

Overview

Tax-loss harvesting has become an important part of many financial advisors' toolkits. When implemented systematically in direct index portfolios, it can add significant value to clients through reduction of overall capital gains taxes – whether the overall objective of the client is to improve after-tax returns or to diversify away from a large appreciated stock position.

In a 2020 study, researchers from MIT and Chapman University concluded that using conservative assumptions, tax-loss harvesting in direct index portfolios added as much as 1.1% to annual after-tax performance over their 92-year sample period. While in some years the results can be higher or lower, and the results of all tax-loss harvesting strategies generally constitute a deferral rather than a permanent elimination of taxes, this study suggests that tax-loss harvesting compares very favorably with the outcomes of traditional active management.¹

Traditional tax-loss harvesting, however, is similar to sailing in that the ability to harvest losses is dependent on market conditions. When the wind is light (cross-sectional volatility is low) or blows in the wrong direction (most stocks rally), getting to the end-point takes longer.

As such, traditional tax-loss harvesting has three main challenges that need to be addressed:

1. **Accelerating diversification of concentrated positions.** For clients with large concentrated positions, the traditional method of tax-loss generation may take too long to offset the gains in the concentrated position, especially if the position makes up the majority of the client's portfolio
2. **Rejuvenating ossified portfolios.** For clients who have employed systematic tax-loss harvesting for a while, the traditional method may run out of opportunity, resulting in what is known as an *ossified portfolio* consisting mainly of low cost-basis positions
3. **Harvesting losses during broad-based rallies.** During large and sustained rallies with low dispersion of individual stock returns, there may not be many opportunities for loss harvesting (unless additional cash is injected into the portfolio) as most positions will have significant embedded gains

Adding a motor

In the past couple of years, a new, more active form of tax-loss harvesting has emerged and started gaining traction in the high net worth segment of the market. Often known as a 130/30 extension, this advanced version of tax-loss harvesting is constructed by purchasing a 130% long position in the market and combining that with a 30% short position. Combination of these two positions results in full market exposure (100%) but offers more opportunities for tax-loss

¹ Chaudhuri, Shomesh and Burnham, Terence C. and Lo, Andrew W., 2020, An Empirical Evaluation of Tax-Loss Harvesting Alpha, Financial Analysts Journal, Volume 76, Issue 3.

harvesting. The strategy can also be run with different levels of leverage, for example as 150/50 or even 200/100.

In order to help with the conceptual understanding of 130/30 strategies, we provide illustrative examples and simulations. These do not represent actual investment results, either historical or projected, of any portfolio or aggregated portfolios.

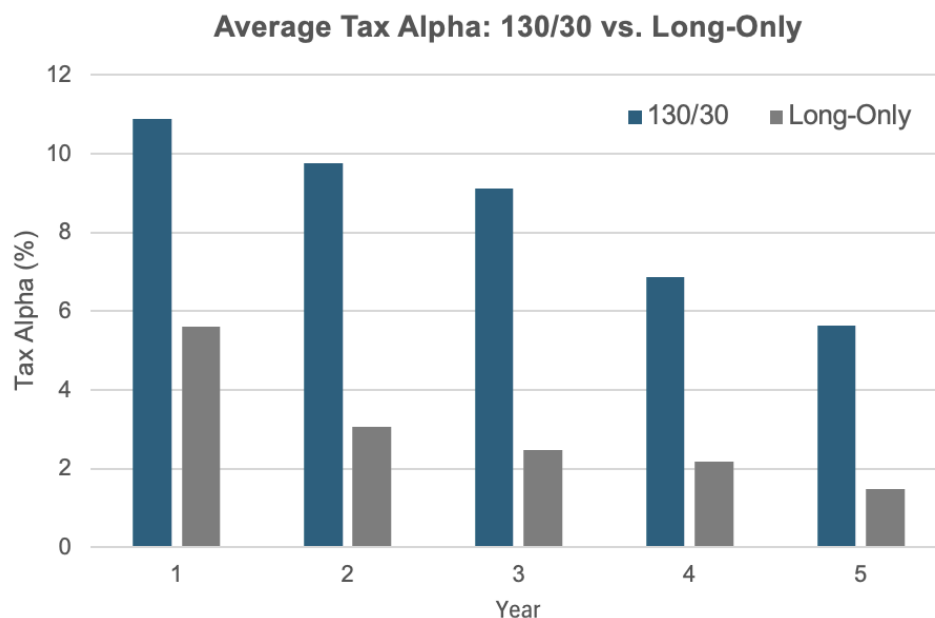
Exhibit 1. *The long-short extension of a 130/30 strategy provides the potential for additional tax benefits from two sources: it puts more dollars to work and enables a way to generate tax losses even when all stocks are going up. This illustrative example assumes a \$100 investment.*



Essentially, this method provides potential benefits through two avenues, as illustrated in Exhibit 1. First, thanks to the long/short extension, the notional value of the portfolio is greater, resulting in an opportunity to harvest more tax-losses in dollar terms. Second, thanks to the short positions, part of the portfolio is always negatively correlated to the market, enabling tax-loss harvesting even if all stocks in the portfolio were to go up at the same time, which may happen when dispersion of individual stock returns is low.

In concrete ways, 130/30 strategies offer a potential for higher and longer-lasting tax alpha versus traditional long-only strategies, as illustrated in Exhibit 2. As an added benefit, any losses harvested from the short positions tend to be deemed short-term capital losses, which can provide greater flexibility in after-tax terms because they can be used to offset taxes on both long and short-term capital gains as well as, to a limited extent, income.

Exhibit 2. Potential for higher and longer-lasting tax alpha using a 130/30 long/short strategy vs. long-only. Averaging tax alphas for each year across multiple 5-year simulations can help illustrate differences in potential outcomes. 130/30 strategies by design also tend to generate more consistent tax alphas across different market environments.



These do not represent actual investment results, either historical or projected, of any portfolio or aggregated portfolios. Actual results will vary.²

Need for an experienced captain

While traditional tax-loss harvesting can be done rather mechanically by systematically selling stocks that have declined in value while ensuring the portfolio's characteristics remain in line with the targeted benchmark, the enhanced tax-loss harvesting strategies described above will require active management of both the long and the short positions in the portfolio.

To successfully manage a 130/30 extension, we believe that one needs to at the very minimum:

1. Have investment views to select securities for the long/short strategy. The long positions should outperform the short positions on average over reasonable periods of time to generate positive pre-tax alpha, or at least to avoid a drag on returns.

²The illustrations are constructed by drawing on multiple 5-year simulations. Products of backtest simulations are illustrated net of 17 bps management fee for long-only strategy and 27 bps management fee for 130/30 strategy. In addition, illustration reflects an assumed financing cost of 100 bps applied to the 30% long/30% short extension. Assumed tax rates are for a California taxpayer in the highest tax bracket (55.6% short-term and 33.6% long-term capital gains). All tax estimates are provided for illustrative purposes only, and taxpayers in other states may not experience efficient outcomes. After-tax calculations include losses incurred by the simulated portfolio but do not account for unrealized gains. If an actual portfolio is not gifted nor bequeathed, the investor will pay taxes on the realized gains upon liquidation, which will affect after-tax returns. Additional information on methodology available upon request.

2. Use an appropriate risk model to ensure undesirable factor bets or other unintended risks do not creep into the overall portfolio.
3. Monitor and risk-manage the overall portfolio daily given that a long/short book requires both active oversight and operational expertise.
4. Ensure that execution costs remain in control by incorporating short availability and the cost of borrow for each candidate short position as part of the daily optimization process.

Investment views

Establishing a 130/30 extension requires security selection since the long and short positions cannot (obviously) be maintained in the same securities, a condition known as “shorting against the box” or “constructive sale”. This means that the portfolio manager must have some investment views on which securities are expected to outperform others.

Some managers use traditional risk factors or factor-based risk premia for constructing the long/short part of the portfolio. Such strategies rely on overweighting stocks that have high exposures to the desired factor(s) in the long portfolio and shorting stocks with low exposures to the same factor(s) in the short portfolio. Examples of well-known factors favored by managers include value, momentum, and profitability. While such factors have generally produced average returns in excess of the market over several market cycles, they are also known to have underperformed for extended periods of time, sometimes for several years.

We believe that a better way is to use sources of return that are uncorrelated to commonly known factors. Such alpha signals can also be selected such that they work well with the broader objective of tax-loss harvesting. Of course, all strategies involve the risk of loss, and there can be no assurance that the use of such signals will generate outperformance.

Risk management

In addition to investment views, delivering consistent results requires an appropriate risk model and a battery of risk controls embedded in a risk-management system. Long/short extensions create new risks for the portfolio, which can be addressed as long as they are identified and monitored. Proper risk management practices can help maintain a desired level of tracking error against the target benchmark and may also guard against tail risks not captured by tracking error.

One type of tail risk stems from large stock-specific shocks. This risk is particularly important in long/short context because the potential loss associated with a short position is unlimited, in contrast to long positions where the maximum loss is capped at -100%. A salient example was the meteoric rise of the Gamestop stock in 2021 when its price rallied 1,700% in one month. Had that stock been a large part of the short basket, it could have resulted in substantial underperformance.

When seeking to manage risks of a long-short portfolio, a portfolio manager needs to pay particular attention to areas, including:

- Automated daily, and preferably intraday, monitoring of all risks, including those associated with potential short squeezes
- Neutralizing the portfolio against all unwanted systematic (factor) risk

- Ensuring proper diversification and position-level risk constraints / stop loss rules to control idiosyncratic risks

In addition, clients should study the backgrounds of portfolio managers. Quantitative equity hedge fund experience is particularly valuable since it provides the training for understanding systematic risk management approaches, among other things.

Operational considerations

Long/short extension strategies are also operationally more intensive. As a result, many RIA custodians do not support short positions in an economically viable manner. In fact, at the time of writing, to the best of our knowledge, only one major RIA custodian provided adequate margin rebates to enable the long-short extension from a cost standpoint.

The key considerations and questions one should ask include:

- Does the client's current custodian support shorting in SMAs? If not, can the client open an account at another custodian that does?
- Since the leveraged long position (30%) is combined with a short position (30%), the cost of the long leverage should be partially offset by the short position. How much credit does the custodian offer for the short positions? If no credit is provided, the program is unlikely to be economically viable. For example, if leverage on long positions costs 5%, without any credits for the short position, a 130/30 portfolio could experience a drag of 1.5% annually ($5\% \times 30\%$).
- Can your investment platform provider support short positions and are they able to include a long/short strategy as a sleeve in a multi-asset unified managed account (UMA)? Being able to seamlessly tax-manage and use the entire portfolio of equities and fixed income as collateral will create operational efficiencies for your RIA practice and most likely additional tax savings too.

While options are limited, there are providers that can support all of the above operational complexities of the long/short extension. However, before one commits to pursuing this strategy, operational and investment due diligence is necessary. And it is important to make sure that an investor considering such an approach fully understands the attendant risks and has consulted with their own tax advisors to decide on its applicability to their specific circumstances.

Risks and concerns

To recap, there are risks associated with long/short strategies that could have a negative impact on portfolio returns, including:

- Idiosyncratic risk, due to company-specific factors that are generally not correlated with the broad market environment, can lead to loss.
- Short-sale risk can amplify losses if the prices of shorted stocks appreciate.
- Borrow risk can result in a "short squeeze," meaning that securities borrowed with a short sale need to be returned to the securities lender on short notice and at a time when other short sellers of the security are receiving similar requests, compelling the end client to buy

such securities on the open market at prices significantly in excess of the proceeds received, which can lead to loss.

- Leverage risk can cause unexpected interactions between longs and shorts, particularly if the portfolio is not properly hedged.
- Cost of borrow can lead to loss, particularly for stocks that are thinly traded or less available for other reasons.

Conclusion

Tax-loss harvesting is a valuable tool for financial advisors and it can be further enhanced through long/short extensions. It should be noted that 130/30 and other long/short extensions are not always the right solution; they require substantial assets (typically \$1M minimum for the strategy) and a margin account with the right custodian-broker. To increase the likelihood of success, long/short extensions should also be expertly managed.

Done right, using the long/short extension can be like adding a motor to your sailboat. It can help you to get where you are going faster, no matter what the market conditions are.

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