment Grade Bonds: Barclays U.S. Aggregate; for U.S. High Yield Bonds: Barclays High Yield Corporate; for REITs: FTSE NAREIT All Equity REITs; for Commodities: S&P GSCI. Index Definitions provided at the end.

# Bond Bull Market: A Thing of the Past?

Investors have long understood fixed income's primary role as a diversifier to equities. But they have also grown to expect from their bond allocation a robust source of return for the portfolio as well—historically a rare combination (Display 3).

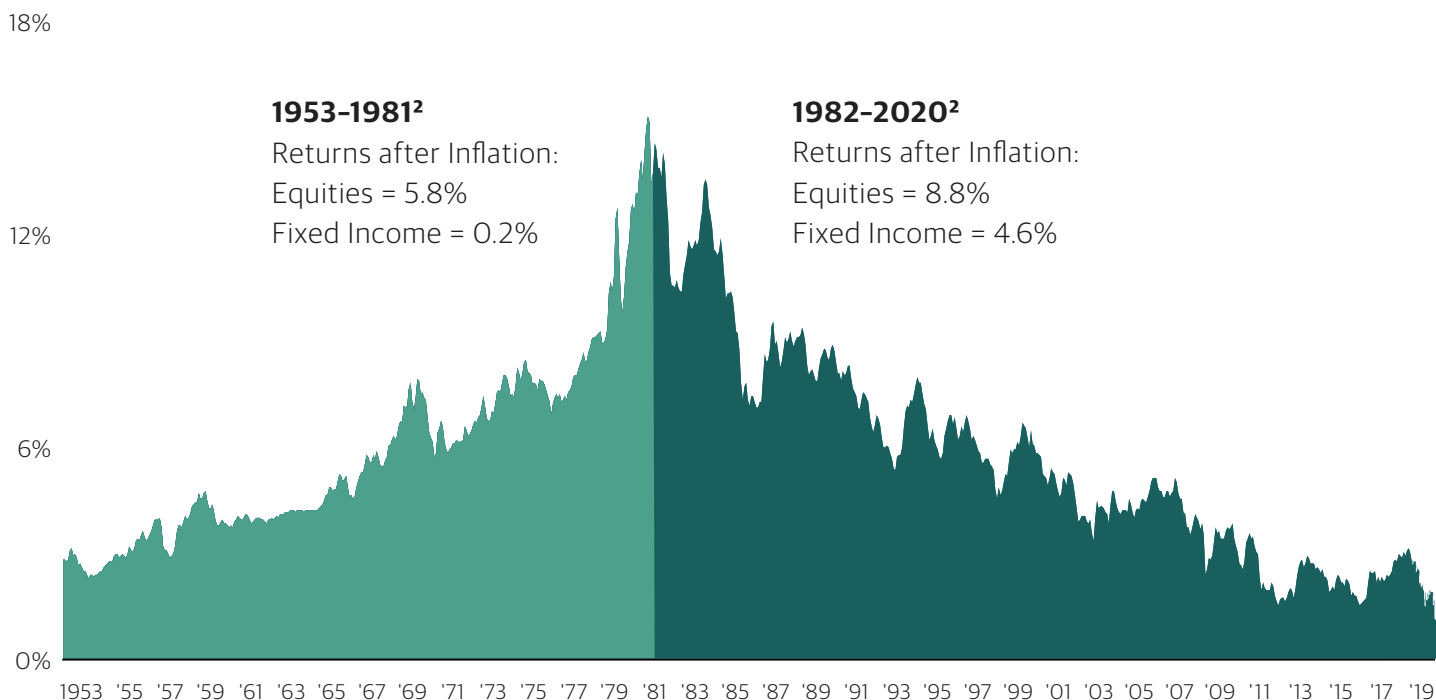
Over the last several years they've had to unlearn this second benefit, with rates near zero and investors starved for yield.

As the longer history of the 10-Year Treasury yield shows, bonds may not always be a support to total return. And based on forecasts, if there is one thing tomorrow's investors will need, it may be a boost in returns for their overall portfolio.

Most analysts agree that equity returns in the U.S. may be constrained by slower growth in the economy going forward.

## DISPLAY 3: A WORLD WHERE BONDS COULD LOSE MONEY

Historical Yield on 10-Year Treasury Bond, 1953-2020<sup>1</sup>



Source: U.S. Treasury and Federal Reserve, and Morningstar Direct. For Equities: S&P 500; for Fixed Income: Barclays U.S. Aggregate.

1. Historic yields as of 3/31/20.

2. Returns after inflation as of 2/29/20.

# Performance Headwinds Ahead

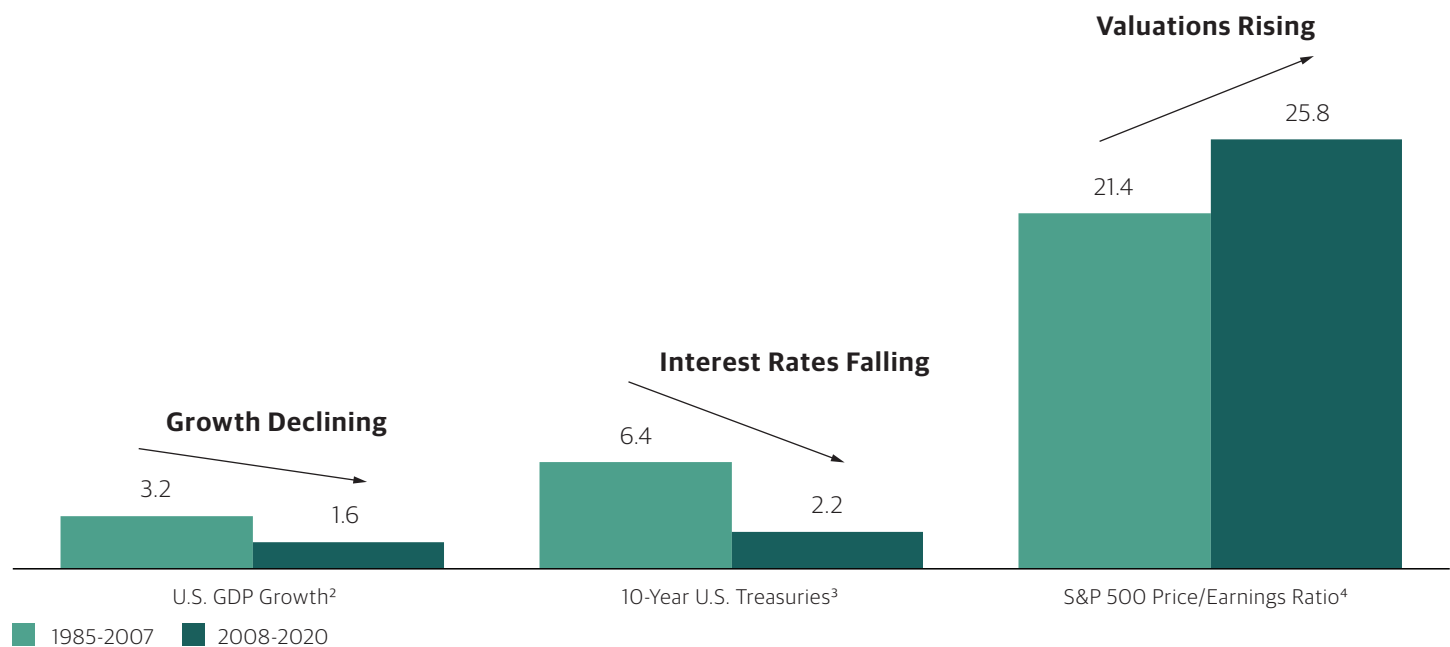
A common way to generate this type of forecast is to look at the equity risk premium based on three underlying components: a reasonable discount rate (Treasuries), overall economic growth (GDP), and the valuation dynamics (price-to-earnings ratio) of equities (Display 4).

All three of those measures—low current yield, tepid economic growth, and relatively high equity valuations—suggest anemic returns for equity markets ahead. It's no surprise then that some analysts see lower returns over the next several years—with U.S. equities projected to earn an annualized return of 3% and a taxable moderate portfolio also returning just 3% over the next 5 years.<sup>1</sup>

This is far below the target annual return that most institutions use to cover their liabilities (generally between 7% and 8% per year), and could easily leave most individual investors wanting more as well.

Simply put, investment returns may be up against some strong headwinds over the near to medium term, and this could be another factor driving investors to look at “alternative” options.

**DISPLAY 4: ECONOMIC BACKDROP SUGGESTS ANEMIC FUTURE RETURNS**



**1.** The quoted returns represent asset class forecasts as estimated by Goldman Sachs (Investment Strategy Group: Outlook, January 2020). Goldman Sachs forecasted a 5-year annualized return for U.S. Equities, as measured by the S&P 500 at 3%. A taxable moderate portfolio was forecasted to have a 3% annualized return. The moderate risk portfolio was allocated among equities, fixed income and additional asset classes and was designed to track 8% volatility. There can be no assurance that any alternative asset classes will achieve their objectives or avoid significant losses. There can be no assurance that the forecasts will be achieved. These comparisons are provided for informational purposes only and should not be relied upon as a benchmark or target for any index or Blackstone fund. There is no assurance that an allocation to alternatives would provide higher real returns. Please consult your own third-party advisors before making any investment decisions based on this information.

**2.** Bureau of Economic Analysis, as of 12/31/19.

**3.** U.S. Treasury and Federal Reserve, as of 3/31/20.

**4.** Morningstar Direct, as of 3/1/20.

# Alternatives as Complements to Traditional Strategies

But first a problem of definition: A common mistake investors make is to treat alternative investments as a homogeneous category. The reality is alternatives are not a single asset class. Alternatives include an array of assets, strategies, and structures and should not be construed as some monolithic investment or a single slice in the allocation pie.

That said, alternatives do share some characteristics that may position them as potential complements to traditional investments (Display 5). For example, traditional investments are typically very liquid, and can be accessed easily, often at low cost: They provide passive shareholders with efficient exposure to “beta” or “the market.”

Alternatives offer different attributes. Instead of simply replicating the market, managers are less constrained, they

are often activist in their approach, and their performance tends to vary substantially. As a result, returns tend to be less correlated to the beta of traditional market investments and are more dependent on the individual manager’s skill.

Alternative managers can also use additional tools, including leverage and shorting, and have the benefit of less liquid capital, which they can deploy at will and without having to be as concerned that investors will run for the exits before their investment theses play out.

Essentially, it’s some informational or trading advantage—a manager’s particular edge—that gives these strategies their unique and attractive characteristics.

## DISPLAY 5: THE NEW INVESTOR BARBELL

Traditional Investments	Alternative Investments
<ul style="list-style-type: none"><li>Managers often highly constrained</li><li>Liquid product in efficient markets</li><li>Market-driven performance with little dispersion among managers</li><li>Highly correlated to market</li><li>Passive shareholder</li><li>High pace of investor fund flows</li></ul>	<ul style="list-style-type: none"><li>Managers less constrained</li><li>“Private” product in less efficient markets</li><li>Manager-driven performance and high dispersion among managers</li><li>Less-correlated returns</li><li>Greater activism, even ownership of assets</li><li>Tend to have more patient capital</li></ul>

For Illustrative Purposes Only. There is no assurance that an allocation to alternatives would provide higher real returns. Please consult your own third-party advisors before making any investment decisions based on this information.



---

# A Divergence in Alternative Allocations

Institutional investors in general, including pensions, endowments, and sovereign wealth funds, have increasingly used alternatives to help achieve their target returns.

Endowments, for example, with their longer investment horizon and thus greater tolerance for illiquidity, have allocated aggressively to alternatives, with 50% of their portfolios on a dollar-weighted basis now given over to alternatives.

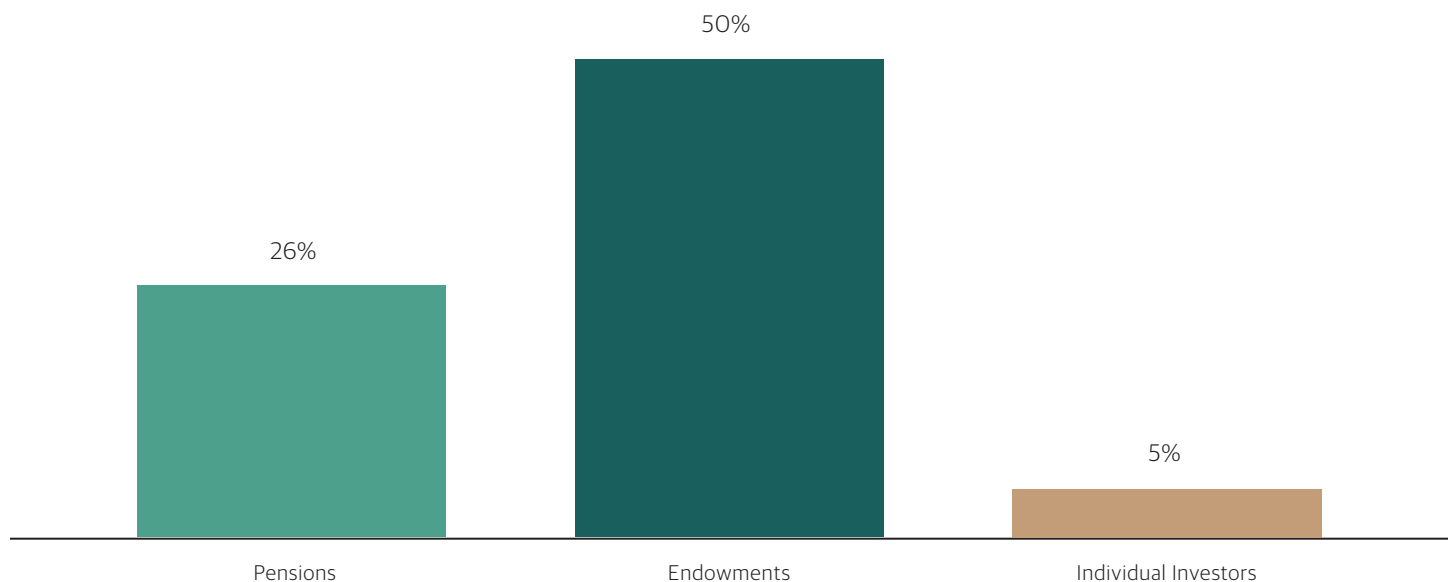
Meanwhile, pensions today have on average 26% of their portfolios allocated to alternatives (Display 6).

By comparison, individual investors continue to allocate substantially less of their portfolios to alternatives. Some believe that's about to change, with individual investors embarking on an allocation shift akin to the one institutions have made over the last 5–10 years. But for that to happen, investors and advisors need to overcome a key impediment: their awareness of and comfort with alternative investments.

---

## DISPLAY 6: INSTITUTIONAL VS. INDIVIDUAL ALLOCATIONS

Alternatives Exposure



---

Source: Willis Towers Watson, "Global Pension Assets Study," 2020; National Association of College and University Business Officers, "TIAA Study of Endowments," 2019; Money Management Institute, "Retail Distribution of Alternative Investments," 2017. For Endowments, the alternative asset allocation is for the Public College, University or System only and represented by allocations to Other equities (includes marketable alternatives, private equity and venture capital) and Real assets (includes TIPS, REITs, commodities/futures, publicly traded Master Limited Partnerships (MLPs), publicly traded natural resource equities, private energy and mining, and private agriculture and timber). Averages provided are dollar-weighted.

# Lack of “Alts” Education Is a Key Impediment

While investors and advisors alike are expressing greater interest in alternatives, considerable confusion remains about the specific nature of alternatives—particularly for individual investors.

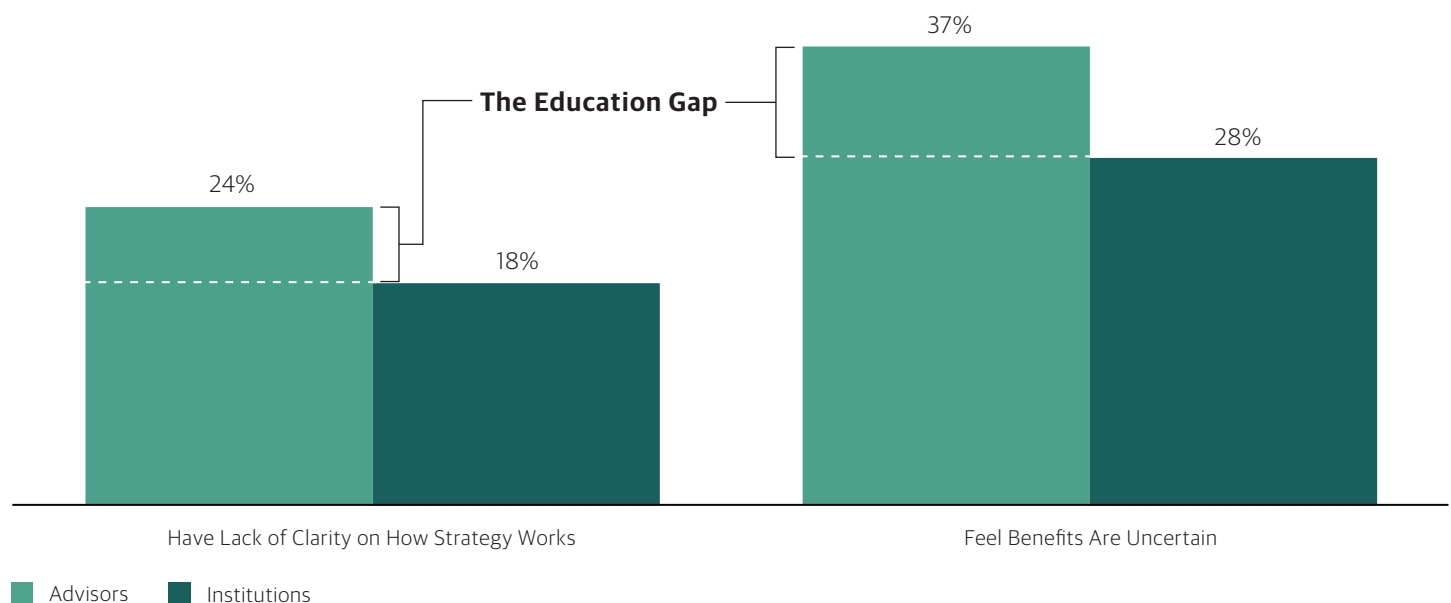
A recent study looked at the reasons advisors and institutions might hesitate to invest in alternatives. The study found that in one category—education—there was a clear gap between advisors and institutions (Display 7). Individuals (and their advisors) are far more likely to hesitate putting money into an alternative

investment due to a feeling of uncertainty around the benefits of alternatives, and a lack of clarity on how specific strategies “work” in the portfolio.

In part this is an industry failing. By labeling these offerings “alternatives” we make them seem more different than they actually are and may over-complicate them in the process. This argues for the need to clarify (and simplify) how we think and talk about “alts.”

## DISPLAY 7: ADVISORS NEED GREATER FAMILIARITY WITH “ALTS”

Top Reasons for Hesitating to Invest in Alternatives



Source: Morningstar and Barron's "Alternative Investment Survey of U.S. Institutional and Financial Advisors," 2015.

---

# Integrating Alternatives into the Traditional Portfolio

One way to describe the relationship between traditional and alternative investing is to consider the “barbell” of investment value, with liquid “public market” exposure on one end and alternatives on the other (Display 8).

First, on the left side, traditional investment vehicles allow liquid, tax-efficient access to precise slices of market beta. With equities, investors can easily access U.S. market exposure, large or small, and with a growth or value orientation. Similarly, with fixed income and real assets, investors can cobble together precise exposures across the major “buckets” of the asset allocation. Each of these component allocations solves a particular investment problem or targets a particular goal.

On the other side, we think investors need to look beyond the “Alternative” monolith and consider aligning individual alternative strategies with their appropriate asset class categories.

For example, if an investor is looking to achieve a higher equity-like return target, he might consider growth-oriented private equity, typically known as Venture Capital, or value-oriented private equity, more associated with traditional PE or Leveraged Buyout funds. For a more liquid solution, there’s long/short equity, which investors may employ as a more efficient substitute for some of their long-only equity allocation.

Next, take a look at the traditional fixed income allocation, ranging from sovereign and investment grade bonds to high yield and emerging debt. In the face of current low yields and the potential vulnerabilities of their traditional fixed income portfolio, investors might look to incorporate strategies that have higher yield or that mitigate the portfolio’s exposure to rising rates. They might consider event-driven credit hedge funds, with very low correlation to the rest of their portfolio,

or the higher yielding opportunities offered by mezzanine and distressed debt, which also tend to do well in periods of rising rates and higher inflation.

Finally, there’s the real asset category, including real estate and commodity-oriented investments. Again, for their alternative complements, investors might look to private real estate, private energy funds, or Commodity Trading Advisors (CTAs) for potentially diversified (and diversifying) real asset exposures.

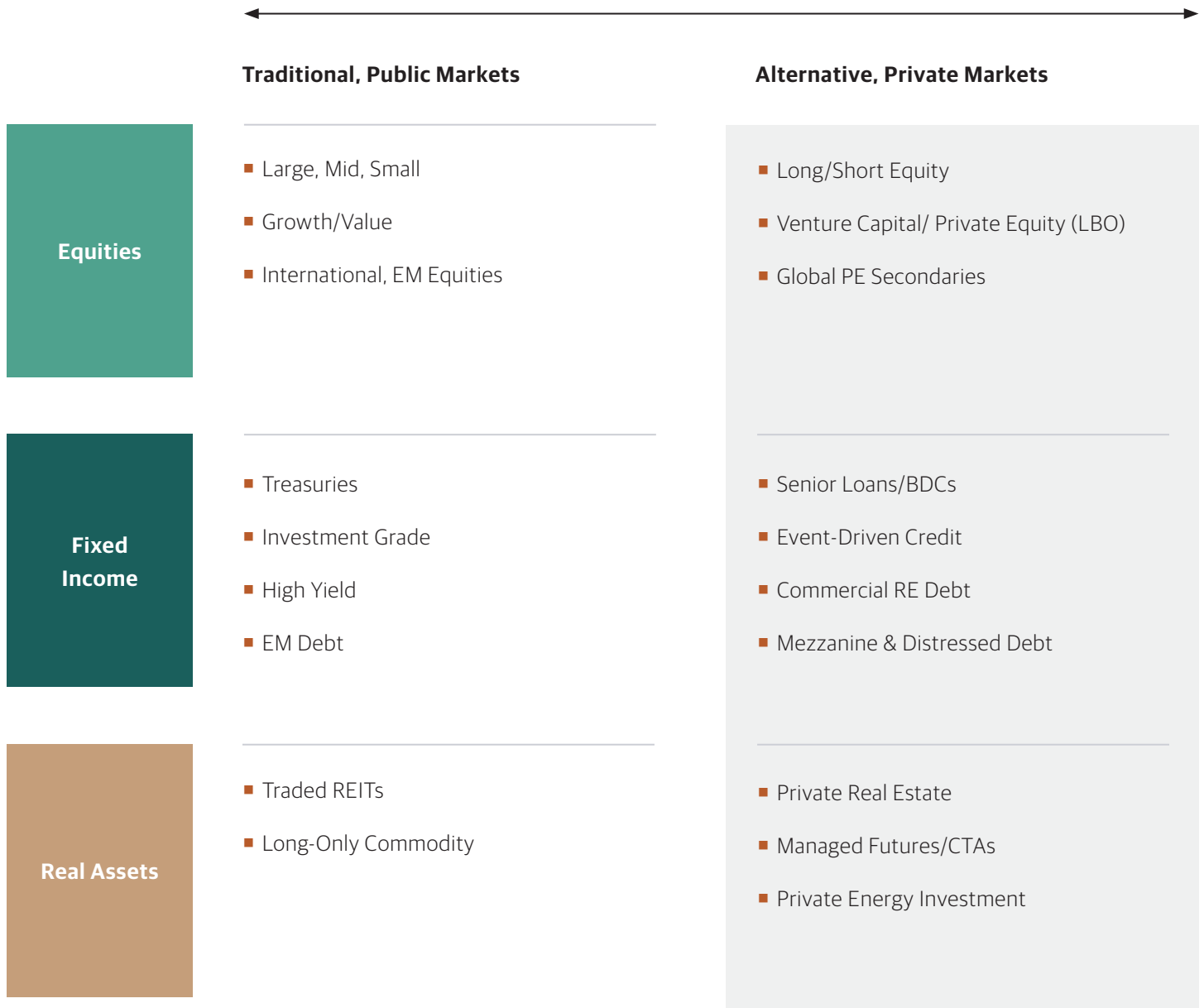
Seen this way, there’s substantial variety under the hood of the singular category of “alternatives.” But with this framework in mind, and using an approach familiar from their work with traditional investments, advisors may begin to build out a comprehensive and more precisely calibrated alternative allocation for their clients.

---

**“Investors need to consider individual alternative strategies alongside their traditional asset class siblings—and allocate to them accordingly.”**

# The Barbell of Investment Value

DISPLAY 8: THE INVESTMENT CONTINUUM—EXTENDING THE ALLOCATION



# The Specific Benefits (and Risks) of Alternatives

If investors begin to look at alternatives using this simplified, goal-oriented approach, they may seek out targeted exposures to deliver on the specific benefits that alternatives offer (Display 9).

For example, if an investor is keen to achieve equity-like growth while maintaining spending power, and he can tolerate some illiquidity, he may consider Private Real Estate and Energy funds.

If he is looking to maintain his current allocation to equities but wants to diversify that exposure and reduce the risk of severe declines, then long/short equity hedge funds may be appropriate.

In the Alternative Fixed Income category, an advisor looking to mitigate the risk of rising rates could seek to diversify the

traditional bond allocation with exposures to event-driven credit or commercial real estate debt. And so on across the matrix below.

Of course, these benefits come with corresponding risks, some alluded to earlier, which can include illiquidity, lack of transparency, higher fees, tax inefficiencies, and other characteristics that some individual investors would prefer to avoid.

But by focusing on the specific objective they are trying to achieve, investors can make more informed and targeted allocations to what many generically label "Alternative Investments."

It may help to step back for a moment and see the broad impact of a comprehensive re-allocation to alternatives.

## DISPLAY 9: ALTERNATIVES MAY SOLVE FOR SPECIFIC INVESTOR OBJECTIVES

Strategy	Diversification	Potential Premium	Potential Risk Reduction	Potential Yield	Interest Rate Diversification
<b>Alternative Equities</b>					
Long/Short Equity	✓		✓		
Private Equity		✓			
Private Equity Secondaries		✓			
<b>Alternative Fixed Income</b>					
Event-Driven Credit	✓		✓		✓
Mezzanine & Distressed Debt		✓		✓	
Commercial Real Estate Debt	✓		✓	✓	✓
<b>Alternative Real Assets</b>					
Private Real Estate	✓			✓	
Private Energy		✓			
Managed Futures/CTAs	✓		✓		✓

Please see disclaimers at the end of this presentation for additional information on the views expressed herein.

# Alternatives Can Make an Impact

Display 10 below offers a generalized view of the benefits achieved by adding a diversified mix of alternatives to different traditional portfolios comprised of just equity and fixed income.

Starting from the bottom left, on the light green line, we plot a “low risk” portfolio of 80% bonds and 20% stocks. On the same line to the right we illustrate the inverse of that portfolio, 80% stocks and 20% bonds—an example of an investor with higher risk tolerance.

The dark green line illustrates the same portfolio with a 20% allocation to alternatives, broken up equally across Private Equity, Distressed Debt, Real Estate and Hedge Funds. The result here, for both lower- and higher-risk investors, is a reduction in risk and increase in return for the portfolio.

But it’s one thing to build the allocation into an efficient frontier chart and quite another to actually incorporate these investments in a client’s portfolio, especially given the illiquid or episodic nature of private market funds.

## DISPLAY 10: ALTERNATIVES MAY HELP IMPROVE THE EFFICIENT FRONTIER

Alternative Impact (10/1/99–9/30/19)



Source: Morningstar Direct, as of 9/30/19. Traditional Assets composed of Equity (S&P 500) and Fixed Income (Barclays U.S. Aggregate). Blackstone used these indices as a proxy for traditional assets given these indices are typically used by the market. 20% AI composed of: 5% Private Equity (Cambridge U.S. PE), 5% Real Estate (NCREIF ODCE), 5% Distressed (HFRI Distressed Restructuring), and 5% Hedge Funds (HFRI Fund Composite). This mix was used to capture alternative investments broadly across the major alternative assets classes: Private Equity, Private Real Estate, Distressed Debt and Diversified Hedge Funds.

Note: Graph illustrates a 20-year investing period from 10/1/99 through 9/30/19. There can be no assurance that an allocation to alternatives would provide higher real returns. Please consult your own third-party advisor before making any investment decisions based on this information. Past performance is not necessarily indicative of future results and there can be no assurance that any index or fund will achieve comparable results or avoid substantial losses. The performance information presented above is that of the identified market indices and funds, which may not be available for investment to any prospective investor. The stated indices are for informational purposes only and not available for investment. Index Definitions provided at the end.

# Building a Comprehensive Alternatives Allocation

There is no simple approach to building a comprehensive, diversified allocation to alternative investments—one that considers investors' distinct liquidity, return goals, and varied time horizons. But we've developed a framework that may help.

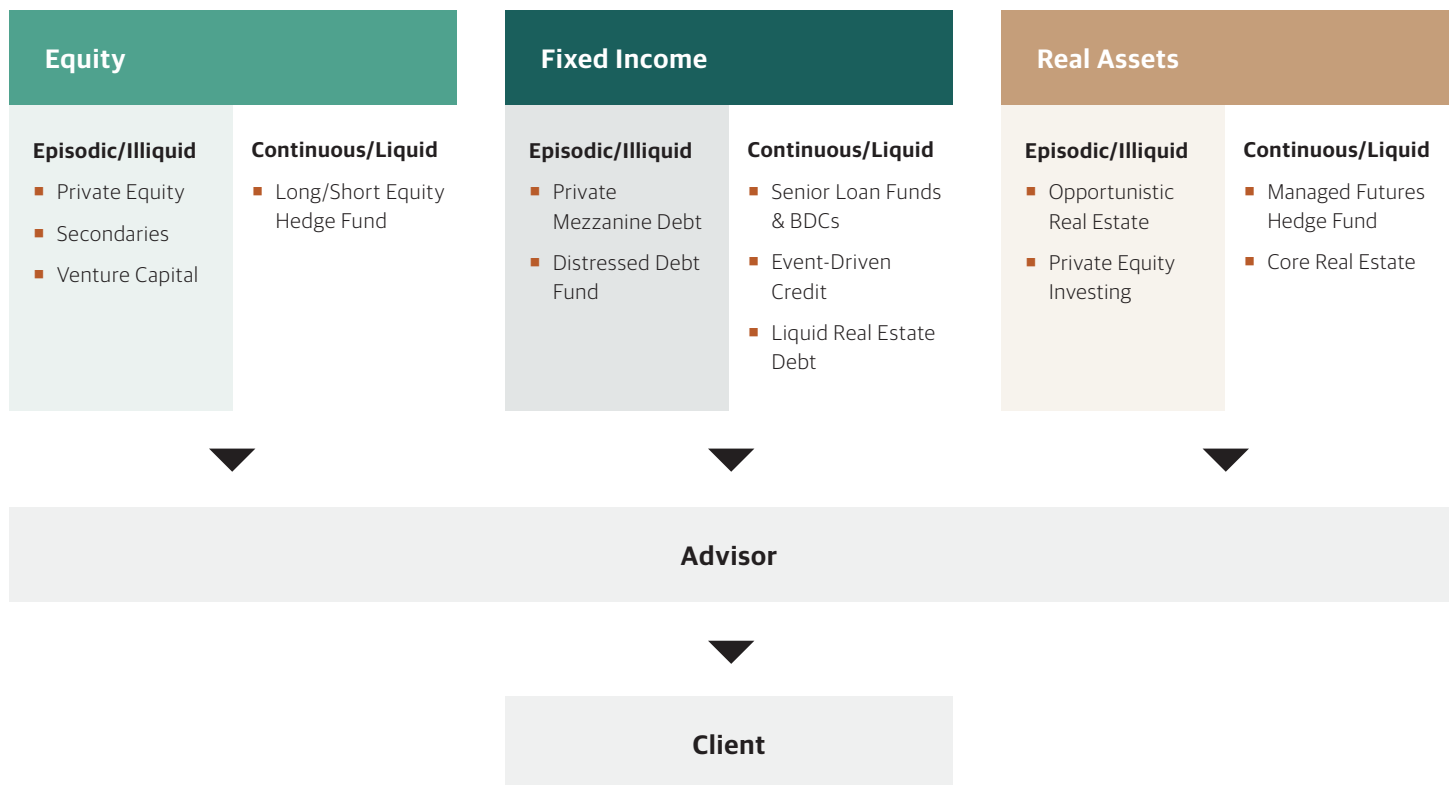
We return to the asset class breakdown discussed earlier—identifying the alternative “complements” to traditional asset classes. We then go on to break the alternative strategies into more liquid, continuously offered solutions and less liquid, episodic funds (Display 11).

Those funds available in more liquid structures tend to include quasi-public hedge fund services, in areas like long/short equity, eventdriven credit, and liquid real estate debt.

Less liquid, private market funds focused on buyouts, private real estate, or distressed debt may take more time to achieve the desired allocation, due to the timing of their fund-raising and an uncertain pace of investment.

In this way, by allocating across the major alternative asset categories in both liquid and less liquid vehicles, advisors and investors may establish and maintain a comprehensive and strategic exposure to alternatives to complement their traditional allocation.

**DISPLAY 11: DELIVERING A HOLISTIC ALLOCATION**



Note: Please see disclaimers at the end of this presentation for additional information on the views expressed herein.

---

# Glossary, Index Definitions, Notes and Disclaimers

## Glossary

### Alpha

Alpha is a measure of the return due to active management, rather than market exposure, or beta. It is often used to refer to the value added by a manager's skill.

### Alternative Investments

Investment categories other than traditional securities or long-only stock and bond portfolios; they include hedge funds, venture capital, private equity, and real estate. Alternative investments often employ strategies typically unavailable to long-only managers, such as the use of derivatives, the ability to short, and the ability to hold illiquid assets.

### Beta

Beta is a measure of the sensitivity of a security or portfolio to broad market movements. The beta of the market index is 1.0. A security with a beta of greater than 1.0 tends to rise or fall more than the market; a security with a beta of less than 1.0 tends to rise or fall less than the market. The term "beta" can also indicate the portion of portfolio returns that results from market exposure, rather than from manager strategies or skill (alpha).

### Correlation

A measure of how the returns of two or more assets perform in relation to one another. Assets with a correlation of 1.0 move in lock step. Those with a correlation of 0 have a random relationship to each other.

### Hedge Fund

A private investment portfolio that uses non-traditional techniques (such as short sales and leverage) to preserve and/or gain capital. Hedge funds are generally considered part of the alternative investments asset class. In many jurisdictions, they are more loosely regulated than long-only portfolios and are restricted to larger or more sophisticated investors.

### Illiquid Alternatives

Alternative investments that invest in illiquid assets and offer limited liquidity to investors. Many illiquid alternatives require investors to make capital commitments over several years that cannot be redeemed in the short term. Illiquid alternatives can include venture capital, private equity, and direct real estate.

### Private Equity

A type of investment that seeks return by acquiring companies and restructuring them, with the goal of improving or restoring profitability. The companies are sold at the conclusion of their restructuring. Private equity investments are illiquid and, by definition, are not publicly traded.

### Standard Deviation

Standard deviation is applied to the annual rate of return of an investment to measure the investment's volatility. Standard deviation is also known as historical volatility and is used by investors as a gauge for the amount of expected volatility.

### Venture Capital

A type of investment that seeks return by providing seed or early-stage financing to privately held, fledgling businesses thought to have strong growth prospects due to a new technology, product, or business model.

## Index Definitions

### Barclays U.S. Aggregate

The Barclays U.S. Aggregate Bond Index is an index of U.S. dollar-denominated, investment-grade U.S. corporate government and mortgage-backed securities.

### Barclays U.S. High Yield Corporate

The Barclays U.S. Corporate High Yield Bond Index measures the U.S. dollar-denominated, high yield, fixed-rate corporate bond market.

### Cambridge Associates U.S. Private Equity

The Cambridge Associates LLC U.S. Private Equity Index<sup>®</sup> is an end-to-end calculation based on data compiled from over 1,500 U.S. private equity funds (buyout, growth equity, private equity energy, and mezzanine funds), including fully liquidated partnerships, formed between 1986 and 2019.

### FTSE NAREIT All Equity REITs

The FTSE NAREIT All Equity REITs Index is a free-float adjusted, market capitalization-weighted index of U.S. equity REITs.

### HFRI Fund Weighted Composite

The HFRI Fund Weighted Composite is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in U.S. dollars and have a minimum of \$50 million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds. The HFRI Fund Weighted Composite index is obtained through Hedge Fund Research, Inc. The HFRI Fund Weighted Composite is being used under license from Hedge Fund Research, Inc., which does not approve of or endorse the contents of this report.



---

## Index Definitions (cont'd)

### **HFRX ED Distressed Restructuring**

Distressed Restructuring Strategies employ an investment process focused on corporate fixed income instruments, primarily on corporate credit instruments of companies trading at significant discounts to their value at issuance or obliged (par value) at maturity as a result of either formal bankruptcy proceeding or financial market perception of near-term proceedings. Managers are typically actively involved with the management of these companies, frequently involved on creditors' committees in negotiating the exchange of securities for alternative obligations, either swaps of debt, equity, or hybrid securities. Managers employ fundamental credit processes focused on valuation and asset coverage of securities of distressed firms; in other cases portfolio exposures are concentrated in instruments which are publicly traded, in some cases actively, and in others under reduced liquidity, but in general for which a reasonable public market exists. In contrast to Special Situations, Distressed Strategies employ primarily debt (greater than 60%) but also may maintain related equity exposure. The HFRX ED Distressed Restructuring is obtained through Hedge Fund Research, Inc. The HFRX ED Distressed Restructuring is being used under license from Hedge Fund Research, Inc., which does not approve of or endorse the contents of this report.

### **MSCI ACWI ex-U.S.**

The MSCI ACWI ex USA Index captures large and mid cap representation across 22 of 23 Developed Markets (DM) countries (excluding the U.S.) and 26 Emerging Markets (EM) countries. The index covers approximately 85% of the global equity opportunity set outside the U.S.

### **NCREIF Fund Open-End Diversified Core Equity**

The NCREIF-ODCE Index is a capitalization-weighted, gross of fees, time-weighted return index with an inception date of January 1, 1978. Published reports may also contain equal-weighted and net of fees information. Open-end Funds are generally defined as infinite-life vehicles consisting of multiple investors who have the ability to enter or exit the fund on a periodic basis, subject to contribution and/or redemption requests, thereby providing a degree of potential investment liquidity. The term Diversified Core Equity style typically reflects lower risk investment strategies utilizing low leverage and generally represented by equity ownership positions in stable U.S. operating properties.

### **S&P 500**

The S&P 500 index was created in 1957, although it has been extrapolated backwards to several decades earlier for performance comparison purposes. This index provides a broad snapshot of the overall U.S. equity market. The index selects its companies based upon their market size, liquidity, and sector.

### **S&P GSCI**

The S&P GSCI® Total Return Index is a composite index of commodity sector returns representing unleveraged, long-only investment in commodity futures across 24 commodities.

## Notes and Disclaimers

The views expressed in this commentary are the views of Private Wealth Solutions group of The Blackstone Group Inc. (together with its affiliates, "Blackstone") and do not necessarily reflect the views of Blackstone itself. All information in this commentary is believed to be reliable as of the date on which this commentary was issued, and has been obtained from public sources believed to be reliable. No representation or warranty, either express or implied, is provided in relation to the accuracy or completeness of the information contained herein.

Investment concepts mentioned in this commentary may be unsuitable for investors depending on their specific investment objectives and financial position. Tax considerations, margin requirements, commissions and other transaction costs may significantly affect the economic consequences of any transaction concepts referenced in this commentary and should be reviewed carefully with one's investment and tax advisors.

This commentary does not constitute an offer to sell any securities or the solicitation of an offer to purchase any securities. This commentary discusses broad market, industry or sector trends, or other general economic, market or political conditions and has not been provided in a fiduciary capacity under ERISA and should not be construed as research, legal, tax or investment advice, or any investment recommendation. Past performance is not necessarily indicative of future performance.

---

## Notes and Disclaimers (cont'd)

Blackstone Securities Partners L.P. ("BSP") is a broker-dealer whose purpose is to distribute Blackstone managed or affiliated products. BSP provides services to its Blackstone affiliates, not to investors in its funds, strategies or other products. BSP does not make any recommendation regarding, and will not monitor, any investment. As such, when BSP presents an investment strategy or product to an investor, BSP does not collect the information necessary to determine—and BSP does not engage in a determination regarding—whether an investment in the strategy or product is in the best interests of, or is suitable for, the investor. You should exercise your own judgment and/or consult with a professional advisor to determine whether it is advisable for you to invest in any Blackstone strategy or product. Please note that BSP may not provide the kinds of financial services that you might expect from another financial intermediary, such as overseeing any brokerage or similar account. For financial advice relating to an investment in any Blackstone strategy or product, contact your own professional advisor.

In the United Kingdom and the European Economic Area: issued by The Blackstone Group International Partners LLP ("BGIP"), authorised and regulated by the Financial Conduct Authority (FRN: 520839) in the United Kingdom. This communication does not constitute a solicitation to buy any security or instrument, or a solicitation of interest in any Blackstone fund, account or strategy. The content of this communication should not be construed as legal, tax or investment advice.



**Blackstone**

---

Blackstone | Private Wealth Solutions | [privatewealth@blackstone.com](mailto:privatewealth@blackstone.com) | 345 Park Avenue New York, New York 10154  
Blackstone Securities Partners L.P., a subsidiary of The Blackstone Group Inc. ("Blackstone") through which Blackstone  
conducts its capital markets business and certain of its fund marketing and distribution, member FINRA