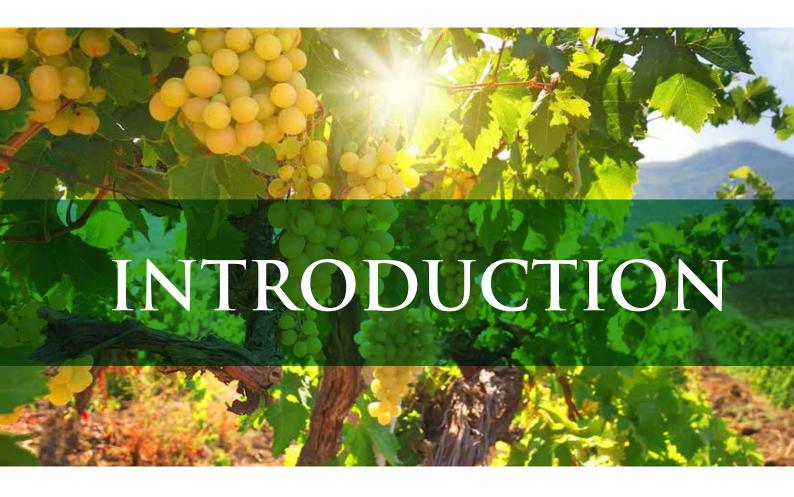


TAX HARVESTING

WITHOUT A COMPREHENSIVE STRATEGY,
YOUR CROP YIELD WILL SUFFER



Tax harvesting is a tool that sophisticated investors and wealth managers use to enhance the after-tax returns on investments. While there are many ways to utilize tax harvesting, and many instances where it makes sense, it is first important to understand what tax harvesting is, its different forms, and why it is valuable. Like farmers and producers of crops, optimal yields come with sophisticated strategies, the right tools, and expertise in knowing when and how to harvest the fruit.

This paper will explore the techniques of tax harvesting and explain each strategy from multiple angles; evaluating the merits, drawbacks and key considerations for each.

At Centura Wealth Advisory, our tax harvesting method centers on a holistic, integrated approach factoring in tax, retirement, and portfolio planning. Doing so allows us to analyze each investor's unique situation and evaluate whether one or more tax harvesting strategies may be liberating, as each situation is unique and what works for one individual may not work for another.



NO DIFFERENT THAN
HARVESTING A HIGH
YIELD GRAPE FROM
THE VINE, TAX
HARVESTING
REQUIRES DEEP
KNOWLEDGE, A PLAN,
AND YEARS OF
EXPERIENCE TO TAKE
THE FRUIT AT THE
OPTIMAL TIME FOR
ITS BEST
PERFORMANCE.

How Centura has successfully utilized Tax Harvesting

At Centura Wealth Advisory, we have worked with tax harvesting strategies in a host of applications. We have found both tax loss harvesting and tax gain harvesting to be effective. Some client demographics and/or areas of planning that we have found success with include:

Tax Gain Harvesting

- Entrepreneurs
- High cyclical income arts, entertain ment, athletics, sales
- Retirees seeking portfolio income
 Charitable deduction consumption
- Loss consumption
- High income clients experiencing down year (transition), excess deductions, etc. and thus a lower than normal income level/capital gains tax rate

Tax Loss Harvesting

- Current year to year tax mitigation /management
- High income/earning years
- Charitable planning
- Wealth transfer & estate planning
- Education funding
- Portfolio reallocation

TAXES & INVESTING

When it comes to human nature, people don't like paying taxes. Whether on the income they make at work, on capital gains from investments, or other, taxes represent a drag on earnings and performance that most people would prefer to avoid. In looking at human behavior, we find that the incentive to avoid taxes is so strongthat it is often sought even when material benefit is not clear.

For example, one study from Abigail Sussman, professor at University of Chicago, and Christopher Y. Olivola of Carnegie Mellon, find numerous examples of irrational tax aversion, such as buying tax free bonds when taxable equivalents offer better results. Behavioral examples such as this indicate people are inclined to avoid taxes regardless of whether there is any material benefit or not. So how does that relate to tax harvesting?¹

Over the past 25 years, numerous academic studies have been conducted to quantify the drag on investment performance associated with taxes. These studies estimate the "tax drag" associated with investment returns, is approximately 1-2% per annum. This tax drag represents an opportunity for advisors to work with their clients and develop a tax management strategy that seeks to improve the net after tax results. This incremental improvement in net after tax results is known as "tax alpha" or excess after-tax returns relative to a benchmark, adjusted for any excess pre-tax returns.

Tax Alpha = Excess After-Tax Return – Excess Pre-Tax Return

Excess After-Tax Return = After-Tax Return_(portfolio) – After-Tax Return_(Benchmark)

Excess Pre-Tax Return = Pre-Tax Return_(portfolio) – Pre-Tax Return_(Benchmark)

Tax management strategies seeking tax alpha often include a combination of tax harvesting and other techniques, but all are aimed at reducing tax drag. Which tax management solution(s) generate the best results is situationally dependent and requires an in depth understanding of taxes, portfolio management and long-term financial planning. Next, we explore tax harvesting and tax alpha more closely.

TAX HARVESTING

Tax Harvesting is a popular planning and portfolio management tool that comes in two primary forms: gain and loss harvesting. Whether tax harvesting generates "alpha" is situationally dependent and is contingent upon the ultimate realization of gains (or not) and the difference between pre-liquidation and post-liquidation capital gains rates. There are times when tax loss harvesting makes sense and other times when recognizing gains may be more beneficial. However, tax harvesting is dynamic and can be integrated with other types of planning (e.g., philanthropy, wealth transfer, etc.) to add synergies that can be accretive to wealth over time.

01 CAPITAL GAINS

Paramount to understanding tax harvesting, one must firmly grasp capital gains tax (both short and long term). Capital gains taxes are levied on profit from the sale of property or of an investment. Short term capital gains (held less than one year) are subject to taxation at the same rate as ordinary income while long term capital gains (held over 1 year) have a specific tax rate. To determine how long you held the asset, count from the day after the day you acquired the asset (Settlement Date) up to and including the day you sold the asset.

In addition, investments can go up or down, and when sold, will generate either a capital gain or a loss. Only gains are taxable, but losses can be used to offset gains. To determine what will be taxed at long-term capital gains rates, we use what is known as net capital gain (see formula below). Net capital gain means the amount by which your net long-term capital gain for the year is more than your net short-term capital loss for the year.

The formula for calculating Net Capital Gains: 4

Net Capital Gain = (Net Long-Term Gain) – (Net Short-Term Loss)

and Net Long-Term Gain is equal to:

Net Long-Term Capital Gain =

(Long-Term Capital Gains) – (Long-Term Capital Losses) – (Long-Term Capital Loss Carry Over)

On December 22, 2017 the Tax Cuts and Jobs Act (TCJA) was signed into law and introduced minor changes as related to capital gains. At the most basic level, not much changed and the capital gains formula remains the same. However, short term capital gains rates will now be applied against the new ordinary income brackets and long-term gains are now associated with maximum taxable income levels as opposed to marginal tax brackets. Current-long-term capital gains (LTCG) tax rates under the TCJA in the United States are:

TAX RATE	SINGLE	JOINT	HEAD OF HOUSEHOLD
0%	\$0 to \$38,600	\$0-\$77,200	\$0-\$51,700
15%	\$38,601-\$425,800	\$77,201-\$479,000	\$51,701-\$452,400
20%	\$425,801 and up	\$479,001 and up	\$452,401 and up

02 LOSSES

There are three unique attributes that make losses particularly valuable: gain offset, tax shield, and ordinary income reduction.

Gain Offset:

Losses can be used to offset capital gains. Short-term losses are used up first, and long-term losses can also be used to offset either long- or shortterm gains.

Tax Shield:

Regardless of short or long term, if losses exceed the gains then a carryforward loss may be created. This carryforward loss effectively serves as a future tax shield and represents the second valuable trait of losses.

Ordinary Income Offset:

The final benefit associated with losses is that they can be used to reduce ordinary income by up to \$3,000 per year. The higher your marginal tax rate, the more valuable this benefit becomes.

A winning strategy is tied to the timing of Harvesting. While losses hold value, when you choose to harvest them and how you choose to consume them will ultimately play into the success or failure of your long-term portfolio tax management plan.

WASH SALES

Wash Sale Rules were first introduced as part of the Revenue Act of 1921 and have seen many iterations since then, based on subsequent tax harvesting abuses.

Under Section 1091, a wash sale occurs when a taxpayer sells or trades stock or securities at a loss, and within 30 days before or after the sale:

- 01 | Buys substantially identical stock or securities,
- 02 Acquires substantially identical stock or securities in a fully taxable trade,
- **03** Acquires a contract or option to buy substantially identical stock or securities, or
- **04** Acquires substantially identical stock for an individual retirement account (IRA).

The "substantially identical stock" acquired in any of these ways is called the "replacement stock" for that original position.

CONSEQUENCES

- **01** The taxpayer is not allowed to claim the loss on the sale (the loss is not "realized").
- Basis Adjustment: The disallowed loss is added to the cost basis of the replacement stock.
- 13 Holding Period: The holding period for the replacement stock includes the holding period of the stock sold.

03

TAX HARVESTING STRATEGIES

Now that we have discussed tax drag, tax alpha and capital gains, we are ready to explore tax harvesting strategies to determine how each item is addressed. As previously mentioned, tax harvesting comes in two primary forms: gain and loss harvesting. Both types utilize individual tax lots to recognize capital gains or losses in the current tax year.

Gain harvesting has the effect of increasing Adjusted Gross Income (AGI) but also steps up the cost basis in the portfolio. Loss harvesting is the opposite, decreasing AGI and lowering the portfolios cost basis. Depending on if you are gain or loss harvesting, the effect is an increase or decrease in the cost basis (unrealized gains) inside of the portfolio.

3.1 GAIN HARVESTING

Tax gain harvesting is a strategy where an investor strategically chooses to recognize capital gains today (at current rates) versus in the future. This strategy is often employed when the taxpayer is in the 0% Long-Term Capital Gain (LTCG) tax bracket and/or expects future tax rates to be higher than they are today (e.g., higher income, legislative changes, etc).

Recognizing capital gains today will increase AGI in the current year which can increase taxes on all income and is an important aspect that must be considered when evaluating a gain harvesting strategy.

In looking at the mechanics involved, each time a gain is recognized we findstepped up cost basis in the portfolio as the amount reinvested is at a higher basis than before. This has the effect of reducing the amount of unrealized capital gains embedded in the portfolio and can add tax alpha if future capital gains rates are higher than when the gain was realized (today). Some refer to this as tax bracket arbitrage.

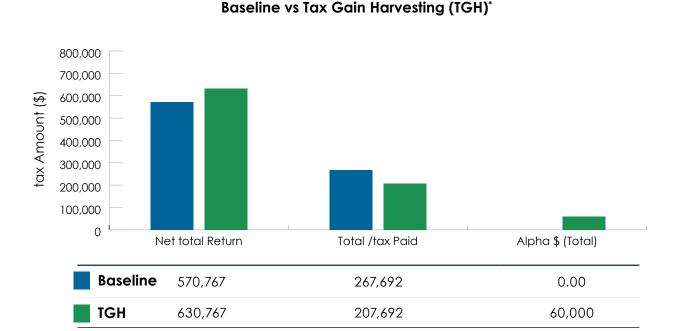
Our own research at Centura Wealth Advisory has revealed a few key findings:

- The eventual realized rate of future LTCG is a primary factor in determining strategic alpha for tax gain harvesting
- This strategy works particularly well for someone who can use 0% LTCG tax rates and/or is at a temporarily lower tax bracket than they expect to be in the future
- Current LTCG tax rates across the board are low, and a gain harvesting strategy could be prudent if rates are higher in the future due to legislative changes
- Tax gain harvesting has the potential to add tax alpha (see example below)

Consider the following, a successful executive leaves his post to seed a startup. He expects a temporary loss of earned income for the next 3 years and plans to live on cash reserves during that time. In addition to his retirement assets, he has a \$1,000,000 taxable portfolio with a cost basis of \$500,000 and plans to retire in 10 years. For simplicity, assume this investor lives in Nevada and does not pay state income tax.

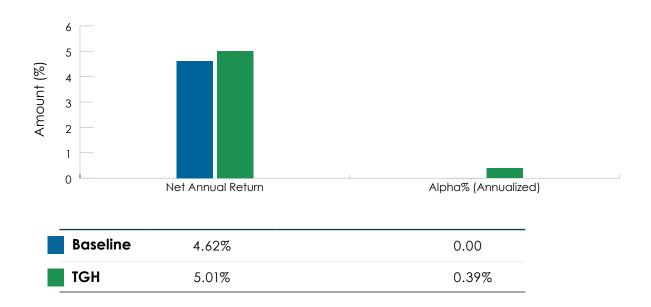
Given this fact pattern, a tax gain harvesting strategy could strategically make sense as the loss of income over the next 3 years will present the opportunity to harvest gains at 0% LTCG tax rate. In conjunction with his advisor's analysis, he and his wife elect to recognize approximately \$100,000 in gains over the next 3 years, remaining in the 0% LTCG tax rate through deductions. This strategy allows the basis on his portfolio to be stepped up to \$800,000, thereby reducing his future tax liability, ceteris paribus.

For illustrative purposes, this transaction is modeled over 10 years and all unrealized gains are assumed to be recognized in the final year. Assuming a growth rate of 7%, the merits are illustrated below:



In this study, we find tax gain harvesting to produce excess return of \$60,000 net over 10 years. On an annualized basis that equates to 39bps or 0.39% alpha or excess return per year (see next page). To contextualize this alpha, if an investor pays gross asset management fees of 1%, tax alpha can reduce the net management fee to 0.61%. It is this type of active tax management (harvesting) and integrated tax planning that allows Centura Wealth Advisory to add value to our client's wealth accumulation. Tax alpha is unique to each investor and can be extracted through thoughtful analysis and strategic planning.

Baseline vs Tax Gain Harvesting (TGH)*



While the results can be compelling, tax gain harvesting is not without draw-backs and is not for everybody. Here are a few key considerations if looking to employ such a strategy:

Income Tax Rates:

Capital gains realization can increase your overall tax rate.

State Income Tax:

Capital gains can trigger state taxes, even at 0% federal rate*.

AGI: Increased AGI may cause phaseouts in certain deductions and/or exemptions.

Social Security:

Capital gains can increase the amount of social security being taxed.

AMT:

AMT may apply and must be considered as it may increase tax liability.

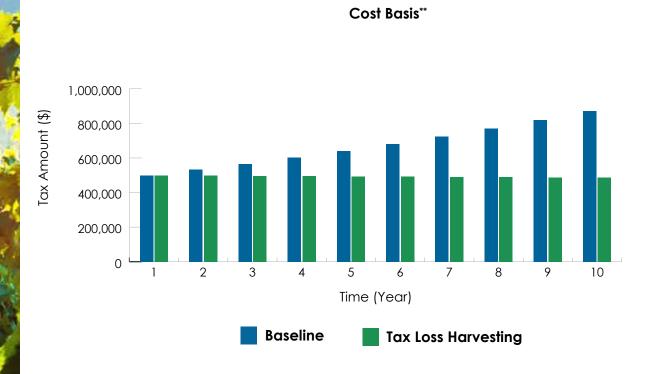
Net Investment Income Tax:

May be introduced by recognition of any short-term gains.

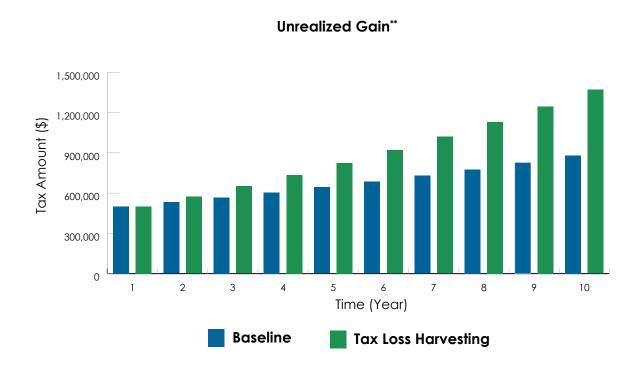


3.2 TAX LOSS HARVESTING

Tax loss harvesting is the practice of recognizing losses to reduce the tax liability associated with capital gains and/or ordinary income. As discussed earlier, losses can be used to offset gains, reducing AGI, and thus taxes in the current year (or year utilized). Mechanically, by recognizing losses and reinvesting proceeds, you are effectively lowering the cost basis in your portfolio and deferring the realization of capital gains to some point in the future.



This is the exact opposite of the unrealized capital gains effect associated with tax gain harvesting and is an important consideration of how tax loss harvesting works.



Since this strategy involves avoiding taxes today to pay them tomorrow, the gain deferral has often been described as an interest free loan from the federal government, with the tax rate at the time of liquidation being the kicker in terms of how much value loss harvesting provides, once the future "loan" has been repaid.

Tax loss harvesting is a popular strategy among investors largely because most taxpayers hate paying tax. As mentioned earlier, investors seem to prefer not paying taxes even when better opportunities may be available. This behavioral bias supports why tax loss harvesting is more popular than gain harvesting and why it is widely used throughout the industry. But, does it work?

To evaluate tax alpha properly, one must not only look at the annualized alpha during the years of harvesting but must also look at the annualized alpha once the entire life of the transaction is complete; including final disposition, transfer, gifting and/or taxation of assets. We classify this as "pre-liquidation" and "post liquidation".

Looking at existing academic research 2 from the last 25 years, we find the following estimates of annualized tax alpha produced through Tax Loss Harvesting:

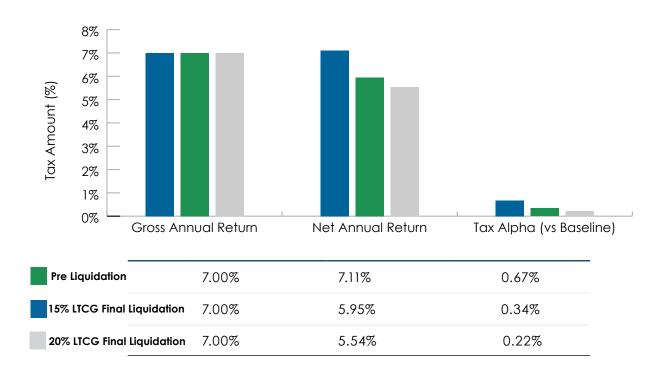
Source ⁵	Alpha (Pre-Liquidation)	Alpha (Post Liquidation)
1) First Quadrant, LP (1991 Paper)		0.5%
2) Natixis	1.22%	0.75%
3) Betterment	0.77%	
4) Wealth Front	1.07%	0.58%
5) Michael Edessess	0.17%	0.14%
6) Parametric	2.00%	1.00%
7) Envestnet		1.00%
8) MRA	1.5%	0.90%
9) CFA Institute		2.50%
Average (Industry)	1.12%	0.70%

Based on the data in the table above, industry estimates quantify the annualized tax alpha created by loss harvesting strategies to be ~1%, with a range of 0.14% to 2.5% depending on the source and methodology used. With such a large range, and multiple factors involved, we decided to conduct our own study to estimate tax alpha from loss harvesting and corroborate or refute previous research findings.

To estimate annualized tax alpha, we consider the same portfolio we modeled for the Tax Gain Harvesting strategy (\$1MM Stocks with \$500K basis) and the same 7% growth assumption per year. The primary difference modeled in the tax loss harvesting scenarios is a loss recognition of \$3,000 in excess of the realized gains for each year (except final liquidation). This allows for the gain to be offset and for \$3,000 of losses to be used each year to offset ordinary income.

Each time a loss is recognized, the cost basis in the portfolio is adjusted downwards and the unrealized gains within the portfolio are increased. In addition, we model this over a 10-year time horizon and evaluate 3 methods of disposal. The first method is to avoid future tax by gifting the shares to charity, lower tax bracket family members or transferring them to heirs upon death; this is the pre-liquidation return. The second is to recognize all the gains at the same rate as today (15%) and the final is to recognize all the gains at a rate higher than today (e.g., 20% vs 15%); these last two are post liquidation returns.

Tax Loss Harvesting - Post Liquidation Returns: 10
Years**



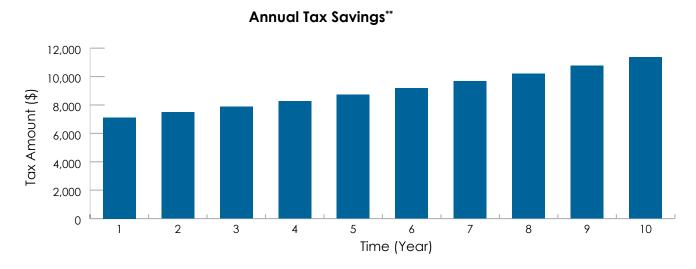
As evidenced in the return numbers above, the tax alpha generated by tax loss harvesting is directly tied to the final utility of assets. If assets will be liquidated by the taxpayer, then tax loss harvesting is value additive (in this example) at 0.22%-0.34% per year tax alpha depending upon the final rate of disposition. In this example, we have modeled and illustrated both 15% and 20% long term capital gains rates (which are consistent with current tax rates in 2018) recognizing future rates may be different and if tax rates go markedly higher, then results may differ.

However, if assets will not be liquidated due to other tax friendly methods of disposition, then tax loss harvesting is decidedly more valuable at 0.67% per year tax alpha. Both estimates (pre-liquidation alpha and post liquidation alpha) are consistent with industry research presented earlier and fall toward the lower, more conservative end of the range.

In decomposing tax alpha, it is clearly being added, but what is driving it? The tax alpha is generated by 2 factors:

1) Annual Tax Savings:

The annual tax savings is invested and remains in the account, compounding with tax deferred treatment.

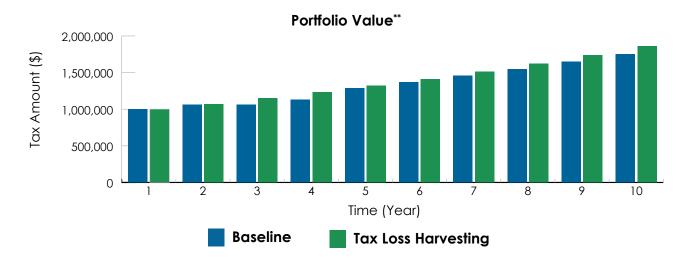


2) Annual Tax Shield:

The income tax shield generated by the \$3,000 ordinary income deduction results in immediate tax savings that can be reinvested and compounded over time. The exact level of savings is dependent upon the taxpayer's marginal rate.

The chart below illustrates the combined effect of year over year tax alpha from these two sources. It highlights how excess returns can start to compound over time.

Given a longer time horizon (i.e., 20 or 30 years) alpha from these 2 sources would be even more significant (ceteris paribus), especially in terms of real dollars and not just percentage-based terms.



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In summary, tax loss harvesting produces alpha across all scenarios, but it appears the greatest beneficiaries of tax loss harvesting are those who can experience the benefits during the life of the transaction and can avoid future taxation of the unrealized gains through tax friendly disposition (e.g., charitable giving, step up in basis upon death, gifting to lower bracket family, etc.).

This does not preclude those who do plan to sell and utilize the assets for themselves, from reaping the benefits of loss harvesting, but does warrant more careful consideration as to when and how the assets are disposed of in the future. To bring our discussion full circle, a tax gain harvesting strategy (in the future) could pair well to minimize the tax drag associated with liquidation and could add additional tax alpha if executed properly.

Summary of our research findings are as follows:

- ✓ Tax Loss Harvesting decreases annual taxes paid and reduces portfolio cost basis
- This strategy works well for investors looking to limit their capital gain tax liability in the same year that gains are recognized
- Tax Loss Harvesting increases unrealized gains in the portfolio, making the strategy vulnerable to future capital gains tax
- Future capital gain harvesting should be analyzed and implemented (if appropriate) to mitigate any tax drags associated with future liquidation
- Replacement exposures present an opportunity cost that requires prudent portfolio management to maintain overall portfolio attributes
- Tax loss harvesting has the potential to add annualized alpha, both pre, and post, liquidation

ADDITIONAL CONSIDERATIONS

Notably absent from our analysis is any consideration of transaction costs and/ or opportunity costs related to loss harvesting and subsequent reinvestment. Each time a security is bought and sold, transaction costs are incurred. In addition, when recognizing a loss, the replacement position presents an opportunity cost in the form of performance and/or tracking error. We recognize the material impact that these factors can have and in practice they must be considered. At Centura, we utilize sophisticated software solutions to help identify optimal tax lots to harvest and are always mindful of both tracking error and transaction costs.

Some industry offerings tout daily, monthly, or annual tax loss harvesting. While this analysis does not delve into the optimal frequency of harvesting, others have researched this topic and there are different perspectives to consider. Not harvesting frequently enough can cause missed loss recognition opportunities, whereas daily harvesting may incur too many transaction costs negating alpha all together. Like many things, it is about balance and finding opportunities as they come available. For this reason, at Centura we recommend a diligent, tax sensitive long-term plan with rules-based guidance for when and where to execute on harvesting. We leverage technology and algorithms to help maximize recognition of appropriate gains or losses while maintaining targeted portfolio risk and return attributes.

CONCLUSION

In summary, tax harvesting is an available strategy that can create alpha, thus improving overall returns. Depending on a client's situation and needs, both tax gain harvesting, and tax loss harvesting offer the potential to produce alpha and can be used in tandem with one another. To be successful in capturing tax alpha, diligence must be given to a variety of considerations, including transaction costs, pre and post-liquidation plans, and anticipated changes in the client's overall tax situation. Clients with tax savvy advisors that understand integrated planning and portfolio management are well served to explore tax harvesting strategies.

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ASSUMPTIONS

*The baseline scenario assumes no capital gains recognized in years 1-9, all assets sold in year 10, and capital gains realized at an effective rate of 20%. Initial portfolio value is \$1,000,000, cost basis is \$500,000 throughout, and annual growth (pre-tax) is 7%.

The tax gain harvesting scenario assumes capital gains of \$100,000 recognized in each of years 1, 2 and 3 at an effective rate of 0%, with the portfolio cost basis stepped up upon each recognition of gain. All remaining assets are sold in year 10, with remaining capital gains realized at an effective rate of 20%. Initial portfolio value is \$1,000,000, cost basis starts at \$500,000 but steps up to \$800,000 by year 3, and annual growth (pre-tax) is 7%.

For illustrative purposes and simplicity, we do not use a capital gains tax worksheet (or blended effective rate) in our example.

**For the baseline scenario, initial portfolio value is \$1,000,000, cost basis is \$500,000, annualized growth (pre-tax) is 7% and capital gains are recognized annually at 3.5% of the portfolio value. No capital losses are realized and the effective rate on capital gains in years 1-9 is 15%, with final year (i.e., disposition) tax rates varied to illustrate rate sensitivity; no liquidation, 15% effective rate, 20% effective rate.

For the tax loss harvesting scenario, initial portfolio value is \$1,000,000, cost basis starts at \$500,000, and is reduced by net losses but increased by additional capital (e.g., ordinary income tax savings), resulting in a year 10 cost basis of \$486,500. Annualized growth (pre-tax) is 7%, capital gains are recognized annually at 3.5% of the portfolio value, and losses are recognized at the same amount as gains plus an additional \$3,000 to be used against ordinary income. Estimated tax savings associated with the ordinary income benefit is illustrated at 50% and assumed to be reinvested. The effective rate on capital gains in years 1-9 is 15%, with final year (i.e., disposition) tax rates varied to illustrate rate sensitivity; no liquidation, 15% effective rate, 20% effective rate.

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