The Big Lie - Tax Alpha from Tax-Loss Harvesting

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1. MOTIVATION

Our industry sells product by communicating perceived benefits. The larger the advertised benefit, the quicker the sale (Cohen 2024). One such example would include the new category of tax-optimized mutual funds and SMAs (Separately Managed Accounts). The second of these has recently grown with the advent of "direct indexing." Often, said tax-optimization is based on tax-loss harvesting and the claimed expected benefit has been labeled tax alpha (Bogle 1997) and (Chen and Roni 2023).

By renaming tax-loss harvesting as tax alpha, our industry's marketing professionals encourage the consumer (whether financial advisor or end client) to believe that (1) the benefit is large enough to be interesting and (2) is repeatable and relatively durable, i.e., it will continue across time (as opposed to "once and done"). If true, this is a substantive benefit, and one that all taxpayers would potentially find of serious interest (Chaudhuri, et al 2020). If false, we have another example of the story-telling getting too far out ahead of the reality (and the regulators having not yet stepped in to narrow the gap).

This article provides an empirical basis for evaluating this question. Attempting to provide evidence as to the question *"Can a relatively durable and sufficiently large level of tax alpha exist under ideal circumstances?"* But is this an important question, does it matter? When one considers the: (1) number of financial advisors marketing ongoing tax alpha (via tax-loss harvesting) as one of their vital value-adds, (2) number of intermediaries offering ongoing tax-loss harvesting overlay, and (3) rapidly growing roster of mutual funds and SMAs targeting tax alpha (including the new tax-managed direct indexing products), the answer would appear to be yes. For example, one of the world's largest investment managers markets a tax-managed SMA (Invesco 2025) that identifies their tax alpha as 12.44% (per annum, since inception, and GIPS compliant). Similarly, another large investment manager (managing $1.5 trillion) markets a S&P 500 direct index product (Natixis 2024a) as having delivered a 3.54% annualized tax alpha (per annum and since inception). A third example is purely hypothetical, but shows a 2.9% annual tax alpha (Natixis 2024b). Any advisor or end client seeing such numbers would either immediately engage or alternately, conclude that such outcomes are too good to be true.

2. OBJECTIVE

The objective of this article is to answer the following questions. In practical day-to-day life, what should the end investor (or their advisor) expect from active tax-loss harvesting? What is a reasonable level of tax alpha? How long will this alpha persist? Is tax alpha front-loaded (once and done) or is it relatively continuous and consistent throughout time? What marketplace environmental conditions enhance tax alpha and which conditions diminish it. Finally, what level of trading costs would neutralize/offset the benefits of tax loss harvesting.

Perhaps we find that 12.44% (or the 3.54%) annual tax alpha is supported by the data during certain very specific market environments. Or in contrast, perhaps we find that active tax loss harvesting (on an ongoing basis) is nothing more than wishful thinking, and remains essentially impossible. But let us not speculate, and instead turn to the data. Under what circumstances is tax alpha possible, in what size, and for how long?

3. THE DATA

This study relies on daily returns for 67 stocks and the S&P 500 Index from 9/21/1981 through 11/15/2024. Data was provided by FactSet Research Systems Inc., Norwalk, Connecticut. So which 67 companies? We selected the largest (by market capitalization) companies that had daily returns since 9/21/1981 and traded locally on a U.S. exchange. Note that this rule does not preclude international companies. Instead, it only requires that they traded here in the U.S. continuously since 1981. We used this approach because we wanted to avoid unintended and unknown biases resulting from the adoption of ad hoc selection rules designed to splice together companies that didn't have records going all the way back to 1981. For example, when do we add Google or Amazon to the mix? Obviously, given the rules stated above, mega-tech companies such as Nvidia, Google, Meta, Broadcom, TSMC, and Amazon were all excluded.

Why 67 stocks? So that an equally weighted portfolio would allocate approximately 1.50% to each. Past articles suggest such a portfolio will have successfully diversified away essentially all of the idiosyncratic risk. Using this approach delivers a portfolio not all that different from the S&P 500 Index. For example, its 10-year beta comes in at 0.96 and its high-level sector weighting differences can be summarized as +10% to Defensive (e.g., healthcare, utilities), -5% to Sensitive (e.g., technology, energy, communication services), and -5% to Cyclical (e.g., financial services, basic materials).

Why a start date of 9/21/1981? So that the analysis fully covers one of the greatest interest rate declines in all of U.S. history. But not back further, least we lose too many companies whose existence didn't predate 1981.

Why the S&P 500 Index? Because when the portfolio sells a stock, the proceeds are temporarily (i.e., for exactly one month) invested in the S&P 500 Index. This procedure is employed to avoid asset allocation changes (i.e., the portfolio remains 100% invested in common stocks at all times) and avoidance of wash sale designations.

4. ANALYTIC APPROACH

We construct an equally-weighted portfolio consisting of the 67 stocks. After 21 trading days have passed, all stocks with unrealized capital losses are sold. The resulting proceeds are reinvested in the S&P 500 Index. End-of-day closing prices are used for all transactions. This process is then repeated for each subsequent passage of an additional 21 trading days, and any money previously invested in the S&P 500 Index is sold and redeployed into the exact same stock from which it came. The initial analysis assumes zero transaction costs. This assumption is relaxed in the later analysis (Arnott, et al 2018) and (Jeffrey and Arnott 1993). The portfolio is managed in this fashion for 12 years (144 months), at which point, the analysis ends and statistics calculated. Why 12 years? We need a long enough time period to allow tax-loss harvesting to proceed through its natural cycle (more on this below). But not so long a period that it meaningfully exceeded investors' real-world investment time horizons.

Why 21 trading days? Simplicity. It is easier to complete this analysis by adopting a uniform time period (as opposed to calendar months that vary from 28 to 31 calendar days). Does the usage of 21 trading days (instead of a calendar month) affect the analysis? No. On average, over a randomly selected 12-year time period the difference in the cumulative number of days between using 144 calendar months and using 144 21-trading-day intervals, amounts to just 1.7 calendar days . . . in other words just a 0.038% difference.

Again, for the sake of simplicity, it is assumed that all dividends are immediately distributed to the investor. This assumption is hypercritical, since the reinvestment of dividends would require the tracking of a different tax basis for each quarterly dividend, across all time, across all 67 stocks. An insurmountable data tracking burden, with no consequent benefit to the analysis.

Intuitively, the analytic approach amounts to building a passive buy & hold portfolio of 67 equally-weighted stocks. Whenever a loss occurs, it is realized and the resulting proceeds are temporarily invested in the S&P 500 so as to avoid wash sales and asset allocation changes (Reichenstein 2020) and (JP Morgan 2024). After one month in the S&P, monies are returned to the original stock from which the monies first originated. This process continues for twelve years and the results are tabulated.

5. SIX DIFFERENT MARKET ENVIRONMENTS

One of the objectives of this article is to identify the marketplace environmental conditions that enhance tax alpha and those that diminish it. To serve this need, we identify six different environments (12-year periods) drawn from the era starting in 1981 and ending today. These six environments do not relay on month-end data. Instead, they are based on daily returns, with the only restriction being that they must encompass exactly 12 years (4,383 calendar days). As a consequence, most but not all of them, start mid-month.

The six different environments are defined as follows:

- **Most Recent** - Twelve years ending 11/15/2024
- **Greatest Interest Rate Decline** - As defined by 10-year Treasury bond yield, twelve years ending 9/30/1993
- **Lowest Volatility** - As defined by standard deviation of daily S&P 500 Index returns, twelve years ending 1/3/2000
- **Highest Volatility** - As defined by standard deviation of daily S&P 500 Index returns, twelve years ending 7/26/2010

- **Highest Return** - As defined by daily S&P 500 Index returns, twelve years ending 12/3/1999
- **Lowest Return** - As defined by daily S&P 500 Index returns, twelve years ending 11/25/2011

6. RESULTS

We present the results for these six time periods, one at a time. Starting with the most recent twelve-year time interval.

Most Recent - Twelve years ending 11/15/2024

This was an unusually favorable period for the portfolio, during which it earned 14.4% per annum. Exhibit 1 provides the results. Let's focus in on several key statistics:

- Over the twelve years, there were only 131 harvests. This is interesting considering there were 9,648 "opportunities" (i.e., 144 months x 67 stocks).
- The half-life for the 131 harvests was just 0.0 years. Essentially, half of the harvests occurred immediately, at the very beginning of the 12-year interval.
- The proportion of the harvests occurring in the first 6 years was 76%.
- The portfolio first became 100% locked up (every position had an unrealized gain) at just 1.2 years. This prevented future tax-loss harvesting unless positions fell in value.
- The first time that the portfolio became 100% locked up and stayed there forever, was at 11.9 years (fairly late in the 12-year life cycle for this portfolio).
- 24% of all realized losses on the stocks were offset by gains in the S&P 500 Index (used to temporarily hold the proceeds from sales, but for just one month).
- The cumulative loss realization during the first six years, was 62% of the total cumulative loss realization over the entire twelve-year period.
- Cumulative net dollar losses realized over the twelve years came to just 1.57% of the portfolio's ending value. In other words, not much.
- Net realized dollar losses on an average per annum basis came to just 13bps.
- The half-life for net realized dollar losses was 4.8 years.
- The average annual portfolio turnover resulting from tax-loss harvesting came in at 17%.
- If trading costs were just 2.6bps, then all of the benefits of tax-loss harvesting would have been fully neutralized/offset.

The last 12 years has been a poor time for tax-loss harvesting. In large measure due to the 14.4% annual return earned by the portfolio. The portfolio first locked up after just 1.2 years (all 67 positions had unrealized gains, no losses). Nevertheless, 131 harvests were completed over the 144 months. Unfortunately, 24% of the losses realized were neutralized by consequent gains in the S&P 500. Net of these offsetting gains, active loss harvesting delivered an extra -0.13% per annum to the portfolio's pre-tax return. But this measure of benefit assumes zero transaction costs. At just 2.6bps in trading costs, this benefit is fully neutralized. And at trading costs higher than 2.6bps, active loss harvesting is a harmful activity.

Exhibit 1

Most recent period - 12 years ending Nov 15 2024

Geometric mean return (%)	Annualized standard deviation (%)	Total number of harvests over 12 years	Half-life for harvests (years)	Proportion of harvests occurring in first 6 years (%)	First time portfolio becomes 100% locked up (years)	When portfolio becomes 100% locked up and stays there forever (years)	Proportion of individual stock losses that were neutralized by gains in the S&P 500 replacement security (%)
14.4	17.2	131	0.0	76	1.2	11.9	24

Net $ loss realized during first 6 years	Net $ loss realized during last 6 years	Loss realization, first 6 years as proportion of total (%)	Net realized losses over 12 years as proportion of total portfolio value (%)	Net realized losses per annum as proportion of total portfolio value (%)	Half-life for net dollar loss realizations (years)	Average annual turnover resulting from loss harvesting (%)	With this trading cost, 100% of the net loss realization is eliminated (basis points)
-3.28	-2.01	62	-1.57	-0.13	4.8	17	2.6

Based on the twelve years indicated above

Reflects capital gains only. Assumption is that all dividend income is instantly distributed in real time

No adjustment for inflation has been made

We next turn to the twelve years that experienced the single greatest interest rate decline.

Greatest Interest Rate Decline - As defined by 10-year Treasury bond yield, twelve years ending 9/30/1993

We define interest rates by the current yield on the 10-year U.S. Treasury bond. Based on this definition the twelve years with the largest decline ended on Sep 30, 1993. Exhibit 2 provides the results. This environment proved even more challenging for tax-loss harvesting. Key statistics for the twelve years evaluated include:

- The portfolio earned an annualized 15.9% return.
- It first locked up after just 0.9 years.
- Nevertheless, sufficient volatility ensued, allowing for a total of 212 tax losses to be harvested.
- Unfortunately, consequent gains in the S&P 500 Index (used to temporarily hold the proceeds, thus avoiding was sales), offset 31% of these loss realizations.
- Net of S&P gains, active tax-loss harvesting contributed (pre-tax) an average annual -0.18% in tax loss realization.
- But even worse than during the twelve-years referenced above, this benefit was fully offset at just 2.4bps of trading costs per transaction. It is extremely unlikely, that any money manager could deliver a tax loss realization benefit net of real-world transaction costs, i.e., tax-loss harvesting would prove counterproductive.

Exhibit 2

Largest interest rate decline period - 12 years ending Sep 30 1993

Geometric mean return (%)	Annualized standard deviation (%)	Total number of harvests over 12 years	Half-life for harvests (years)	Proportion of harvests occurring in first 6 years (%)	First time portfolio becomes 100% locked up (years)	When portfolio becomes 100% locked up and stays there forever (years)	Proportion of individual stock losses that were neutralized by gains in the S&P 500 replacement security (%)
15.9	17.3	212	0.0	90	0.9	11.8	31
Net $ loss realized during first 6 years	**Net $ loss realized during last 6 years**	**Loss realization, first 6 years as proportion of total (%)**	**Net realized losses over 12 years as proportion of total portfolio value (%)**	**Net realized losses per annum as proportion of total portfolio value (%)**	**Half-life for net dollar loss realizations (years)**	**Average annual turnover resulting from loss harvesting (%)**	**With this trading cost, 100% of the net loss realization is eliminated (basis points)**
-7.12	-1.49	83	-2.19	-0.18	0.3	41	2.4

Based on the twelve years indicated above

Reflects capital gains only. Assumption is that all dividend income is instantly distributed in real time

No adjustment for inflation has been made

In brief, periods when interest rates are experiencing unusually large, consistent declines, do not support active tax-loss harvesting as a contributive process. We next turn to the period of lowest stock market volatility.

Lowest Volatility - As defined by standard deviation of daily S&P 500 Index returns, twelve years ending 1/3/2000

Volatility is defined by the standard deviation of daily S&P 500 Index returns (price only). The twelve years of lowest volatility ended on Jan 3, 2000. Exhibit 3 provides the results. This third environmental period proved even more challenging for tax-loss harvesting than the prior two. Critical observations include:

- Annual portfolio return came in at 19.8% per annum.
- The portfolio first locked up after just 1.1 years.
- Gains in the S&P 500 neutralized 24% of the losses previously realized.
- As a consequence, net loss realization came in at only -0.10% per annum.
- If transaction costs were just 2.4bps per trade, 100% of this realization benefit was lost to transaction cost drag.

Exhibit 3

Lowest ever volatility period - 12 years ending Jan 3 2000

Geometric mean return (%)	Annualized standard deviation (%)	Total number of harvests over 12 years	Half-life for harvests (years)	Proportion of harvests occurring in first 6 years (%)	First time portfolio becomes 100% locked up (years)	When portfolio becomes 100% locked up and stays there forever (years)	Proportion of individual stock losses that were neutralized by gains in the S&P 500 replacement security (%)
19.8	14.9	177	0.0	99	1.1	10.7	24
Net $ loss realized during first 6 years	**Net $ loss realized during last 6 years**	**Loss realization, first 6 years as proportion of total (%)**	**Net realized losses over 12 years as proportion of total portfolio value (%)**	**Net realized losses per annum as proportion of total portfolio value (%)**	**Half-life for net dollar loss realizations (years)**	**Average annual turnover resulting from loss harvesting (%)**	**With this trading cost, 100% of the net loss realization is eliminated (basis points)**
-7.14	-0.19	97	-1.25	-0.10	2.6	32	2.4

Based on the twelve years indicated above

Reflects capital gains only. Assumption is that all dividend income is instantly distributed in real time to the investor

No adjustment for inflation has been made

Based on these analyses, in environments such as we experienced over the last twelve years, during sharply falling interest rates, and during unusually low volatility, tax-loss harvesting has no chance of adding value net of transaction costs. And is more likely to subtract value. But let's turn to more favorable environments with the objective of demonstrating tax-loss harvesting's expected benefit.

Highest Volatility - As defined by standard deviation of daily S&P 500 Index returns, twelve years ending 7/26/2010

As before, we define volatility by the standard deviation of daily S&P returns. The twelve years experiencing the highest volatility ended on Jul 26, 2010. Exhibit 4 provides the results. One would expect that unusually high volatility, such as experienced during this period, would maximize tax-loss harvesting benefits. Key statistical observations include:

- Portfolio return collapsed, but still remained positive, coming in at 4.0% per annum.
- The total number of tax loss harvests rocketed upward to reach 408 during the twelve-year period. This was the highest number experienced during any one of the six environments examined herein.
- Moreover, returns on the S&P 500 Index were so poor, that they offset only 14% of the tax losses harvested.
- As a consequence, the portfolio's active tax loss harvesting delivered a net benefit (pre-tax) of -1.70% per annum.
- Unfortunately, this benefit came at the cost of high annual portfolio turnover, coming in at an average 68% per year.
- As a consequence, if trading costs are just 3.8bps, 100% of the tax loss benefit would be offset by trading cost drag.

Exhibit 4

Highest ever volatility period - 12 years ending Jul 26 2010

Geometric mean return (%)	Annualized standard deviation (%)	Total number of harvests over 12 years	Half-life for harvests (years)	Proportion of harvests occurring in first 6 years (%)	First time portfolio becomes 100% locked up (years)	When portfolio becomes 100% locked up and stays there forever (years)	Proportion of individual stock losses that were neutralized by gains in the S&P 500 replacement security (%)
4.0	19.3	408	1.8	84	2.8	12.0	14
Net $ loss realized during first 6 years	**Net $ loss realized during last 6 years**	**Loss realization, first 6 years as proportion of total (%)**	**Net realized losses over 12 years as proportion of total portfolio value (%)**	**Net realized losses per annum as proportion of total portfolio value (%)**	**Half-life for net dollar loss realizations (years)**	**Average annual turnover resulting from loss harvesting (%)**	**With this trading cost, 100% of the net loss realization is eliminated (basis points)**
-18.18	-3.63	83	-20.35	-1.70	1.7	68	3.8

Based on the twelve years indicated above

Reflects capital gains only. Assumption is that all dividend income is instantly distributed in real time to the investor

No adjustment for inflation has been made

These observations raise serious concerns about any money manager’s ability to deliver a net benefit (after gains in the S&P 500 or other substitute temporary holding vehicle and ongoing trading costs as one harvests losses and redeploys). Keep in mind, this might be the best possible environment, and if one can’t add value under such circumstances, the game is probably pointless. But before drawing such a conclusion, let’s examine two last environments.

Highest Return - As defined by daily S&P 500 Index returns, twelve years ending 12/3/1999

The twelve years that delivered the highest ever return for the S&P 500 Index (price only) ended on Dec 3, 1999. Exhibit 5 provides the results. Key observations include:

- The portfolio returned an impressive 20.9% during this period.
- The total number of tax-loss harvests fell to an all-time low of just 115.
- But gains in the S&P 500 offset just 19% of the realized tax losses.
- This allowed tax-loss harvesting (net of gains in the S&P) to still contribute (pre-tax) a net -0.07% per annum.
- Due to the low annual portfolio turnover (just 16% per annum), this loss realization benefit is offset if trading costs run at 2.8bps.

Exhibit 5

Highest ever return period - 12 years ending Dec 3 1999

Geometric mean return (%)	Annualized standard deviation (%)	Total number of harvests over 12 years	Half-life for harvests (years)	Proportion of harvests occurring in first 6 years (%)	First time portfolio becomes 100% locked up (years)	When portfolio becomes 100% locked up and stays there forever (years)	Proportion of individual stock losses that were neutralized by gains in the S&P 500 replacement security (%)
20.9	14.4	115	2.6	96	1.2	11.3	19
Net $ loss realized during first 6 years	**Net $ loss realized during last 6 years**	**Loss realization, first 6 years as proportion of total (%)**	**Net realized losses over 12 years as proportion of total portfolio value (%)**	**Net realized losses per annum as proportion of total portfolio value (%)**	**Half-life for net dollar loss realizations (years)**	**Average annual turnover resulting from loss harvesting (%)**	**With this trading cost, 100% of the net loss realization is eliminated (basis points)**
-5.45	-0.01	100	-0.83	-0.07	2.8	16	2.8

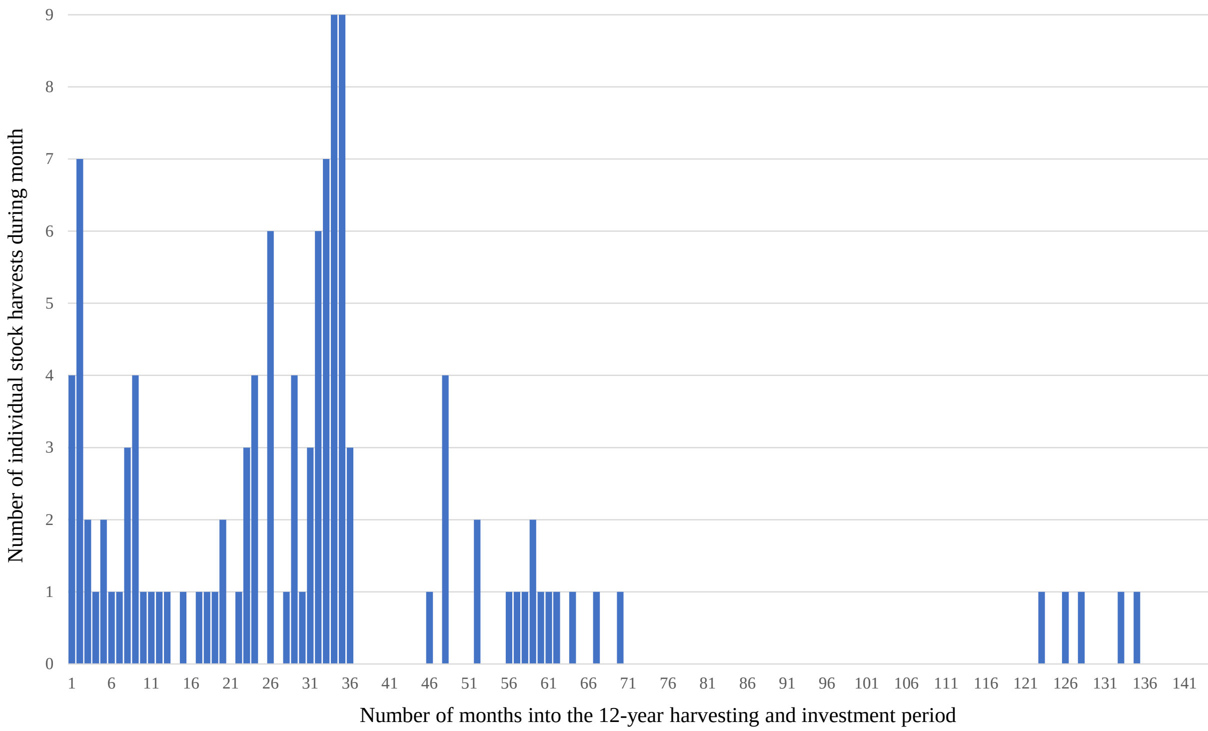
Based on the twelve years indicated above

Reflects capital gains only. Assumption is that all dividend income is instantly distributed in real time to the investor

No adjustment for inflation has been made

Exhibit 6 provides a more intuitive understanding (via a graph) as to what's happening with this portfolio's tax-loss harvesting efforts. The horizontal axis measures time, i.e., the 144 months that comprise this interval of highest ever S&P 500 Index returns. The vertical axis shows the number of individual stocks being tax-harvested each month. Essentially, everything occurs in the first 36 months. Thereafter, the portfolio essentially locks up, with nothing left to harvest. This should still not be interpreted as justifying or supporting active tax-loss harvesting over the short-run. Why? Because one still needs to overcome transaction costs, which in this case if above just 2.8bps, would result in net damage to the portfolio.

Exhibit 6
Monthly loss harvesting during highest ever return period - 12 years ending Nov 22 1999



As a last effort to show tax-loss harvesting's expected value added, we explore what should be the easiest possible environment.

Lowest Return - As defined by daily S&P 500 Index returns, twelve years ending 11/25/2011

The twelve years that delivered the lowest ever cumulative return for the price-only S&P 500 Index ended on Nov 25, 2011. Exhibit 7 provides the results for our 67-stock portfolio. If tax-loss harvesting can't deliver attractive results during such a period, then it never will. Key observations include:

- Our portfolio still earned 5.0% per annum.
- Not surprisingly, the portfolios completed 371 individual tax-loss harvests
- With 84% of these occurring during the first 6 years of the portfolio's life, i.e., positions quickly started becoming locked up.
- Despite this being, potentially, the best possible environment for active tax loss harvesting, the portfolio become 100% locked up after just 1.5 years (all 67 positions had unrealized gains).
- With the stock market's poor returns, gains in the S&P 500 offset just 22% of realized tax losses.
- As a result, active tax-loss harvesting, delivered a net benefit (pre-tax) of -1.43% per annum. Such a contribution is fairly interesting, and potentially quite contributive.
- Unfortunately, it required an annual portfolio turnover, that averaged 60% per year.

- With trading costs running at 4.1bps the tax loss realization benefit is fully offset.

Exhibit 7

Lowest ever return period - 12 years ending Nov 25 2011

Geometric mean return (%)	Annualized standard deviation (%)	Total number of harvests over 12 years	Half-life for harvests (years)	Proportion of harvests occurring in first 6 years (%)	First time portfolio becomes 100% locked up (years)	When portfolio becomes 100% locked up and stays there forever (years)	Proportion of individual stock losses that were neutralized by gains in the S&P 500 replacement security (%)
5.0	17.9	371	0.0	84	1.5	11.9	22
Net $ loss realized during first 6 years	**Net $ loss realized during last 6 years**	**Loss realization, first 6 years as proportion of total (%)**	**Net realized losses over 12 years as proportion of total portfolio value (%)**	**Net realized losses per annum as proportion of total portfolio value (%)**	**Half-life for net dollar loss realizations (years)**	**Average annual turnover resulting from loss harvesting (%)**	**With this trading cost, 100% of the net loss realization is eliminated (basis points)**
-17.12	-3.51	83	-17.21	-1.43	1.8	60	4.1

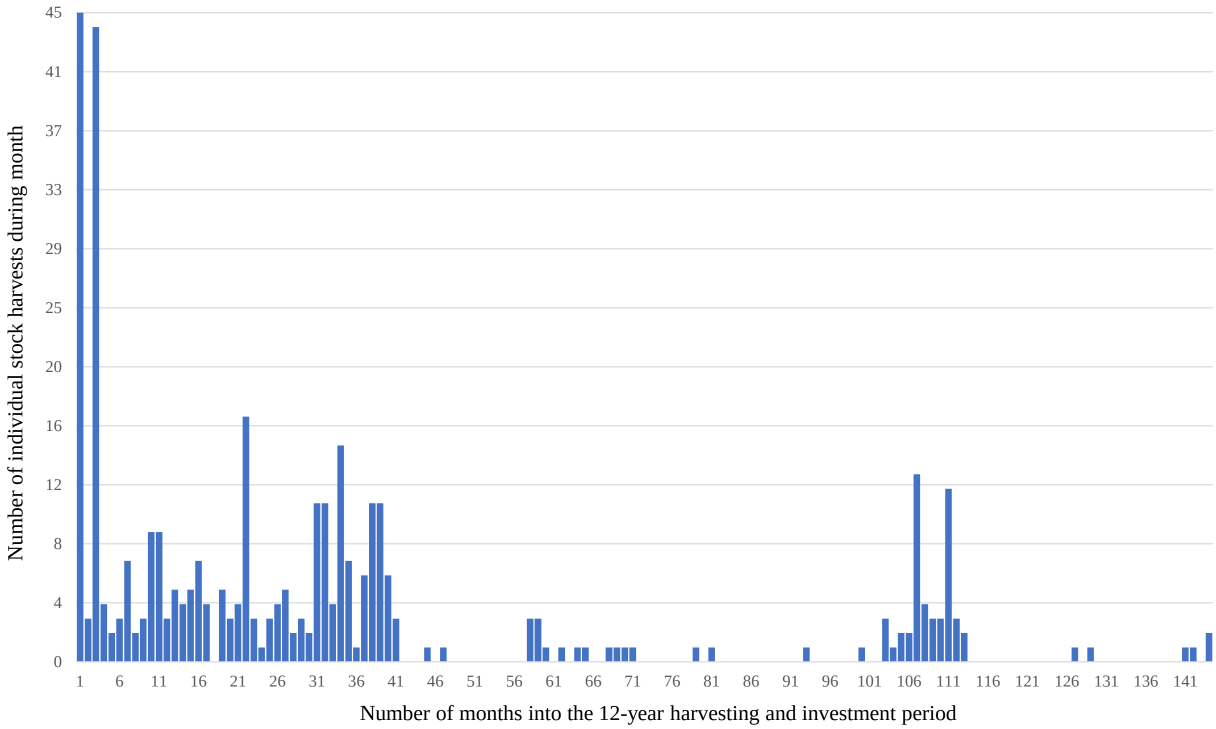
Based on the twelve years indicated above

Reflects capital gains only. Assumption is that all dividend income is instantly distributed in real time to the investor

No adjustment for inflation has been made

These observations, given that they're drawn from a best possible environment, i.e., the single most attractive time interval drawn from 1981-present, supports the conclusion that active tax-loss harvesting is a fool's errand. Exhibit 8 provides a graphical view as to when the individual harvests occurred. As before, they are massively front-loaded, with the first 36 months being the sweet spot, and the portfolio becoming locked up thereafter. Certainly, if the investment manager is charging an extra fee for active tax-loss harvesting, such fee should probably apply for the first two years, and then revert to zero thereafter.

Exhibit 8
Monthly loss harvesting during lowest ever return period - 12 years ending Nov 25 2011



I end with a final observation concerning portfolio concentration resulting from the application of a tax-loss harvesting approach. For tax-loss harvesting to deliver its stated benefits, it needs to realize capital losses while at the same time avoiding the realization of capital gains. Pursuing such an objective results in portfolio concentrations in certain names building to problematic levels with the passage of time.

The examined portfolio starts with 10% invested (by dollar value) in 10% of the stocks with the greatest allocation (the portfolio begins its life equally-weighted). But after twelve-years have passed, the consequent portfolio is frighteningly unbalanced. This imbalance results from the need to avoid capital gain realization. Exhibit 9 provides the results for the six cases examined herein.

Exhibit 9

Level of portfolio imbalance after twelve years

Asset allocation to those companies that comprise the largest 10% (by number of positions) of the aggregate portfolio						
At the very beginning of the 12-year period	Most recent period - 12 years ending Sep 1 2024	Largest interest rate decline period - 12 years ending Sep 30 1993	Lowest ever volatility period - 12 years ending Dec 31 1999	Highest ever volatility period - 12 years ending Jul 28 2010	Highest ever return period - 12 years ending Dec 3 1999	Lowest ever return period - 12 years ending Aug 25 2011
10%	39%	59%	47%	40%	53%	36%

Based on the twelve years indicated above

Reflects capital gains only. Assumption is that all dividend income is instantly distributed in real time

Not surprisingly, the best- and worst-case outcomes are found with the two 12-year intervals that correspond to the lowest- and highest-ever return intervals. With the 10% of the stocks (by number) occupying 36% and 53% of the portfolio (by $ value), respectively. This is not a healthy outcome.

7. CONCLUSIONS

The investment industry at three different levels is promoting the benefits of "tax alpha". These are: (1) investment/financial advisors promoting tax alpha as a significant portion of their value add, (2) industry intermediaries offering active tax-loss harvesting for a given client/advisor portfolio, and (3) tax optimized mutual funds, SMAs (Separately Managed Accounts), and direct indexing products. By labeling the benefit as tax alpha, our industry is encouraging consumers (financial/investment advisor or end client) to believe: (1) the benefit is large enough to be interesting and (2) is sufficiently durable and consistent over time (as opposed to once and done). These observations are well-supported by public-facing marketing collateral provided by investment managers, intermediary overlay service providers, and financial/investment advisors.

If true, then such tax optimization services and products are of significant interest (and potentially serious benefit) to many if not most taxable accounts. If false, then our industry's marketing has exceeded its reality. This article provides a transparent empirical basis for evaluating this question. It is based on market data spanning 1981-present. And evaluates cost-free trading versus costly trading (nothing is ever free). It also explores the question during six radically different market conditions.

It is found that tax alpha resulting from tax-loss harvesting is practical and interesting for "a year or two". But after that, the portfolio becomes locked up with unrealized capital gains and can't be traded (there's nothing left to tax loss harvest). This result holds across radically different market environments, and thus holds with substance and significance. In other words, tax alpha (derived from ongoing tax-loss harvesting) is nothing more than a marketing ploy targeting the unwitting.

Least one throws the baby out with the bath water, nothing herein is intended to downplay the tremendous value added resulting from a diligent attention to tax efficient actions (or inactions). But tax efficiency is simple, vanilla, obvious, and painfully transparent. In other words, it's so easy that the only right-price is zero. Tax efficiency (under U.S. tax law) entails just seven simple tradeoffs: (1) Long-term versus short-term capital gains tax rates, (2) Capital gains versus current income tax rates, (3) Qualified versus non-qualified dividend tax rates, (4) Muni bonds versus taxable bonds, (5) Limit on net cumulative tax loss realization of $3,000 per year, (6) Immediate versus delayed realization of gains so as to temporarily use "the government's money" for one's own benefit, and (7) AMT (Alternative Minimum Tax) rules as they apply to the application of prior carried-forward tax losses (a serious gottcha).

The prudent application of these seven tax law arbitrage opportunities does not facilitate or allow for tax alpha, but they do still provide a significantly attractive benefit. Nevertheless, as the results of this article demonstrate, pro-active tax loss harvesting as a source of "tax alpha" is most likely only helpful during the first "two years" of a portfolio's life. Thereafter, some version of lock-up has occurred. The best possible environment for ongoing tax alpha occurs when the broad-based market is experiencing an exceptionally severe and extended "down market". But even during such an environment, the expectations for tax alpha should be seriously modest. Examining the period 1981-present, during the lowest-ever twelve-year return environment, active tax-loss harvesting returned an additional +1.43% (tax loss realization) per annum. But this benefit assumed zero transaction costs. If one assumes a one-way transaction cost of 4.1bps, them this benefit is fully offset (there is no benefit). Public-facing marketing collateral identifying annual tax alphas of 12.44%, 3.54%, or 2.1% per annum would appear to be unsupported by the data, based on the analysis herein spanning 1981-present.

8. REFERENCES

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