

130-30: Is It Working?

The development of 130-30 investment management products is an important step forward for traditional long only managers as reflected by their strong, but short, track record. However, performance and diversification problems have already emerged and could grow if investors engage in a broad switch to these products. For instance, recent poor performance suggests many 130-30 managers operate similarly, and no matter how many are hired, diversification benefits may be limited. Risk could possibly increase.

The redirection of investor interest and cash flow to alternative assets in recent years has not gone unnoticed by the traditional “long only” money management firms which, in response, are borrowing techniques found in hedge funds to enhance their own product offerings. Most popular to date have been the “130-30” equity products (also known as “short extension”) that use short selling and leverage in an effort to boost risk-adjusted performance. Unlike hedge fund managers, 130-30 managers seek to outperform an equity index benchmark such as the S&P 500 or EAFE, rather than to achieve an absolute return.

In a typical 130-30 equity portfolio, the manager augments long stock positions equal to 100% of the portfolio value with short positions equal to 30% of portfolio value. Cash proceeds from the short sales are used to invest an additional 30% in long positions. Gross asset exposure equals 160% (130% long plus 30% short) and net asset exposure – long exposure minus short exposure – equals 100%. Gross and net asset exposures are also generally fixed in 130-30 portfolios, unlike in hedge funds where leverage and shorting vary depending upon perceived investment opportunities. The benefit of 130-30 restrictions is that the 160% gross asset exposure gives investors some assurance about overall use of leverage while the 100% net asset exposure keeps the portfolio’s market or beta level of return and risk equal or close to the benchmark index.

Interestingly, the 160% gross asset exposure in 130-30 equity products is similar to the 167% median gross asset exposure for equity long-short hedge funds. The difference is that equity hedge funds tend to have larger short positions that result in far lower net asset exposure when compared to 130-30 portfolios. Median gross long, gross short, and net asset exposures are 113%, 57%, and 54% for a universe of 65 larger institutional oriented equity long-short hedge funds. These statistics suggest that while 130-30 equity portfolios are similar to equity long-short hedge funds in leverage, the primary difference is the constant and higher 100% net asset exposure for 130-30 portfolios. Another important difference is that while a large proportion of equity hedge funds use fundamental research to generate alpha, the vast majority of 130-30 managers are quantitatively based.

130-30 managers correctly argue that the traditional long only restriction limits their ability to generate alpha. Shorting allows them not only to take full advantage of the alpha opportunity in overvalued stocks, but also helps to control risk. For example, hedge funds often use short positions in individual or groups of stocks to eliminate unwanted industry, country, or commodity risks that might arise when an undervalued stock position is over weighted.

The theory behind 130-30 seems convincing, but are the managers producing the expected results? Exhibit 1 provides some early answers, showing performance data for the 46 month period starting December 31, 2003 and ending October 31, 2007. The December 31, 2003

starting date was selected because until then, fewer than ten 130-30 managers were reporting returns. There were eleven 130-30 managers at the starting date and 68 by the end of the period.

Column A in Exhibit 1 reports “excess” return and risk for what we call the Cliffwater 130-30 Index, an equal weighted index of 130-30 manager returns. Excess return for a 130-30 portfolio is calculated by subtracting the relevant benchmark return from a portfolio’s total return. Under the assumption that the 130-30 portfolio has a net beta of one, the excess return can also be thought of as alpha.¹ Because some managers offer multiple 130-30 products that differ only in their benchmark index, we chose to average excess returns (total return minus benchmark index) across products to create one set of returns for each manager. For example, if a 130-30 manager has two products, one benchmarked to the Russell 1000 Index and another benchmarked to the S&P 500 Index, monthly excess returns would be averaged for the two products and counted as one for purposes of inclusion in the Cliffwater 130-30 Index. The one exception is that U.S. equity products are treated separately from non-U.S. equity products. Therefore, a 130-30 manager would be counted twice in the Cliffwater 130-30 Index if it had both U.S. and non-U.S. products.

Not all 130-30 managers provide net of fee returns, so the Cliffwater 130-30 Index is constructed by averaging manager reported excess returns that are gross of fees and then adjusting downward by 90 basis points, the average fee charged by 130-30 managers.

Exhibit 1: Performance Comparisons for 130-30 and Hedge Funds
(December 31, 2003 to October 31, 2007)

	(A)	(B)	(C)	(D)	(E)
	Cliffwater 130-30 Index	Cliffwater 130-30 Early Entrants Index	Equity Long-Short Hedge Funds (HFRI Equity Hedge)	HFRI Equity Market Neutral Hedge Funds	All Hedge Funds (HFRI Composite)
(1) Excess return (net of fees)*	2.40%	2.73%	7.10%	1.93%	7.13%
(2) Standard deviation of (1) **	2.06%	2.40%	5.52%	1.96%	4.44%
(3) Information Ratio (1)/(2)	1.17	1.14	1.29	0.98	1.61
<u>Beta-adjusted***</u>					
(4) Excess return (net of fees)*	1.95%	2.05%	3.28%	1.87%	4.11%
(5) Standard deviation of (4) **	2.00%	2.32%	3.90%	1.94%	3.22%
(6) Information Ratio (5)/(6)	0.97	0.88	0.84	0.96	1.28
* A 90 basis point annual management fee is deducted monthly from gross 130-30 returns. Hedge fund returns are reported net of fees. All returns are annualized.					
** Annualized.					
*** S&P 500 regression betas:	0.06	0.08	0.54	0.12	0.42
T-statistic	1.55	1.62	6.64	3.20	6.30

We also formed a Cliffwater 130-30 Early Entrants Index, shown in column B, which represents the performance of just the 11 managers that existed prior to 2004. Sometimes weaker managers imitate successful product offerings and their subsequent inclusion in performance data can dilute the index averages. We created the Early Entrants Index to test whether the growth in 130-30 products was coming primarily from less skilled managers and conclude that it is not. The

¹ While the net dollar exposure of 130-30 portfolios is 100%, the net beta may differ from one. If, for example, a 130-30 manager preferentially shorts low beta stocks, the net beta of the portfolio may be greater than one.

performance of the Early Entrants is not materially different from the performance of the entire set of 130-30 managers shown in column A.

Next we compare 130-30 managers with equity hedge funds to understand whether there are any meaningful differences in their respective ability to deliver excess return to investors. Columns C and D show excess returns and risk for two styles of equity hedge funds. Equity long-short hedge fund performance is shown in column C and is represented by the HFRI Equity Hedge Index, which includes about 1,800 funds. Equity long-short hedge funds represent the largest of the hedge fund styles and, as noted earlier, their gross asset exposure is similar to 130-30 products. A much smaller group or style of equity hedge funds is referred to as equity market neutral. Gross asset exposures for equity market neutral hedge funds average 350%, about twice the gross asset exposures for 130-30 products and equity long-short hedge funds, but their net exposure is kept very close to zero, as their name implies. Performance results for equity market neutral hedge funds are shown in column D and are represented by the HFRI Equity Market Neutral Index, which includes about 400 funds. Column E reports return and risk for all hedge fund styles, including those that do not invest in stocks, and is represented by the HFRI Fund Weighted Composite Index.

Like the Cliffwater 130-30 Indexes, all three HFRI Indexes give equal weight to funds and are net of fees. In the calculation of hedge fund excess returns, we subtract LIBOR from monthly hedge fund returns on the assumption that LIBOR is the appropriate benchmark for hedge funds, just as the appropriate equity index benchmark was subtracted from 130-30 returns to arrive at their excess returns. Excess returns and their volatility are compared in rows 1 through 3. The two hedge fund indexes representing equity long-short hedge funds and the composite of all hedge funds produced excess returns exceeding 7% per year. The 130-30 indexes and the market neutral hedge funds earned much lower excess returns but with lower risk levels.

A common and legitimate complaint with this type of comparison is that hedge fund returns contain some beta return and risk that is not captured by a LIBOR benchmark. The result is that simply subtracting LIBOR gives an overestimate of true alpha. In rows 4 through 6 of Exhibit 1 we recalculate excess return and risk for the presence of beta. The beta adjustment is accomplished by simple regression where for each column the excess return in row 1 is the dependent variable and excess market return (the difference between the S&P 500 Index return and LIBOR) is the independent variable.² The resulting beta-adjusted excess return should theoretically represent only alpha. Comparing the excess returns in row 1 with the beta-adjusted excess returns in row 4 shows that stripping out S&P 500 Index beta reduces equity long-short (column C) and composite (column E) hedge fund excess returns by about one-half and, as expected, has a much smaller impact on 130-30 and equity market neutral excess returns.

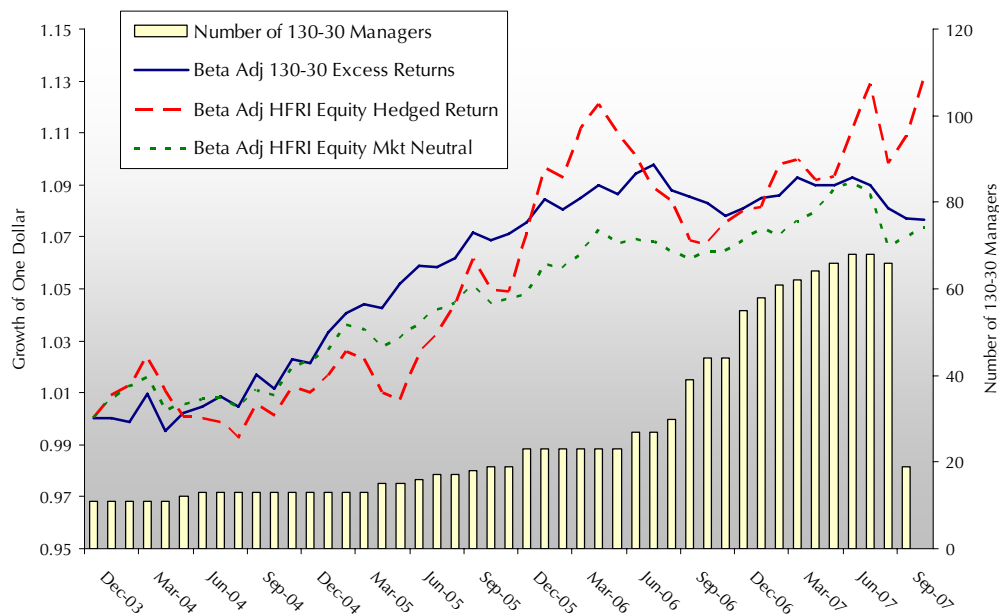
The beta-adjusted excess returns, risk, and information ratios in rows 4 through 6 provide a more apples-to-apples assessment of 130-30 performance. The annualized beta-adjusted excess return for the Cliffwater 130-30 products equals 1.95% annually. Standard deviation of beta-adjusted excess return for the Cliffwater 130-30 Index is a low 2.00%, yielding a strong information ratio of 0.97. One logical competitor for 130-30 money might be equity long-short hedge funds (column C). Some investors are taking the unusual step of replacing traditional equity managers with equity long-short hedge funds, even though lower and varying betas would undoubtedly create greater tracking error with respect to equity indexes. The HFRI Equity Hedge Index

² Regression betas are reported in Exhibit 1. The low 0.06 and 0.08 betas for the Cliffwater 130-30 and Early Entrants Indexes should theoretically equal zero. However, neither value is statistically significant.

produced a higher 3.28% beta-adjusted excess return than the Cliffwater 130-30 Index but also a higher 3.90% level of risk. The higher risk causes the 0.84 information ratio for the HFRI Equity Hedge Index to fall below the 0.97 ratio for the Cliffwater 130-30 Index.

Despite their strong performance thus far, 130-30 strategies should be approached with caution for two reasons. First, the track record for most 130-30 managers is very short. The bars in Exhibit 2 show the number of 130-30 managers in the Cliffwater Index. Fewer than 20 managers offered 130-30 portfolios until 2006 when the number of manager offerings jumped to almost 68. (The small number of offerings in October 2007 reflects the fact that most managers have not yet reported October returns, which can be delayed up to six weeks after month-end.) Second, the 130-30 beta-adjusted excess returns depicted by the solid line in Exhibit 2 show that no excess return has been created over the past one and one-half years. While this period coincides with the growth in the number of 130-30 offerings, our analysis of the early entrant subset shows that the falloff is not due to weaker new 130-30 managers. The drop in the Cliffwater 130-30 Index is partly attributable to the publicized performance troubles with quantitatively based products in recent months. However, the Index reached its high almost a year earlier, at July 31, 2006. This 130-30 performance lull may be temporary but it highlights the need for investor patience, if not concern.

Exhibit 2: 130-30 and Equity Long-Short Performance Comparison
(Beta-adjusted Excess Returns: December 31, 2003 to October 31, 2007)



In contrast, beta-adjusted excess returns for equity long-short hedge funds, represented by the dashed line, are somewhat more volatile than 130-30 returns but, unlike 130-30 returns, they do not appear to have abated.

An interesting comparison is that between 130-30 managers and equity market neutral hedge funds. The similarity of their excess returns and risk is reflected in Exhibit 1. Exhibit 2 shows that they also display the same time pattern of returns, with equity market neutral hedge funds also not performing strongly over the past year and one-half. In fact, the correlation between

beta-adjusted excess returns for the Cliffwater 130-30 Index and the HFRI Equity Market Neutral Index is a somewhat high 0.70. This is not surprising given that many 130-30 managers employ the same quantitative valuation and risk management techniques used by equity market neutral hedge funds. In fact, one could reasonably argue that 130-30 products should be considered a subset of equity market neutral hedge funds but with a beta target of 1.0 rather than zero.

The development of 130-30 products is an important step forward for the traditional long only manager, as reflected by their strong but short track record. We believe that the 130-30 portfolio structure can make good managers even better if the manager has the right research and risk management processes available to take advantage of the increased flexibility. However, the 130-30 model has thus far attracted a fairly small subset of quantitatively inclined active managers, in some cases the same managers as those that operate market neutral equity hedge funds. It is important that investors *diversify the sources of alpha* in their portfolios and at this juncture it appears that 130-30 products at best represent only a partial solution to investors' efforts to maximize risk-adjusted return.

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December 3, 2007

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