Investing in ETFs: The Advantage of Low Cost Investing

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Introduction

There are many options available for Canadians looking to invest their money and one of the possible ways is by buying Exchange-Traded Funds (ETF). The goal of this article will be to explain what an ETF is, how it is different from other investment products, and how an ETF can help an average Canadian investor meet their financial goals. An ETF falls in the general domain of low cost investing relative to other investment methods such as mutual funds. To demonstrate the effect of how lower costs can affect the return on investment, a mathematical comparison will be provided that compares a popular Canadian ETF portfolio against a mutual fund.

What is an ETF?

An exchange-traded fund (ETF) is an investment fund that can contain a collection of assets such as stocks or bonds. The main feature of an ETF is that it is freely traded on an exchange at a price determined by the market.[1] ETFs are commonly used to mimic an index. For example, Vanguard‘s U.S Total Market Index ETF (VUN) aims to track the U.S Total Market Index to the best of it‘s ability, by investing in various US stocks such as Apple, Alphabet, General Electric [2]. To demonstrate the flexibility of ETFs, there are many ETFs that are set to track various other indexes such as bonds or commodities.[3]

Why Buy ETFs?

The two main benefits of owning ETFs are low cost and diversification. ETFs on average have lower management expense ratios (the cost incurred by the investment company to manage the fund [5]) relative to mutual funds. ETFs also commonly hold hundreds and possibly thousands of securities, which result in broad diversification while offsetting risk you might have when investing in a single security.[4] One of the main goals of buying ETFs is to create a low cost, low maintenance, highly diversified portfolio while also aiming for a modest rate of return. One popular example of this would be the Canadian Couch Potato Portfolio, which allocates a portion of your cash into a bond ETF, a Canadian ETF, and a global equity ETF at varying amounts based on your risk tolerance.[6]

A Cost Analysis Comparison: Mutual Funds And ETFs

To demonstrate the effect of low cost ETF investing, consider an investor who has $65000 to invest.

First, we will calculate how much the investor will earn if they invest in a mutual fund. As a simplifying assumption, assume that the fund consistently earns an annual rate of return at 8%. Also, assume that the investment company charges a MER of 2.3%. The investor lets their money grow in this fund for 10 years. To calculate the return after 10 years:

Since the MER of 2.3% is annualized, but deducted at the end of each month. The monthly deduction:

$$\frac{0.023}{12} = 0.00191666666$$

To return is also annualized. The equivalent monthly rate of return is:

$$1.08^{\frac{1}{12}} - 1 = 0.00643403011$$

Hence the investor will receive:

$$65000((1 + 0.00643403011) * 0.99808333334)^{120} = \$111,472.395175$$

After the 10 years and the deducted fees, it turns out that the actual return is about 2.45% less:

$$(\frac{111472.395175}{65000})^{\frac{1}{10}} - 1 = 0.05542018931$$

Now consider the case when an investor instead implements the Canadian Couch Potato Portfolio using ETFs. As of December 31, 2015, the 10 year annualized return of the balanced portfolio was 6.10% with an average weighted MER of 0.17%.[7] We can now calculate the return after 10 years.

The MER is deducted daily. The daily deduction is:

$$\frac{0.0017}{365} = 0.00000465753$$

The annual rate of 6.10% converted to a daily rate is:

$$1.061^{\frac{1}{365}} - 1 = 0.00017254858$$

After 10 years, the investor will receive:

$$65000((1 + 0.00017254858) * 0.99999534247)^{3650} = \$119,957.226488$$

With the actual rate of return being:

$$(\frac{119957.226488}{65000})^{\frac{1}{10}} - 1 = 0.06319103505$$

Results

While the mutual fund had a return of 8%, after the fees, it actually performed worse than the balanced Canadian Couch Potato strategy implemented by ETFs. After the 10 years, the investor would have made

$$119957.226488 - 111472.395175 = \$8484.83$$

more than the mutual fund. While this model has made simplifying assumptions about the rates of return, it stands to reason that deceptively small fees can take large bites out of investment return. As a result, calculating how much costs affect your rate of return should be one of the most important factors when deciding to invest.

Recommendation

While ETFs have many benefits, there are certain conditions that determine if they will be a good option for investing. Firstly, there is the initial time commitment to learning about passive index investing, and the process of opening a brokerage account and buying ETFs may be inconvenient for some. Secondly, if one does not have a sizeable investment that they want to invest, the cost benefits of ETFs over mutual funds may be less noticeable. ETFs provide a viable alternative to investing in mutual funds by allowing you to create a low cost, diversified, portfolio with an asset allocation tailored to your risk tolerance.

References

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