Kenmar Advisory

Using and understanding the InvestorEd Mutual Fund Fee impact calculator

http://www.investored.ca/tools-and-calculators/mutual-fund-fee-calculator/

This calculator is a useful tool for demonstrating the impact of mutual fund fees on long- term performance. All you have to do is enter the gross return of the fund (referred to as the Market Return which could be misunderstood as the benchmark index return), the annual fee, any applicable loads and the number of years. We suggest using the 10-year compound average return if available or the 10-year average compound return for the fund category if not available. If there has been a change in fund manager, a merger or other major change you may want to review more recent performance as a sanity check.

Unfortunately , the calculator cannot access specific information about a mutual fund from other information sources on the Internet-there is no real-time data feed feature at this time .Strangely, the site refers to the investment fund industry lobbyist website ,the Investment Funds Institute of Canada (thankfully the link http://www.ific.ca/eng/frames.asp?l1=Investor_Education is broken)

It then provides a summary of the impact due to fees and the final net value of the investment in dollars. The Lost return potential tries to measure the possible gains you've given up. (Also called opportunity loss) due to fees. Front end loads are clearly a lost opportunity since the money goes to the firm and is not invested in the fund. The calculator deals with front and back-end loads and redemption fees You'll also see results in an easy-to-understand printable multi-colour pie chart.

The key assumptions inherent in the underlying mathematical model are:

1. a lump sum is invested at the beginning of the period with no additional investments thereafter (the Australian Securities Commission funds calculator does permit annual contributions to be included which is more realistic http://www.fido.gov.au/fido/fido.nsf/byheadline/Managed+funds+calculator?openDocument)

2. an average return is utilized in the impact calculation, as calculated by a formula defined by regulators (it is not an asset -weighted return which many feel is more realistic) Note also that past performance is not a reliable predictor of future performance.

3. a basic compound interest formula is used in performing the calculations

4. the MER is constant over the time horizon

5. All distributions are reinvested
6. Reinvested distributions earn the average rate of return (it appears that the Lost Return potential is calculated using the gross rate of return which means investing with an MER= 0% thus overstating the numbers)
7. The distributions are reinvested without paying any income tax
8. the MER and loads are the only expenses associated with fund ownership
9. no consideration is given to the transaction expense ratio (TER), a figure that at times could be significant for an actively-managed fund.
10. The calculator does not cover any optional fees a fund company or dealer may charge. These include fees to open an account, switch fees, wrap fees, annual RRSP trustee administration fees or account closing fees. Those fees relate to an account, not a specific fund but obviously they adversely impact your nest egg.
11. Final dollar amounts are *then* dollars not *current* dollars i.e. inflation is not factored in (you can assume a rate of inflation and subtract it from the gross return used in the calculator)
12. any interest expenses incurred if your salesperson has caused you to employ leverage are excluded

Discussion

In reality most investors invest on a monthly, quarterly or annual basis so that the impact will be different depending on the behaviour of the fund and you`re contribution timing to the fund. In practical terms, the MER changes over time either due to cost efficiencies (rare) or increases in regulatory requirements or taxes. The MER could also come down as a DSC sold fund is converted to a lower MER Front-end load fund at the end of the DSC period. If this conversion happens, the impact of fees will be reduced.

Because the calculator uses an average return it does not capture the effects of volatile fund performance over the time horizon considered. If the fund's performance was great when you first invested and deteriorates as your investment dollars accumulate or vice versa, a significantly different impact of fees would be expected. The combined effect of periodic (as opposed to a lump sum) contributions to the fund and changing annual return rates could cause a larger impact on opportunity loss than this simplified scenario would suggest. The assumption that all

distributions are reinvested is the norm but for those who use income funds and collect monthly income, the model provides no insight.

The assumption on taxes is of course not a problem if a registered account such as an RRSP account is being assessed. For a non-registered account ,income taxes would of course be payable thus reducing the actual amount available for reinvestment (or requiring you to lay out the cash for the income tax so that the reinvested amount can occur at full value).Depending on fund performance, your tax rate, timing of transactions and other factors ,the impact could be significant. If you own a high MER bond fund and the distributions are taxable the percentage of return lost to fees and expenses could be shocking. Remember, returns come and go but fees are forever.

A significant expense that is not included is the Transaction expense ratio (TER) which is the ratio of the brokerage expenses incurred to fund assets. Funds that trade a lot can run up pretty significant brokerage expenses that in extreme cases can rival the MER in magnitude. The TER statistic is disclosed in the Management Report of Fund Performance, which as a fund owner you are entitled to receive. It should be added to the MER for use in the calculator. This will obviously lead to a higher loss due to fees and expenses.

Another calculator at http://public.sheet.zoho.com/public/dsboglehead/effect-of-expenses provides an Excel spread sheet with year by year results of the effect of fees .This presentation allows an investor to get a better feel how returns are being eroded by fees .It provides a different chart that plots portfolio dollar value over time against pre and post fee scenarios The difference in the 2 curves graphically illustrates the menace to portfolios caused by fund fees and expenses over long time periods.

Bottom line

The calculator tool provides useful insight into the negative long-term impact of ongoing expenses. Improvements to the calculator that factored in taxes, periodic contributions and the TER would be helpful. Greater transparency as to the underlying model would also be a positive and is considered a Best Practice. Default data should be updated to Dec.31, 2008. The current default numbers are based on 10 year average returns from January 1, 1996 to December 31, 2005, which includes both bull and bear markets but nothing like 2008.The calculator can handle negative returns.

We add parenthetically, that although the MER is the largest single predictor of fund performance, professionals would argue that it's the risk- adjusted return that is important. What should matter to investors is whether there is value received for the MER cost. If the mutual

fund product is providing a better risk- reward profile after expenses than the most comparable ETF then there is arguably value added. To compare a fund strictly on MER when the higher MER fund outperforms the lower one net of costs could lead to choosing the inferior investment. The challenge is to be consistent in choosing the best funds. Even this tells only part of the story for investors who choose to seek help from financial advisors. The personal-advice component is often overlooked, distorting fee and performance comparisons. The MER of course has the sales commission embedded in it and from this commission an advice component is supposed to be provided. Investor behavior factors caused by inherent cognitive tendencies are at least as important to investment success as investment expense ratios. The issue that arises however is that commission-driven advice may be biased to the client's disadvantage.

For those who want to assess a specific fund`s performance or compare it to a benchmark try www.globefund.com, www.morningstar.ca or www.fundlibrary.com . To learn about some other cautions related to mutual funds visit www.canadianfundwatch.com

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