The financial media has an infatuation with fund closures: Recent headlines, such as “ETF INDUSTRY HIT WITH RASH OF FUND CLOSINGS” and “Record Number of ETF Closures This Year” highlight how popular a topic it is. Fund closures can cause advisors and investors a number of headaches, including but not limited to the need to recognize capital gains; find a new vehicle for exposure; and rectify tracking problems. However, one thing investors don’t need to worry about is losing all of their money. When an issuer shuts down a fund, it sells all its positions and distributes the proceeds to shareholders. As an investor, you get paid out at NAV. Still, it’s a hassle: No advisor wants to tell a client that the fund he chose was so unpopular that it closed. Moreover, there are tax, cost and tracking considerations to worry about.

Obviously, it would make everyone’s life easier if funds at risk of closing had neon signs advertising this risk, but that may be asking too much. Prevailing wisdom seems to be that low AUM is the only indicator of potential closure: There are a number of different gauges of fund closure, such as the ETF DeathWatch, all of which focus almost entirely on low AUM.

But we’ve found that low AUM is actually a poor predictor for fund closure, as it generates too many false positives (i.e., there are large numbers of low-AUM funds that do not close each year; far more than those that do). As such, IndexUniverse has gone to great lengths to analyze historical fund closures and find the common themes to better prepare advisors and investors. What follows are the results of this analysis and the warning signs that lie at the heart of our proprietary “Fund Closure Risk” metric.

WHAT HAPPENS WHEN A FUND IS CLOSED?

Before we evaluate the warning signs for closure, let’s first discuss what happens when a fund is closed.

There is no set timeline or process for shutting down a fund. The process can take weeks, or months. Nonetheless, there are a few general steps that all fund companies follow:

- Step 1: Closing is announced
- Step 2: Trading and creations/redemptions are halted
- Step 3: Exchange formally halts trading
- Step 4: Liquidation period
- Step 5: Distribution of cash

One of the most high-profile recent closures was the shutdown of all 15 FocusShares ETFs. Let’s look at that example to show the general process of funds shutting down. Here was the timeline for the FocusShares closures:

- Aug. 6: FocusShares announced the closure of all 15 of its ETFs and laid out its timeline for liquidation.
- Aug. 17: The last day on which creation units of each FocusShares ETF’s shares could be purchased or redeemed and the last day retail investors could buy or sell shares.
- Aug. 20: NYSE Arca formally suspended trading and FocusShares began liquidating portfolio assets.
- Aug. 20-30: Liquidation of portfolio continued. Shares can be sold “off exchange” directly to a broker-dealer, but there is no guarantee that broker-dealers will be willing to engage in this practice.
- Aug. 31: Distribution of cash. All remaining shareholders received cash equal to the NAV of their fund shares as of Aug. 30, 2012.
The most important thing to note here is that you do not lose your money when funds close. Rather, as the fund winds down, the underlying assets are sold for cash, and that cash is distributed to investors in proportion to their beneficial ownership in the ETF.

**RISKS OF FUND CLOSURES**

However, just because there is no loss of capital does not mean there are no risks associated with holding until liquidation. Specifically, there are three issues investors should be concerned with: taxes; closing costs; and tracking uncertainty.

**Taxes**

When a fund is closed, the fund manager must sell all of the holdings in the fund. He has to do this regardless of the cost basis of his positions, significantly raising the likelihood of realized capital gains as well as capital gains distributions. This is amplified by the fact that many investors are likely to exit the fund prior to the actual liquidation, decreasing the number of investors over which any final gains can be spread. If gains are generated, the resulting capital gains distributions can be significant.

**Closing Costs**

While it’s customary for the issuer to cover any fees (mostly legal) associated with liquidating funds (shielding the fund’s NAV from closure costs), that is not guaranteed. In 2009, for example, SPA ETFs charged the last-out investors approximately 10 percent of NAV to close its funds.

**Tracking Uncertainty**

Since the issuer begins liquidating its portfolio the day that trading is suspended, the tracking difference between the fund and its underlying index will increase between that day and the day investors are reimbursed. As the fund unloads its assets (e.g., the stocks that make up the ETF), it becomes less and less representative of the index. If you choose to hold the ETF until the day the cash is deposited into your brokerage account, the returns you get over the days after trading is suspended and before the cash is disbursed will likely be much different than those produced by the index. In other words, you have no idea what you own for those two weeks.

**WHAT DRIVES CLOSURES?**

The traditional view is that low AUM drives fund closures, and that is of course true. After all, an issuer’s revenue from a fund is driven primarily by two factors: the expense ratio; and the assets under management. A fund with low AUM generates low income for the issuer. The industry rule of thumb says that funds need $50 million+ to be “profitable” for issuers, although that number varies with the difficulty of managing a fund and its expense ratio.

But AUM alone is not a good predictor of fund closure risk. Going into 2012, there were 701 ETFs with less than $50 million in AUM. Through Oct. 30, only 92 had closed.
WHAT ELSE DRIVES CLOSURE RISK?

We analyzed all 284 funds that have closed in the history of the ETF industry to determine the primary drivers of closure. Our analysis follows below:

<table>
<thead>
<tr>
<th>REASON</th>
<th>FREQUENCY</th>
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<tbody>
<tr>
<td>Issuer Strength</td>
<td>133</td>
</tr>
<tr>
<td>Low AUM</td>
<td>76</td>
</tr>
<tr>
<td>M&amp;A</td>
<td>36</td>
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<tr>
<td>Fund Rank in Segment</td>
<td>21</td>
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<tr>
<td>ADV</td>
<td>8</td>
</tr>
<tr>
<td>Unusual for Issuer</td>
<td>5</td>
</tr>
<tr>
<td>Automatic Trigger</td>
<td>4</td>
</tr>
<tr>
<td>Restructuring</td>
<td>1</td>
</tr>
<tr>
<td>Total Closed Funds</td>
<td>284</td>
</tr>
</tbody>
</table>

**Issuer Strength**

As mentioned, the AUM of a fund is just one driver of fund closure. After all, big issuers like iShares, SSgA and Vanguard haven’t closed an ETF in a decade. Plenty of their funds have less than $50 million in assets.

Our analysis showed that the biggest driver of fund closure over the years has been issuer continuity: When the issuing company is unprofitable overall, it tends to shutter its entire ETF line. As such, we believe that a strong predictor of fund closure risk is the overall AUM of the issuer … as much or more so than the AUM of the fund itself.

Take BlackRock, for example. If it issues an ETF that sits on the shelf for a year, garners little to no interest and runs at a loss the entire time, it is unlikely to threaten the stability of the firm or have much of an impact on its bottom line. After all, it has funds like AGG and EEM that have more than $40 billion combined in AUM. Those “profit center” funds allow BlackRock to absorb the losses of funds that start slowly out of the gate.

On the other end of the spectrum is a firm like Old Mutual, which closed its suite of GlobalShares ETFs in 2010 due to lack of assets across its entire product line. Had one of the funds from Old Mutual succeeded to the point that it could cover the losses from its less popular offerings, it is possible that the firm’s ETF business could have lasted longer.

Ultimately, the likelihood of success for new issuers in the ETF market is falling as the ETF industry matures. The ability of a new entrant to find the financing required to support itself for a prolonged period of time is a major hurdle to overcome. After all, even popular ETFs have relatively small profit margins, so the upside for financiers is limited.

Of course, not all issuers are the same. Each firm has its own issuer culture, which plays a large role in our own measure of fund closure risk. While iShares or Vanguard may keep low-AUM funds open indefinitely because they can absorb the losses, other issuers with big asset tallies are more proactive in closing funds, even if they may also be able to absorb losses. Take WisdomTree or PowerShares, for example. Both issuers rank in the top 10 on the
ETF AUM league table and yet both have closed funds in the past three years. PowerShares has closed 32 funds since 2009, while WisdomTree closed 10 in 2010. In other words, being a big issuer does not guarantee a fund will continue to exist; issuer culture also matters.

<table>
<thead>
<tr>
<th>ISSUER</th>
<th>NUMBER OF FUNDS</th>
<th>CLOSURE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETF Advisors</td>
<td>4</td>
<td>2003, 2006</td>
</tr>
<tr>
<td>Ameristock</td>
<td>5</td>
<td>2008</td>
</tr>
<tr>
<td>MacroShares</td>
<td>6</td>
<td>2008, 2009</td>
</tr>
<tr>
<td>Adelante Shares</td>
<td>7</td>
<td>2008</td>
</tr>
<tr>
<td>HealthShares</td>
<td>19</td>
<td>2008</td>
</tr>
<tr>
<td>FocusShares</td>
<td>4</td>
<td>2008</td>
</tr>
<tr>
<td>Nets</td>
<td>17</td>
<td>2009</td>
</tr>
<tr>
<td>SPA</td>
<td>6</td>
<td>2009</td>
</tr>
<tr>
<td>Grail</td>
<td>2</td>
<td>2010</td>
</tr>
<tr>
<td>GlobalShares</td>
<td>5</td>
<td>2010</td>
</tr>
<tr>
<td>FaithShares</td>
<td>6</td>
<td>2011</td>
</tr>
<tr>
<td>Scottrade</td>
<td>15</td>
<td>2012</td>
</tr>
<tr>
<td>Russell</td>
<td>25</td>
<td>2012</td>
</tr>
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</table>

What’s more, the ability to finance a new product is by no means a panacea. Two recent sets of closures that grabbed headlines, those of the FocusShares and Russell ETFs, were backed by large institutions with deep capital bases (Scottrade and Russell Investments, respectively). The decision to shut down these product lines had to do with the issuers’ inability to compete with the massive scale available to competing issuers. The distribution network required to successfully support a product line is also a major hurdle for new entrants and makes it all that more unlikely that a new, smaller issuer will succeed with a new product line regardless of how innovative their offerings may be.

While there are certainly exceptions to this rule—firms like IndexIQ, WisdomTree and others have built solid businesses from scratch in the ETF industry—it isn’t easy. To be successful, small issuers need to offer something new that investors want, which can be a difficult thing to ascertain. The reality is that ETFs issued by small firms are at the greatest risk of closure, and investors or advisors looking at funds offered by these firms should proceed with some caution.

**Low AUM**

As you might expect, the amount of assets in a given ETF matters. Issuers are in business to make money, not lose it, and the higher the asset tally in a fund, the more money they make. As such, the lower the AUM figure, the higher the likelihood of closure.

Based on our findings, the AUM safety threshold for closure seems to be $50 million. Only one fund with more than $50 million in AUM has closed, and that was a unique case. The fund in question, TTH, had over $100 million in AUM and was one of the HOLDRS ETFs issued by Merrill Lynch and subsequently sold to Van Eck. After the acquisition, Van Eck closed 8 HOLDRS ETFs, including TTH.
Of the 284 funds that have closed over the past 10 years, the issuing company cited poor asset growth as the primary reason for 76 (27 percent) of the closures.

M&A
Another common driver of fund closure is merger and acquisition activity. An issuer will sometimes, instead of developing new products in-house, acquire a competing firm or a competing firm’s ETF business. Guggenheim did it twice: first when it acquired Claymore; and again when it acquired Rydex. As with any acquisition, there are assets viewed by the acquiring firm as valuable and other assets viewed as surplus.

When it comes to the purchase of an ETF issuer, many of the assets in question are ETFs. As such, the purchasing firm may decide that certain ETFs are not viable or are redundant, and should therefore be closed. Guggenheim closed 12 Rydex funds after the acquisition. This type of fund closure is a catalyst to act on other closure risks, such as low AUM, fund rank or ADV. In all, M&A has caused more than 12 percent of fund closures historically.

Fund Rank in Segment
Of the funds that closed over the past 10 years, issuers cited that the funds were uncompetitive in their segment in 7 percent of the cases.

What does that mean? Well, if you offer the second or third or fourth fund in a particular area of the market—let’s say, the third Brazilian small-cap ETF—you face an additional hurdle in attracting assets. That’s particularly true if your fund lags its peers in not just assets, but performance. Regardless of the validity of the strategy, sometimes it is just too narrow to support multiple ETFs. Moreover, sometimes the first-mover advantage is too great for even the best-managed funds to overcome. In the case of WisdomTree, the combination of these factors forced the firm to close its suite of international sector ETFs in 2010.

The takeaway here is context. Some themes (emerging markets, high dividend, oil) are popular enough to support multiple products. In the emerging markets segment, two different funds have more than $30 billion in assets, and six other funds have more than $100 million in AUM each. On the other hand, you have global renewable energy, which has less than $500 million in AUM spread across 10 different funds, with PBW the only fund having more than $100 million in assets. In narrow segments like these, first-mover funds are typically issued by one of the biggest issuers and are the lone funds safe from closure.

ADV
Average dollar volume (ADV) is a commonly used, if not imperfect, measure of ETF liquidity. Just 3 percent of the issuers that have closed funds over the past two years cited poor ADV as a reason for closure, but that does not make it an irrelevant statistic here. After all, low ADV can be an impediment to future growth. Many investors shy away from illiquid funds that would otherwise be attractive because they don’t meet certain liquidity thresholds. A fund that carries both low AUM and low ADV faces a double-whammy.

Unusual For Issuer
As with any successful business, ETF issuers are constantly reassessing their product lines to optimize their clients’ experiences and solidify their brands. This will sometimes lend itself to closures, as issuers determine that certain strategies are outside their comfort zone. This type of closure, while rare, has been the impetus for five different
closures historically. Direxion closed its airline ETF based on the fact that it was out of line with its portfolio of products, most of which are leveraged and inverse funds. This type of closure is slightly easier to predict, as issuers venturing into new product segments are more likely to abandon those products down the road.

**Automatic Trigger**
Another reason funds close is because they meet a predefined “trigger” in their prospectus. For instance, Barclays recently redeemed its iPath Short Extended S&P 500 TR Index ETN (SFSA) because the fund traded at $10, the automatic redemption price specified in its prospectus. As described in the prospectus, an automatic termination event occurs when the intraday indicative note value of the ETN on any trading day is equal to or less than the automatic termination level of $10. This feature is unique to the ETN structure and is responsible for just 1 percent of all closures.

**Restructuring**
Although only one fund appeared on our fund closure risk tally as a victim of “restructuring,” it is a far more common occurrence than you might think. Sometimes an issuer will take an unpopular fund and announce an index change that has a completely different strategy. Often the issuer will change the ticker as well, leaving no trace of the original fund. The fund does not “close,” but it bears no resemblance to the fund as originally issued.

**CONCLUSION**
In the end, the biggest concern for any advisor choosing among ETFs should be how well it’s managed and how well the fund lines up with their desired exposures. Fund closure should be lower on the list of considerations.

Still, it cannot be overlooked. For investors worried about fund closure risk, a few general notes are in order.

For one, barring exceptional circumstances, low AUM should be considered an important—but not complete—predictor of fund closure risk. Funds that close tend to have one of the following precipitating factors alongside their low AUMs:

- Low issuer strength
- Issuer willingness to close ETFs
- M&A activity
- Low ADV
- Automatic trigger (ETNs only)

By our analysis, there are over 300 funds at high risk of getting closed; a significant number, but a much lower one than the 744 funds that have less than $50 million in AUM.

It’s easy to avoid investing in funds that may close by concentrating on funds with more than $50 million in assets and/or that are issued by larger, more established companies. The flip side is that you will exclude some of the more interesting, innovative products on the market.

In the end, it comes down to investor choice. But if you are going to analyze fund closure risk, at least do so with a more sophisticated tool than low AUM.