

# 130/30 Investing: Relaxing the Long-only Mandate

By William J. Coaker II, CIMA®, CFP®, CFA®

Investor interest in 130/30 strategies has increased substantially in the past year. On September 30, 2006, 32 institutional products were using a 130/30 strategy, but one year later that number had more than doubled, to 68 institutional products with a total of \$53 billion in assets. Indeed, in the third quarter of 2007, 130/30 assets rose 77 percent.<sup>1</sup> The account minimum for these products typically is \$1 million or more, but six mutual funds recently have introduced 130/30 products, so these strategies now are available to more investors.

This article explains the investment thesis for 130/30 investing, examines issues that investors should consider before investing in these products, illustrates the potential for increased returns, and evaluates the actual returns of these strategies.

## Description

Suppose a manager receives \$100 to invest. To implement a 130/30 strategy, the manager would sell short \$30 worth of stock and receive cash when the sale is made. After the sale of the short positions, the manager has \$130 in cash to buy stocks. In other words, the manager has the following:

- Long positions totaling \$130
- Short positions totaling \$30
- A net long position of \$100

Long/short investing isn't restricted to 130/30. 110/10, 120/20, 140/40, and other mixes are used. The amount of shorting depends on an investor's preferences, and other factors discussed later in this article.

## Investment Thesis

The S&P 500 has just 15 stocks with a

weight of 1 percent or more each. The average weight of the 500 stocks in the index is 0.20 percent and the median weight is 0.10 percent. In other words, each of approximately 250 stocks makes up less than 10 basis points of the index and each of 485 stocks makes up less than 1 percent of the index.

Long-only managers who believe a stock will underperform an index have two options: underweight the stock or don't own it at all. But when a stock has a small weight in the index, the manager's insights, even if correct, will have almost no impact on improving returns.

For example, suppose ABC stock is 0.10 percent of an index, and a manager expects the index will return 10 percent but ABC will return 0 percent. Because ABC is expected to underperform, the long-only manager decides not to own it. If the manager is right and ABC underperforms by 10 percent, the manager's insights increase return by just one basis point (0.01 percent).

Comparatively, if the manager dedicates 2 percent of the portfolio to a short position in ABC and ABC underperforms by 10 percent, the manager's insight increases return by 0.20 percent. Further, suppose the manager expects XYZ stock to outperform and uses the proceeds from the short sale of ABC to increase a position in XYZ by 2 percent. If XYZ outperforms by 10 percent, the manager's insights into XYZ increase return another 0.20 percent. Hence, by taking a 2-percent short position in ABC and using the proceeds from the short sale to increase the position in XYZ, the manager increases total return by 0.40 percent.

Allowing managers to short stocks

can add even more value if the manager is working with a larger index because larger indexes have more stocks that will outperform and underperform. For example, the Morgan Stanley Country Index (MSCI) is made up of 1,928 stocks, but just 24 of them have a weight greater than 0.50 percent, the average weight is just five basis points, and the median stock makes up just 2.5 basis points of the index.

In short, allowing managers to short stocks they view negatively and increase the allocation to stocks they view positively can increase return for the same level of beta (i.e., systematic risk).

Indeed, 130/30 can enhance returns when stocks expected to outperform actually do outperform and stocks expected to underperform actually do underperform. Below is a comparison of 130/30 and long-only strategies, based on the following assumptions:

- The index is expected to return 15 percent and actually returns 15 percent.
- Stock A is expected to return 20 percent and actually returns 20 percent.
- Stock B is expected to return 10 percent and actually returns 10 percent.

If the manager's insights prove correct, the manager can outperform the index using one of the following strategies:

**Overweight stocks expected to outperform and underweight stocks expected to underperform.** If the manager allocates 70 percent to Stock A and 30 percent to Stock B, the return is 17 percent and outperforms the index by 2 percent.

**Allocate entirely to stocks expected to outperform and don't own stocks expected to underperform.** Using this strategy, the manager would



earn a 20-percent return and beat the index by 5 percent.

**Short stocks expected to underperform and use the proceeds from the short sale to increase the allocation to stocks expected to outperform.** If the manager invests 110 percent in Stock A and -10 percent in Stock B, the return is 21 percent, outperforming the index by 6 percent and beating the best long-only strategy by 1 percent. If the manager invests 130 percent in Stock A and -30 percent in Stock B, the return would be 23 percent, outperforming the index by 8 percent and beating the best long-only strategy by 3 percent.

However, 130/30 strategies also can make performance worse.

What if the expectations for stocks A and B remain the same, but the expectations are proven wrong? Let's look at an example where the assumptions change to the following:

- The index is expected to return 15 percent and actually returns 15 percent.
- Stock A is expected to return 20 percent but actually lags the index and returns 10 percent.
- Stock B is expected to return 10 percent but actually outperforms and returns 20 percent.

When the manager's insights prove incorrect, the following scenarios may play out:

**Overweight stocks expected to outperform and underweight stocks expected to underperform.** If the manager allocates 70 percent to Stock A and 30 percent to Stock B, the return is 13 percent and underperforms the index by 2 percent.

**Allocate 100 percent to stocks expected to outperform and 0 percent to stocks expected to underperform.** If the manager allocates 100 percent to Stock A and 0 percent to Stock B, the return is 10 percent and underperforms the index by 5 percent.

**Short stocks expected to underperform and use the proceeds from the short sale to increase the**

**TABLE 1: EXPECTED EXCESS RETURNS AND TRACKING ERROR (GROSS)**

	Expected Excess Returns	Expected Tracking Error
110/10	1.75%	2.50%
120/20	3.00%	4.00%
130/30	3.75%	5.00%

Source: eVestmentAlliance

Note: Expected excess returns and tracking error are quoted from the managers of 130/30 products.

**allocation to stocks expected to outperform the index.** If the manager allocates 110 percent to Stock A and -10 percent to Stock B, the return is 9 percent and underperforms the index by 6 percent. If the manager allocates 130 percent to Stock A and -30 percent to Stock B, the return is 7 percent and underperforms the index by 8 percent.

In short, 130/30 investing can improve the results of a good manager and make a bad manager's results worse.

#### Characteristics of 130/30

130/30 portfolios have the following characteristics:

- The long minus the short positions equal 100 percent.
- The investment objective is to outperform a benchmark subject to no change in systematic risk, meaning the beta is kept very close to 1.00 versus a specified benchmark. In other words, the investment objective is to maximize return per unit of systematic risk (meaning market, or nondiversifiable, risk).
- Tracking error should be low for products using a minimal amount of leverage and shorting (110/10 strategies) and moderate for strategies using higher amounts of leverage and shorting (such as 130/30).
- To maintain a beta very close to 1.00 and to control tracking error, the market capitalization, style exposure (value, core, or growth), fundamental characteristics (e.g., price-earnings, price-book, dividend yield, etc), and sector weights of 130/30 portfolios are kept very similar to their benchmarks.

A simple example of 130/30 investing is a manager who believes that Toyota will outperform General Motors (GM). Toyota and GM have very similar business risks, systematic risks, and betas, and they obviously are in the same sector. By investing 130 percent in Toyota and -30 percent in GM—rather than 100 percent in Toyota and 0 percent in GM—the manager has not increased the portfolio's systematic risk or changed its sector weights. If Toyota returns 20 percent and GM returns 10 percent, a 130/30 manager will earn 23 percent or 3 percent more than a manager who allocates 100 percent to Toyota.

#### Expected Excess Returns

Table 1 summarizes expected excess returns and tracking error for 130/30 and other net 100-percent long strategies that allow a specified amount of shorting. 110/10 strategies have an expected excess return of 1.75 percent per year with a tracking error of 2.50 percent. 130/30 strategies have an expected excess return of 3.75 percent per year with a tracking error of 5.00 percent. The expected excess returns are gross of fees.

#### Actual Excess Returns to Date

Table 2 summarizes actual excess returns of 130/30 products over varying time periods. Since inception, 130/30 products have earned excess returns of 0.35 percent per year net of fees. In computing net returns, the author used the average gross excess returns of 1.14 percent per year minus the average fixed rate management fee of 0.79



**TABLE 2: 130/30 ACTUAL EXCESS RETURNS (NET)**

Inception to Date	Annualized Returns				Annual Returns				
	3rd Qtr. 2007	1 Year	3 Years	5 Years	9/30/2007	2006	2005	2004	2003
Excess Returns	-1.40%	-0.58%	2.51%	2.35%	-0.61%	0.86%	3.08%	4.81%	3.74%
# of Products	55	32	11	7	40	23	16	11	10

Source: eVestmentAlliance

percent per year. Note: The reason that annualized returns over three and five years in table 2 are considerably higher than the average net excess return of 0.35 percent since inception is because 80 percent of all 130/30 products are less than three years old and average excess returns from the first quarter of 2006 through the third quarter of 2007 have been almost flat.

For the year ended September 30, 2007, 130/30 products earned excess returns of -0.58 percent net of fees. For the three years ended September 30, 2007, the results are more encouraging, with 130/30 products earning an annualized excess return of 2.51 percent net of fees. However, only 11 products using a 130/30 strategy have a track record of three years or longer. With such a limited time series and sample size, it's too early to know whether the results of 130/30 thus far will be representative of their longer term results.

Lastly, in the credit crunch and market volatility in third quarter 2007, 43 out of 55 products using a 130/30 strategy underperformed their benchmarks. This will be discussed more thoroughly in the section titled, "Effect of Deleveraging."

**Practical Issues**

This section evaluates a range of practical issues unique to 130/30 strategies. The amount of shorting to allow, and whether to use these strategies at all, depends on the amount of tracking error the investor is willing to accept, as well as the other issues discussed in this section.

**1. Tracking Error**—Tracking error is the difference between a product's

return and the return of the product's benchmark. Products with greater amounts of leverage and shorting, such as 130/30, will have higher tracking error than 110/10 mandates.

While these strategies do not increase their exposure to systematic risk (market risk), they do increase their exposure to idiosyncratic risk (also called stock-specific, unique, and nonmarket risk) because they take larger active positions versus their underlying benchmarks. Greater amounts of leverage and shorting mean greater idiosyncratic risk, and greater idiosyncratic risk means higher tracking error. Tables 1 summarizes the expected and actual tracking error for 110/10, 120/20, and 130/30 strategies.

**2. Management Fees**—130/30 strategies generally have higher management fees than long-only active managers. The average management fee of a long-only large-core product is 55 basis points for a \$50 million account. Most 130/30 products offer two management fee schedules: a flat fee averaging 79 basis points or a flat fee averaging 40 basis points plus an incentive fee of 20 percent of the alpha they produce. If a manager outperforms the benchmark by 3 percent, the total management fee using a base fee of 40 basis points plus 20 percent of the alpha would be 1.00 percent.

**3. Transaction Costs**—130/30 strategies incur two forms of higher transaction cost. First, 130/30 managers must execute the leveraged and short positions.

For large U.S. stocks, 130/30 strategies incur approximately 12–25 basis points annually in additional transaction cost and 110/10 strategies incur an additional 4–8 basis points in transaction cost per year. The amount depends on market volatility, liquidity, bid-ask spreads, and other factors.

For small U.S. stocks, the additional cost to execute 130/30 strategies will be higher. That said, 52 of the 57 products using 130/30 strategies that the author evaluated are benchmarked versus a large-stock index such as the S&P 500 (28 products), Russell 1000 (15 products), Russell 1000 Value, Russell 1000 Growth, or Russell Top 200 Value (9 products). The other five products are benchmarked versus either the Russell 3000 (4 products), an all-cap index, or the Russell 2500 (1 product), a small-midcap index.

For international stocks, the cost to execute the leveraged and short positions of 130/30 strategies are higher because transaction costs are higher in overseas markets. The amount of additional transaction cost depends on the country, plus the factors noted earlier that affect transaction cost in the United States.

130/30 strategies also incur higher transaction cost due to greater turnover, which averages 40–50 percent more than a long-only mandate. 130/30 strategies trade more frequently to maintain sector, style, and fundamental factors close to their benchmark.

**4. Custody**—Traditional custodians do not hold custody of a short posi-



tion in a stock. Hence, investors in 130/30 strategies may have many custodians. That makes it difficult to track positions for accounting, computing returns, verifying risks, and conducting performance attribution. Investors could solve these difficulties by directing their 130/30 managers to short securities only with their custodians, but that severely limits liquidity. The events of July and August 2007 demonstrated the adverse effects on security prices when liquidity dries up.

**5. Voting Proxies**—It might be surprising to know that the holder of a short position in a stock, not the owner (the long position) of a stock, is authorized to vote proxies. A 130/30 strategy could increase the number of proxies plan sponsors vote by up to 60 percent, increasing the cost of proxy governance.

**6. Unrelated Business Income**

**Tax**—For nonprofit investors such as public plans, endowments, and foundations, shorting stocks may result in unrelated business income tax (UBIT). UBIT is complicated, and the author is not a tax specialist. If your organization is a nonprofit, check with your house counsel or a tax attorney to determine whether shorting stocks could result in UBIT.

**7. Inverted Yield Curve**—When the short end of the yield curve becomes inverted—that is, when the yield on the three-month Treasury bill is higher than the two-year Treasury note—shorting stocks can become unexpectedly expensive. While inversions at the short end of the yield curve are uncommon, investors should know that such events can be disruptive to 130/30 strategies and reduce their returns.

**8. Limited Track Record**—As shown in table 2, only 11 130/30 products

have a track record of three years or longer. While the theoretical basis for these strategies is sound, almost all of these products still are relatively new and unproven, and their aggregate results so far have only slightly outperformed their benchmarks.

**9. Magnifying Positive and Negative Alpha**

—As discussed previously, constrained long-short strategies can magnify positive or negative alpha. In a long-only mandate, the alpha source comes from 100 percent of a portfolio. In 130/30, the alpha source comes from 160 percent of a portfolio. 130/30 can enhance the return for a good manager and make results of a bad manager worse.

**10. Liquidity**

—Investors should know what types of stocks a 130/30 manager plans to short. In the United States there is ample liquidity and availability to short most large stocks, so illiquidity usually is not a problem. However, there is limited liquidity to short small U.S. stocks. Hence, in a declining market, just when a manager might want to short a stock, he/she may not be able to do so.

In international markets, shorting stocks is more limited than in the United States. Some countries, such as Brazil, South Korea, and Taiwan, prohibit all shorting. Even many developed countries, such as the United Kingdom, Germany, and Switzerland, place restrictions on shorting stocks.

**11. Experience Evaluating Stocks with Unfavorable Attributes**

—In long-only mandates, managers usually screen for stocks with favorable characteristics and ignore stocks with negative attributes. But in 130/30 investing, skill in evaluating stocks with negative characteristics is important because

the manager plans to short stocks with unfavorable attributes. Most long-only managers lack experience evaluating stocks with unfavorable characteristics.

**12. Experience Shorting Stocks**

—The ability to short stocks requires a different skill set from what's needed to buy stocks. It sometimes can be difficult to find liquidity to short stocks, particularly small stocks, and investors that are short can find themselves squeezed by other investors. Investors should evaluate a manager's experience shorting stocks before investing in 130/30 strategies.

**13. Effect of Deleveraging**

—It is important to know the effect that different trading strategies have on market movements. The following is a brief description of various trading strategies and their effects on the markets:

- Buy-and-hold investors reduce market volatility because they trade infrequently.
- Contrarian investors reduce market volatility because they buy when stocks are declining and sell when stocks are advancing. In down markets, contrarians serve to limit the decline.
- Momentum investors increase market volatility because they buy when stocks are advancing and sell when stocks are declining. In down markets, momentum investors serve to exacerbate the decline.
- Leveraged investors can have the effect of either a contrarian or momentum investor. When leveraged investors buy undervalued securities and short overvalued securities, they reduce market volatility, and in down markets they limit the decline.

But when stock prices decline, leveraged investors may receive margin calls from their brokers. Margin calls can



**“The investment thesis of 130/30 makes sense because it enables the manager to add value by shorting stocks expected to underperform and increase the allocation to stocks expected to outperform. However, investors need to evaluate a wide range of issues before investing in these strategies.”**

force a leveraged investor to sell stocks in a declining market, which puts more downward pressure on already falling stock prices. Under such a scenario, leveraged investors have a similar effect as momentum investors. Further, if stock prices continue to decline, leveraged investors can receive more margin calls, causing them to sell more stocks, which puts even more downward pressure on stock prices.

In the third quarter of 2007, when leveraged investors either chose to reduce their leverage or were forced to do so by margin calls, 130/30 strategies underperformed their underlying benchmarks by an average of -1.40 percent (net), and 43 out of 55 products (78 percent) underperformed their benchmarks in that quarter. Of the 43 products that underperformed in third quarter 2007, their average underperformance was -2.83 percent (net).

In short, investors should know that large-scale deleveraging, such as what took place in July–August 2007, can be disruptive to 130/30 strategies and reduce their returns.

#### Is 130/30 an Investment Fad?

The author believes the investment thesis for 130/30 is sound and theoretically is superior to long-only strategies. While the amount of dollars allocated to 130/30 still is relatively minor, large institutional clients are expressing

significant interest in these strategies. At recent conferences some investment professionals have predicted that more than \$1 trillion will be allocated to 130/30 within 10 years, and others have predicted that 130/30 will become “the gold standard” of active management and become more popular than long-only strategies.


It’s unlikely interest in 130/30 will pass quickly for two reasons. First, Wall Street wants 130/30 to happen so they’ll earn higher fees. Second, investors are more willing than ever to consider new ideas if they’ll earn higher returns. If 130/30 products earn disappointing returns and underperform their benchmarks, investors will become cautious and allocations will be made only to the most successful managers. If 130/30 products on average earn higher returns than long-only active strategies and outperform their benchmarks, \$1 trillion or more could be allocated to this space.

As noted earlier, it is important that investors know that 130/30 investing can make the results of a good manager better and the results of a bad manager worse. Also, if 130/30 does earn excess returns and receives \$1 trillion or more in assets, investors need to know that a very large sum of assets may make it more difficult to short stocks, which would adversely impact their strategy and potentially reduce returns.

#### Summary

130/30 investing enables managers to short stocks they expect will underperform and increase their allocation to stocks they expect will outperform. 130/30 comes in many variants that allow shorting while maintaining a net 100-percent long position.

The investment objective of 130/30 is to outperform an index while keeping the beta, sector weights, and fundamental characteristics of the portfolio very similar to their underlying benchmark. The investment thesis of 130/30 makes sense because it enables the manager to add value by shorting stocks expected to underperform and increase the allocation to stocks expected to outperform. However, investors need to evaluate a wide range of issues before investing in these strategies. While 130/30 products have earned modest excess returns since inception, they still are relatively unproven, and in third quarter 2007 when market volatility soared, 130/30 posted disappointing results.

That said, for investors willing to accept a higher level of idiosyncratic risk, 130/30 investing is an interesting innovation that may enable talented managers to earn higher returns with no increase in systematic risk. 

*William J. Coaker II, CIMA<sup>1</sup>, CFA<sup>1</sup>, CFP<sup>1</sup>, is senior investment officer of equities, San Francisco Employees Retirement System. He earned a B.S. at Loyola Marymount University and an M.B.A. at Golden Gate University. Contact him at [billcoaker@att.net](mailto:billcoaker@att.net).*

#### Endnote

<sup>1</sup> According to research conducted using eVestmentAlliance, a manager research software tool for institutional clients.