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A Taxing Dilemma: An Analysis of Liquidating ETFs in Favor of SMAs

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Many wealth management clients have begun to see the value of investing in separately managed accounts (SMAs)—which offer diversified, index-like, and customizable exposure—as an alternative to ETFs. However, what does this mean for investors who already hold a basket of appreciated ETFs but would like to unlock the potential of a Custom Core® portfolio? To fully invest in customizable SMAs, investors will likely need to realize gains today for benefits that will accrue over the next several years. This research brief explores this dilemma and provides guidance for recognizing when it might be time to sell—and when it might be time to hold—under reasonable sets of uncertain future scenarios.

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ETFs and SMAs

Let's begin with a quick reminder of how ETFs and SMAs work. ETFs have become immensely popular in the last several years, with the primary use being for passive exposure to broad, cap-weighted indexes. They produce this exposure by purchasing all securities in a stated index to their index weight. These securities are naturally tax efficient because they typically have low turnover and the ability to deliver low-basis securities in-kind for rebalances and withdrawals as part of the unique creation and redemption mechanism for ETFs.

SMAs may be more appropriate for high-net-worth investors. They too provide broad-market, index-like exposures, but they can also provide a wide range of flexibility depending on the unique situation of the investor. SMAs offer many potential benefits such as greater control of the underlying exposure, incorporation of social and ethical principles or concentrated holdings, and charitable gifting and transitions, to name a few. In short, they offer fully customizable beta exposure. In particular, a basic customization available in an SMA that many investors value is a favorable tax outcome compared with an exposure that only closely tracks the chosen target. Tax-loss harvesting—through the acceleration of realizing capital losses and the deferral of realizing capital gains—creates a valuable and tangible after-tax benefit to SMA investors because those capital losses can be passed to the individual investor, which is something an ETF can't do. In other words, excess losses realized in the SMA can be used to offset gains that exist elsewhere in an investor's overall asset portfolio (for example, gains from other equity managers or the sale of real estate). Any losses not used to offset gains can be carried forward indefinitely into the future until they're exhausted—and all the while the SMA is reasonably tracking the targeted exposure.

Essentially it comes down to this for an investor: taking the reasonable step to maintain a passive exposure via the ETF vehicle keeps the capital gain distribution relatively low compared with the other investments in their portfolio. However, the investor sees the value of active tax management and would like to unlock the ability to pass through realized capital losses to reduce their tax bill further—but their ETF is now appreciated. This implies that they'll need to pay a price today—taxes on realized gains on the ETF liquidation—to realize the value of a tax-managed SMA in the years to come.¹ How long will it take them to break even on the transaction to realize a net positive with the transition?

Considerations

The reader won't be surprised to learn that the answer to this question is "it depends." There are lots of factors involved, and we don't have the foresight necessary to know the answer to this question with certainty. Let's look at the most critical factors.

The degree to which the ETF is appreciated

The appreciation of an ETF is a critical determinant of whether to sell. For example, an ETF purchased in 2018 or 2019 most likely experienced a nice run for equities—and there's a chance that the emergence of the COVID-19 pandemic has already partially reduced its gain significantly depending on the chosen exposure. Investors that have chosen to leg into the market over several tranches may have several ETF tax lots with varying cost bases.

¹ As mentioned, in-kind redemptions of ETFs are possible, but this transaction is considered a taxable event to the end investor. This usually includes the delivery of less tax-efficient, low-basis securities—and it's typically available for only very large ETF holdings.

Prevailing market expectations

As of this paper's publication date, it's anyone's guess where return expectations may go—and we don't pretend to know any better than anyone else. However, it's clear that the overall annualized return investors can expect over, say, the next 10 years, is a critical assumption and will matter in terms of tax implications in the future. As a distinction from the overall level of market volatility—which comprises many individual stocks combined and averaged into a composite—the volatility of individual stocks among one another for a given period of time (cross-sectional volatility) is an important factor in the ability to manage the taxes of optimized portfolios. The more cross-sectional volatility, the better the investor's ability to manage the taxes of an SMA.

The holding period and time horizon

It could be long term, short term, or both. As a general rule, we like to take advantage of favorable long-term holding period tax rates for securities with appreciated assets. For assets with more modest gains, there could be a case for selling regardless of the holding period. For the sake of simplicity, let's assume that it's best to always wait until the appreciated asset is held long term—for one year or more. Also, assuming the ETF is at least reasonably appreciated, the investor will need to allow some time for the value of SMA tax management to transpire to recoup the tax costs incurred up front. Investors with short time horizons may want to simply hold the ETF in these cases.

Trading costs and fees

Explicit and implicit costs should be carefully considered for the SMA in comparison with the ETF, which has no such costs if held. As of this publication date—and considering the very liquid US large-cap space—trading costs are very low on an annualized basis. Regarding fees, simple beta exposure via an ETF is usually cheaper than customization in the form of tax management. The larger the difference in this fee, the bigger the drag—and the longer it'll take to break even in an SMA.

Tax rates

Generally speaking, the higher the tax bracket or the prevailing tax rate regime is, the higher the value of tax management. Many investors also face both federal and state capital gains taxes. Further, the higher the holding period tax rate differential (short-term rates versus long-term rates), the higher the value of short-term losses in a tax-managed SMA. Of course, to reiterate the point of this exercise, this should be carefully balanced against the gains taken at the outset by the liquidation of the ETF.

The Monte Carlo simulation

Considering the variables listed in the previous section, it's impossible to say with absolute certainty how long it will take to recoup up-front tax costs—and clearly each investor's situation will be unique. To help frame the problem, we model tax-managed SMA performance through Monte Carlo simulation.² To paraphrase the great statistician George Box, who said that all models are wrong but sometimes they're useful, we model the problem not to discover certainties and truth but to aid in our understanding of the problem and to help execute a sensible strategy.

² Source: Parametric. The simulation was conducted with the following assumptions: (1) 10,000 simulated trials of optimized S&P 500® portfolios are rebalanced quarterly for tracking error and tax management, (2) the annual turnover is constrained to 5%, (3) there's a cross-sectional volatility of 35%, (4) there's an annual SMA fee of 0.35% and ETF expense ratio of 0.05%, and (5) transactions costs are 0.10% per dollar traded. The assumed annual rate of return was varied and the simulation reran to achieve annual after-tax performance results that varied depending on the return environment. These results can then be compared to an ETF whose appreciation varies, but whose assumed market return expectation matches that of the corresponding Monte Carlo simulation. The after-tax results assume the highest federal tax rates of 40.8% or 23.8% depending on the holding period. We limit our time horizon to a view of the next 10 years. Simulated performance is hypothetical and is provided for illustrative purposes. It does not reflect the actual experience of any investor, and it should not be relied on to make investment decisions. All investments are subject to risk of loss. See disclosures for additional information.

There are a couple of ways to think about this. There's strictly the tax implications of selling the ETF today and accumulating net tax benefits in the future—isolating the impact of taxes outside the core investment problem. Although this is an important consideration, it's also not what's most important to an investor facing this dilemma. What's most important is the overall impact on investor wealth. That's to say the up-front tax cost digs into the investor's principal and there's a resulting and compounding impact on the investor's ending wealth. We focus on this wealth metric from a breakeven standpoint.

Scenarios

Let's turn to a handful of representative scenarios an investor may face and examine the payback period based on the results of the Monte Carlo simulation.

High return expectations and high ETF appreciation. Suppose an ETF has appreciated 40% since it was purchased. Further, it gives the investor high equity market return expectations for the next 10 years. In this case the investor would be happy with their wise decision to invest in an ETF that's expected to yield additional returns going forward. With the hefty up-front tax bill and the generally high market returns going forward—limiting the ability to take advantage of sufficient constituent losses—the best course of action is to enjoy that ever higher appreciation.

Midrange return expectations and moderate ETF appreciation. Suppose an ETF has appreciated by 20%, but the investor's confidence about the next 10 years isn't as high as it has been in the last 10 years. Despite the tempered sentiment, they still feel good about equities as long-term investments and feel that 8% is reasonable. There's a strong case for liquidating the ETF today and investing in a tax-managed SMA. The investor will break even in less than three years, which will afford them the joy of an ongoing annual tax benefit of 0.50%–1.50% per year in addition to the pretax return.

Lower return expectations and low ETF appreciation. Perhaps the ETF is modestly appreciated, with 10% appreciation. Additionally, the investor feels that the last few years have been unusually flattering to equity markets and that we're due positive annual returns but with a period of mean reversion from the heights of the last 10 years. They see 6% as reasonable. This is nearly a trivial consideration so long as their time horizon is more than one year. They'll break even in that time frame and enjoy years of after-tax benefits of 1%–2% per year on average.

Matrix of possible outcomes

There are a voluminous number of iterations to consider with the previously outlined variables at play. However, figure 1 presents the breakeven time period (in years) based on the ETF's appreciation and the future equity return expectation for federal tax rates.

The simulation was also run for California and New York taxpayers. Additional corresponding breakeven figures are presented in the appendix that include both federal and state results (figures 2 and 3, respectively). To preview those results, it modestly increases the amount of time it takes to break even. Despite the same holding period tax rate differential, it takes longer for the SMA to catch up to the larger up-front tax costs. However, the results aren't drastically different at lower levels of appreciation of roughly 20% or less. The breakeven increases significantly for highly appreciated assets—and at aggressively high return assumptions.

Figure 1: ETF liquidation: Number of years to break even in a tax-managed SMA (federal)

ETF Appreciation	Market Return Assumption						
	4%	6%	7%	8%	9%	10%	12%
0.0%	0	0	0	0	0	0	0
5.0%	0.5	0.5	0.5	0.5	0.5	0.6	0.6
10.0%	0.9	1	1	1.1	1.1	1.2	1.4
12.5%	1.2	1.3	1.4	1.5	1.5	1.6	1.8
15.0%	1.5	1.6	1.7	1.8	1.9	2.1	2.5
17.5%	1.8	2	2.1	2.3	2.5	2.7	3.4
20.0%	2	2.4	2.6	2.8	3.1	3.5	6.5
22.5%	2.4	2.8	3.1	3.4	3.8	4.9	10+
25.0%	2.8	3.3	3.7	4.2	5.4	7.4	10+
30.0%	3.7	4.8	5.8	7.3	10+	10+	10+
35.0%	4.9	6.9	10+	10+	10+	10+	10+
40.0%	6.5	10+	10+	10+	10+	10+	10+
45.0%	8.2	10+	10+	10+	10+	10+	10+

Source: Parametric. The simulation was conducted with the following assumptions: (1) 10,000 simulated trials of optimized S&P 500® portfolios are rebalanced quarterly for tracking error and tax management, (2) the annual turnover is constrained to 5%, (3) there's a cross-sectional volatility of 35%, (4) there's an annual SMA fee of 0.35% and ETF expense ratio of 0.05%, and (5) transactions costs are 0.10% per dollar traded. The assumed annual rate of return was varied and the simulation reran to achieve annual after-tax performance results that varied depending on the return environment. These results can then be compared to an ETF whose appreciation varies, but whose assumed market return expectation matches that of the corresponding Monte Carlo simulation. The after-tax results assume the highest federal tax rates of 40.8% or 23.8% depending on the holding period. We limit our time horizon to a view of the next 10 years. Simulated performance is hypothetical and is provided for illustrative purposes. It does not reflect the actual experience of any investor, and it should not be relied on to make investment decisions. All investments are subject to risk of loss. See disclosures for additional information.

A few quick comments about the results in figure 1:

- Modestly appreciated ETFs—of, say, 15% or less—have fairly reasonable payback periods regardless of the market return assumption. Payback periods last for less than three years, and the range of outcomes is relatively tight depending on the market return: 1.5 years on the low end to 2.5 years on the high end.
- Under conservative tracking and turnover assumptions in an SMA, deeply appreciated ETFs result in long time lines for payback—long enough to fall outside of the scope of this analysis. Even in cases of very low prospective equity returns, the payback is more than five years.
- More moderately appreciated ETFs—20% to 30%—offer payback results that do critically depend on the future return assumption. For example, an ETF with 25% appreciation has a payback range that varies widely, from less than three years on the low return expectation end to more than 10 years. Somewhere in this 20%–25% range is a true tax dilemma for the investor because the costs and benefits conflict depending on future market conditions.

Furthermore, the investor may have a gain budget in mind that they're comfortable with and may wish to only partially sell an appreciated ETF. Since the investor will be able to only proportionally invest in a tax-managed SMA, this won't have a material impact on the time to recoup the up-front tax cost. Other investors may still have multiple tax lots of one or several ETFs—the ability to specify tax lots in this case allows the investor to defer the most appreciated lots or short-term lots in favor of selling higher-cost lots to reduce the amount of time to break even on the sale of those ETF lots. Parametric can manage a portfolio that includes a portion of ETFs, but this does proportionally reduce the value of tax management.

Conclusion

The decision to invest in a tax-managed SMA involves a number of considerations for the investor. A major one is whether to sell an appreciated asset at the outset, incurring an up-front tax hit. With this research brief, we've examined the payback period of this transaction through the use of a Monte Carlo simulation. We find that the answer crucially depends on the depth of gains of an investor's appreciated asset, their prevailing market expectations, and their investment horizon. Although both up-front taxes and future tax benefits are important considerations, there are many other less quantifiable benefits to the SMA investor, including:

- Efficient transitions between strategies
- Efficient asset class rebalancing
- Efficient charitable gifting
- Better control over the underlying exposure
- Intelligent management around concentrated stock positions
- Incorporation of responsible investing considerations

Special thanks to invaluable quantitative analysts Michael Thompson and Michael Kincheloe for their astute insights, attention to detail, and computational rigor in the data-generating and -processing portion of this research brief.

Appendix: Breakeven analysis for selected federal and state taxpayers

Figure 2: ETF liquidation: Number of years to break even in a tax-managed SMA (California—federal and state)

ETF Appreciation	Market Return Assumption						
	4%	6%	7%	8%	9%	10%	12%
0.0%	0	0	0	0	0	0	0
5.0%	0.5	0.5	0.6	0.6	0.6	0.6	0.7
10.0%	1	1.1	1.2	1.2	1.3	1.4	1.5
12.5%	1.3	1.4	1.5	1.6	1.7	1.8	2
15.0%	1.7	1.8	1.9	2	2.2	2.5	3.7
17.5%	1.9	2.2	2.5	2.6	3.2	3.6	5.9
20.0%	2.3	2.7	3.2	3.4	4.2	5.4	10+
22.5%	2.8	3.4	4	4.7	5.6	10+	10+
25.0%	3.3	4.2	5.1	7.1	10+	10+	10+
30.0%	4.6	6.8	10+	10+	10+	10+	10+
35.0%	6.5	10+	10+	10+	10+	10+	10+
40.0%	8.6	10+	10+	10+	10+	10+	10+
45.0%	10+	10+	10+	10+	10+	10+	10+

Figure 3: ETF liquidation: Number of years to break even in a tax-managed SMA (New York—federal and state)

ETF Appreciation	Market Return Assumption						
	4%	6%	7%	8%	9%	10%	12%
0.0%	0	0	0	0	0	0	0
5.0%	0.5	0.5	0.5	0.5	0.6	0.6	0.6
10.0%	1	1.1	1.1	1.1	1.2	1.3	1.5
12.5%	1.4	1.4	1.4	1.5	1.6	1.7	2.1
15.0%	1.7	1.7	1.7	1.9	2	2.3	3.7
17.5%	2	2.1	2	2.4	2.6	3.2	5.9
20.0%	2.4	2.5	2.5	3	3.3	5.9	10+
22.5%	2.8	3	3.1	4.1	4	10+	10+
25.0%	3.3	3.7	3.9	6	10+	10+	10+
30.0%	4.4	5.4	7.1	10+	10+	10+	10+
35.0%	5.8	7.2	10+	10+	10+	10+	10+
40.0%	7.6	10+	10+	10+	10+	10+	10+
45.0%	10+	10+	10+	10+	10+	10+	10+

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