TD Wealth

The Wise Investor The Components of Net Returns

Investors face a myriad of investment options, and determining which options offer the best odds of success is no mean feat. A prudent investment approach will weigh relevant elements such as risk, diversification, consistency of outcomes, expected returns and costs.

The intersection of the latter two elements - returns and costs - forms the net return of the investment. Net returns are paramount to long-term success because they are what investors get to eat, so to speak.

Net returns can be distilled into several key components, which should be evaluated based on their combined effect on an investment. Yet many investors often focus on just a few elements and consider their isolated effect on returns. For example, a tax-sensitive investor might concentrate on investments that promote enhanced tax efficiency without taking into account the extremely high fees and expenses that may accompany a tax-efficient structure. The strategy is appealing when viewed through the singular lens of taxation, but when factoring in all the components of net returns, it may equate to paying an additional dollar in fees and expenses to save 75 cents in taxes.

Similarly, investors might scrutinize management fees and expenses because those costs are easily quantifiable and receive a lot of media attention. An investor concerned about management expense ratios (MER) might choose an index fund or ETF while overlooking how other components affect net returns.

Exhibit 1 is designed to help guide investors through the components of net returns and facilitate a more comprehensive analysis. These are grouped by category: Asset Allocation, Fund Level, and Investor Level components.

Asset Allocation	+ Market Exposure	Allocation to equity versus fixed income
	+ Dimensions of Expected Returns within Equities	Exposure to size, relative price, and expected profitability
	+ Dimensions of Expected Returns within Fixed Income	Exposure to term and credit
Fund Level	+ Securities Lending Revenue	Revenue from lending securities net of portion paid to the lending agent
	- Fees and Expenses	Management Expense Ratio (MER)
	- Explicit Trading Costs	Trading Expense Ratio (TER)
	- Implicit Trading Costs	Bid/ask spreads and market impacts
	■ Cash Drag	Reduced expected return from allocation to cash
	- Withholding Taxes	Applied to foreign dividends (may or may not be fully or partially recoverable via foreign tax credit)
Investor Level	- Taxes	Distributions: Income, capital gains, and dividends Capital gains on redemptions Foreign withholding taxes on dividends from investment vehicles domiciled outside of Canada (e.g., US listed ETFs)
	- Investment Vehicle (e.g., ETFs) Trading Costs	Commissions, bid/ask spreads, premiums/ discounts to NAV

The following summarizes each component by category and describes the potential impact on net returns.

ASSET ALLOCATION

The first three components - market exposure, equity dimensions, and fixed income dimensions - relate to asset allocation and the corresponding risk/return tradeoffs investors must make with respect to their unique goals, risk preferences, and time horizon. Decades of theoretical and empirical research supports that the dimensions of expected returns within equities (market, size, relative price, and more recently, expected profitability) and fixed income (term and credit) are the primary contributors to the gross expected return of a portfolio. One should consider how the investment strategy attempts to capture the return premiums from these dimensions, if at all.

FUND-LEVEL COMPONENTS

Fund-level components can impact a fund's net asset value (NAV) and reported return by either increasing revenues or incurring higher costs.

Securities Lending

Lending the securities in a portfolio is a lesser-known means of adding value beyond the performance of the underlying holdings. The added return depends on the securities held in the fund, the type of collateral, and the execution of the lending program. Fund revenue goes up with an increase in the utilization rate (i.e., portion of the fund on loan), a higher fund portion of the revenue split with the lending agent, and larger spreads (collateral investment rate minus the rebate rate paid to the borrower). Typically, a fund holding a larger percentage of securities in high demand, known as "specials," can achieve larger spreads and higher utilization rates.

Revenue from securities lending is reported in a fund's financial statements. It does not reduce the reported MER of a fund, but it can increase returns to investors.*

*Revenue from securities lending is not guaranteed.

Fees and Expenses

The MER quantifies management fees and fund operating expenses and is expressed as an annualized percentage of average net assets. This publicly disclosed, easily quantifiable, and readily available cost is a significant component of net returns and rightfully receives a lot of attention.

Dimensional Fund Advisors (DFA) offers cost-effective solutions with MER that are among the lowest in the industry. Competitive management fees and an independent approach to fund operations contribute to the cost efficiency.

The only revenue DFA receives from investors is management fees. All costs associated with operating the funds are paid to independent service providers. These include costs incurred for recordkeeping, legal, audit, custody, valuation, regulatory filing, printing, and GST/HST. These costs flow through to the funds so that investors pay actual costs incurred. DFA, as manager of the funds, has incentive to reduce these costs wherever possible.

In contrast, some fund managers charge a fixed administration fee to the funds (disclosed in the prospectus), from which the manager pays independent parties directly or provides the services internally. Either way, the fixed administration fee can exceed the actual cost of the services and provide an additional source of revenue to the manager, in which case a manager may have less incentive to reduce operating expenses.

Explicit Trading Costs

Since markets are not frictionless, a fund's net return also depends on how much it trades, which is measured by the amount of turnover. Explicit trading costs are not reflected in the MER and include commissions paid to buy and sell securities, and possibly exchange fees, stamp duties, and other taxes, depending on the market. The trading expense ratio (TER) quantifies total commissions paid and is expressed as an annualized percentage of average net assets. This is another publicly disclosed, easily quantifiable, and readily available metric that investors can use to analyze net returns. The TER does not reflect exchange fees, stamp duties, and/or other applicable taxes.

The TER for DFA's equity funds is typically only a few basis points due to the low turnover inherent in our core and vector equity strategies (a basis point is one one-hundredth of a percent, or 0.01%). However, it is not uncommon for the TER of higher-turnover funds in the industry to exceed 10 basis points.

Implicit Trading Costs

Implicit trading costs are market frictions that typically have a greater order of magnitude than explicit trading costs. Implicit costs are a function of the desire to complete an order and the need for immediacy in trading. Seeking liquidity moves prices and increases trading costs. The higher the immediacy and quantity needed to execute, generally the higher the price paid. At the very least, a liquidity seeker will pay the bid-ask spread. More importantly, in addition to incurring the costs of that spread, demanding liquidity will often move prices, resulting in even higher implicit trading costs.

Unfortunately, implicit costs are not disclosed, not easily quantifiable, nor readily available. The costs are embedded in the returns of the fund as a result of the increased price paid for securities or the decreased price received for securities.

To avoid requiring urgency in trades and help keep trading costs low, DFA's portfolio design allows for flexibility and patience in the implementation process, which is enabled through broad diversification, a desire and ability to spread turnover over time, and a focus on aggregate portfolio characteristics.

On the other hand, conventional and index investment approaches often require immediacy in their trades because the manager has a view about future prices or must satisfy a low-tracking-error constraint.

Cash Drag

If we broadly define costs as components that reduce the expected return of a portfolio, then a frequently overlooked cost is the potential drag on performance from holding cash or cash equivalents. The expected return on cash is modestly

positive, albeit presently close to zero, whereas the expected return on a higherrisk asset class, such as equities, is substantially positive. If, for example, the difference in the expected returns on cash and a portfolio of riskier assets is 6%, and a fund holds an average 5% of its portfolio in cash, the "cash drag" or reduction in expected returns is 30 basis points.

Managers may hold cash for various reasons. Their view of future security prices may lead them to attempt market timing that results in a sizeable cash position. Regardless of their view, they might also maintain higher cash balances to meet redemptions if the fund has frequent and sizeable cash outflows.

On the other hand, the stability of cash flows in DFA funds reduces the need to maintain relatively large cash balances for meeting redemptions. Also, since our investment strategies do not rely on predicting market movements, we strive to keep portfolios nearly fully invested, with cash balances generally below 1%.

Foreign Withholding Taxes

Dividends received from non-Canadian investments are usually subject to foreign withholding taxes because most countries require tax to be withheld from dividend payments to foreign investors and be remitted to the local government. This withholding tax reduces the reported return of the fund because the tax comes out of the NAV.

Taxable investors in Canada receive a credit² for the amount of foreign taxes paid (up to 15% of dividends), so the tax paid to foreign governments is substantially, if not completely, offset by a reduction in Canadian taxes.³

On the other hand, investors do not receive a refundable credit for foreign taxes paid in their non-taxable accounts, such as Registered Retirement Savings Plan (RRSP). In certain situations, Canadians with non-taxable accounts are effectively taxed on dividends earned from non-Canadian securities.

Foreign withholding taxes can become more onerous and opaque when a U.S. entity stands between a Canadian-domiciled fund and non-U.S. securities. For example, when a Canadian-listed ETF or a Canadian-domiciled mutual fund invests in a U.S.-listed ETF that holds non-U.S. securities, there is tax withheld on dividend payments from the underlying securities to the U.S.-listed ETF. There also may be an additional level of tax withheld on dividend payments from the U.S.-listed ETF to the Canadian-listed ETF or mutual fund.

Moreover, the additional level of withholding tax cannot be recovered. If the extra level of withholding tax applies, the additional tax drag will depend on the dividend yield of the underlying portfolio and the withholding tax rate charged. DFA can avoid this second level by holding non-U.S. securities directly in a Canadian-domiciled mutual fund.

INVESTOR-LEVEL COSTS

Investor-level components detailed below reduce net returns to the investor but not the fund's reported return since the costs do not come out of the fund's NAV.

Taxes

Taxes on capital gains from redemptions as well as distributions of capital gains, interest, and foreign and Canadian dividends reduce net returns to taxable investors. These taxes do not affect reported fund performance because their impact is felt when an investor files a tax return.

Some structures propose to reduce or eliminate these distributions. However, a reduction in distributions ultimately corresponds to an increase in capital gains on redemptions. In this case, while the advantage is sometimes interpreted as a reduction in tax, it is in fact a deferral of tax. The benefit may not be the amount of tax saved but the time value of money on the tax deferred. The economic benefit from the tax treatment of these structures should not only be quantified accurately but also weighed against all other components of net returns, taken as a whole.

Although DFA does not utilize more costly fund structures that purport to offer enhanced tax efficiency, stable cash flows and low turnover in our core and vector equity funds have contributed to their tax efficiency. Furthermore, we also seek to mitigate the level of income distributions in fixed income strategies by pursuing lower coupon bonds.

Finally, as outlined in the fund-level section above, foreign withholding taxes applied at the investor level can also become more burdensome when a U.S. entity stands between a Canadian investor and non-U.S. securities. A common example is when taxable Canadian investors buy U.S.-listed ETFs that hold non-U.S. securities. A first level of tax is withheld on dividend payments from the underlying securities to the U.S.-listed ETF, and a second level of tax is withheld on dividend payments from the U.S.-listed ETF to a taxable Canadian investor.

The second level is substantially, if not completely, offset by a reduction in Canadian taxes via foreign tax credit, but the first level is not. Once again, DFA can avoid this second level by holding non-U.S. securities directly in a Canadian-domiciled mutual fund.

Investment Vehicle Trading Costs

There may be additional implicit and explicit costs to trade the investment vehicle itself. For example, ETF trade on an exchange like stocks. In some cases, commissions are paid to buy and sell the ETF, which would not apply to mutual funds. Additionally, in all cases, the implicit cost of bid/ask spreads applies to

buying and selling an ETF, whereas there is no implicit cost to buy and sell mutual funds because both trades are done at the NAV.

Finally, ETF investors should be mindful of the possibility that they will be on the wrong side of a price when an ETF trades at a premium or discount to the underlying NAV of the ETF's holdings. The magnitude of a pricing discrepancy tends to be correlated with the liquidity of the ETF holdings.

Summary

While some components of net return are more easily observed and measured than others, all of them affect a client's investment experience with varying orders of magnitude. Advisors play a vital role in assessing the interplay among all of these elements and in choosing investment strategies that seek to improve the client's odds of success.

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