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September 2019

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Taxable investors have an additional layer of complexity on top of the already multifaceted investment decision process. In this paper, we will focus on common techniques for maximizing after-tax returns. Tax considerations can come in many different forms, but among the most distorting tend to be:

1. Assessing an investment depends on more than just performance, but more importantly how much of an investment gain the investor can actually keep.
2. The individual circumstances of the investor matter greatly, so general guidance can sometimes lead to worse outcomes.
3. Each asset class has a mix of different taxable characteristics. This means you cannot just construct a portfolio with a 'tax efficient bucket,' but must consider the implications of *every* investment on the after-tax outcome.

Partially as a result of this complexity, and partially because taxes are so universally unloved, *it is easy for an investor to become overly focused on this area and sacrifice more return than is optimal in an attempt to minimize their tax bill.* Doing so will lead the investor to a lower tax bill but also to less wealth, which goes against the purpose of the entire exercise.

In this brief overview, we will focus on the questions that taxable investors should consider when implementing a tax efficient strategy. Given our belief that overly broad guidance can lead investors astray in some situations, we will instead emphasize the criteria that investors should use so that they are able to find the best solutions for their particular situations.

What are the best techniques for improving after-tax performance?

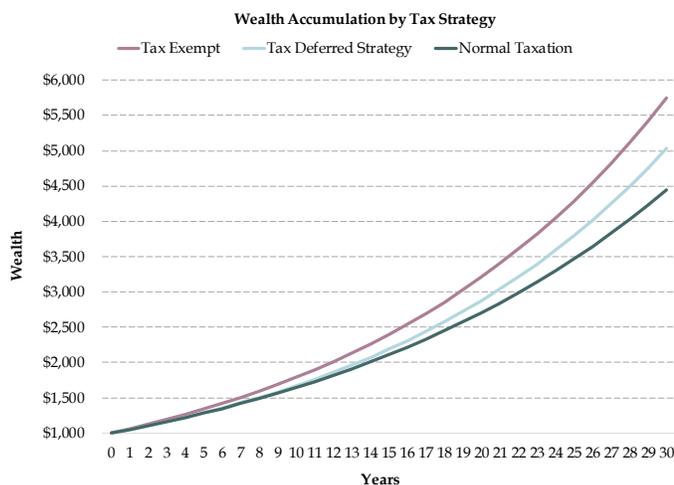
There are too many tax vehicles and strategies to cover all of them in a short paper, but we provide a selection of references in the endnotesⁱ (see the appendix) for the curious reader. In this publication, we focus on the most common and powerful techniques used for tax aversion.

1. Tax-Lot Management
2. Managing Long-term vs. Short-term Capital Gains
3. Deferring Tax
4. Tax-Loss Harvesting

Improving after-tax performance can come in many different forms. Tax-Lot management is the necessary precursor to each of them and boils down to accurate and detailed record keeping. The simple reason is that if an investor would like to claim a tax benefit, they need to have clear records to identify it. In most cases, a 'first-in-first-out' (FIFO) approach will be the default methodology used to track tax lots, with the exception of mutual funds that can use averaging. After-tax returns can be vastly improved in most cases with a customized tax-lot management strategy.

One of the most powerful techniques for improving after-tax performance is also the simplest. Because the long-term capital gains tax is lower than the tax on short-term capital gains, investors holding investments for periods longer than one year can substantially lower the tax drag on their investments. In the U.S., this is normally about a 20 percent improvement, though it depends on the investor's tax bracket.

The third technique for improving after-tax performance is tax deferring, and it can be used in tandem with the first (tax-lot management) to improve gains further. Both of these strategies put time on the side of the investor. The intuition here is that if tax is deferred, those untaxed gains compound over time. This, in short, gives the investor more cumulative gains as a result of compounding. The adjacent chart shows an example to give a sense of the scale of this benefit.



The fourth technique is called tax-loss harvesting. A taxable investor can mitigate a capital gain by realizing an offsetting loss. The investor is then able to reinvest that capital in addition to the amount that would otherwise have been taxed. An example may clarify this:

An investor purchases stock ABC for \$120, which loses value over the year and finds a new market price at \$100. If the investor realizes this loss of \$20, they can offset gains from other investments, which lowers their tax basis. This 'saves' the investor who is taxed at a 20% rate \$4 (20% tax rate times \$20 loss) that would otherwise need to be paid in taxes. This allows them to reinvest in a different stock a total of \$104, therefore offsetting some of the loss.

Tax-loss harvesting can work with any asset, but tends to be used more often in volatile asset classes simply because, by definition, volatile assets will produce more opportunities to harvest losses.

To close out this section, it is necessary to discuss two other areas: the Alternative Minimum Tax and Tax Advantaged Accounts. While covering them in detail is beyond the scope of this paper, they are important considerations for any tax efficient strategy.

The Alternative Minimum Tax (AMT) is effectively a parallel tax system designed to prevent high-income taxpayers from avoiding the individual income tax. The AMT accomplishes this by mandating taxpayers always pay the higher amount between their standard tax bill (with all exemptions) and the AMT tax bill. Tax changes in 2018 increased the level of exemptions for the AMT, which should vastly decrease the number of taxpayers subject to this tax. For those who are still subject to AMT, this important tax creates a laundry-list of challenges, and it is a major reason why general solutions can run awry in many cases. Two examples clarify the most common.

1. In general, investors prefer steady gains that are taxed at the ostensibly lower long-term capital gains tax rate (i.e., a slow and steady approach). But investors who are subject to the AMT may not be able to reap the lower long-term tax rate and therefore may prefer higher returning, shorter-term investments because the marginal gain on the flat AMT tax will produce greater wealth, net of the AMT.
2. Certain tax-averse investments or vehicles lose their appeal for investors who are subject to the AMT. For example, an investor may wish to invest in municipal bonds which have some tax benefits. However, since the AMT is a flat tax on all income, an investor who is subject to the AMT is not able to reap any of these tax benefits and instead has only accepted uncompensated credit risk and a lower net return than might be achieved from investing in other bonds of similar credit quality.

Tax-Advantaged Accounts include various forms of savings, retirement, insurance wrappers, and offshore accounts that can add substantial after-tax value to the taxable investor. In essence, these accounts can allow for the tax-free compounding of gains over time.

Tax Characteristics of Mutual Funds

The tax characteristics of each class of investment are fundamental to the investment decision process for the taxable investor. In this section, we will highlight mutual funds since they are such a commonly used investment vehicle. We include a more exhaustive list of these characteristics and components in the appendix.

Mutual funds are a 'pass-through' entity, meaning net capital gains are passed through this vehicle to the end investor. Mutual funds can be comprised of investments in one or more of any publicly traded asset class(es). The pass-through nature has important implication for the taxable investor because it decreases their flexibility for when they would prefer gains to be harvested and dividends to be distributed. Since these vehicles work by pooling investors, when other shareholders seek redemptions this can create liquidations that result in involuntary capital gains. The takeaway for these vehicles are that the investor loses the ability to control when gains are realized, meaning that a much higher proportion is likely to be realized at the higher rate of a short-term capital gain as opposed to the lower long-term rate. These vehicles are also not well suited for tax-loss harvesting because the tax lots are only available for the fund and not for the underlying investments within their fund.

How much focus should tax aversion strategies receive?

Every investment made, taxable or otherwise, will come at the cost of another opportunity or risk. It is too easy to get drawn into tax-aversion strategy and lose sight of the larger investment picture and the goals of diversification, appropriate risk taking, and the impact of fees.

To get a sense of the size of the benefit that tax efficient strategies can bring to an investor we examined 26 open-ended equity mutual funds using after-tax objectives¹ and compared it to

¹ Full list in appendix.

the broad S&P 500 Index. The general findings about the characteristics of these strategies were not surprising given what we have stated above. First, the ability to offset losses for after-tax gains provides an incentive for these strategies to take more risk. As a group, these strategies exhibited about 140% more standard deviation than the broad index. Furthermore, looking at pre-tax returns, a tax-efficient strategy was about 3X more likely to experience a loss in any given year than the broad index. That said, utilizing the strategies we list above, the median manager is expected to outperform the broad index by 1% in after-tax returns.

The propensity of these strategies to take more risk highlights the importance of the manager research process when choosing a tax-efficient strategy. Indeed, a top 40th percentile manager or above will need to be selected for the expected after-tax benefit to beat the broad index benchmark. In practice, this means that due to more risk taking, a tax-efficient strategy will not provide an after-tax benefit above their own fees unless that manager is able to consistently perform above the 40th percentile.

The short answer to the question of this section is that it will depend on the size of the investor. For smaller investors, good record keeping, long holding periods, and a review of tax-advantaged strategies are appropriate. Any focus on more complex strategies is likely to add more in fees and a loss of diversification than the benefit gained.

As the size of the investor grows, this area deserves more and more attention. We recommend that this is approached in a manner such that a thorough analysis of the expected benefit vs. the associated costs is undertaken. The difficult part here is the accounting of costs and risks, because these come in many different forms. Taxable investors who seek concentration in tax avoidance strategies should consider the associated loss of diversification, the fees and other costs, as well as the factors that are driving those gains. In each case, if this is combined with customized and detailed record keeping, substantial gains are available. Constructing a strategy to best meet these complex and potentially conflicting goals must be done with care.

CONCLUSION

Investing in a taxable environment adds another layer of complexity to an already challenging process. While some common guidelines include 'invest for the long term' and 'invest in tax-sheltered vehicles like municipal bonds,' each investor must consider their particular situation as these general rules can often lead some investors astray. This is especially true because an investor can become overly focused on this area to the detriment of their absolute wealth.

While tax efficient investing is a very important concept, it must be weighed with the more traditional areas of the investment process and should not dominate the investor's attention. A successful implementation of a tax efficient strategy uses the tax characteristics across each type of investment and asset class. It will also employ several techniques to harvest value as a result of tax rules. Balancing these concerns with the traditional investment process requires an in-depth look at the individual situation of the investor and a careful analysis of the potential benefits and costs in terms of risks and opportunities.

APPENDIX

What are the characteristics of expected return in regard to taxation?

The expected return for different asset classes is driven by many different components that need special consideration with regard to tax. Therefore, in order to make the best possible decisions in this area, we must first isolate each of these components and then discuss them in the context of each asset class.

The components of expected return are as follows:

1. Ordinary income
2. Dividends
3. Long-term capital gain
4. Short-term capital gain
5. Asset class specific tax rates
6. Federal tax exemption
7. State/local tax exemption
8. Foreign income subject to withholding

How do different asset classes have different components of tax characteristics?

We will cover at a high level how each of the above characters are reflected in the returns of different asset classes. It is important to note that many other types of asset classes and investable opportunities exist such as collectibles, individual businesses, etc. but we will not cover those here.

Fixed Income: One may expect tax treatment to be the simplest for this asset class, but in reality the large variety of vehicles that this label comprises make it one of the most complex. Just for a few examples:

1. Zero-coupon bonds create annual tax liabilities for imputed but unpaid interest.
2. U.S. Treasury bonds are taxable at the federal level but not the state or local level.
3. Municipal bonds are generally tax exempt at the state level if you pay taxes in the state of the bond issuer.
 - a. A complex caveat is that in many cases while these bonds are technically tax exempt at the federal level they produce income that will be taxed by the Alternative Minimum Tax (AMT).
4. Mortgage-backed bonds pay a mix of taxable interest and untaxed principal amortization.

The mix of taxable levels (federal vs. state) as well as long- and short-term gains from payments and principal on different forms of income make this asset class one of the most diverse from a tax perspective.

Stocks: Stocks generate return from price changes and payments in the form of dividends. Dividends are taxed as ordinary income (i.e., taxed at the highest tax rate). If the stock has been held for over a year, the price accumulation will be taxed at the long-term capital gains rate, which is much lower. The short takeaway here from a tax perspective is that a low dividend, high price appreciation stock which has been held for a long period of time is a good investment from a tax perspective. Another characteristic of stocks is that they are volatile investments. While this characteristic must be tolerated for any investment in this asset class, a taxable investor can make volatility work in their favor through tax-loss harvesting.

Mutual Funds and Exchange Traded Funds (ETFs): These vehicles can be made up of investments in one or more of any publicly traded asset class(es). The important points of note for these vehicles are that the investor loses the ability to control when gains are realized, meaning that a much higher proportion is likely to be realized at the higher rate of a short-term capital gain as opposed to the lower long-term rate. These vehicles are also not well suited for tax-loss harvesting because the tax lots are only available for the fund and not for the underlying investments within their fund. In both cases, using a Mutual Fund or an ETF decreases investor flexibility.

Real Estate: How an investment in real estate is taxed can be vastly different depending on the purpose and vehicle. Personal residences are treated differently from vacation homes, but both have significantly different treatment from real estate that is held for investment purposes. Net rents are treated as ordinary income and long-term capital gains are taxed at a special intermediate rate, while recaptured depreciation² expenses are taxed at a third rate. Real Estate Investment Trusts (REITs) are treated similar to a mutual fund. Real estate partnerships are a pass-through entity that pay no tax themselves, but tax is paid by the investment partners and in some cases a tax-free exchange can be used.

Private Equity: Private equity investments (including venture capital, buyouts, etc.) are typically limited partnerships that are treated as pass-through entities. This means that no tax is paid at the Fund level, but rather profits are 'passed-through' to investors (limited partners) and taxed at the investor level. Due to the longer holding period of illiquid investments, the gains from these investments will often be taxed as long-term capital gains.

Hedge Funds: Another alternative investment that acts as a pass-through entity is hedge funds. In contrast to private equity partnerships, which have longer-term investment periods, hedge funds tend to engage in frequent trading or the use of derivatives, which results in short-term capital gains. To further complicate matters, there are special tax codes for gains from derivatives and/or if the fund treats their activities as "traders."

² The most common case of recaptured depreciation is in real estate. For example, a rental property can be depreciated on the investor balance sheet, keeping the interim tax bill lower. When that property is sold (if sold for more than it was purchased) that depreciation is 'recaptured' in the sale and the realized gain must be taxed.

LIST OF TAX-EFFICIENT STRATEGIES EXAMINED

T Rowe Price Tax-Efficient Equity Fund
AQR Tax-Managed Small Cap Momentum Style Fund
Eaton Vance Tax Managed Small Cap Growth Fund
Dreyfus Tax Managed Growth Fund
Russell Tax-Managed U.S. Mid & Small Cap Fund
Vanguard Tax-Managed Capital Appreciation Fund
Eaton Vance Tax-Managed Growth Fund 1.1
DFA Tax-Managed US Equity Portfolio
Eaton Vance Tax-Managed Growth Fund 1.2
JPMorgan Tax Aware Equity Fund
DFA Tax-Managed US Small Cap Portfolio
DFA Tax-Managed US Targeted Value Portfolio
BNY Mellon Tax-Sensitive Large Cap Multi-Strategy Fund
Vanguard Tax-Managed Small-Cap Fund
Russell Tax-Managed US Large Cap Fund
Eaton Vance Tax-Managed Value Fund
SEI Tax-Managed Small/Mid Cap Fund
DFA Tax-Managed U.S. Marketwide Value Portfolio II
DFA Tax-Managed US Marketwide Value Portfolio
SEI Institutional Managed Trust - Tax-Managed Large Cap Fund
AMG FQ Tax-Managed US Equity Fund
SEI Institutional Managed Trust - Tax-Managed Managed Volatility Fund
Bridgeway Tax-Managed Small-Cap Value Fund
NexGen US Dividend Plus Tax Managed Fund

REFERENCE MATERIALS

- i - Apelfeld, Roberto, Gordon B. Fowler, Jr., and James P. Gordon, Jr. 1996. "Tax-Aware Equity Investing." *Journal of Portfolio Management*, vol. 22, no. 2 (Winter): 18-28.
- Apelfeld, Robert, Michael Granito, and Akis Psarris. 1996. "Active Management of Taxable Assets: A Dynamic Analysis of Manager Alpha." *Journal of Financial Engineering*, vol. 5, no. 2 (June): 117-146
- Arnott, Robert D., Andrew L. Berkin, and Gia Ye. 2001. "Loss Harvesting: What's It Worth to the Taxable Investor?" *Journal of Wealth Management*, vol. 3, no. 4 (Spring): 10-18.
- Constantinides, George M. 1983. "Capital Market Equilibrium with Personal Tax." *Econometrica*, vol. 51, no. 3 (May): 611-636.
- Dammon, Robert M. 1988. "A Security Market and Capital Structure Equilibrium under Uncertainty with Progressive Personal Taxes." *Research in Finance*, vol. 7: 53-74
- Dammon, Robert M., Chester S. Spatt, and Harold H. Zhang. 2004. "Optimal Asset Location and Allocation with Taxable and Tax-Deferred Investing." *Journal of Finance*, vol. 59, no. 3(June): 999-1038
- Gordon, Robert N., and Jan M. Rosen. 2001 *Wall Street Secrets for Tax-Efficient Investing*. Princeton, NJ: Bloomberg Press.
- Horan, Stephen M. 2005. *Tax-Advantaged Savings Accounts and Tax-Efficient Wealth Accumulation*. Charlottesville, VA: Research Foundation of CFA Institute.

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