



Dr. Richard Michaud

President and CEO
New Frontier

Dr. Michaud earned a Ph.D. in Mathematics from Boston University and has taught investment management at Columbia University. He is the co-holder of four U.S. patents and is the author of *Efficient Asset Management* and many professional and academic articles.

Strategic Investing in ETFs

April 11, 2017

Our January commentary (1/3/17) discussed some critiques of index-fund ETFs topical in the investment community. The argument was that ETFs, because they trade like stocks, tend to encourage investors to trade actively as opposed to traditional mutual fund investing. But it is always true that anything can be misused however otherwise beneficial. In our view, ETFs are the modern way to invest. ETFs are roughly half as expensive, more transparent, and more tax efficient than comparable mutual funds. They are also easier to manage when adding funds or requiring redemptions. ETFs are popular even with many long-term institutional managers.

ETFs tend to raise the issue of passive vs active investment. This is because many ETFs are rule-based index fund products. Passive investing has a negative connotation for many investors. Price discovery in a capital market can't exist if all investors are passive. Moreover, any truly mechanical or rule-based strategy can be gamed by high frequency trading (HFT) managers. HFT algorithms continuously monitor trading patterns in global capital markets at high computational speed. A consistent mechanical rule-based trading pattern, once identified, can be anticipated with advanced computer systems to the HFT manager's benefit. But are all ETFs subject to HFT trading losses? As importantly, are ETF strategists passive managers?

ETFs based on a managed index such as the S&P 500 index, are not rule based and are theoretically immune from HFT trading losses. An index fund that is truly a market clearing portfolio is also by definition trading-price-neutral and can't be gamed. But any deviation of a rule based ETF from a market clearing index, however small, is at least theoretically, a non-price-neutral trade that can be picked off by an HFT. Factor-based index ETFs are particularly vulnerable to HFT trade limitations. But even traditional index fund ETFs are, to varying degrees, not price-neutral-trading funds and are not immune from HFT trading losses. So how should investment strategists limit their choices of ETFs?

The fact that the vast majority of ETFs are not trade-price-neutral implies that ETF strategists are not a passive investment strategy. The most important decision is how the fund fits into a well-formed well-diversified portfolio. An ETF manager is necessarily an active manager of a managed index of ETFs, in a controlled cost effective way. The choice of ETF indices, the construction of the portfolio of ETFs, and the choice of risk level for meeting objectives, all require investment

expertise. It is the optimality of the portfolio allocations relative to goals that drive the value of an ETF strategy. The management fee is a rent on the manager's expertise and technology in providing an optimal investment.

Retirement investing puts a high premium on long-term reliable investing. But how can long-term reliability be optimized? Managers have hot streaks. Some managers are better in value markets, others when growth sentiment dominates. Few managers can claim added value over long-time periods and many fail in periods with fundamental changes in markets and politics. No manager is invulnerable to unforecastable risk.

Though diversification does not ensure a profit or protect against a loss, it is a valuable no-forecast strategy for dealing with unforecastable risk. Michaud optimization offers a unique patented process for enhanced diversification as reported in rigorous simulation studies. It has been a major factor in our effort to provide high quality investment strategies for more than twelve years in actual practice.

This note was posted as an entry on New Frontier's investment blog on April 11, 2017. Read this entry and other posts at: newfrontieradvisors.com/blog.