

130/30 Long-Short Equity Strategies

This paper aims to familiarize institutional investors with 130/30 (longshort "extension") equity strategies. It addresses how these strategies were developed, why these strategies (and their variants) may be of interest to institutional investors, and how to deploy them within their portfolios. The paper also reviews the risk and return characteristics of 130/30 strategies, compares them to long-only strategies, addresses several implementation issues, and provides a snapshot of the current 130/30 marketplace. Finally, the paper provides clear quantitative and qualitative examples so that institutional investors may better understand the underlying mechanics of these strategies.

Background

Shortly before the Great Financial Crisis of 2007–09, the financial press was paying increased attention to the then up-and-coming 130/30 investment strategy, creating much buzz in the investment community. Justification for the development of these strategies was grounded in financial literature and theory. Of course, the practical aspects are even more important and involve issues such as fee structures, liquidity, contribution to risk, and expected returns. Now that this strategy has built a decade-plus track record and gone through a full market cycle, it deserves a deeper evaluation to determine its suitability for an institutional investor's portfolio.

The 130/30 approach is based on the assumption that a typical active equity portfolio manager is hampered by her ability to hold only long positions (i.e., she cannot sell stocks short). Active portfolio construction typically centers on screening a particular universe of stocks (e.g., domestic large cap) and picking the best securities for the portfolio. Whatever her analytical approach, the portfolio manager will seek to select stocks that she believes will outperform the market over the expected holding period. It is natural to assume that during this analytical screening process, the portfolio manager may also come across stocks that she expects to *under*perform the market. That is, the portfolio manager not only has ideas about which stocks may be winners, but by logical extension, the same analytical process is likely telling her which stocks are likely may be losers as well. If this portfolio manager could short the stocks she were pessimistic about, she might be able to add value to the portfolio. A 130/30 strategy is designed to allow the portfolio manager to do just that, without modifying the portfolio's net exposure to the equity market.

WHITEPAPER SEPTEMBER 2019

CONTRIBUTORS Timur Yontar, PhD Maria Faleyev Frank Benham, CFA, CAIA Leo Festino, CFA, CAIA Suppose that a long-only portfolio manager is benchmarked to the market capitalization weighted Russell 1000 index of U.S. large-cap equities. The largest 200 stocks in this index comprise over 75% of the index's total capitalization. The other 800 stocks each account for a fraction of a percent of the remainder. If the investment manager has a positive opinion on the 201st stock, she can buy a large quantity of it and take advantage of her conviction, as the managed portfolio weight in this stock will dwarf the index weight. However, if the portfolio manager has a negative opinion on the 201st stock, the most she can do is to weight the stock at zero inside the portfolio. She cannot stretch the boundary of potential performance because of the shorting constraint that she faces. The stock is too small for the portfolio to benefit significantly from her conviction that the stock is about to underperform. However, if we remove the short constraint "handcuffs" and allow the portfolio manager to short this stock, then she can effectively achieve a *negative weighting* that captures her investment beliefs better than merely reducing that stock's weighting in the portfolio to zero. Thus, in theory, the long short manager can put her opinions of individual securities (both bullish and bearish) to work in generating excess returns for the portfolio more effectively than can a long-only manager.

Selling short

Short selling is the process of selling shares of a security without owning them, planning to buy them back at a future date in the expectation that their price will have fallen. It is "buy low, sell high," but with the order reversed. The concept of short selling may be particularly appealing to a 130/30 manager, who has an opinion not only on which stocks will go up in price, but also which ones will decline.

To engage in short selling, an investor must establish an account with a prime broker, who arranges to borrow the security to be shorted. For illiquid securities, short selling poses a particular problem, as it may be difficult to borrow the needed quantity. Moreover, if the lender recalls the security, the broker may not be able to find a replacement, thus forcing the investor to cover their short position at what may be an inopportune time.

The cost of borrowing stock can vary greatly based on supply and demand. The cost of borrowing for less widely-traded, illiquid securities may be hundreds of basis points higher than the cost for widely-traded stock. The short seller incurs this cost as a "haircut" on the "short rebate," a payment received from the interest earned on the short sale proceeds. The prime broker typically takes custody of the long positions as collateral for the short positions.

On its own, short selling can be very risky. When an investor takes a long position in a security, the amount they can lose is limited to the amount they invested in the security, as the price of the security cannot fall below zero. However, when short selling, the amount an investor can lose is unlimited, as the underlying security may increase in value infinitely. Further, the long-term trend for equities has been to increase in value.

Just as on the long side, a portfolio of short positions decreases in risk with increased diversification. Further, a portfolio of short positions becomes less risky when combined with a portfolio of long positions, as this reduces some of the market risk.

130/30 long-short construction

The numbers "130" and "30" indicate that a manager has a 130% weighting in long positions and a 30% weighting in short positions within the same portfolio. The result is a 100% net long portfolio. To illustrate the mechanics, suppose that a manager purchases for the portfolio \$100,000 worth of stock that he expects to outperform relative to the market. He then shorts \$30,000 worth of stock that he expects to underperform, and subsequently uses the proceeds to buy \$30,000 more of the expected outperformer stocks. The result is a gross exposure of \$160,000 (\$130,000 long plus \$30,000 short) to the market with a net of \$100,000 actually invested.

These 130/30 portfolios are targeted to have a beta of 1.0, and are therefore also known as "beta one" strategies. The beta-one 130/30 portfolio is structured such that the net beta is targeted to be the same beta value as the index to which the strategy is benchmarked. With the same systematic risk as the market, the goal is then to produce a return greater than the market (i.e., positive alpha) without taking on added market risk. Contrast this with a passive index fund, which, by definition, has a beta of 1.0 but an expected alpha of zero.

History

The global bear markets during the 2000-2002 period caused much concern for institutional investors, as decreasing asset values threatened the robustness of pensions and other institutional accounts that had been financially buttressed during the great bull market run of the 1980s and 1990s. As is often the case following bear markets, financial innovation came to the fore and investors flocked to alternative sources of returns. Thus, in the mid 2000s, there was tremendous growth in the "alternative" investment space, including private equity investments, hedge fund strategies, portable alpha, and myriad other strategies. As base interest rates and risk premia declined, there was a growing consensus that investors were entering a period of low expected returns. It is in the crucible of this environment that the interest in alternative investment strategies, including 130/30, came to the forefront.

The concept of the 130/30 portfolio and its "extension strategy" variants (e.g., the 120/20 and 140/40 portfolios) is not new. Academic research has touted the benefits of pairing longs and shorts in a single portfolio ever since the advent of Modern Portfolio Theory. Markowitz's original work, expanded upon by Sharpe, Lintner, Mossin, and others, resulted in the Capital Asset Pricing Model (CAPM). "Efficiency" in this framework calls for the unlimited ability to sell short and employ full use of the proceeds. Jacobs and Levy, as well as Brush and others, began writing articles on long-short investing in the 1990s, largely to explain the risk and return properties of market-neutral portfolios that were being managed since the 1980s. However, it was not until the work of Clarke, de Silva, Thorley, and Sapra was published and widely understood that 130/30 strategies began to gain serious traction as a separate entity from other long-short combinations such as a market-neutral hedge fund. The foundation was laid that justified this particular combination of longs and shorts as being the optimal (in a theoretical and mathematical sense) structure for expressing manager skill.

After the Global Financial Crisis, this strategy seemed largely abandoned by investors before once again gaining traction beginning in 2011.

The 130/30 strategy gained an influx of popularity in the mid 2000s and by 2008 there were sixty-eight 130/30 products in the eVestment Alliance database,¹ with assets under management in excess of \$25 billion. In addition, there were a handful of other extension strategies (e.g., 120/20, 150/50). Importantly, many of these 130/30 products were brand new and had track records of less than one year, which made evaluation of these products difficult. Even so, the level of attention placed on these strategies caused them to be popular investment options. The previous bull market had resulted in an increased risk tolerance for many investors. However, just as many of these products were incepting, the Global Financial Crisis occurred, causing great losses across risk assets. While a typical equity fund may have a 96% long exposure with 4% cash, which provides a slight cushion in downward markets, 130/30 funds aim to be 100% long and do not have that protection from cash. Many portfolios lost significant value and experienced below average returns, causing products to close in their first few years.

After the Global Financial Crisis, this strategy seemed largely abandoned by investors before once again gaining traction beginning in 2011. New products have emerged, in addition to those that survived the Financial Crisis. Many private funds, which have

¹ eVestment Alliance was used throughout this paper for manager database comparisons. fewer regulations than public ones, have also adopted the strategy. Our research indicated that, in a more stable environment, there has been some evidence of success with this strategy. Even so, with low numbers of products available for review, this strategy should certainly be looked at on a manager-by-manager basis.

Why a 130/30 structure?

Clarke, de Silva, and Thorley (2002) outline how two major factors, signal quality and the transfer coefficient (TC), contribute to excess returns. Signal quality describes how well the manager can forecast the returns of securities in the portfolio, and is therefore a measure of manager skill. The TC is a measure of how effectively a manager can translate that skill into actual security weights to capitalize on his forecasting ability. An investment manager with a high signal quality (information ratio) but a low TC because of portfolio constraints is like an architect who has drafted the blueprints for his masterpiece but lacks funding to actually buy the materials and see construction through completely. As should be expected, the removal of the long-only constraint can theoretically enable the manager to transfer his knowledge into a more efficient portfolio construction and increase his TC. If TC is increased, then the information ratio is increased – translation: higher active returns per unit of active risk.

There have been numerous academic and practitioner studies showing the benefits of loosening the shorting constraint of a manager on the resultant TC of the portfolio. Clarke, de Silva, and Sapra (2004) show that the marginal increase in the TC begins to diminish as the 125/25 to 150/50 range is reached. Alford (2006) shows that the increase in expected alpha at a given tracking error begins to diminish with increases in the amount of shorting in the portfolio past a 130/30 structure. The dominant consensus is that while increasing the amount of shorting beyond 130/30 could potentially add value, most of the benefits of shorting are captured in the 130/30 configuration and any additional shorting would entail marginal risks and costs that exceed the marginal benefits of the additional constraint loosening.

In reality, 130/30 managers may stray from a pure 130/30 long-short allocation as the landscape of opportunity changes. Many managers begin with a 130/30 allocation as a starting point and then deviate as seems fit based on a variety of factors. A 130/30 manager may drift between structures if they perceive the potential to add value. An institutional investor should check the details of the product's investment policy to see how much leeway the manager has in changing the tactical long-short allocation.

Analytical process

Quantitative techniques naturally lend themselves to a more comprehensive coverage of the investable universe for a 130/30 strategy because automatic rules can be set up. Thus, the majority of 130/30 managers to-date utilize quantitative analysis as

opposed to fundamental analysis. Ranking systems vary among managers, but range from the simple (earnings or cash flow multiples) to the complex (multifactor regression models to determine stock price sensitivity). The main idea behind all of the quantitative variants is straightforward. Once the model or the screening criteria are established, the decision threshold automatically ranks and designates securities for purchase and sale without the perceived handicap of emotion or judgment. This enables the quantitative manager to scour through a much larger investable universe than a fundamental manager reasonably could.

However, there are a few 130/30 managers that claim to primarily use fundamental techniques.² One potential drawback with this approach is that fundamental analysis is generally more time consuming than a quantitative approach. If comprehensive analysis of each of the stocks within the Russell 1000 is going to take place on a security-by-security basis, then it could be resource exhausting (or impossible) to thoroughly analyze each name in the investable universe. This is not normally a problem for a long-only fundamental portfolio where the fundamental analysis can be conducted and updated as needed. However, in a portfolio where there is short selling involved, this can be problematic because the shorted names will typically have a higher turnover than the long side of the strategy. Constant fundamental updating in the short book in such a way is so daunting that most fundamental 130/30 competitors tend to be the larger investment managers that have access to enormous analytical manpower and institutional-quality resources. Alternatively, rather than selecting individual stocks to short, the manager may short a "basket" of stocks (e.g., via an ETF) based on the broad market or sector of the market. Notwithstanding the challenges faced by fundamental managers, our research indicates that the amount of assets under management in fundamental and guantitative approaches is likely to be more balanced in the future, as more fundamental managers embrace 130/30 strategies.

Characteristics

Risk and return

One goal of a "beta-one" strategy is to achieve a return higher than the benchmark while taking the same market risk as the benchmark. By definition, the risk as measured by beta for any equity index is 1.0 (hence the "beta-one" name). Therefore, unlike an active long only strategy, which may seek beta exposures that differ from the market to achieve excess returns, the 130/30 manager uses the blended long-short strategy to target the same risk as the market. As a result of the limited supply of small-cap and lower mid-cap securities available (due to the higher costs to borrow and short), larger-cap indices such as the S&P 500 and the Russell 1000 are favorable to use as benchmarks.

² As of March 2019, approximately 85% of the portfolios examined used a quantitative technique. Many of the 130/30 portfolios that existed in the 2000s have since closed, bringing the number of portfolios examined for this study from 68 in 2008 down to 47 in 2019. Calculating returns net of fees further decreased the sample to 23. Although the sample was significantly reduced, we believed it was important to report net of fees data to better compare returns as 130/30 funds have higher fees then long-only ones. The following table summarizes the performance, net of fees, across this small sample.

Reporting <i>at</i> <i>Least</i> a:	Number of Products	Median 130/30 Trailing Return Over Period (%)	Number of Products	Median Large-Cap Long Only Trailing Return Over Period (%)	Benchmark Trailing Return Over Period (S&P 500, %)	Benchmark Trailing Return Over Period (Russell 1000, %)
Q1 2019 Return	23	11.7	1,664	12.3	13.7	14.0
1 Year Return	20	2.9	1,617	5.1	9.5	9.3
3 Year Return	20	10.7	1,508	10.9	13.5	13.5
5 Year Return	19	8.5	1,359	8.2	10.9	10.6
10 Year Return	14	15.0	988	14.2	15.9	16.1

TABLE 1 Sample of Observed 130/30 and Long Only Account Returns, Net of Fees (as of March 31, 2019)

Across the 5-year and 10-year returns shown in the preceding table, the median 130/30 outperformed the long-only returns. However, the portfolios have slightly underperformed in the last three years. This could be due to a number of reasons, including small sample size. If a single fund performed poorly, it has a larger effect on the median returns for 130/30 funds then it would for the larger universe of long-only funds. Also important to note, the 10 year returns are for the portfolios that have survived the Global Financial Crisis and are therefore among the most successful managers. Many managers who experienced severe underperformance subsequently closed their funds and those returns have been excluded from the data. Thus, the results are skewed higher than one would expect for a broad population by this survivor bias.

While previously it was difficult to get a full picture of empirically observed returns without sufficiently long track records to calculate standard risk metrics, these metrics are now available. The table below compares the average standard deviation and beta of a 130/30 portfolio in comparison to that of a large cap long-only portfolio.

	1	30/30 Strate	gies	Long-Only Large Cap Strategies			
Reporting <i>at</i> <i>Least</i> a:	Number of Products	130/30 Strategies Average Standard Deviation	Average Beta	Number of Products	Average Standard Deviation	Average Beta	
1 Year Return	45	17.6	1.03	2,368	15.7	0.89	
3 Year Return	45	12.4	1.03	2,368	11.4	0.90	
5 Year Return	45	12.4	1.00	2,157	11.9	0.93	
10 Year Return	33	13.9	1.01	1,600	13.0	1.00	

TABLE 2

Observed 130/30 and Long-Only Risk Metrics (Monthly Data as of March 31, 2018)

As shown, a 130/30 portfolio has been more volatile than a long-only portfolio. The risk, however, seems to have been higher in the short-term rather than in the long term. While the average standard deviation is slightly higher for 130/30 portfolios, the beta is actually closer to 1.00.

There is, however, inherently more risk with 130/30 portfolios. Targeting a beta of 1.0 ex ante, for the portfolio does not mean that the beta will actually be 1.0 ex post for all portfolios. Further, a manager could be wrong on both their long and short positions, thus losing money on both sides. The strategy is also theoretically open to unlimited losses as a result of the short position exposures. In a long-only portfolio, for instance, the worst that can happen is that the investment manager makes the worst concentrated bets imaginable and all of the positions in the portfolio like a 130/30, the manager could make the worst concentrated bets imaginable and all of store positions in the portfolio like a 130/30, the manager could make the worst concentrated bets imaginable and not only see the long positions drop to zero, but see the liability to replace the shorts begin to burgeon such that the effective return is less than -100% with no sellable long positions to cover the shorts. While in practice this scenario is extremely unlikely, it is possible in theory for the manager to lose more than the initial investment, although this could not be passed through to the investor.

As a practical matter, there is a high enough correlation between stocks as well as a dearth of managers in a 130/30 that would actually make such concentrated bets that the probability of the aforementioned scenario occurring would be vanishingly small. We illustrate the differences in position returns in the following table. This table shows the hypothetical return outcomes for a 130/30 strategy, ignoring associated costs for simplicity, if the short positions increase or decrease in value by the percentage shown on the y-axis and if the long positions increase or decrease in value by the percentage shown on the x-axis. The intersecting total portfolio percentage return is the outcome given the 130/30 long-short proportions of the strategy and assuming *full investment* of the short proceeds.

%∆ in		-30%	-20%	-10%	0%	10%	20%	30%
	-30%	-30%	-17%	-4%	9%	22%	35%	48%
gre	-20%	-33%	-20%	-7%	6%	19%	32%	45%
Aggregate	-10%	-36%	-23%	-10%	3%	16%	29%	41%
Short	0%	-39%	-26%	-13%	0%	13%	26%	39%
	10%	-42%	-29%	-16%	-3%	10%	23%	36%
Positions	20%	-45%	-32%	-19%	-6%	7%	20%	33%
ons	30%	-48%	-35%	-22%	-9%	4%	17%	30%

TABLE 3 Hypothetical 130/30 Returns Matrix

%∆ in Aggregate Long Positions

Though the shown ranges in Table 2 are limited $(\pm 30\%)$ movement on the long and short picks), showing a greater range is actually not needed. Observing the data, a clear pattern of short leverage on portfolio returns is discovered: For every 10% countermovement in the returns on the aggregate short picks relative to the returns on the aggregate long picks, the total long-short portfolio's performance is impaired or enhanced by an incremental 3% versus the long-only portfolio. For instance, suppose the long positions in the portfolio increased in value by 10% and the short positions of the portfolio also rose by 10% (note that this last part is not beneficial to the total portfolio because the manager wants the short picks to decrease). In Table 2, we see that the total portfolio return would then be 10%. That is, the strategy has not done any better than a long-only strategy which also returned 10%. Now suppose that the stocks representing the short component remain static in price (0% return) while the long component still delivers 10%. Now the total portfolio is shown to have a return of 13%, or 3% better than the long-only portfolio. The reason that this is possible even though the shorts did not decrease in value is that the 130/30 manager was able to purchase more than the net investment worth of long positions as a result of using the proceeds from the shorted stock. This pattern continues. If the portfolio longs deliver 10% and the shorted stocks decrease 10% (a 20% countermovement), then the total portfolio will return 16% (or 6% better than the long only portfolio). This ratio of every 10% countermovement producing a 3% marginal increase/decrease in performance makes sense because by definition, the portfolio is leveraged 30% with shorted funds. Of course, the leverage works in the opposite direction as well. If the shorts increase by 10% relative to the longs, then the portfolio will do 3% worse than the long-only portfolio.

Role of strategy

How to classify the strategy within an investor's portfolio is not a simple determination. Alford (2006) believes that the strategy can be included in a portfolio's conventional equity allocation. After all, most of the strategy's expected return (and risk) will derive from the public equity market. However, some institutional investors might be uncomfortable considering a 130/30 addition as an equity variant. First, consider that the 130/30 strategy may have correlation and risk properties different from a traditional long-only equity portfolio. Second, the manager of a 130/30 strategy has greater leeway in making opportunistic bets than does the manager of a long-only equity strategy.

At the very least, the 130/30 concept can be considered a first step for an institutional investor that wants to evaluate the effects of shorting before investing in long-short hedge funds. In this sense, the 130/30 portfolio may be classified as a bridge to the "alternative" asset class category, which may or may not fit into the investor's existing equity allocation. In short, it makes sense for most institutional investors to classify this strategy as an equity product, though more conservative investors may choose to classify it as an alternative investment.

Implementation issues

130/30 products naturally have a plethora of implementation issues that managers must face. Note that all these implementation considerations, except of the benchmark issue, apply to all long-short equity and extension funds and are not unique to 130/30 portfolios.

Benchmarks

Finding the most appropriate benchmark for 130/30 strategies has been a debated topic. Benchmarks ought to be transparent, investable, and replicable. 130/30 investors have generally benchmarked their large capitalization or all capitalization 130/30 managers to traditional long-only indices such as the S&P 500 or the Russell 1000 indices. In 2007, Credit Suisse created a generic 130/30 Large Cap Index that provided a benchmark specifically for 130/30 portfolios. Other organizations such as Standard & Poor's have also developed proprietary 130/30 indices. Their methodologies and construction methods differ, and no one 130/30 index seems to have a clear edge over the others as of the writing of this document. Further, one can argue that their methodologies closely resemble actively managed strategies, or at least active bets versus the market. Consequently, the vast majority of investors continue to benchmark 130/30 products against the long-only indices, and there is no reason to anticipate a change in the near future.

Fees and other costs

By their nature, 130/30 strategies are active. Thus, higher fees are going to be associated with a 130/30 portfolio. Moreover, the fees are higher than are those for traditional active long only portfolios because of the increased costs of managing the short positions; consequently, fees may resemble the fee structures for hedge funds. A typical 130/30 manager may require 1% on the managed assets plus a 10-15% cut of any excess returns (above the benchmark).

Not only are the management fees above those of long-only portfolios, but the trading costs are higher as well. In particular, the gross exposure of 160% of assets (130% long plus 30% short) translates into higher transaction costs. As a practical matter, 130/30 strategies could easily have transaction costs 1.6 times higher than traditional long-only portfolios, on average. In addition, 130/30 strategies are more sensitive to the timing of bets, particularly on the short side, where the borrowed stocks may have to be replaced by a pre-specified time. Consequently, the holding period for securities in 130/30 portfolios may be shorter than in traditional long-only portfolios, leading to more frequent trading and hence greater transaction costs. Higher fees and transaction costs obviously present a much higher hurdle for the portfolio manager to overcome.

There is also the inherent cost of borrowing stock to short. On top of that cost, a prime broker may require collateral to be held from the proceeds of selling the security. The premise of a 130/30 strategy is that with the proceeds from the shorts, long positions are purchased to create increased leverage. When a prime broker requires collateral, this can make it difficult for a portfolio manager to implement a true 130/30 strategy.

Because of the prime broker's importance to the 130/30 strategy execution, it is imperative that an investment manager have an established relationship with one if the strategy is to be successful.

Many skeptics see the 130/30 strategy as a way for previously long-only portfolio managers to manage a product for which they can charge hedge fund-like fees while they receive on the job training in shorting stocks. Some portfolio managers of 130/30 strategies have been criticized for merely shorting index/industry ETFs, while actively managing only the long side of the strategy. Such a manager shows no skill in shorting, and as a result, many feel that such a manager adds minimal value over a long-only strategy and does not deserve the higher fees charged by this strategy.

Use of prime brokers

130/30 strategies involve an extra layer of complexity in that the investment manager needs to use a prime broker to carry out their short sale operations. Mostly all of the large investment banks provide prime brokerage services. For the short side of the book, prime brokers perform the critical function of securing the stocks for shorting. In addition, the prime broker deals with cash management, clearing, and custody.

The prime broker may also provide analysis of the short market, and inform the investment manager of supply and demand factors, as well as provide intelligence on opportunities that may arise for short trades. Without the prime broker providing all of these functions, the 130/30 strategy would not be possible.

Because of the prime broker's importance to the 130/30 strategy execution, it is imperative that an investment manager have an established relationship with one if the strategy is to be successful. In fact, it has become standard since the Global Financial Crisis for a manager to have multiple prime brokers in order to mitigate operational risk. Managers who have just entered the 130/30 arena may have extensive operational issues in establishing a relationship with a prime broker, including systems compatibility and unfamiliarity with the complex details of maintaining this relationship. This is particularly germane for institutional investors considering investing in a commingled 130/30 account, where an established prime broker relationship may mean a more efficient product. However, should an institutional investor be large and sophisticated enough to want a separately managed account, that investor will have their choice of which prime broker(s) to use. In many cases, though, the extra costs associated with forcing the investment manager to use a new prime broker instead of their established prime broker relationship may exceed any perceived benefits.

Stop-loss controls

As a result of the potential for a greater potential magnitude of loss on the short side of the portfolio, care must be taken to investigate what kind of stop-loss controls a 130/30 manager has in place to mitigate these risks. A stop-loss order is typically used to prevent a loss if the price of a stock goes down, but this order can also be used to purchase a stock at a given target price when the price of a shorted stock goes up. For instance, a manager could place a stop loss (buy) order on Stock XYZ at \$50. If the current market price is \$40, when the stock climbs upward and hits \$50, this will trigger the stop-loss order and it will automatically become a market order to buy at \$50. Why does the manager want to do this? If the manager is dealing with multiple short positions that are difficult to monitor simultaneously, then setting up the stop-loss orders is an insurance policy allowing the portfolio manager to "set it and forget it." For better or worse, it also takes the human (emotional) element out of the decision. Hence, if the shorted stock rises past a particular level, the manager can reacquire the stock at a known value that does not create unlimited downside exposure for the portfolio.

Short squeezes

Short positions are much more sensitive to short-term volatility than long positions. For each position, the short seller has a smaller window of time in which her stock's price can advantageously move, as compared to a long position. Additionally, the phenomenon known as a "short squeeze" can inject added risk into a long-short portfolio.

In a short squeeze, price increases in the shorted stock spur a systematic purchasing of the stock to cover the short positions before the losses get worse. This purchasing can occur manually but frequently occurs because stop-loss orders have automatically been placed on the shorted stock. In ordinary market conditions, this is sensible and will act to mitigate the losses of the short seller. However, if there is enough demand for the stock in a time when short interest is also very high, the stop-loss mechanism can lose its effectiveness. The situation snowballs as buy orders begin to inundate the market, further driving the stock price up and worsening the magnitude of losses for short sellers. A short squeeze is more likely to happen with a smaller capitalization stock. This is because a small capitalization stock is more likely to have a higher proportion of short interest compared to total shares outstanding than a larger capitalization stock. However, since most 130/30 strategies are using a large capitalization universe from which to select securities,³ the possibility of a short

Summary and recommendation

squeeze is low, though not zero.

The 130/30 portfolio structure appears to have a mixture of support and resistance. While a highly skilled active manager can theoretically add greater value within a 130/30 framework than a long-only portfolio, investors have not replaced long-short or long-only portfolios *en masse*, perhaps because actual experience has not lived up to the expectations for the average 130/30 manager. However, this strategy can be seen as a different, and perhaps more efficient, way to obtain equity market exposure.

If an institutional investor is looking to obtain exposure to strategies of a nontraditional nature, then 130/30 strategies represent a logical step in the pursuit of returns above what a long-only portfolio can deliver. For institutional investors with existing hedge fund exposure (particularly long-short), there may be no discomfort with hiring a 130/30 manager in principle, but this type of investor may view the 130/30 as a watered-down version of an existing strategy.

The market for 130/30 funds has grown since falling during the financial crisis. As with any other strategy, both winners and losers have and will continue to emerge as manager skill in this space is tested by the market. The higher fees charged and costs incurred represent a significant hurdle that may be difficult for most managers to overcome. The small sample size of available data also makes it difficult to reach definitive conclusions. If an institutional investor does decide to proceed with the inclusion of a 130/30 strategy, they should look at the products on a manger-to-manager basis. As this strategy requires a high amount of skill and active management, proper manager selection is of utmost importance to add value using a 130/30 strategies.

Sources

Acadian Asset Management. "Systematic 130/30: A Better Path to High Conviction," *Thematic Research*, Acadian Asset Management, February 2018.

AIMA Canada, "AIMA Strategy Paper: 130/30 Strategy," *Strategy Paper Series*, AIMA Canada, 2010.

Alford, Andrew. "Demystifying the Newest Equity Long-Short Strategies: Making the Unconventional Conventional." *Perspectives: Insights on Today's Investment Issues*, Goldman Sachs Asset Management, October 2006.

Bradley, Brendan O. "Global Equities Hampered by Long-Only Restrictions," *Pensions & Investments*, April 30, 2007, p. 28.

Brush, John S. "Comparisons and Combinations of Long and Long/Short Strategies," *Financial Analysts Journal*, May/June 1997, pp. 81-89.

Business Wire. "Credit Suisse and AlphaSimplex Launch the Industry's First 130/30 Index," Business Wire, October 2017.

Clarke, Roger G., de Silva, Harindra, Sapra, Steven, and Steven Thorley. "Long/Short Extensions: How Much is Enough?" SSRN Working Paper. July 2007.

Clarke, Roger G., de Silva, Harindra, and Steven Sapra. "Toward More Information-Efficient Portfolios," The Journal of Portfolio Management, Fall 2004, pp. 54-63.

Clarke, Roger G., de Silva, Harindra, and Steven Thorley. "Portfolio Constraints and the Fundamental Law of Active Management." *Financial Analysts Journal*, September/ October 2002, pp. 48-66.

Cohen, et al. "Supply and Demand Shifts in the Shorting Market." The Journal of Finance 62 (2007): 2061-2096.

Cooper, Jay, and Christine Williamson. "Money Managers, Prime Brokers Reap Benefits of Popularity," *Pensions & Investments* (May 28, 2007). July 27, 2007, http://www.pionline.com.

Eurkahedge. "130/30 Funds: What is Behind the Commercial Offensive?," *Research*, Eurkahedge, November 2007.

Grinold, Richard C., and Ronald N. Kahn. "The Efficiency Gains of Long-Short Investing," *Financial Analysts Journal*, November/December 2000, pp. 40-53.

Jacobs, Bruce I. and Kenneth N. Levy. "20 Myths about Enhanced Active 120-20 Strategies," *Financial Analysts Journal*, July/August 2007, pp. 19-26.

Jarrow, Robert. "Heterogenous Expectations, Restrictions on Short Sales, and Equilibrium Asset Prices," *The Journal of Finance*, December 1980, pp. 1105-1114.

Johnson, Steve. "The decline, fall and afterlife of 130/30," *Financial Times Fund Management*, Financial Times, May 2013.

JP Morgan Chase & Co. "Spotlight On: 130/30 Strategies," *Investment Insights*, J.P. Morgan Asset Management, February 2012.

Lintner, John. "The Effect of Short Selling and Margin Requirements in Perfect Capital Markets," *The Journal of Financial and Quantitative Analysis*, December 1971, pp. 1173-1195.

McDermott, Scott. "Are Constraints Eating Your Alpha?" *Strategic Research*, Goldman Sachs Asset Management, August 2005.

Ross, Stephen A. "The Capital Asset Pricing Model (CAPM), Short-Sale Restrictions and Related Issues," *The Journal of Finance*, March 1977, pp. 177-183.

Sharpe, W. F. "Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk," *The Journal of Finance*, September 1964, pp. 425-442.

Strategic Investment Group. "The Long and Short of Extension Strategies," *Fiduciary Insights*, Strategic Investment Group LLC, December 2015.

Tsong-Yue, Lai, Hin Man, Mak, and Ko Wang. "Asset Pricing Model with Short-Sale Restrictions: The Case of Asian Property Markets," *International Real Estate Review,* Vol. 4 2001, pp. 43-56.

Disclaimers

This document is for general information and educational purposes only, and must not be considered investment advice or a recommendation that the reader is to engage in, or refrain from taking, a particular investment-related course of action. Any such advice or recommendation must be tailored to your situation and objectives. You should consult all available information, investment, legal, tax and accounting professionals, before making or executing any investment strategy. You must exercise your own independent judgment when making any investment decision.

All information contained in this document is provided "as is," without any representations or warranties of any kind. We disclaim all express and implied warranties including those with respect to accuracy, completeness, timeliness, or fitness for a particular purpose. We assume no responsibility for any losses, whether direct, indirect, special or consequential, which arise out of the use of this presentation.

All investments involve risk. There can be no guarantee that the strategies, tactics, and methods discussed in this document will be successful.

Data contained in this document may be obtained from a variety of sources and may be subject to change. We disclaim any and all liability for such data, including without limitation, any express or implied representations or warranties for information or errors contained in, or omissions from, the information. We shall not be liable for any loss or liability suffered by you resulting from the provision to you of such data or your use or reliance in any way thereon.

Nothing in this document should be interpreted to state or imply that past results are an indication of future performance. Investing involves substantial risk. It is highly unlikely that the past will repeat itself. Selecting an advisor, fund, or strategy based solely on past returns is a poor investment strategy. Past performance does not guarantee future results.