



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.

Passive vs. Intelligent Investing

July 27, 2017

It is a common academic mantra, and of many respected investment professionals, that investing in an index fund is best for the majority of investors. There are two reasons for this view: 1) Experience has shown that active investment strategies charge more and perform less well on average relative to many common index funds; 2) Twentieth century financial theory asserts that the “market” portfolio is mean-variance (MV) efficient, and investors should simply invest in a combination of the market portfolio and a low risk asset. We briefly examine both issues here.

Long-term studies have found that few active managers have had consistent superior investment performance relative to benchmarks and fees over time.¹ Investors are advised to invest in index funds because they have lower fees and have often performed as well or better than active managers on average over time. In simple terms, index funds are a better investment deal. In addition, the Capital Asset Pricing Model (CAPM), the dominant financial theory of the 20th century, holds that the “market” portfolio is MV efficient. CAPM theory advises that investors should invest in a combination of a market index fund as a surrogate for the “market” and a low risk bond index fund relative to meeting long-term objectives. The convergence of modern financial theory and experienced professional advice makes a compelling case for passive index fund investing for all but highly experienced investors.

However, there is a serious issue with one of the two pillars for the investment optimality of index fund investing: Is the theoretical rationale for market portfolio efficiency correct? In an important article, Dr. Harry Markowitz, the founder of modern finance, argues that CAPM is in error and that the “market” portfolio is not MV efficient.² What does Markowitz theory mean in practical terms? Consider that active investors have many competing perceptions of security valuation and portfolio optimality including earnings, book value, discounted cash flow, earnings growth, dividend income, yield, momentum, short and long investment horizons, and varying risk aversion.³ All of these views result in a market clearing fund representing no one’s view of security pricing. Index funds represent investment by committee that are bereft of security valuation information.

It worth noting this is not the first time that the market portfolio has been described as a no-investment information investment.⁴ Keynes (1936) famously proposed that markets resemble a beauty contest where participants are asked

to predict the average of the choices of the participants.⁵ The winning entry, as in the pricing of securities in the market, represents a view that is not associated with that of any individual.⁶

However, index funds remain lower cost and often equivalent or superior performing investments on average relative to many active investment strategies. Without additional reliable information, a low-cost market fund represents a rational investment alternative.

But there is a paradox in our discussion. What can explain why even astute well-resourced active managers rarely outperform index fund benchmarks on average relative to fees? Is active asset management fundamentally flawed? I propose an alternative rationale: Active investment management has been afflicted by out-of-date investment technology.

Compare innovation in other fields with asset management for the last fifty years. Many, including health, energy, and computation, have benefited from substantial advances in technologies developed since the late 20th century. In contrast, there are virtually no notable innovations in active management technology since the 1970s. In particular, it is well-known that traditional portfolio optimization technology may actually destroy the benefit of the value of information.⁷

In New Frontier's index fund ETF investment strategies, ETFs are chosen not because the index is efficient but because the fund reflects a well-diversified cost-efficient security representing a specific global risk premium appropriate for our optimized portfolios. New Frontier adds value to passive funds with 21st century investment technologies including the multi-patented Michaud MV portfolio optimizer and Michaud-Esch portfolio rebalance procedure. Our portfolios are efficient not because they use market index ETFs but because the portfolio of the passive funds is Michaud MV efficient.

Footnotes

¹One example of such results: <https://us.spindices.com/documents/spiva/spiva-us-yearend-2015.pdf>

²Markowitz, H. 2005. "Market Efficiency: A Theoretical Distinction and So What?" *Financial Analysts Journal*, 6(5):17-30.

³Michaud, R. 1998. "Is Value Multidimensional?" *The Journal of Investing*, 7(1): 61-65.

⁴It may be the first time that the market is described this way based on a mathematical theorem.

⁵Keynes, J. M. 1936. The General Theory of Employment, Interest and Money. London: Macmillan (reprinted 2007).

⁶The Paris School of Economics proposes a similar view of the market. A recent example is Orlean, A. The Empire of Value: A New Foundation for Economics. MIT Press, 2014. Translated by M.B. DeBevoise.

⁷Michaud, R. 1989. "The Markowitz Optimization Enigma: Is Optimized Optimal?" Financial Analysts Journal. 45(1): 31-42.

This note was posted as an entry on New Frontier's investment blog on July 27, 2017. Read this entry and other posts at: newfrontieradvisors.com/blog.