# THE LONG AND SHORT OF EXTENSION STRATEGIES



iduciary Insights

THE USE OF EXTENSION STRATEGIES, AKA 130/30 AND LIMITED SHORTING STRATEGIES, CAN BE ONE OF THE MOST EFFECTIVE MEANS TO IMPROVE PORTFOLIO EFFICIENCY AND PERFORMANCE. These strategies combine long and short positions to enhance opportunities to add value while maintaining a net exposure of 100% of asset value. This edition of Strategic's Fiduciary Insights series considers the structural impediments to adding value faced by long-only strategies and examines how extension strategies can surmount these obstacles.

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### Long-Only Strategies Can Be Short on Performance

lpha is hard to achieve and even tougher to sustain, for a number of reasons. One of them is that active management is a zero-sum game. Abovebenchmark returns achieved by one investor come at the expense of another, and fees and costs eat into the returns of both. The data are dispiriting, especially for active managers with high fees such as those commonly charged by mutual funds (Exhibit 1). Only about 18% of active U.S. large cap equity mutual fund managers outperformed the market over a 10-year horizon ending in 2014, a particularly weak year for active managers. These poor odds appear to span all markets, and do not conform to conventional assessments of relative market efficiency. Even managers operating in markets typically deemed to be less efficient, like small cap U.S. and emerging equities, face long odds. For example, fully 90% of emerging equity market managers generated below-market returns over a 10-year period. Sadly, these data are worse than they appear, as the average

investor underperforms the average manager because of inopportune asset allocation and style shifts.

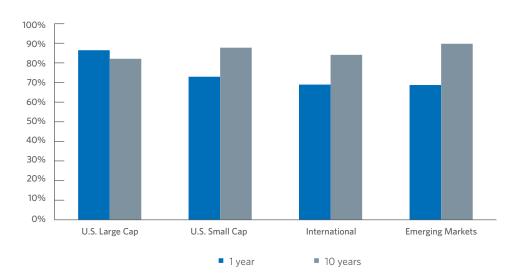
Another reason why even many skilled active managers underperform is that they are barred from shorting stocks and must run their portfolios with a long-only constraint. This restriction weakens the link between talent and added value in two ways. First, it limits the ability of managers to benefit from their insights into securities likely to underperform the market. When a zero weighting is as low as you can go, the limit to underweighting a security is set by the weight of that security in an index. In capitalizationweighted equity indices, there are only a few mega-cap stocks that, when underweighted, are large enough to have a material impact on performance relative to the benchmark. Many stocks have miniscule index weights, so in a long-only portfolio they can have only miniscule underweights. In the case of the Russell 3000, for example, the median potential underweight represents only 1 basis point of the index capitalization. For the EAFE index, the median is only 5 basis points (Exhibit 2).

A long-only constraint can also result in unintended risk factor exposures. For example, managers often perceive small cap stocks to provide fertile ground for active management. Compared with the large cap ...active management is a zero-sum game. Above-benchmark returns achieved by one investor come at the expense of another, and fees and costs eat into the returns of both.

#### **EXHIBIT 1:**

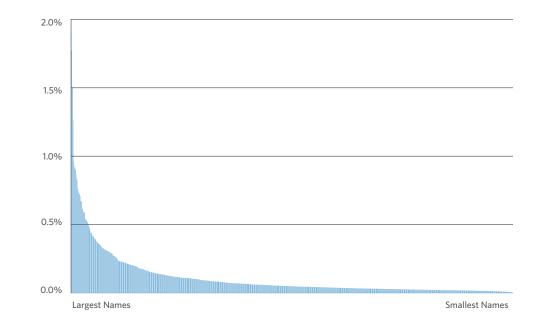
#### Percentage of Actively Managed Mutual Funds Underperforming Their Benchmarks

Source: S&P / Dow Jones U.S. fund universe. Data through end-December 2014.



#### **EXHIBIT 2:** Weights of EAFE Names

Sources: MSCI, Strategic. Data as of end-March 2015.



The more independent decisions with the potential to add value, the higher are the chances of successful active management.

> sector, small stocks have more volatile fundamentals and prices, are more responsive to earnings surprises, and have lower analyst coverage — all characteristics conducive to successful active management. A long-only manager may see alpha potential in focusing on the smaller companies in the benchmark, but not want the risk of a small cap tilt. However, without the capacity to short, the manager is unable to neutralize this risk. The same logic extends to managers with expertise in other market segments, like sector or regional specialists. Without the ability to short, managers are unable to offset the incidental factor exposure of their best ideas.

### There Ought to be a Law

According to Richard Grinold<sup>1</sup>, who propounded what he called "the fundamental law of active management," a manager's information ratio — i.e., the amount of active return generated as a proportion of active risk — is a function of manager skill, the number (or breadth) of independent active decisions available, and the ease with which active insights can be implemented (Exhibit 3). In Grinold's equation, the size of the opportunity set is critical. The more independent decisions with the potential to add value, the higher are the chances of successful active management. Portfolio management decisions that inherently have a limited opportunity set, like tactical asset allocation decisions, typically have less potential for value added than the myriad of security selection and other decisions open to a manager with a broad equity or fixed income mandate.

Yet, even when the opportunity set is large, managers must be able to translate insight into action. As we have just seen, the long-only constraint is a major impediment to the efficient implementation of active management decisions. In the case of long-only mandates with capitalization weighted benchmarks, effectively expressing "underperform" insights is only possible for a relatively few mega-cap stocks, and thus almost half of a skilled manager's insights are wasted. Improving implementation efficiency is a key way in which extension strategies boost the potential of skilled managers to add value.

1 Richard C. Grinold, "The Fundamental Law of Active Management," Journal of Portfolio Management, Spring 1989.

#### **EXHIBIT 3:** The Fundamental Law of Active Management

Source: See footnote 1.

Information Ratio =	Active return Active risk
= f ( Skill x $\sqrt{Breadth}$ x	Implementation Efficiency)
	Long-only constraint is a major impediment to efficiency.

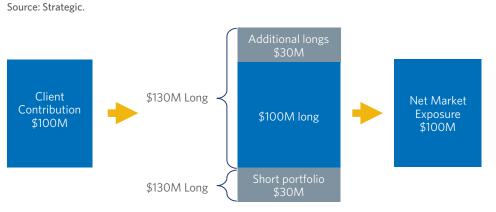
Using an extension strategy, active managers can more symmetrically express "outperform" and "underperform" insights, and exploit anomalies... without taking unwanted tilts toward particular risk factors or market segments.

## The Long and Short of Extension Strategy Construction

Extension strategies are designed to address the shortcomings of long-only strategies. They do so by easing the long-only constraint to capture alpha more efficiently. Using an extension strategy, active managers can more symmetrically express "outperform" and "underperform" insights, and exploit anomalies in market segments in which the manager has the greatest insight, without taking on unwanted tilts toward particular risk factors or market segments.

Extension strategies, often called 130/30 or limited shorting strategies, are typically constructed as a long portfolio representing 130% of total assets and a short portfolio of 30% (Exhibit 4). The short portfolio consists of securities that the manager expects to underperform. Selling these securities short and repurchasing them at a lower price represents a source of expected manager value added. The proceeds from the short sale of securities are used to purchase additional long positions in securities expected by the manager to outperform. The securities sold short are borrowed. This borrowing entails additional cost, in the form of margin, and complexity, in the need for a prime broker to hold the long and short positions. Although the 130/30 ratio may vary in some instances from 120/20 to 160/60 or more, in all extension strategies the long and short portfolio combined is structured to have a beta of one, with the short portfolio offsetting the additional long positions.

### **EXHIBIT 4:** Construction of an Extension Strategy



Extension strategies permit a more efficient implementation of active strategies and a more complete translation of manager insights into action.

### Benefits and Risks of Extension Strategies

xtenstion strategies permit a more efficient implementation of active strategies and a more complete translation of manager insights into action. The capacity to hold short positions eases the constraint on underweighting stocks, thus allowing managers to take better advantage of their insights into which stocks are likely to underperform the market. The ability to short also improves risk management by making it easier for managers to neutralize the undesired factor byproducts of long positions taken for the alpha opportunities. In this way, for example, managers who see inefficiencies in small caps can attempt to exploit them without also taking an undesired size bet.

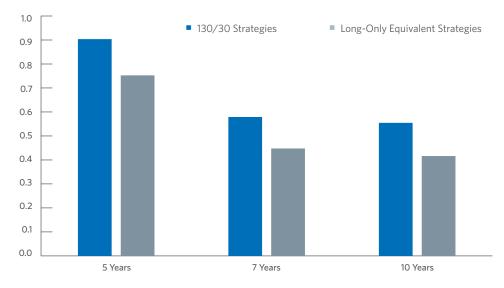
o achieve these benefits, there are certain key prerequisites for manager selection. First, managers must truly have the rare commodity of skill, and this skill must extend to the generation of both

positive and negative forecasts. Extension managers also need to be adept at managing short positions and using those positions as a way to add value as well as manage risk. Successful shorting also requires experience in working with prime brokers and operating in the securities lending market. Managers must have systems in place to perform risk analyses that assess the interaction of long and short positions simultaneously and take into account all costs, including the cost of borrowing securities sold short. To benefit from the additional flexibility of the extension strategy approach, managers must have capabilities in people, process, and infrastructure.

xtension strategies managed by skilled investors with the requisite expertise have significant scope for generating value added more efficiently than their long-only counterparts. A comparison of the historical performance of extension strategies with their long-only counterparts supports the thesis that extension strategies are capable of achieving a higher information ratio (Exhibit 5).

#### **EXHIBIT 5:** Extension Strategy vs. Long-Only Equivalent Strategy Average Information Ratio

Sources: MSCI, Strategic. Data as of end-March 2015.



xtension strategies also entail additional risk. They are more exposed to active management decisions than most long-only strategies, and usually have higher tracking error to benchmarks. This potential for higher active management exposure reflects the fact that the gross positions established by the manager are greater than 100% of the net dollar value of the account. Moreover, short positions theoretically expose the manager to unlimited downside, if the shorted security skyrockets in value. Extension strategies are arguably also more susceptible to systemic shocks that affect market liquidity and counterparty risk than long-only strategies. They are typically less liquid than their long-only counterparts both as a result of the underlying investments and the commingled vehicles used to deliver the strategies. Exposure to counterparty risk is higher given the use of prime brokers and, in some cases, derivatives counterparties. These inherent additional risks of extension strategies make it especially important that the due diligence process for these strategies encompass their unique characteristics.

### Conclusion

n a world where manager skill is a precious commodity, it is especially important to give truly talented managers full rein to apply their insights. Extension strategies help ease one of the main structural impediments to adding value faced by long-only managers. Portfolio theory suggests that the increased efficiency of implementing manager insights afforded by extension strategies should improve their added value and information ratios. A comparison of the historical performance of extension strategies with their long-only counterparts supports this thesis. Strategic's own long experience with extension strategies further suggests that - provided that a manager truly has skill and robust risk analytics and controls extension strategies can improve portfolio efficiency and performance.

### Strategic Investment Group

Strategic, a pioneer in dedicated Outsourced CIO (OCIO) solutions since 1987, offers a comprehensive service platform for managing customized portfolios for institutional and private investors. Our proprietary process combines active portfolio management, rigorous risk management, and open architecture manager selection.

Strategic functions as our clients' investment partner and co-fiduciary, effectively becoming an extension of their resources. Clients are then free to focus on their core businesses, while we focus on providing the highly specialized portfolio management expertise that clients need to meet their investment goals. Depending on a client's needs and preferences, Strategic can orchestrate the management of an entire portfolio comprising multiple asset classes, focus on specific asset classes, such as alternatives (e.g., hedge funds, real estate, and/ or private equity) or international investments, or manage strategies with high potential for adding value (e.g., portable alpha through investor-friendly turnkey structures). Customized liability-driven investing (LDI) solutions, whether through an integrated total portfolio approach or a targeted long-duration strategy, are also available, as are solutions that address mission-related investment objectives.

We strive to build enduring partnerships with our clients by strengthening their investment programs through a dynamic, value-enhancing investment process, sound governance framework, and world class client service. Our mission is to empower investors through experience, innovation, and excellence.

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