

The Case for Multimanager Alternative Investments

Executive Summary

With interest rates near record lows and stock valuations elevated, more investors are considering liquid alternative investments (LAI) as potential sources of investment returns.¹ We believe the search for a well-balanced, diversified allocation matters—and that the effort to create this allocation can take a number of paths. Investors may, for instance, (1) seek to build an allocation themselves with several individual strategies, (2) opt for a single, pre-assembled package of strategies, or (3) use some combination of these approaches. In our view, the pre-assembled package—via so-called “multimanager” strategies, many of which are found in Morningstar’s “Multialternative” category—may suit a range of investors seeking to gain liquid alternatives exposure.

The path to build a liquid alternatives allocation can hinge on a variety of factors, from expertise in the asset class to risk tolerance and due diligence capabilities. Whichever path an investor chooses, the key, in our view, is to seek similar results: a well-diversified allocation with the potential to provide a driver of returns in addition to stocks and bonds.

We believe the role of the “multimanager” approach can be any of several: (1) a “turnkey” allocation that seeks diversified exposure in a single package, (2) a core liquid alternatives allocation to be complemented with additional strategies of an investor’s choosing; or (3) an answer to the demanding questions of due diligence, manager selection and ongoing research, which a well-balanced liquid alternatives allocation can require.

¹ As measured by asset flows into Morningstar’s alternative mutual fund categories, as of September 2015.

Alternative investing is not suitable for all investors and liquid alternatives are not riskless investments, so investors can lose money. Diversification does not protect an investor from market risk and does not ensure a profit. Please see additional risk considerations.

Glossary Terms: Please refer to the glossary on pages 6 and 7 for additional information on any term in *italics*.

What are Liquid Alternatives?

In our view, liquid alternative investments are daily liquid investment strategies that, like *hedge funds*, seek to deliver: (1) differentiated returns from those of core asset classes—returns that are most beneficial during difficult times in core markets; (2) the potential to reduce overall portfolio risk; and (3) the potential to mitigate the effects of severe drawdowns, particularly in equities. Please refer to the glossary on pages 6 and 7 for additional information on any term in *italics*.

Why Diversify an Alternatives Allocation?

At Goldman Sachs Asset Management, we categorize the liquid alternative investments universe into five categories for selection and evaluation: *Equity Long/Short*, *Event Driven*, *Relative Value*, *Tactical Trading/Macro*, and *Multistrategy*. (See “Appendix: GSAM Liquid Alternative Investments Selection Methodology” as well as the glossary for definitions.) Using these classifications, we have categorized the Morningstar-tracked universe of liquid alternative funds into five GSAM Liquid Alternative Investments Peer Groups—a categorization which, in our view, can help investors understand the elements of a well-diversified allocation.

But why take a well-diversified approach in the first place? As Exhibit 1 illustrating the five GSAM LAI Peer Groups shows, there is not much persistence of returns across liquid alternatives category averages from year to year. For this reason, selecting the top-performing category in a given year, let alone selecting top-performing managers, can be challenging. For example, in 2010, Event Driven strategies outperformed the four other Peer Groups before descending the ranks in three of the four subsequent years. In another example, Tactical Trading/Macro strategies achieved top-performing status in 2014 after trailing all other Peer Groups for two straight years.

Exhibit 1: Median Returns by LAI Peer Group

Historically, the performance of the LAI Peer Groups has been difficult to predict. We believe that this “quilt” pattern suggests that the effort to “time” an allocation to a given LAI strategy based solely on recent past performance may lead to poor future results.

	2010	2011	2012	2013	2014
% Annual Return	7.63	2.71	6.64	14.20	5.31
	5.85	0.30	6.02	6.09	3.01
	5.76	0.03	3.68	4.74	2.29
	4.84	-1.44	2.33	2.95	1.83
	0.46	-2.89	1.52	1.92	0.06
	GSAM LAI Equity Long/Short	GSAM LAI Event Driven	GSAM LAI Relative Value	GSAM LAI Tactical Trading/Macro	GSAM LAI Multistrategy

Source: GSAM, Morningstar. For illustrative purposes only. As of June 30, 2015. **The returns represent past performance. Past performance does not guarantee future results, which may vary. Current performance may be lower or higher than the performance quoted.** In order to help investors make sense of the myriad of LAI offerings, we analyzed the 642 mutual funds that Morningstar, Inc. categorizes as liquid alternatives to identify those that employed an investment style that we deemed to be “hedge fund-like.” We eliminated funds that used certain nontraditional investment styles that do not closely resemble a traditional hedge fund investment strategy. Our elimination process narrowed the universe of liquid alternative investments to 331 funds. Once we identified our universe of “hedge fund-like” LAI funds, we then assigned each fund to one of the five standard hedge fund buckets based on fund information²: *Equity Long/Short*, *Event Driven*, *Relative Value*, *Tactical Trading/Macro*, and *Multistrategy*. See “Appendix: GSAM Liquid Alternative Investments Selection Methodology” for detail on GSAM’s liquid alternative investments category methodology. **Diversification does not protect an investor from market risk and does not ensure a profit.**

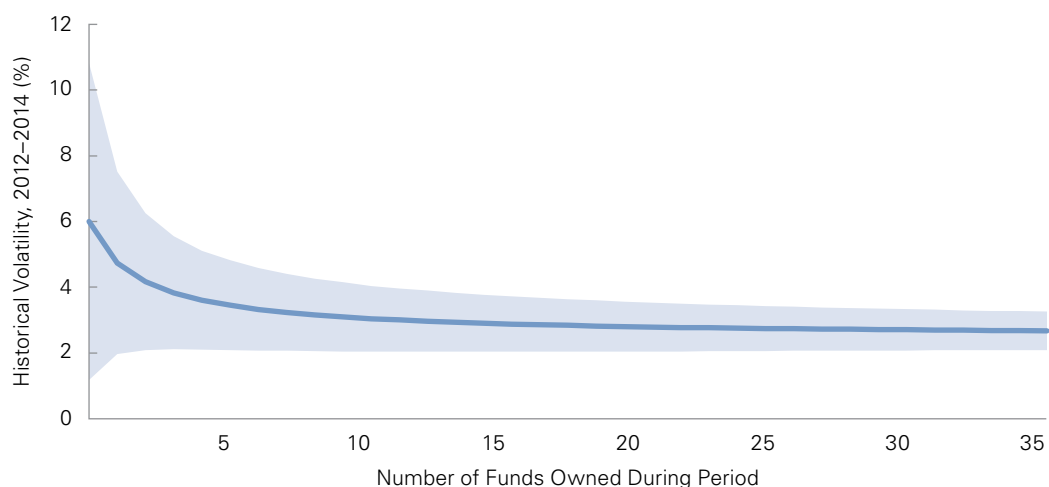
² Sources of information include but are not limited to: fund prospectus, fact sheet, annual/semi-annual report, and manager commentary.

Glossary Terms: Please refer to the glossary on pages 6 and 7 for additional information on any term in *italics*.

For these reasons, we believe that diversifying across LAI Peer Groups should be considered when investing in liquid alternatives, since it seeks to avoid the highs and lows of any given year in any given single strategy. How much manager diversification would be needed to mitigate these highs and lows? Exhibit 2 displays the results of a multiple trial simulation analysis of the monthly returns of 121 single-strategy liquid alternative funds over the period from January 1, 2012 to December 31, 2014. Our analysis shows that, for the period, a portfolio combining nine funds would have reduced the allocation's annualized volatility³ from an average of 6.0% per fund for the category, to slightly more than half that level, 3.2%.

Exhibit 2: Historically, Diversifying Liquid Alternative Investments Has Reduced Volatility

Over the period from January 1, 2012 to December 31, 2014, combinations of the single-strategy liquid alternative investment funds that make up the GSAM LAI Peer Groups exhibited lower volatility than individual single-strategy funds.



Source: GSAM, Morningstar. For illustrative purposes only. As of December 31, 2014, based on historical returns of 121 single-strategy liquid alternative investment funds which make up the GSAM LAI Peer Groups and possess track records over the period January 1, 2012 to December 31, 2014. The dark blue line represents the average annualized volatility of the combined monthly returns of a given number of funds. The light blue shading represents the annualized volatility of 90% of the combined monthly returns of a given number of funds. **The returns represent past performance. Past performance does not guarantee future results, which may vary. Current performance may be lower or higher than the performance quoted. Diversification does not protect an investor from market risk and does not ensure a profit.**

As the chart shows, the historical volatility of a small number of liquid alternative funds (1-3 funds) was higher compared to combinations of several funds (5 or more funds). The reduction in volatility was pronounced when adding several additional funds.

Importantly, we believe our analysis shows that lower volatility did not come at the expense of returns, which averaged an annualized 4.2% for all samples between 5 and 30 funds. This compared to fractionally lower average annualized returns in our samples of 1 to 4 funds, which returned anywhere from 4.1% to just below 4.2%.

We estimate on the basis of this analysis that investors historically achieved 90% of the potential volatility reduction benefits over the 36-month period under examination by spreading the allocation across 12 funds.

Next, we'll examine in greater detail a few different paths by which investors can search for a diversified allocation.

³ Volatility is a measure of the historical tendency of a security to swing in price.

Glossary Terms: Please refer to the glossary on pages 6 and 7 for additional information on any term in *italics*.

The Considerations In Building A Diversified Allocation From Scratch

One approach investors may consider is to weave several liquid alternative investments into a unified portfolio construction framework. The potential benefits of the approach, which we term “Build,” are numerous, beginning with an ability to emphasize high-conviction strategies or to select individual managers.

This approach may be attractive for investors seeking to express high-conviction market views or for those who possess deep knowledge of particular strategies and managers.

However, we believe that the process of selecting liquid alternative investments requires expertise in the asset class, knowledge of manager capabilities, judgment of manager and strategy risks, and acumen in assessing market dynamics. Investors who build well-constructed diversified alternatives allocations from scratch generally engage in substantial manager and strategy research.

Investors also typically may need processes for a range of decisions. For instance, processes may be needed to (1) eliminate underperforming managers from the allocation and replace those managers with new ones, (2) judge market conditions, and (3) assess each manager’s prospects under a given set of market conditions. Adding further to the list of tasks, investors also periodically assess risks particular to each fund or risks which exist across the category.

For this reason, the “Build” approach may be research-intensive, since it requires formulating and defending views on markets, individual strategies and managers. As of June 2015, there were, for instance, over 630 alternative mutual funds on the market.⁴ These funds were spread across 15 unique Morningstar subcategories (including the nontraditional bond category, which contains nontraditional and alternative funds). Moreover, several of these categories include funds which we believe are not “alternatives” in the sense that they do not closely resemble a traditional hedge fund investment strategy.

The “Build” approach may also require that investors perform initial and ongoing due diligence on individual managers, which requires time and effort. Finally, for financial advisors, the tradeoff of selecting individual strategies and managers may be more complex client statements, and a greater overall number of investments than the “Buy” approach—which we’ll examine next.

The Potential Benefits Of Buying A Diversified Allocation

In another approach, investors may consider opting for pre-assembled packages of alternative investments. This approach, which we term “Buy,” can be carried out via so-called “multimanager” alternative funds, many of which are categorized by Morningstar as “Multialternative.”

In this approach, investors effectively seek to partner with an asset manager who carries out many of the tasks associated with building a liquid alternatives allocation. These tasks may include (1) investment manager selection and research, (2) decisions on when to replace a manager, and (3) ongoing due diligence.

This approach generally does not require advisors or investors to develop or defend views on high-conviction strategies or managers, and it may involve less complex client statements when compared to approaches which build the allocation from several different funds.

⁴ This includes the 14 categories in Morningstar’s “alternative” broad category group as well as the nontraditional bond category, which contains nontraditional and alternative funds. In an effort to distinguish funds by what they own, as well as by their prospectus objectives and styles, Morningstar developed the Morningstar Categories. While the prospectus objective identifies a fund’s investment goals based on the wording in the fund prospectus, the Morningstar Category identifies funds based on their actual investment styles as measured by their underlying portfolio holdings (portfolio and other statistics over the past three years).

Glossary Terms: Please refer to the glossary on pages 6 and 7 for additional information on any term in *italics*.

Investors' decision effectively to outsource several tasks commonly associated with building a liquid alternatives allocation, of course, comes with a tradeoff: investors do not get a customized allocation. They opt instead for a pre-assembled package of strategies.

Buy-And-Build: Combining The Multimanager and "Build" Approaches

Another potential use of multimanager alternative strategies is what can be termed a hybrid "Buy-and-Build" approach. This approach generally entails deploying a pre-assembled package of diversified liquid alternative investments which is then complemented by one or more high-conviction managers whom the investor believes can potentially contribute to specific investment objectives.

The potential benefits of this approach may include the pursuit of a diversified approach to liquid alternative investments with the flexibility to add high-conviction managers or strategies to the allocation—which we view as a middle ground between the "Buy" and "Build" approaches.

The Multimanager Approach: What Are The Risks?

Multimanager approaches entail a number of tradeoffs of which we believe investors should be aware. For instance, performance may depend on the ability of the investment adviser to select, oversee, and allocate fund assets to individual managers, whose investment styles may not always be complementary. In addition, these managers may underperform the market generally or underperform other investment managers that could have been selected for the fund.

In addition, some managers have little experience managing liquid alternative funds which, unlike private investment funds, are subject to daily inflows and outflows of investor cash and certain legal and tax-related restrictions. We believe investors should be mindful of these and other risks as they consider the approaches described above.

Conclusion

We believe multimanager strategies have the potential to help investors pursue additional sources of investment returns and diversify their alternative investment allocations. We have observed that, generally, investors who are new to investing in liquid alternatives frequently opt for the "single package", which multimanager strategies can represent, while more experienced liquid alternatives investors often consider multimanager strategies a starting point in the construction of their preferred allocations. The key, in our view, is to understand the potential of liquid alternative investments to offer an additional driver of portfolio returns.

Appendix

GSAM Liquid Alternative Investments Selection Methodology

In order to draw the line between liquid alternatives and other nontraditional investments, we started with GSAM's definition of what it means to be a liquid alternative investment, as detailed on page 2. We then identified conditions that we believe are necessary for nontraditional mutual funds to behave in a manner similar to hedge funds.

Our first criterion was that liquid alternatives should provide more than just long-only exposure to asset classes, namely: equities, fixed income, commodities, or currencies. Secondly, they seek to significantly *hedge* against potential downside risk via short positions (we used 20% of *net assets* as a threshold, the same threshold that Morningstar, Inc. uses). We believe that, without considering this narrower universe, investors could end up investing in a fund with an investment strategy that is inconsistent with their investment goals or objectives.

For the **GSAM LAI Equity Long/Short Peer Group**, we included all funds that select stocks long, using a *bottom-up*, *top-down*, *fundamental*, or *quantitative* process, and then hedge by shorting stocks, stock-index futures, ETFs, or long *put options* (again using the 20% minimum threshold). Most of these funds were sourced from Morningstar's *Long/Short Equity* category, and a few were found in the Morningstar *Market Neutral* category.

For the **GSAM LAI Event Driven Peer Group**, we included all funds that invest in equity or debt securities in order to potentially profit from *corporate events*, such as mergers or bankruptcies. These strategies included the *merger arbitrage* funds from the Morningstar Market Neutral category, and the *long/short credit* strategies from the Morningstar Nontraditional Bond category.

For the **GSAM LAI Relative Value Peer Group**, we included all funds that seek to capture the price differential between two similar securities. Therefore, we selected the *equity market neutral* and (non-merger) *arbitrage* funds from the Morningstar Market Neutral category.

For the **GSAM LAI Tactical Trading/Macro Peer Group**, we chose all funds that take dynamic *directional* (long or short) views on at least three of four asset classes (equities, fixed income, commodities, currencies) using *systematic* or *discretionary* approaches. We combined the systematic *managed futures* funds from the Morningstar Managed Futures category with the global macro strategies (which consistently short 20%) from the Morningstar *Multialternative* category.

And finally, for the **GSAM LAI Multistrategy Peer Group**, we selected all funds which employ strategies consistent with at least two of the other LAI peer groups using a multimanager or single-manager approach, using *active management* or *hedge fund replication*. We found most of these funds in Morningstar's Multialternative category.

Glossary

Active management An investment strategy that does not seek to closely track a specific benchmark index.

Arbitrage See relative value.

Bottom-up An investment strategy that starts by selecting individual securities, rather than countries or sectors.

Corporate events Significant changes in publicly traded corporations, such as mergers, acquisitions, spin offs, restructurings, recapitalizations, bankruptcies, and changes in management.

Directional A way to describe a position in a portfolio; long or short positions, viewed independently.

Discretionary Sourced primarily from a manager's knowledge.

Equity Long/Short A Morningstar alternative category. According to Morningstar Inc.'s methodology document, http://corporate.morningstar.com/us/documents/MethodologyDocuments/MethodologyPapers/MorningstarCategory_Classifications.pdf, long/short portfolios hold sizable stakes in both long and short positions in equities and related derivatives. Some funds that fall into this category will shift their exposure to long and short positions depending on their macro outlook or the opportunities they uncover through bottom-up research. Some funds may simply hedge long stock positions through exchange-traded funds or derivatives. At least 75% of the assets are in equity securities or derivatives.

Equity Market Neutral Strategies that match long stocks with short stocks in order to reduce most of the portfolio's systematic or broad market risk.

Event-Driven A strategy which seeks to take advantage of events such as mergers and restructurings which may result in the short-term mispricing of a company's stock.

Fundamental An investment process that attempts to value securities based on the financial statements and intangible characteristics (such as management quality, brand, or competitive advantages) of the underlying companies.

Hedge Establishing a position to reduce the risk of adverse price movements in a strategy.

Hedge fund Private, pooled investment vehicles that are offered via private placement to qualified investors, including certain high net worth individuals and institutional investors.

Hedge fund replication A quantitative strategy that seeks to mimic the returns of a hedge fund index.

Long/Short Credit The buying of a security with credit risk – a long bond or short credit default swap, for example – with the expectation that the asset will rise in value, combined with the selling of a security with credit risk – a short bond or long credit default swap, for example – with the expectation that the asset will fall in value.

Long/Short Equity A Morningstar alternative category. According to Morningstar Inc.'s methodology document, http://corporate.morningstar.com/us/documents/MethodologyDocuments/MethodologyPapers/MorningstarCategory_Classifications.pdf, long/short portfolios hold sizable stakes in both long and short positions in equities and related derivatives. Some funds that fall into this category will shift their exposure to long and short positions depending on their macro outlook or the opportunities they uncover through bottom-up research. Some funds may simply hedge long stock positions through exchange-traded funds or derivatives. At least 75% of the assets are in equity securities or derivatives.

Managed Futures A trading strategy that utilizes futures and options contracts to gain exposure to financial instruments; trading programs can generally be classified as either technical or fundamental; managers are often referred to as “Trend Followers” or “Momentum Traders”; generally operated by CTAs (Commodity Trading Advisors) or CPOS (Commodity Pool Operators).

Market Neutral A Morningstar alternative category. According to Morningstar Inc.’s methodology document, http://corporate.morningstar.com/us/documents/MethodologyDocuments/MethodologyPapers/MorningstarCategory_Classifications.pdf, these funds attempt to reduce systematic risk created by factors such as exposures to sectors, market-cap ranges, investment styles, currencies, and/or countries. They try to achieve this by matching short positions within each area against long positions. These strategies are often managed as beta-neutral, dollar-neutral, or sector-neutral. A distinguishing feature of funds in this category is that they typically have low beta exposures (<0.3 in absolute value) to market indices such as MSCI World. In attempting to reduce systematic risk, these funds put the emphasis on issue selection, with profits dependent on their ability to sell short and buy long the correct securities.

Merger Arbitrage The strategy of buying the stock of a target company and shorting the stock of the acquirer.

Multialternative A Morningstar alternative category. According to Morningstar Inc.’s methodology document, http://corporate.morningstar.com/us/documents/MethodologyDocuments/MethodologyPapers/MorningstarCategory_Classifications.pdf, these funds offer investors exposure to several different alternative investment tactics. Funds in this category have a majority of their assets exposed to alternative strategies. An investor’s exposure to different tactics may change slightly over time in response to market movements. Funds in this category include both funds with static allocations to alternative strategies and funds tactically allocating among alternative strategies and asset classes. The gross short exposure is greater than 20%.

Multistrategy Funds employing more than one of the GSAM LAI (Liquid Alternative Investments) Peer Group strategies, as defined by GSAM.

Net Assets Calculated as total assets less total liabilities of a mutual fund, as reported in the annual and semi-annual reports.

Put Option A privilege, sold by one party to another, that gives the buyer the right, but not the obligation, to sell (put) a stock at an agreed-upon price within a certain period or on a specific date.

Quantitative Sourced primarily by a computer program.

Relative Value Long and short positions in similar securities, viewed together.

Systematic See quantitative.

Tactical Trading/Macro Strategies which can take long and short directional positions in any asset class that change regularly in response to market views.

Risk Considerations

Multimanager Approach Risk. A multimanager fund’s performance may depend on the ability of its investment adviser in selecting, overseeing, and allocating fund assets to underlying managers. The underlying managers’ investment styles may not always be complementary. Underlying managers make investment decisions independently of one another, and may make decisions that conflict with each other. For example, it is possible that an underlying manager may purchase an investment for the fund at the same time that another underlying manager sells the same investment, resulting in higher expenses without accomplishing any net investment result; or that several underlying managers purchase the same investment at the same time, without aggregating their transactions, resulting in higher expenses. Moreover, a fund’s multimanager approach may result in the fund investing a significant percentage of its assets in certain types of investments, which could be beneficial or detrimental to the fund’s performance depending on the performance of those investments and the overall market environment. A fund’s underlying managers may underperform the market generally or underperform other investment managers that could have been selected for the fund.

Some underlying managers have little experience managing registered investment companies which, unlike the private investment funds these underlying managers have been managing, are subject to daily inflows and outflows of investor cash and are subject to certain legal and tax-related restrictions on their investments and operations. Subject to the overall supervision of a fund’s investment program by its investment adviser, each underlying manager is responsible, with respect to the portion of the fund’s assets it manages, for compliance with the fund’s investment strategies and applicable law. An investment adviser and a fund may have received an exemptive order from the Securities and Exchange Commission that permits the investment adviser to engage additional underlying managers, to enter into subadvisory agreements with those underlying managers, and to materially amend any existing subadvisory agreement with underlying managers, upon the approval of a fund’s board of trustees and without shareholder approval.

All investments contain risk and may lose value. Investing in the **bond market** is subject to certain risks, including market, interest rate, issuer, credit and inflation risk.

Equity investments are subject to market risk, which means that the value of the securities in which it invests may go up or down in response to the prospects of individual companies, particular sectors and/or general economic conditions. Investors should also consider some of the potential risks of alternative investments:

Alternative Strategies. Alternative strategies often engage in leverage and other investment practices that are speculative and involve a high degree of risk. Such practices may increase the volatility of performance and the risk of investment loss, including the entire amount that is invested.

Manager experience. Manager risk includes those that exist within a manager’s organization, investment process or supporting systems and infrastructure. There is also a potential for fund-level risks that arise from the way in which a manager constructs and manages the fund.

Leverage. Leverage increases a fund’s sensitivity to market movements. Funds that use leverage can be expected to be more “volatile” than other funds that do not use leverage. This means if the investments a fund buys decrease in market value, the value of the fund’s shares will decrease by even more.

Counterparty risk. Alternative strategies often make significant use of over-the-counter (OTC) derivatives and therefore are subject to the risk that counterparties will not perform their obligations under such contracts.

Liquidity risk. Alternative strategies may make investments that are illiquid or that may become less liquid in response to market developments. At times, a fund may be unable to sell certain of its illiquid investments without a substantial drop in price, if at all.

Valuation risk. There is risk that the values used by alternative strategies to price investments may be different from those used by other investors to price the same investments.

The above are not an exhaustive list of potential risks. There may be additional risks that should be considered before any investment decision.

Investments in **Liquid Alternative Funds** expose investors to risks that have the potential to result in losses. These strategies involve risks that may not be present in more traditional (e.g., equity or fixed income) mutual funds.

These Funds generally may seek sources of returns that perform differently from broader securities markets. However, correlations among different asset classes may shift over time, and if this occurs a Fund's performance may track broader markets. In addition, if returns are in fact uncorrelated to the broader securities markets, a Fund may underperform those markets. For example, in periods of robust equity market returns, returns from a Fund may be lower or negative.

The use of alternative investment techniques such as shorting or leveraging creates an opportunity for increased returns but also creates the possibility for greater loss. Losses on short positions are potentially unlimited, since the positions lose value as the asset that was sold short increases in value. Taking short positions leverages a Fund's assets, because the Fund is exposed to market movements beyond the amount of its actual investments.

Derivative instruments may involve a high degree of financial risk. These risks include the risk that a small movement in the price of the underlying security or benchmark may result in a disproportionately large movement, unfavorable or favorable, in the price of the derivative instrument; risks of default by a counterparty; and liquidity risk.

There is risk that alternative funds hold investments that may be difficult to value and as a result the values used by alternative funds to price investments may be different from those used by others to price the same investments. At times, a Fund may be unable to sell certain of its illiquid investments without a substantial drop in price, if at all. There is also the risk that funds will not be able to pay redemption proceeds within the allowable time period because of unusual market conditions, an unusually high volume of redemption requests or other reasons.

There may be additional risks that the Funds do not currently foresee or consider material. Not all investment products are suitable for all investors. This is not a recommendation for any particular investment product or strategy.

General Disclosures

This material is provided for informational purposes only and should not be construed as investment advice or an offer or solicitation to buy or sell securities.

Past performance does not guarantee future results, which may vary. The value of investments and the income derived from investments will fluctuate and can go down as well as up. A loss of principal may occur.

The S&P 500 Index is an unmanaged index of 500 stocks that is generally representative of the performance of larger companies in the U.S. Please note an investor cannot invest directly in an index.

This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. This material has been prepared by GSAM and is not a product of Goldman Sachs Global Investment Research. The views and opinions expressed may differ from those of Goldman Sachs Global Investment Research or other departments or divisions of Goldman Sachs and its affiliates. Investors are urged to consult with their financial advisors before buying or selling any securities. This information may not be current and GSAM has no obligation to provide any updates or changes.

The website links provided are for your convenience only and are not an endorsement or recommendation by GSAM of any of these websites or the products or services offered. GSAM is not responsible for the accuracy and validity of the content of these websites.

Although certain information has been obtained from sources believed to be reliable, we do not guarantee its accuracy, completeness or fairness. We have relied upon and assumed without independent verification, the accuracy and completeness of all information available from public sources.

Goldman, Sachs & Co., member FINRA.

© 2015 Morningstar, Inc. All Rights Reserved. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. Past performance is not guarantee of future results.

Views and opinions expressed are for informational purposes only and do not constitute a recommendation by GSAM to buy, sell, or hold any security. Views and opinions are current as of the date of this presentation and may be subject to change, they should not be construed as investment advice.

© 2015 Goldman Sachs. All rights reserved.

171437.MF.MED.OTU Date of first use: November 16, 2015.