



Tax Matters

Improving Direct Indexing: 130/30 and 150/50 Strategies

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In a [recent post](#), we showed that the tax benefits of direct indexing strategies decay rapidly over time—in fact, close to zero after just a few years.

Investors can enjoy higher and more persistent tax benefits by utilizing tax-aware 130/30 and 150/50 strategies (also known as *relaxed-constraint* strategies), if they are open to a modest amount of shorting and some level of *informed* tracking error (note that direct indexing also requires tracking error).¹ Like direct indexing strategies, tax-aware 130/30 and 150/50 strategies seek to outperform an equity benchmark index on an after-tax basis, but they also have the potential to benefit both from successful factor tilts (and thus potentially higher pre-tax returns) and from greater tax loss harvesting due to their long and short “extensions.”

In this post, we expand the analysis in our paper “[The Tax Benefits of Direct Indexing](#),” which studies the tax benefits of a hypothetical tax-aware direct indexing strategy with 1% tracking error. Here, we add two hypothetical tax-aware equity strategies: a 130/30 strategy with 1% tracking error; and a 150/50 strategy with 4% tracking error. We compare the tax benefits for an investor who uses each strategy’s losses under three scenarios:

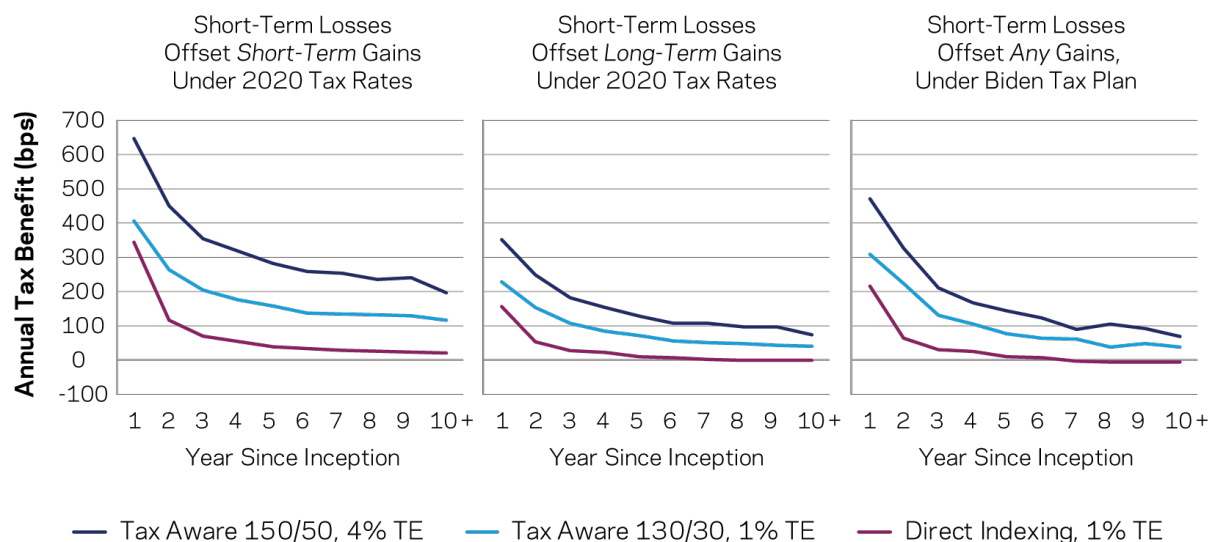
- a) to offset *short-term* capital gains from other investments, under 2020 tax rates,
- b) to offset *long-term* capital gains from other sources, under 2020 tax rates,
- c) to offset *any type* of capital gains, under the Biden administration’s proposed tax rates.²

“By allowing a modest amount of shorting, 130/30 and 150/50 strategies have the potential to improve the chances of sustained tax benefits over time”

Figure 1 shows that, in all three scenarios and in all years since inception, the annual tax benefits are greatest for the hypothetical 150/50 strategy, followed by the hypothetical 130/30 strategy. When it comes to direct indexing, the most obvious shortcoming is tax benefits decline to very low levels after just a few years. In fact, many investors may face tax liabilities in later years (for example, when investors only have long-term capital gains from other investments³ or under the Biden Tax Plan that proposes to equalize the long-term and short-

term capital gains tax rates).⁴ In contrast, by allowing a modest amount of shorting, 130/30 and 150/50 strategies have the potential to improve the chances of sustained tax benefits over time.⁵

Figure 1. Higher Hypothetical Tax Benefits of Tax-Aware 130/30 and 150/50 Strategies



Source: AQR, XPressFeed, S&P, MSCI Barra. We run 45 separate strategy simulations starting January 1 of every year from 1975 to 2019 and all ending December 31, 2019. Each month, for direct indexing, we minimize both tax costs and transaction costs, subject to staying within a pre-specified tracking error (computed using the MSCI Barra risk model) to the S&P 500. For 130/30 and 150/50, in each monthly rebalance, we maximize exposure to a value-momentum factor model and minimize both tax costs and transaction costs, subject to staying within a pre-specified tracking error (computed using the MSCI Barra risk model) to the S&P 500. Transaction costs are computed as a function of VIX, the risk of the stock, and the amount traded relative to the stock's trading volume. For tax costs, we modeled two alternative tax rate assumptions: the 2020 tax rate regime and the proposed Biden Tax Plan regime. Under the 2020 tax rate regime, the tax rates on short-term capital gains were assumed to be 40.8%, and that of both long-term capital gains and dividend income were assumed to be 23.8%. We assumed that under the Biden Tax Plan all the gains and dividends are taxed at a uniform rate of 43.4%. When reporting tax benefits, we calculate this separately for an investor who can offset only long-term capital gains vs. an investor who can offset both long-term capital gains and short-term capital gains. Further, we account for unrealized capital gains by computing an effective tax rate or expected present value of future tax liabilities. We use the effective tax rates of 10% and 25% for 2020 tax rate regime and Biden Tax Plan regime, respectively. Finally, all tax benefits are computed relative to a benchmark, which is modeled as a direct holding in a passive ETF which distributes dividend income but does not generate any capital gains, and all other modelling choices (capital flows, charitable contributions, and tax rates) are applied consistently.

[1] For example, starting with \$100 of capital, an investor can construct a stock portfolio that goes \$130 long and \$30 short stocks. The shorted stocks are generally those that the alpha model underlying the strategy dislikes the most.

[2] We use the top bracket Biden Tax Plan rate of 43.4% applicable to all capital gains, long-term and short-term.

[3] As we show in "The Tax Benefits of Direct Indexing," investors without hedge fund or derivatives allocations are less likely to have a reliable source of short-term capital gains to offset.

[4] These tax liabilities result from trimming down some highly appreciated positions with the goal of preserving a low tracking error to the benchmark index, while not being able to harvest losses.

[5] Note that 130/30 and 150/50 strategies also have the potential to deliver pre-tax alpha and, therefore, higher pre-tax investment returns than direct indexing strategies.

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Risks of Tax Aware Strategies (Not Exhaustive)

1. **Underperformance of pre-tax returns:** tax aware strategies are investment strategies with the associated risk of pre-tax returns meaningfully underperforming expectations.
2. **Adverse variation in tax benefits:** deductible losses and expenses allocated by the strategy may be less than expected.
3. **Lower marginal tax rates:** the value of losses and expenses depends on an individual investor's marginal tax rate, which may be lower than expected for reasons including low Adjusted Gross Income (AGI) due to unexpected losses and the Alternative Minimum Tax (AMT).
4. **Inefficient use of allocated losses and expenses:** the tax benefit of the strategy may be lower than expected if an investor cannot use the full value of losses and expenses allocated by the strategy to offset gains and income of the same character from other sources. This may occur for a variety of reasons including variation in gains and income realized by other investments, at-risk rules, limitation on excess business losses and/or net interest expense, or insufficient outside cost basis in a partnership.
5. **Larger tax on redemption or lesser benefit of gifting:** gain deferral and net tax losses may result in large recognized gains on redemption, even in the event of pre-tax losses. Allocation of liabilities should be considered when calculating the tax benefit of gifting.
6. **Adverse changes in tax law or IRS challenge:** the potential tax benefit of the strategy may be lessened or eliminated prospectively by changes in tax law, or retrospectively by an IRS challenge under current law if conceded or upheld by a court. In the case of an IRS challenge, penalties may apply.