Five Steps to Optimizing After Tax Investment Returns for New York City Tax Payers

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hen investing, taxes matter more than you think and more than you would like. For wealthy New Yorkers, it just got worse as the state and local tax burden, one of the highest in the country at 12.7%, lost the bulk of its deductibility against federal taxes. Adding together federal, state, and Obamacare (Net Investment Income; "NII") tax, translates into a maximum rate for ordinary income of 54% and a maximum rate for long-term capital gains of 37%. At the same time, projected asset class returns are declining. Accordingly, we believe optimization of after-tax investment returns has become an even more critical element of portfolio management for taxable investors.

This white paper summarizes our learning from many years of research and experience in optimizing after-tax return for US taxpaying clients. We start with an explanation of how taxes impact typical portfolios and then we lay out our five-step process for optimizing after-tax investment returns.

Partners Capital was founded 18 years ago to bring what we believe to be the most advanced institutional investment approach to our clients. The foundation of this approach (often referred to as "the endowment model") is multi-asset class diversification. Many "alternative" asset classes are relatively tax inefficient. "Alternatives" are often riddled with tax complexities that must be carefully understood.

While many US investors have embraced the endowment model, we find they have not always properly accounted for these tax inefficiencies. Many clients we encounter in New York City have taken the attitude that after-tax returns will "all come out in the wash" by targeting the highest pre-tax returns, which is simply untrue. For example, at the extreme you could find yourself paying over 70% taxes on certain hedge funds classified as "investor status" as you pay taxes on returns gross of management fees (i.e. management fees are not deductible).

Careful optimization of after-tax performance in an endowment-style portfolio increases annual post-tax

returns nearly 30% (+1.2% annual incremental post-tax returns) compared with what could be achieved by ignoring taxes and optimizing pre-tax performance. Specifically, we project a 7.5% endowment-style return, typical for today's sophisticated investors focused on pre-tax results, will be taxed at 43%, delivering an after-tax return of 4.3%. When we set out to maximize post-tax returns, we believe private clients can achieve a 5.5% after-tax result¹.

This incremental return approaches the significance of the full +1.8% of total annual outperformance (alpha) generated by leading institutional investors such as the Yale endowment. Without a clear tax optimization plan, all the effort that goes into generating pre-tax outperformance through sophisticated investing can be erased by ignoring taxes.

Our goal is to maximize expected after-tax results from a multi-asset class portfolio with a relatively high level of certainty. To do this, we have developed the following five Golden Rules of Tax Efficient Investing:

- 1. Focus on and measure after-tax performance
- 2. Increase portfolio risk to reflect the dampening effects of taxation
- 3. Allocate across asset classes based on after-tax returns, volatility and correlations
- 4. Select asset managers based on a range of after-tax expected returns
- 5. Utilize tax efficient structures

In Figure 1, we more fully define the five Golden Rules and their contribution to the potential improvement in post-tax returns.

Note: Partners Capital Investment Group, LLP is not a tax adviser. Clients should seek independent professional advice on all tax matters. Please see the important disclaimers at the back of this document for further detail.

¹ The return estimates are based upon certain assumptions which should not be construed to be indicative of actual events that will occur. There is no assurance that the performance presented will be achieved. Please see important Disclaimers at the end of this material.

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Figure 1: Summary of Five Golden Rules of Tax Efficient Investing

| Golden Rule | Key Analytical Insights | Specific Action Implications | Incremental Annualized Return from Optimization |
|---|--|---|--|
| Focus on and measure after-tax performance | a) Effective tax rate on different investments varies hugely, from 60%+ in the case of investor status active funds to below 30% in the case of capital gains dominated strategies with long holding periods. b) There is a complex trade-off between alpha and tax efficiency (e.g. equities are tax efficient, but difficult to outperform). | Always report on pre and post-tax portfolio performance. Estimate the long term expected post-tax return on each asset class and asset manager as the key inputs of portfolio construction. | NA |
| 2 Increase portfolio risk to reflect the dampening effects of taxation | a) The more equity-like risk the overall portfolio carries, the higher its tax efficiency. b) Taxes dampen portfolio volatility; therefore, tax-paying portfolios can afford higher equity-like risk. | Set your risk budget based on maximum tolerable after-tax value drawdown; e.g. a 2-standard deviation decline of 13% pre-tax corresponds with an 60% equity-like risk budget, but this is likely to be an 7% decline after tax. A taxable investor that can withstand a 13% after tax decline can afford a near 100% equity-like risk budget. We acknowledge that most will be uncomfortable with a substantially higher risk level, particularly given current equity market valuations therefore we recommend only increasing the risk-level to 80%. | +0.5% |
| Allocate across asset classes based on after-tax returns, volatility and correlations | a) Portfolios should be optimized based on expected long-term post-tax (not pre-tax) asset class returns. b) In general, the most tax-efficient asset classes include long-only public equities, private equity, and property. c) Strategies with lower correlation to traditional markets are usually less tax efficient. | Employ multi-asset class portfolios but bias to Equities and Property. Limit exposure to Hedge Funds. Increase the illiquidity budget which benefits from tax deferral, particularly Private Equity and Private Equity Real Estate. Swap to tax-efficient options within asset classes (e.g. Munis vs. Treasuries and High Yield Munis vs. corporate High Yield bonds). | +0.3% |
| 4 Select asset managers based on a range of after-tax expected returns | a) Know the likely future pattern of ordinary income vs capital gains. b) Deferring realizations within portfolio (low trading) allows compounding of gross of tax returns. c) There are many nuances to individual fund tax treatment including deductibility of management fees, treatment of futures, and foreign taxes. d) There are cases where manager alpha does compensate for high taxes; but expected after-tax returns must be based on probabilistic assessment of downside, base, and upside case for alpha. | Select managers based on estimated after tax returns for each manager based on ordinary income ("OI") and long-term capital gains ("LTCG") composition and detailed rules around tax treatment of individual instruments and structures. For LLCs/LLPs, review K-1s to estimate normative split of OI vs LTCGs and distinguish between investor vs. trader status for management fee deductibility and Sec 1256 60/40 LT/ST gains treatment for futures within look-through vehicles (LLPs, LLCs). Know how structures affect taxation (e.g. mutual funds, ETFs, MLPs, LLPs, LLCs, etc.). Consider Qualifying Electing Fund Passive Investment Corporations ("QEF PFICs") as alternatives to investor status funds | +0.4% |
| 5 Utilize tax efficient structures | a) Structures taxable investors should consider are: Private Placement Life Insurance ("PPLI") Charitable Lead Annuity Trusts ("CLATs") Grantor Retained Annuity Trusts ("GRATs") Donor Advised Funds ("DAFs") | PPLI is a valuable tool for sheltering investments with the highest tax-cost (either through tax-inefficiency or high return). Incorporate legal structures to improve wealth transfer, charitable goals, and other tax factors. | NA |
| Total | | | +1.2% |



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Figure 2: US Taxable Client Checklist

Individual tax paying clients should review their portfolios across the following key areas to improve tax efficiency.

| Strategy Area | # | Action |
|------------------------|--------------------|---|
| Increase Risk Level | 1 | Increase equity like risk to a level that reflects after-tax volatility tolerance because taxes dampen after-tax volatility |
| Optimize asset | 2 | Bias toward Private Equity, Real Estate, and long-hold public equities for long-term capital gains |
| | 3 | Avoid TIPS given the phantom income which is taxed. Consider synthetic TIPS using Munis + CPI swaps |
| | 4 | Bias away from Private Debt and Absolute Return, only using the highest-conviction managers |
| | 5 | Consider direct property holdings for Core Property exposure to enable 1031 exchanges that prevent taxes on property gains |
| allocation | 6 | High yield munis should be used for their tax efficiency, duration, and lack of correlation over fixed income and traditional credit assets |
| | 7 | Employ futures where possible for high-yielding / low tax efficiency asset classes. Commodity futures are also tax-efficient for the equity-like risk taken |
| | 8 | Avoid mutual funds in favor of ETFs, particularly those with large embedded gains. Mutual funds may pass through realized gains (that belong to other investors) annually with distributions whereas an ETF is taxed as an individual stock with long term capital gains when sold. Be aware that some ETFs generate K-1s so check this to prevent any unexpected tax complexity |
| | 9 | Use tax loss harvesting strategies for capital call management, particularly in high interest rate environments when value of deferral is highest |
| | 10 | Pursue long-hold direct equity strategies/structures (e.g. Co-invest) given higher tax-efficiency and similar alpha potential compared with higher turnover, higher fee Public Equities managers |
| Improve | 11 | Check for new alternatives that can be uncorrelated and tax efficient (e.g. catastrophe insurance, appraisal rights, life settlements, and drug trial financing |
| Manager Tax | 12 | Seek tax-efficient Private Debt opportunities such as Freddie Mac low-income housing securitizations |
| Efficiency | 13 | Look for hedge fund strategies that employ futures which receives 60% LTCG treatment even if held <1 year |
| | 14 | K-1s: Avoid "Investors status" funds unless extremely tax-efficient otherwise (e.g. high proportion of LTCGs). Investor status funds incur tax charges on gains gross of management fees resulting in very high effective tax rates. "Trader status" funds, in contrast, are taxed on net of management fee returns. It is critical to estimate the different expected after tax returns incorporating assumptions about mix of ordinary income vs. LTCGs and the effect of management fee deductibility for every fund issuing a K-1 |
| | 15 | K-1s: In instances where managers are considered investor status (vs. trader), go for high incentive fee options (e.g. our Japanese fund manager with 0% mgmt. fees and 40% perf fee over TOPIX) |
| | 16 | K-1s: Look for Absolute Return funds with a 475 election (all gains treated as realized Ordinary Income, but losses are not subject to limitation, no wash sale, and expenses are deductible) |
| | Tax Planning | |
| | 17 | Before selling liquid investments eg. stocks, ETFs, and mutual funds, analyze cost basis and holding period. Defer sales to long-term (>1 year) where possible. Optimize lot selection at the custodian level where possible (Schwab has an automatic setting for this; ensure it is selected). |
| | 18 | Conduct tax loss harvesting actions at the end of each year |
| | 19 | Review upcoming year-end mutual fund tax distributions in Nov-Dec. When the distribution exceeds your taxable gain, consider selling and migrating to an alternative. Be careful to avoid a wash sale (buying something "substantially identical") |
| Additional | Tax Structuring | |
| Strategies | 20 | Consider Private Placement Life Insurance (PPLI) in the right circumstances. It is a good means of sheltering high returning and tax-inefficient asset classes (e.g. private equity, private debt and hedge funds) |
| | 21 | If PPLI is too restrictive, Private Placement Variable Annuity (PPVA) is more flexible, but is a deferral mechanism and should be used for higher-returning investments expected to be held for long periods of time (e.g. 7%+ returns for >10 years) to be worth the admin cost |
| | 22 | Work with attorneys and accountants to organize charitable planning trusts (e.g. CLATs and DAFs) or wealth transfer trusts (e.g. GRATs) |
| | Other | |
| | 23 | Look at passive income. If large and predictable passive income exists, consider buying tax credits in renewables or historical rehab, which can generally be acquired for 85c/\$ and offset the tax due on a 1:1 basis. This reduces the tax liability on these earnings by ~15%. |

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How Taxes Presently Impact New York City Tax Payer Portfolios

Over the past ten years tax rates have climbed and are taking an increasingly large share of investment portfolio gains. At the same time, slow economic growth, quantitative easing and low interest rates worldwide have decreased forward looking returns across asset classes. The result is an environment where post-tax take-home investment gains have eroded. When considering inflation, the impact on real after-tax returns is even more dramatic.

At the federal level, tax rates for short-term capital gains are up from 35% to 40.8% and long-term gain rates have risen from 15% to 23.8%, including the 3.8% Net Investment Income (NII) "Obamacare" Tax. While the 2017 Tax Cuts and Jobs Act decreased the top federal tax rate from 39.6% to 37%, we expect most wealthy New York City income earners will see minimal benefit or even an increase in their effective rate due to reductions in allowable deductions and the \$10,000 cap on state and local tax (SALT) deductions.² This is particularly hard-hitting as New York City residents face one of the highest state and city tax rates in the country at 12.7%. For example, for New York City tax payers in the top state and federal brackets for annual income saw their tax rate on income increase by 12.0% from 2008 to 2018 given the increase in state and city taxes from 2009-2012 and the cap on SALT deductions from federal taxes in 2017.

When you put all these taxes together for New York City residents, as seen in Figure 3, short-term capital gains, ordinary income, and non-qualified dividends are taxed at a maximum rate of 53.5%. Long-term capital gains and qualified dividends are taxed at 36.5%; hence a 17% spread between short-term and long-term capital gains treatment. This means a portfolio implementing the asset allocation of a typical endowment-style portfolio will give away almost 44% of gains in taxes, inclusive of the state and city levy, up from 31% taxes 10 years ago, as seen in Figure 4. The tax increase has occurred coincident with an environment where expected returns have fallen across asset classes, exacerbating the impact.

We estimate that today's typical endowment-style multi-asset class portfolio has an expected pre-tax return of 7.5%³. This is down from 9.5% annualized pre-tax return ten years ago, as shown in Figure 4. The decrease in returns, in conjunction with higher tax rates means that after-tax annualized results have declined over 35%, from 6.6% in 2008 to 4.3% today, as shown in Figure 3. Subtracting inflation of 2%, real after-tax results have been cut in half, from 4.6% to 2.3%

Figure 3: Tax Rates for Top Tax Bracket

| State | Туре | Federal | ACA Surcharge | State + City taxes | Effective Tax Rate |
|----------|-------------------------------------|---------|------------------|-----------------------|-----------------------|
| Federal | STCG / Ord Inc / Non-Qualified Divs | 37.0% | 3.8% | | 40.8% |
| Only | CG / Qualified Dividends | 20.0% | 3.8% | | 23.8% |
| New York | STCG / Ord Inc / Non-Qualified Divs | 37.0% | 3.8% | 12.7% | 53.5% |
| City | CG / Qualified Dividends | 20.0% | 3.8% | 12.7% | 36.5% |



² The removal of the SALT deduction may increase taxes for individuals previously subject to AMT (Alternative Minimum Tax), as they may now see a higher overall tax-bill than their previous tax-bill including AMT. For ultra-high net worth individuals, most were not paying AMT to begin with, therefore losing the SALT deduction has a direct impact as illustrated in the body of this document.

³ The return estimates are based upon certain assumptions which should not be construed to be indicative of actual events that will occur. There is no assurance that the performance presented will be achieved. Please see important Disclaimers at the end of this material.

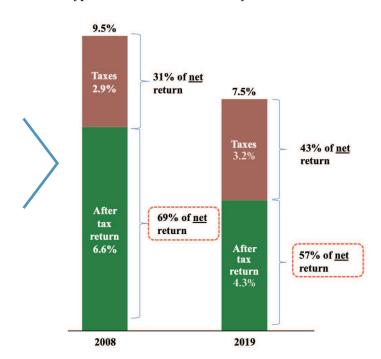
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Figure 4: Pre- and Post-Tax Portfolio Returns for a New York City Tax Payer Implementing an "Endowment-Style" Portfolio

Federal + State and City Tax Rates, Then and Now⁴

| | 2008 | 2019 |
|--|-------|-------|
| Short Term Capital Gains | 41.5% | 53.5% |
| Long Term Capital Gains | 23.5% | 36.5% |
| Taxable Endowment Portfolio Tax Rate | 30.7% | 43.0% |

Typical Taxable "Endowment-Style" Portfolio Returns



Below, we lay out our five golden rules for optimizing after-tax returns short of leaving New York City and moving to no or low taxing states such as Nevada, Florida and Texas.

Golden Rule #1 – Focus on and Measure After-Tax Performance

Without a deep understanding of a portfolio's tax consequences, it is unlikely that investors will do what they need to do to preserve and grow the base of assets through maximizing real after-tax returns.

It is not easy to measure after-tax returns. For example, there are issues with the reporting and calculation time lag, the interaction of investment taxes with taxes on earned income or non-financial assets outside the portfolio, and a range of other factors. Despite these challenges, we believe it is possible to arrive at useful forward-looking estimates of tax impact on various investments and on your overall portfolio.

Figure 5 shows a typical summary page for one of our taxable New York City clients, reflecting both the pre-tax and hypothetical post-tax return. We build up and report expected portfolio tax estimates through an analysis of the expected tax rate on the underlying investments in the portfolio. These estimates are used to adjust the pre-tax return on a statement to create a hypothetical post-tax return⁵. In the sections that follow, we explain more thoroughly how we arrive at these estimates.

At Partners Capital, the summary performance report, as shown in Figure 5 takes asset class tax rates from the sum of our estimates of each underlying asset manager's likely tax treatment. Any approved asset manager is analyzed for tax treatment (based on review of past K-1s and similar information) and we log the expected tax treatment of income and gains in our systems. We can compare the aggregate tax rate and expected after-tax returns to a passive portfolio

⁴ For the information shown regarding 2008 tax rates, the analysis assumes that long-term capital gains are the only source of taxable income. Additionally, the phase-out of itemized deductions has not been reflected in the rates shown for 2008.

⁵ Hypothetical post-tax returns do not represent actual trading. Actual post-tax returns may differ materially from those reflected. There is no guarantee that the hypothetical returns assumptions presented will be realized. Please see important Disclaimers at the end of this material.

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Figure 5: Partners Capital After-Tax Portfolio Statement Summary

Performance Overview Client Name

Quarterly Investor Summary Statement Quarter Ending 30 June, 2019 (unaudited)

| | | | YTD (Jan - Jun 19) Asset Class | |
|--|---------------|---|--------------------------------------|---------------------------------|
| Asset Class (Client Currency) | 30-Jun-19 | Hypothetical Effective Federal + State + City Tax Rate ¹ | Actual Pre-Tax Return | Estimated Post-Tax Return |
| Fixed Income | \$2,098,783 | _ | 5.6% | 5.6% |
| Credit | \$12,913,563 | -57% | 5.6% | 2.4% |
| Absolute Return | \$21,407,863 | -52% | 1.5% | 0.7% |
| Hedged Equities | \$20,616,807 | -45% | 15.8% | 8.7% |
| Global Equities | \$64,787,961 | -38% | 18.2% | 11.3% |
| Cash | \$4,053,591 | | NA | NA |
| Total Liquid Portfolio | \$125,878,568 | | | |
| Private Debt | \$2,538,747 | -53% | 4.2% | 2.0% |
| Private Equity | \$6,610,206 | -38% | 6.0% | 3.8% |
| Private Equity Real Estate | \$2,555,069 | -39% | 9.0% | 5.5% |
| Total Illiquid Portfolio | \$11,704,022 | | | |
| Total Portfolio (Gross of Partners Capital fees) | \$137,582,590 | -41% | 12.3% | 7.4% |
| Partners Capital Fees | | | -0.2% | |
| Total Portfolio After Tax Return: Net, hypothetical tax rate ¹ | \$137,582,590 | | 12.1% | 7.2% |
| Summary of Absolute Dollar Amounts | | | | |
| Actual Pre-Tax Total Portfolio YTD Gain or Loss | | | | \$16,664,029 |
| Tax Rate: Net, hypothetical Effective Tax-Rate ¹ | | | | -41% |
| Estimated Taxes on Total Portfolio YTD Gain or Loss: Net, hypothetical expected taxes to be paid ¹ | | | | -\$6,756,062 |
| Estimated Net After-Tax Portfolio YTD Gain or Loss: Net, hypothetical expected taxes to be paid ¹ | | | | \$9,907,968 |

Notes:

The cash benchmark which was previously blank (unassigned) has been updated to the 3 Month T Bill return (US Treasury Bills 3 Months TR USD). This change became effective January 1, 2018.



Statement: Consolidated Report

^{1.} Partners Capital is not a tax-advisor and does not provide tax advice. The estimates above are estimates based on Partners Capital internal research and are not a guarantee of the actual tax-rate experienced.

^{2.} Your QTD and YTD total portfolio returns are reported net of all Partners Capital fees. This includes fees for the preceding two quarters collected in Q1 and Q3 on a cash basis, and all current period accrued fees.

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to ensure there is enough projected alpha to offset the higher tax rate of an endowment-style approach. For example, if a passive portfolio is expected to deliver a 5% return with a 25% tax rate (3.8% after-tax) and an active portfolio is expected to deliver a 7.5% return with a 43% tax rate (4.3% after-tax), then we know that any tax inefficacies are offset by superior active manager performance.

Using these estimates, we can isolate asset classes where investment managers are more or less efficient than their asset classes (represented passively) and put a spotlight on which allocation decisions or investments are contributing the most and least to after-tax returns for the overall portfolio.

Golden Rule #2 – Increase Portfolio Risk to Reflect the Dampening Effects of Taxation

Thinking of your risk budget in terms of maximum after-tax drawdown or volatility may point to increasing your overall portfolio risk level. Our tax paying clients with a true long-term investment horizon are taking on approximately 20% higher risk once they examine risk in after-tax terms. This type of risk increase (e.g. going from 63% equivalent equity risk to 80%) is expected to add +0.5% to after-tax results, moving annual returns from 4.3% to 4.8%⁶.

The risk budget in a portfolio is one of the most important decisions that investors make. Traditionally, taxable investors focus on pre-tax return volatility and drawdown levels to set risk budgets. Taxation has a volatility-reducing effect on returns in both up and down markets. Most investment portfolio value declines manifest themselves in the form of realized or unrealized capital losses, rather than ordinary income losses. In the event of a capital loss in a given year, the portfolio will carry a loss forward into the following year, which is used as a credit against future gains. This credit dampens the actual after-tax downside experienced by creating an asset to be used in the future. We believe that taxable investors should focus on post-tax volatility and drawdowns to establish their risk budgets.

Investors generally set the maximum amount of risk they want to take in their portfolios (i.e. their "risk budget") in terms of the maximum decline in portfolio value or drawdown at any point in time or over any given period – usually one year. One way to estimate this maximum drawdown is to think about how investment returns have varied in the past as measured by the standard deviation or volatility of their returns. Historically, annual public equity market return volatility has averaged around 16% with an average return of 9%, therefore, we would expect annual returns for two of three years to fall between -7% and 25%, if the returns were normally distributed. We characterize the maximum drawdown tolerable for an investor as a two-standard deviation move **below** the expected return, which we would expect to happen once in 40 years (and two standard deviation **above** the expected return once in 40 years). So, thinking just about public equities, with most experts forecasting future public equity returns of 6% per annum, the two standard deviation downside outcome would be a -26% decline in value (6% expected return minus 2 x 16%). Most investors are not comfortable with the prospect of a -26% decline and set risk budgets below 100% equity-like risk, whether they pay taxes or not. Assuming an average tax rate of 43%, the comparable two-standard deviation aftertax decline of public equities is -14.6% (3.4% expected after-tax return minus 2 x 9%). Clearly a maximum drawdown of -14.6% is more acceptable than a maximum drawdown of -26%, which underscores the importance of setting portfolio risk budgets in terms of maximum after-tax drawdowns.

We use Figure 6 to make the case for a tax paying investor to take greater risk than a typical nontaxable endowment portfolio. We use a measure of equity like risk to discuss risk budgeting – specifically equivalent net equity beta (ENEB). Most of us can relate to what the risk of a pure 100% public equity portfolio would be, especially if we believe the historical average annual volatility of 16% to be a useful guide. As a starting frame of reference, the average non-taxable endowment investor in the US takes on about 63% of the risk of a pure equity portfolio or a 63% ENEB. As shown in Figure 6, this translates into a theoretical maximum drawdown of -12.5% in a given year. For taxable investors comfortable with a maximum theoretical post-tax drawdown of -12.5%, the portfolio's equity-like risk can be hypothetically increased to 100% assuming an effective tax-rate of

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Figure 6: Pre- and Post-Tax Portfolio Returns, Volatility and Risk Level

| Example Portfolio | Expected Portfolio Return | Equity Volatility | Portfolio Volatility (Annual SD) | Maximum Drawdown | Effective Tax Rate |
|---|---------------------------------|----------------------|--|---------------------|-----------------------|
| Pre-tax Normal institutional portfolio | 7.5% | 16.0% | 10.0% | -12.5% | 63% |
| Post-Tax Normal institutional portfolio | 4.3% | 9.1% | 5.7% | -7.1% | 63% |
| Pre-Tax Returns & Vol of higher vol portfolio | 9.7% | 16.0% | 16.0% | -22.2% | 100% |
| Post-Tax Return and Vol at Pre-tax Volatility | 5.5% | 9.1% | 9.0% | -12.5% | 100% |
| Pre- Tax Return and Vol at 80% ENEB | 8.6% | 16.0% | 12.8% | -17.1% | 80% |
| Post-Tax Return and Vol at 80% ENEB | 4.8% | 9.1% | 7.3% | -9.8% | 80% |

4.3%. If investors truly set their personal risk budgets based on after-tax drawdown potential, they would be raising risk budgets as tax rates rise. We rarely see this.

In our tax-optimized asset allocation for US tax payers, we recommend 80% equity-like risk, which is ~20% higher than the typical tax-exempt endowment-style asset allocation which has around 63% equity-like risk. While risk budgets for large taxable family offices and ultra-high-net worth individuals vary considerably, the mean risk level we observe most often is very close to this 63% level (usually sitting between 50-70% equitylike risk). While simply adjusting a typical institutional portfolio risk level for the effects of taxes would point to a risk budget of something close to 100%, we find that our typical tax-paying clients usually stop short of moving their portfolios to the full risk level required to equate pre- and post-tax drawdowns. We chose 80% to acknowledge the fact that taxes reduce the volatility of investment returns suggesting that higher risk is appropriate for taxable investors. Offsetting this, however, we need to reflect the fact that most taxable individual investors do not have the same long-time investing horizon and same risk appetite as typical nontaxable institutional investors. Hence, we use an equitylike risk budget of 80% to illustrate the portfolio return impact of moving up the risk spectrum from where we typically see the wealthiest tax-paying individuals.

Using our models for optimal asset allocation, which optimize for the best risk-adjusted after-tax returns, we estimate that an increase in risk budget from 63% to 80% adds 0.5% to the expected multi-asset class portfolio after-tax return, increasing it from 4.3% to 4.8% as shown above.

Golden Rule #3 – Allocate Across Asset Classes Based on After Tax Returns, Volatility and Correlations

Optimizing a multi-asset class portfolio for a higher level of equity-like risk improves after-tax results by an incremental +0.3% bringing after-tax returns from 4.8% to 5.1% ⁷.

The most basic asset allocation optimization model is the Markowitz mean variance optimization model which has three key inputs for each asset class: expected return, standard deviation of returns and correlations of returns with other asset classes. At Partners Capital, we run these models as one input to a more judgemental asset allocation process. But, critically, we build tax-paying client portfolios using a totally different set of inputs for these three factors by adjusting them for after-tax returns. After-tax returns are of course lower, but they decline by varying



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amounts depending on tax efficiency of any given asset class. Figure 7 shows our projected pre- and post-tax returns by asset class incorporating both federal, New York state and city taxes. The tax rates are derived from the typical mix of ordinary income vs long term capital gains for each asset class applied to expected future average returns including a modest amount of expected outperformance or alpha from active management. The tax rates applied to each asset class are what we see as the typical manager's tax treatment, not the most tax efficient manager or strategy within each asset class. Those savings are discussed below under Golden Rule #4 which focuses on asset manager selection as a source of further improvement of after-tax returns.

To improve the overall tax efficiency of our taxable portfolios, we bias them toward tax advantaged asset classes such as public equities, private equity and real estate. In addition, we consider municipal bonds in place of Treasuries and structured inflation-linked municipal

bonds (municipal bonds plus a return swap linked to the Consumer Price Index) in place of traditional inflation-linked bonds. Conversely, we avoid tax-inefficient asset classes with low manager outperformance (alpha) potential such as liquid credit and are selective on absolute return and hedged equities.

The least tax efficient asset classes are yield-based including liquid credit, inflation-linked bonds, traditional fixed income (such as Treasuries) and private debt because the income stream is subject to the higher ordinary income tax rates. Absolute Return strategies are usually highly tax-inefficient as well given the high frequency of trading inherent to many uncorrelated strategies. Hedged Equities are marginally better (49.6% effective tax rate) but suffer from high turnover leading to mostly short-term capital gains which are taxed at ordinary income tax rates.

Both liquid public equities and private equity which are held (and not realized) for long periods of time have low effective tax rates due to the benefits of

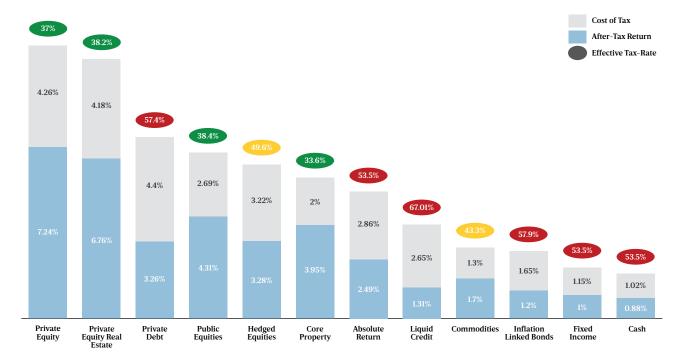


Figure 7: Expected Returns and Tax Rates by Asset Class for New York City Tax Payers

Notes

- 1. Illustration based on Partners Capital research.
- 2. Partners Capital is not a tax advisor. Please consult your tax advisor for all tax related questions.

Five Steps to Optimizing After Tax Investment Returns for New York City Tax Payers

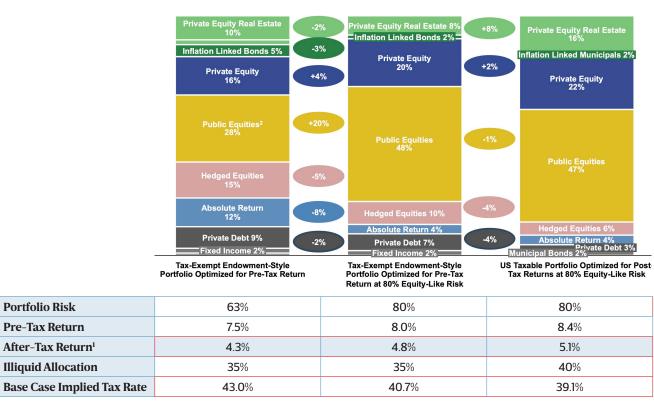
deferral, as unrealized gains accumulate tax free and returns compound on those unrealized gains. Property (particularly core property) is among the most tax efficient asset class with a 33.6% expected tax rate. This is primarily because depreciation, capex and interest expenses shield ordinary income generated by tenants, allowing investors to defer taxes to the point of sale, at which point they are recaptured at a reduced rate (38%) up to the property's cost basis. Gains beyond the cost basis are fully deferred and taxed at long-term capital gain tax rates. Taxes on some property gains can be completely avoided in Section 1031 exchanges where you sell an investment property and reinvest the proceeds from the sale within certain time limits in a property or properties of like kind and equal or greater value.

Below in Figure 8 we compare our recommended non-taxpaying institutional client portfolio with an equity-like

risk budget of 63% to the optimal asset allocation for a non-tax paying client with an equity-like risk budget of 80%. You can see that this adds 0.50% to the expected return as discussed under rule #2 above. The third bar (far right) then incorporates the after-tax returns of each asset class to shift from what is an optimal mix for a non-taxpayer to what is optimal for a New York City tax paying investor. It emphasizes tax efficient asset classes such as private equity, global equities and real estate, which comprise three-quarters of the asset allocation, while reducing investments in private debt, absolute return, and inflation linked bonds.

Relative to the higher risk asset allocation optimized for non-taxpaying investors, the higher risk tax optimized portfolio for New York City tax payers results in a 39.1% effective tax rate compared to a 40.7% effective tax rate, adding +0.3% to after-tax returns (from 4.8% to +5.1%).

Figure 8: The Optimal Tax-Exempt Asset Allocation Compared the Optimal Taxable Asset Allocation



Notes



^{1.} Expected return calculated from the probability weighted Partners Capital 2019 Insights asset class and beta return assumptions. Expected returns presented are model returns that do not reflect actual trading. Actual returns may differ materially from those reflected. There is no guarantee that the returns presented will be realized. Please see important Disclaimers at the end of this material.

^{2.} Global Equities allocation assumes 86% allocated to Developed Market Equities and 14% allocated to Emerging Market Equities

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Golden Rule #4 – Select Asset Managers Based on a Range of Expected After-Tax Returns

The legal structures and strategies of individual asset managers have a material impact on after-tax returns. By appropriately analyzing the tax consequences of alternative asset managers and selecting asset managers based on their expected after-tax returns, it is possible to further improve after tax returns by +0.4% to 5.5%8.

We find that few investors select managers based on their expected after-tax returns relative to their peer group. Tax advisors know how taxes affect different asset managers, but they don't know how to estimate expected pre-tax returns. Investment advisors should be good at estimating an asset manager's expected pre-tax return in the future, but most do not understand the likely after-tax outcome. At Partners Capital, we work with tax advisers to apply their knowledge on taxes to our knowledge on expected pre-tax returns to arrive at the best view for selecting asset managers. With this knowledge, we put in the effort to understand each asset manager's tax profile as defined below.

Vehicle Type and Legal Structure-Based Tax Savings

Investments come in the form of directly held public securities, futures and options and directly owned private companies, private debt and private property. Most large investors invest much of their capital via third party managers or instruments including mutual funds (Reg 40 Act funds), exchange traded funds (ETFs), real estate investment trusts (REITs), Master Limited Partnerships (MLPs) and look-through vehicles including limited liability companies and partnerships (LLCs and LLPs), to name a few. Investments can be on-shore or off-shore.

Each of these will have a different mix of long-term capital gains, short-term capital gains, qualified dividends and other ordinary income and may be taxed on a look-through or non-look through basis. So it is complicated, but it is worth the effort to know how each are taxed.

Four of the most important concepts in understanding investment vehicle tax efficiency are:

- 1. The normative mix of long-term capital gains, short-term capital gains, qualified dividends and other ordinary income.
- 2. Realized versus unrealized gains the benefit of tax deferral from long hold periods
- 3. Investor vs. Trader status LLCs or LLPs determines deductibility of fund management fees and other expenses
- 4. Gains on futures / Section 1256 gains where all gains are considered fully realized (annually) with 60% long-term and 40% short-term capital gains treatment

Normative mix of LTCGs, STCGs, qualified dividends, other ordinary income and deductible expenses

Most investors know that their tax advisors need to closely examine past form 1099s for mutual funds and K-1s for look-through vehicles to estimate the future taxes on such investments. K-1s are more complicated with gains and income spread throughout the document and varying from one year to the next. It is important to examine at least three years of K-1s to arrive at reasonable assessments of historical tax charges as a basis for forecasting the future.

2. Realized versus unrealized gains – the benefit of tax deferral

Portfolios that derive their return from capital gains, which are only paid on realization, benefit from the impact of deferral. Deferral is a highly effective means of tax rate reduction. While a powerful tool, tax deferral is not tax elimination except in the case of holding beyond one year where long-term gains taxation is -17% lower than short-term gains taxation.

When you defer gains by not selling securities in any given year, the IRS, in effect, lets you keep the taxes which will eventually be owed and accrue income and gains on gross-of-tax assets at work. In this way, deferral reduces the effective tax rate on long-term gains by allowing multi-year compounding of untaxed returns. As shown in Figure 9 below, the impact of deferral is even more pronounced when looking through the lens of paying short-term capital gains on most of the pre-tax returns, where the benefit to only paying long-term capital gains taxes on 2% of the pre-tax annual return translates to a 17% lower effective tax rate over 10 years.

⁸ The return estimates are based upon certain assumptions which should not be construed to be indicative of actual events that will occur. There is no assurance that the performance presented will be achieved. Please see important Disclaimers at the end of this material.

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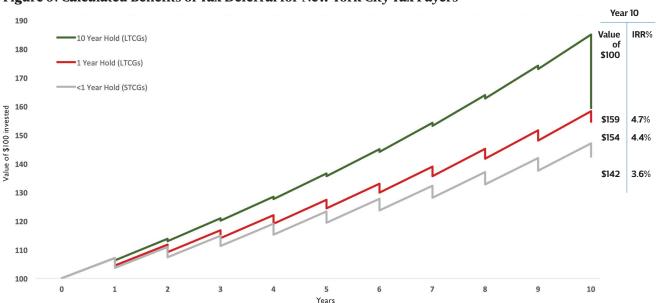


Figure 9: Calculated Benefits of Tax Deferral for New York City Tax Payers

| Investment Holding Tax Effects Period Scenario | | Value of \$100 @ Year 10 | After-tax IRR on 7% pre-tax IRR | Effective tax rate |
|---|---|--------------------------------|---------------------------------------|-----------------------|
| 1. 10-year hold — Tax Deferral of Price Gains and LTCG annual treatment of Qualified Dividends | 2% annual return from dividends taxed at 36.5% tax rate (23.8% Fed + 12.7% NY state and city tax on Qual Divs) 5% of the return from price appreciation unrealized for 10 years – no taxes Full realization of all past unrealized gains in year 10 at 36.5% (23.8% Fed + 12.7% NYS/C CA on LTCG) | \$159.3 | 4.8% | -31.9% |
| 2.1-year Hold — Fully Taxed at LTCG rate at end of each year | • All gains fully taxable at 36.5% rate in each year | \$154.50 | 4.4% | -36.5% |
| 3. Less than 1-year hold – Fully Taxed Gains at LTCGs rate for Dividends and STCG rate for Price Return each year | 2% of the return due to dividends taxed at 36.5% tax rate each year 5% of the return taxed at 53.5% each year | \$142.40 | 3.6% | -48.6% |

It is important to note that LLPs and LLCs will "pass through" the realized gains and losses from underlying trading activity to their investors, regardless of whether the investor has taken any action in the fund (e.g. trimmed or added, received a dividend, etc.). For example, if a stock is sold at a gain within such a fund, the gain from the sale is reportable for the investor as a taxable gain in that year via K-1 reporting. This means that taxable gains and losses can differ from economic gains and losses (money in your pocket). Ultimately, realized and unrealized gains converge, but only over the life of the investment (5 – 15 years).

Many offshore funds are deemed to be Passive Foreign Investment Corporations (PFICs) which have punitive

from the offshore fund sponsor. A Passive Foreign Investment Corporation letter, or PFIC letter, if offered by the fund, shows the capital gains and/or income attributable to their position in the calendar year. Note that PFICs will not show realized losses, therefore losses on one's investment are carried forward within the fund and cannot be used to offset gains elsewhere in a taxable portfolio. If an investor redeems the position at a loss, the losses are realized and are offsettable against gains in the portfolio at that time. For the IRS to characterize the gains on a PFIC as capital gains and income, the investor in the PFIC must elect that the PFIC is a qualifying electing fund ("QEF")

tax consequences unless a "PFIC letter" is obtained

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otherwise all income from the PFIC is characterized as ordinary income and interest costs can be charged. Given the many complexities and onerous burdens for misfiling elections, it is only in rare instances that a taxable investor would invest in a PFIC.

3. Investor vs. Trader status – deductibility of fund management fees and other expenses

Fees and expenses generally reduce the taxable investment return except in some cases with look through vehicles such as LLCs and LLPs. Mutual funds, ETFs, REITs and other similar investment vehicles allow for all expenses to be offset against their underlying income and capital gains for tax calculations. The tax status of LLCs and LLPs is an annual determination made by the auditor of the fund, based on the degree to which the fund trades the underlying investments. If a fund is classified as "investor status" (versus "trader status") then management fees and certain other expenses are not deductible against gross investment income for income tax purposes. The result is that taxes are charged on returns net of performance fees but gross of management fees. This is particularly costly for investor status funds with high management fees and low returns. Figure 10 highlights the potential for an investor status fund to have an 8% higher effective tax rate versus a trader status fund with the same underlying return and tax-rate assumptions.

Figure 10: Trader Status vs. Investor Status Funds - Impact on After-Tax Net Returns

Assumptions

 $\begin{array}{lll} \mbox{Management Fee} & 1.50\% \\ \mbox{Performance Fee} & 20\% \\ \mbox{Tax Rate} & 43\% \end{array}$

| Manager Tax Comparison | Trader Status | Investor Status | | | |
|--|------------------|--------------------|--|--|--|
| Assumptions | | | | | |
| Gross Fund Return (%) | 12.0% | 12.0% | | | |
| | | | | | |
| Net-Return and Tax Calculati | ons ¹ | | | | |
| Net Return (%) | 8.4% | 8.4% | | | |
| Taxable Return (%) | 8.4% | 9.9% | | | |
| Percent of return due in Taxes | -3.6% | -4.3% | | | |
| | | | | | |
| After-Tax Return Calculation | | | | | |
| After-Tax Net Return (%) | 4.8% | 4.01% | | | |
| Tax Rate as % of Pre-Tax Net Return | -43% | -51% | | | |

Note:

Typically, we find strategies which hold onto the underlying assets for long periods ("long-hold funds" e.g. private equity, private debt, long equities, and certain hedge fund strategies) are classified as investor status. Higher frequency trading funds (e.g. absolute return, quantitative, and some hedge fund strategies) will generally be classified as trader status, because they are considered to be in the "trade or business" of trading stocks.

In both investor and trader status funds, performance fees (or carried interest) reduce the taxable gain and are therefore not taxed and are effectively "deductible." Only management fees and other expenses of the fund are not deductible in the case of investor status funds. In the case of a lower-returning investment or one that has higher management fees, the effective tax rate can easily go above 50% and sometimes reach over 100%. Credit managers structured through LPs / LLCs focusing on taxable bonds often fall into this category and effective tax rates often reach 70% or higher.

^{1.} Manager fees are assumed to be 1.5% management and 20% performance fees and that the manager's effective tax rate is 44% before accounting for non-deductibility of expenses.

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As noted above, PFICs only report capital gains and ordinary income on a net asset value basis. Therefore, management fees are netted against ordinary income and are essentially tax deductible. This can improve the effective tax rate for funds with high management fees and low performance results. US taxpayers allocating to investor status funds may consider allocating to the offshore equivalent if the fund allows onshore investors, issues appropriate PFIC letter and can qualify for a QEF declaration.

4. Gains on futures / Section 1256 gains – where all gains are considered fully realized (annually) with 60% long term and 40% short term capital gains treatment

The attractiveness of using futures depends on the asset class and strategy being undertaken. In the instance of US Treasuries, it can be attractive to use futures in lieu of direct bonds as investors would hypothetically pay 60% long term and 40% short term rates on gains from the futures compared to gains being fully taxed at income rates for cash Treasuries, assuming that yield is the only component of forward-looking returns. Alternatively, using the example of global equities, it is less attractive to hold equities futures as the 60% / 40% treatment is significantly worse than the buy-and-hold cash equities strategy which have something closer to 100% taxes at LTCG rates (including the qualified dividends).

Optimizing After-Tax Returns Within Each Asset Class

In Figure 11, we lay out what we believe to be some of the most effective tax strategies for optimizing the post-tax returns of each asset class.

The greatest opportunity for tax savings in manager selection is generally found in public equities from the combination of long hold strategies and tax loss harvesting. We discussed long-hold strategies above. Tax loss harvesting is the practice of selling a security that has experienced a loss. By realizing, or "harvesting" a loss, investors can offset taxes on both gains and income. The sold security is replaced by a similar one, maintaining an optimal asset allocation and expected returns. Tax loss harvesting benefits deteriorate over time as gains become embedded in the portfolio and harvestable losses become scarcer. This is due to the strategy systematically selling stocks with losses and retaining stocks with gains, therefore,

if the market continues to rise then generally there will be fewer positions with losses to sell and more with imbedded gains which will not be sold. In addition, loss harvesting over time increasingly runs the risk of tracking error against its benchmark as the positions purchased from the sale of stocks with losses cannot be identical to the position sold or the losses generated would be disallowed under wash-sale rules.

Selecting Managers Where Alpha More Than Compensates for Tax Inefficiency

While we often look to select managers that improve upon asset class selection, in many cases the returns of an individual manager can more than compensate for any tax inefficiency in its strategy and/or asset class. Selecting a manager with lower tax-efficiency but higher post-tax alpha requires conviction in the forward-looking pre-tax alpha expectations. Included in Figure 11 are our estimates of where we believe investors are likely to be making the wrong trade-off by passing on high performing managers. We acknowledge that many investors may not be making this mistake, but we feel it is useful to illustrate a few examples where manager outperformance may justify paying the higher taxes.



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Figure 11: Optimal Manager Tax Strategy Within Each Asset Class and Impact on After-Tax Returns

| Asset Class (allocation %) | Optimal manager strategy within asset class | Average Active Manager Tax-Rate | US Tax Optimized Portfolio Tax Rate | Total Impact of Manager Selection |
|--|--|---------------------------------------|--|---|
| Public Equities (47%) | Focus on long-hold, concentrated strategies within global equities including direct replication ("co-investment") that taxpayers can manage to long (> 5 year) hold periods. Utilize tax-loss harvesting strategies within the portfolio's liquid allocation instead of mutual funds or ETFs. | 38% | 35% | 0.2% |
| Hedged Equities (6%) | Focus on managers with trader status (management fee deductibility) that focus on generating alpha through long/short spread, as short alpha (negative absolute performance but positive relative performance) can generate a tax-asset for taxable investors. | 50% | 37% | 0.1% |
| Private Debt (3%) | Focus on private debt strategies that include warrants as a part of their strategy and specialized leasing strategies that can be structured in a tax-efficient manner, such as life sciences direct lending or railcar leasing (depreciation strategy). Consider real estate lending that can be structured as a REIT and benefit from pass-through deductions lowering the effective tax rate. | 57% | 39% | 0.0% |
| Absolute Return (4%) | For liquid absolute return strategies, select quantitative equity market neutral strategies given focus on spread (see above on long/short strategies), futures focused managers given the 60/40 LT/ST treatment of gains or uncorrelated strategies that can be structured in a tax-efficient manner, such as reinsurance. Look for 475 elector status which marksto-market gains as realized but permits unlimited deduction of losses against income. | 54% | 40% | 0.1% |
| Inflation Linked Bonds (2%) | Default option is to invest in municipal bonds with a 12-month CPI swap compared to traditional TIPs given the tax-treatment of TIPs yield and potential phantom income issues. | 58% | 0% | 0.0% |
| Fixed Income (2%) | Monitor after-tax performance of US Treasuries compared to municipal bonds and allocate appropriately. Municipal bonds will generally have higher after-tax returns net of modest levels of defaults. | 54% | 0% | 0.0% |
| Private Equity (22%) | Private equity is highly tax-efficient in most cases. For further tax-efficiency, focus on strategies that invest in qualified small businesses (<\$50m in gross assets), where meeting certain eligibilities can result in capital gains exclusions of up to 100% of gains. | 37% | 37% | - |
| Private Equity Real Estate (16%) | Focus on multi-family strategies with faster depreciation schedules. In offices and other longer-depreciation assets, bias toward redevelopment which delivers returns through long-term cap gains over income. | 38% | 38% | - |
| Total Value Add | from Manager Selection | | | 0.4% |

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Figure 12: Tax and Performance Trade-offs at the Manager Level Trade9

| | Forward-Looking Tax and Performance Estimates | | | | |
|---|---|-------------------------------------|---------------------------------------|--|--|
| Partners Capital's Forward-Looking Estimates of Tax and Performance Tradeoffs | Default Hedged Equity Fund | Specialist Hedged Equity Fund | Default Global Equities Manager | Concentrated Global Equities Mnaager | |
| Beta Exposure | 50% | 50% | 100% | 100% | |
| Total Day Total Allahar | 2.00/ | 0.007 | 1.00/ | 9.00/ | |
| Total Pre-Tax Manager Alpha | 2.8% | 6.0% | 1.3% | 3.0% | |
| Pre-Tax Manager Total Return | 6.5% | 9.8% | 7.0% | 8.7% | |
| Effective Tax-Rate | 49.6% | 53.5% | 38.4% | 43.8% | |
| After-Tax Return | 3.3% | 4.6% | 4.3% | 4.9% | |
| Incremental After-Tax Return | | +1.3% | | +0.6% | |

⁹The return estimates are based upon certain assumptions which should not be construed to be indicative of actual events that will occur. There is no assurance that the performance presented will be achieved. Please see important Disclaimers at the end of this material.

Quite simply, we want to stress here how critical it is to think about tax rate and total returns in combination. In some cases, the returns on an individual manager can more than compensate for the tax inefficiency. An example of this includes specialized managers within the Hedged Equity asset class, where we believe that expert knowledge within a geography, sector or sub-sector will lead to higher than the asset class average pre-tax alpha generation. Another exceptional instance would be a concentrated Public Equities manager that structures its largest positions in a manner to maximize returns while mitigating potential downside through derivatives. The structuring may result in gains being characterized in less tax-efficient manner, but the additional tax cost is more than offset by the higher alpha generation from the structuring. Figure 12 illustrates this effect.

By optimizing strategy and fund selection using the factors above, we expect that we can reduce the portfolio's effective tax-rate by -2.4% and add an additional $+0.4\%^{10}$ in after-tax results to portfolios versus a portfolio with an average (as defined by tax rate in the asset class) fund line-up.

Golden Rule #5 — Utilize Tax Efficient Structures

Any good tax strategy must examine the various legal structures that may be pertinent to the private investor's personal situation and provide for far more substantial income tax savings than the recommendations described above. The list of tax structuring options is long and requires the engagement of specialized tax counsel. Below we provide you with a shorter list of examples of tax efficient structures that Partners Capital clients have deployed most frequently with our clients. These include Charitable Lead Annuity Trusts ("CLATs"), Grantor Retained Annuity Trusts ("GRATs"), Donor Advised Funds ("DAFs"), and Private Placement Life Insurance ("PPLI"). Figure 13 provides a brief description of each of these four tax efficient structures with a description of the intended benefits.



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Figure 13: Tax Efficient Legal Structures

| Structure | Description | Benefits |
|--|--|---|
| Private Placement Life Insurance ("PPLI") | Enables investors to invest in the more tax inefficient (e.g. hedge funds) private investment funds within a life insurance policy, allowing for tax-free compounding of investment returns. Upon the insured's death, the cash value of the policy passes to beneficiaries free of income tax. If structured properly in a trust, estate tax can also be avoided. | Life insurance provision Transferring wealth to children with little or no gift or estate tax |
| Charitable Lead Annuity Trust ("CLAT") | Trust that requires annual distributions to be made to a charity for a defined period (e.g. 15 years), based on the initial value of assets transferred into the trust and applicable interest rates determined by the IRS. After the defined term ends, any remaining assets may generally be transferred with little or no gift tax back to the donor's family members or other specified individuals. Types: Grantor CLAT: Allows donor to take a tax deduction on the present value of annuity payments up front, although you will pay taxes on annual income/gains in the CLAT. Non-Grantor CLAT: All taxes on gains are paid by the CLAT. | Donating money to charity Creating a tax deduction for the donor Transferring wealth to children with little or no gift or estate tax |
| Grantor Retained Annuity Trust ("GRAT") | Trust that requires annual distributions (loan repayments) to be made to the grantor for a period (e.g. 2 years), based on the initial value of assets transferred into the trust, charging interest rates determined by the IRS. The grantor pays taxes on any gains realized within the GRAT. | Transferring wealth to children with little/no gift or estate tax |
| Donor Advised Fund ("DAF") | Vehicle into which donors make contributions of cash and/or assets to eventually donate to charity. The donor receives a tax deduction up to 60% of adjusted gross income annual for cash contributions or 30% for nonstock contributions at the time they move assets into the trust (DAF). An individual can make an excess charitable contribution, defined as a contribution greater than 60% of AGI for a DAF in a given year. That excess charitable contribution can then be deducted annually over 5 years until it is all used, subject to the maximum annual deduction limit. Assets grow tax-free and can be distributed to charities in the future. | Donating money to charity Creating a tax deduction for the donor |

In recent years, Private Placement Life Insurance ("PPLI") has seen significant improvements in the overall cost of insurance and better definition around the rules that govern it, making it a very powerful tool for certain portfolios looking to pass assets to their heirs in a tax efficient manner. Partners Capital has been involved in helping clients with PPLI underlying investments for many years and today operates a

range of insurance dedicated funds mostly focused on housing the most tax inefficient but higher returning investment strategies.

Charitable Lead Annuity Trusts ("CLATs") and Grantor Retained Annuity Trusts ("GRATs") benefit from the current low interest rate environment, as the annual distribution requirement is tied to an interest rate

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determined by the IRS, potentially leaving a higher percentage of the trust's assets that can be transferred to beneficiaries after the period of charitable payments has expired.

For charitable giving, the use of Donor Advised Funds ("DAFs") can be advantageous over setting up a private foundation. The trade-offs individuals should consider regarding DAFs are higher itemized deduction rates (60% of AGI vs 30% of AGI), lower program taxes and expenses, and a lower administrative burden compared to a private foundation. The primary trade-off with DAF's is a reduced universe of investment options as you are limited to what the DAF manager offers.

For DAFs, individuals can currently deduct cash contributions of up to 60% of their annual gross income ("AGI") at the time they make their contribution to a DAF, which is higher than the limit of 30% for cash contributions to a private foundation. Non-cash contributions, such as stock contributions, are capped at a lower amount, specifically 30% for non-cash contributions to a DAF and 20% for non-cash contributions to a private foundation. Furthermore, an individual can make an excess charitable contribution, defined as a contribution greater than 60% of AGI for a DAF or 30% of AGI for a private foundation in a given year. The excess charitable contribution can then be deducted annually over the subsequent 5 years until it is all used, subject to the maximum annual deduction limit as a percentage of AGI. For example, if an individual with \$10m of AGI contributes \$36m to a DAF, they can deduct the maximum amount of \$6m in the year that they contributed to the DAF and then \$6m annually for the following 5 years (assuming AGI remains constant). If that same individual chose to set up a private foundation, they could only deduct the maximum amount of \$3m in the year that they contributed and then \$3m annually over the following five years (assuming AGI remains constant, as above).

As a DAF is provided by a third party, the individual avoids any additional tax filings associated with the program, but typically limits the DAF's investment portfolio to available investments on a third party's platform. Private foundations provide additional flexibility for the program's investment options, but often can be more expensive and time consuming than a DAF, especially considering the IRS Form

990PF filing requirements and annual 2.0% net investment income tax that is charged on private foundation's investment income, but not on the income of a DAF.

Conclusion

We believe that an endowment-style of multi-asset class portfolio management continues to be the optimal investment strategy for private investors with substantial accumulated wealth and a long investment time horizon. Nevertheless, it must be modified relative to non-tax paying endowment portfolios to optimize after-tax returns. The simplest advice is that all key investment decisions – risk budget, asset allocation and manager selection – must be made based on after-tax expected risk and returns. Measuring and reporting on after-tax returns will help to reinforce this discipline.

We recommend taxable portfolios target higher equity-like risk levels than their tax-exempt counterparts (generally 80%-85%, and potentially higher) in consideration of the tax efficiency of higher-risk assets and the volatility-dampening effects of taxes. We estimate that increasing the risk level by focusing on higher equity-like risk strategies could increase the after-tax return by +0.5%. In addition, we modify the asset allocation in favor of more tax efficient asset classes to improve post-tax returns by +0.3%11. By making more fully-informed and deliberate manager selection decisions, we improve post-tax results by an additional +0.4%11. Taken together, we expect a well-optimized taxable portfolio can return 5.5%, which is a +1.2%11 improvement over a typical endowment-style multi-asset class portfolio. Incorporating additional overarching legal structures can help in wealth transfer or in achieving charitable goals.

Too often, taxes are ignored because they are "invisible" to advisors, leading to sub-optimal decision-making and advice. In reviewing projected returns and actual results with taxable clients, the focus must be on what the investor takes home after taxes are paid.



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Firm Profile

Partners Capital is a leading Outsourced Investment Office located in London, Boston, New York City, San Francisco, Paris, Singapore and Hong Kong serving investment professionals, endowments, foundations, pensions and high net-worth families globally. We provide wholly independent advice on asset allocation and access to what we believe to be best-of-breed asset managers across all asset classes and geographic markets. This access is strongly enhanced by the quality of our community of shareholders and clients, most of whom are veteran investors themselves in specialist sectors around the world.

The firm was founded in 2001 by investment professionals seeking an independent and conflict free adviser to provide portfolio construction advice and rigorous analysis of investment opportunities. From its initial focus as the "money managers to the money managers" with a base of 70 clients, Partners Capital has grown to become an adviser to endowments and foundations as well as prominent family offices and successful entrepreneurs across the U.S., U.K., Europe and Asia. Endowments have become a large proportion of the institutional client base, which now includes Oxford and Cambridge Colleges, and many of the most highly respected museums and charitable foundations located around the world.

Among Partners Capital services are bespoke outsourced investment solutions for endowments, foundations and tax-efficient and tax-deferred investment strategies for taxable private clients. Partners Capital predominantly advises on entire portfolios but also specialty strategies, such as Private Equity or Private Debt strategies.

Partners Capital deploys an investment philosophy that embraces many of the powerful diversification benefits of the "endowment model" of investing. However we apply a more dynamic approach to asset allocation. which seeks to clearly delineate between performance derived from market factors as opposed to the skill of individual managers.

Today, with over \$26 billion of assets under management, Partners Capital's clients comprise an equal mix of private individuals and institutional clients. Many of our clients are among the most sophisticated investors in the world, with a sound understanding of investment principles and experience across multiple asset classes.

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