Understanding Flaws in ETF Data

by Matt Hougan

Exchange-traded funds (ETFs) are among the best investment vehicles ever created. They offer extremely low-cost and tax-efficient access to nearly every imaginable asset sliver, allowing individual advisers to build institutional-quality portfolios for pennies on the dollar.

At the same time, ETFs come with challenges. Anyone who thinks otherwise should look back at the "flash crash" or try to explain to his or her uncle why the U.S. Oil Fund (USO) doesn't actually track spot oil. ETFs have pushed investors into new asset classes and forced them to consider factors—such as contango, spreads, and volatility decay—that they never had to consider before.

These challenges shouldn't deter you, but they should make you think. If you are going to play in the ETF sandbox, you have to take the time to dig into the data. And because some ETF data is misleading, you'll do best if you approach it carefully.

In this article, I lay out a few examples in which following commonly accepted ETF data will lead you toward disaster, and how—with a little work—you can find your way around these problems.

Charts Can Lie

The first thing most investors do when they start to research an ETF is to pull up a chart. It provides an easy, at-a-glance look at how that fund has traded over time. But when you chart an ETF, are you actually getting the data you're looking for? Chances are, no.

Figure 1 is a chart I pulled from Yahoo Finance, showing the iShares Barclays Aggregate Bond ETF (NYSE Arca: AGG) in blue, plotted against the S&P 500 in red.

A quick glance seems to tell you everything you need to know about this fund. Over the past five years, the bond fund AGG has been a stagnant beast, up about 5 percent in five years. By this accounting, you would have been better off putting your money in a bank account.

It's a complete illusion.

The problem with nearly all stock charts is they use "price return" data, meaning they ignore the impact of dividends and distributions. Tracking dividends is difficult, and with equities (where stock charting began), it's not *all* that important because over the short to intermediate term, the impact of dividends on a stock portfolio is vastly outweighed by the impact of vacillating markets.

But ETFs have made it easy to chart investments like bonds, where dividends represent almost the entire story. Want proof? Take a look at Figure 2.

The blue line at the bottom is the chart you'll find on Yahoo Finance or most consumer financial sites; the red line at the top is the actual total return an investor experienced.

Total return charts are available from companies like Bloomberg (for the low, low price of $20,000 a year for a licensed terminal), but most of the data sources investors use exclude them. Don't let the charts you see of bond funds dissuade you.

Premiums and Discounts

Another area in which ETF data is straight-up misleading is that of premiums and discounts.

ETFs are designed to track the value of their underlying securities, and generally speaking they do. It doesn't, however, work perfectly. Depending on a variety of factors, at any given point an ETF may be either over- or undervalued compared with its true underlying net asset value. Investors make a big deal about this, and rightly so. One of the great things about mutual funds is that you can always buy or sell them at exactly their net asset value, whereas with ETFs, that's not the case. If a particular ETF is trading well above its fair value, you would want to avoid it and go with a competing product.

The SEC knows just how important it is for investors to get a fair price when trading ETFs, so it requires every ETF issuer to publish an estimate of that fair value every 15 seconds of every trading day. This is called the indicative net asset value, or iNAV for short. You can pull up the iNAV on any major quoting system and use it to check that you're receiving fair value when you buy or sell.

Or not. iNAVs, alas, are wildly inaccurate and misleading for many ETFs.

The idea of requiring iNAVs stretches back to the beginning of the ETF industry and the very first U.S. ETF, SPY, which tracks the S&P 500. iNAV works great for SPY. The fund holds all 500 securities in the S&P 500, so to calculate the iNAV, the issuer simply looks at the last price of each of those securities. It's basically flawless.

But the ETF industry has evolved and there are now ETFs providing exposure

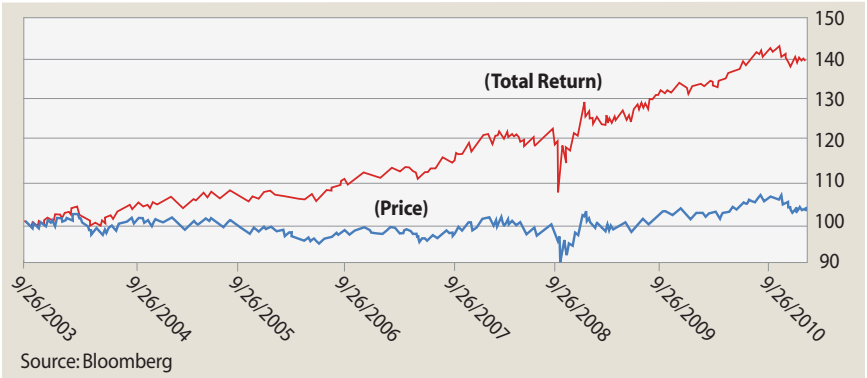
to every corner of the market, including many international securities that don't trade during the U.S. trading day. Take the SPDR S&P China ETF (NYSE Arca: GXC), a fund that holds Chinese equities listed primarily in Hong Kong. Those stocks do not trade during U.S. market hours. As a result, the iNAV for GXC barely updates at all during the U.S. market day. But GXC's price will move based on U.S. investors' estimates of where those shares *will* open up when the Chinese market day starts. The difference between the iNAV of the fund and the actual share price will be reported as a "premium" or "discount," but it's nothing of the sort; the ETF is simply engaged in price discovery while the underlying securities are not trading.

There's no great way to get around this problem without building elaborate models. One strategy is to focus on highly liquid ETFs, which presumably have more investors paying attention to them and competing to set a fair price. The important thing here is to know that the premiums and discounts reported in the international space are fabricated, and you're better off ignoring them than using them to trade the funds.

Figure 1: AGG Plotted Against the S&P 500

Source: Yahoo Finance

Figure 2: AGG Since Inception



Source: Bloomberg

Bond Holdings Data

One more area in which ETF data lie is in the bond space, with what I like to call "the Ford problem."

High-yield bond ETFs have become very popular with investors. They deliver high income and, recently, strong returns. The risk with a high-yield bond fund, of course, is that one or more of its constituents will go bust and you'll lose out.

Let's say you are worried about Ford Motor Company, thinking that high gas prices might drive the only U.S. carmaker not bailed out by the federal government into delinquency. If you pull up the iShares iBoxx $ High Yield Corporate Bond Fund (HYG) on iShares.com and look at the top 10 holdings, you won't see Ford anywhere. In fact, if you look at all the holdings, Ford's name doesn't come up until number 27, which shows a mere 0.48 percent of the fund allocated to the Ford Motor Credit bond. Phew.

But wait, dig a little deeper. As you scroll down the list, you'll see that there are actually eight different Ford bonds in HYG. If you sum up the combined exposure, HYG has 2.81 percent of its portfolio in Ford, making it one of the single-largest holdings in the fund.

It's not iShares's fault. The same is true of every ETF issuer. Unlike equities, in which there is only one Ford stock trading, there are hundreds of different Ford bonds outstanding. The same is true for every company that issues bonds. Currently, there is no way to present the aggregated company risk in a bond portfolio except to calculate it by hand. If you're worried about security risk, you should take the time to do this on your own.

Growing Complexity

The world of financial data is built around stocks, and U.S. stocks in particular. ETFs, however, have opened up every asset class under the sun, be it international equities, fixed income (domestic and international), commodities, currencies, options, and more. As you move down the list, the reliability of the data suffers, and it is incumbent on the smart adviser to take the time to properly understand what is in front of you. Doing so will pay dividends, allowing you to tap into the true benefits of ETFs, mitigate the risks, and put yourself head and shoulders above your peers.

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