# New Frontier

# How We Invest

### Independent global ETF manager

Tax-efficient, transparent ETFs are the modern way to invest. New Frontier is an independent ETF manager free to choose the best value ETFs from all ETF producers. All of our ETFs are carefully analyzed for liquidity, maturity, diversification, and cost.

### Strategic but not static

Overly academic managers employ a static asset allocation oblivious to markets, regulation, and financial innovation. New Frontier is an institutional global quantitative manager that continuously calibrates to the evolving geopolitical structure of global capital markets for meeting strategic long-term objectives.

# Unique optimized asset allocations

Traditional optimization methods do not work well. They tend to create poorly diversified portfolios. New Frontier is globally famous for inventing unique patented technology that addresses the problems of current methods, resulting in far better risk-managed funds.

# Portfolio rebalancing done right

Effective portfolio rebalancing is fundamental for reliable investment performance, but contemporary practice is universally based on sub-optimal calendar- or rangebased rules. New Frontier is globally known for inventing the first need-to-trade probability to avoid trading in noise but trade when effective.

# Effective long-term investing is different

Compound return is not average return. Portfolio compound return is the key for designing investment strategies that optimally meet long-term objectives. New Frontier has a long history in compound risk-return research. All New Frontier portfolios are optimal compound return investments.



# **Contact Us**

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# Why New Frontier Optimizes

Many managers gave up on using portfolio optimization. There was much professional evidence in the 80s and 90s that optimized portfolios simply didn't work in practice. Optimized portfolios were typically poorly diversified and often had poor performance. As a consequence, many professional and academic managers avoid optimization by constructing an equity portfolio (Portfolio A) and a bond (non-equity) portfolio (Portfolio B) that are then combined in fixed proportions to meet different levels of investor risk. For example, a "conservative" investment strategy may be a 25% allocation to Portfolio A and 75% allocation to Portfolio B. Similarly, an "aggressive" strategy may be 80% in Portfolio A and 20% in Portfolio B. The display below illustrates how the resulting strategies are simple combinations of the two portfolios.

In the display below we also illustrate the potential of a well-defined optimized allocation. In this idealized case, strategies that avoid optimization are clearly suboptimal. For the same information, the well-optimized asset allocation will have more return for the same level of risk or less risk for the same level of return as the fixed proportion strategies.



#### The Promise of Portfolio Optimization

New Frontier is globally known for having invented a new, patented form of portfolio optimization. This signature investment technology is unique to New Frontier. It is published in texts by Harvard and Oxford press, in major refereed journals, and tested by the most respected authorities in modern finance<sup>1</sup>. Unlike traditional optimizers, New Frontier methods can be scientifically shown to enhance investment value in out-of-sample investing.

The bottom-line value of New Frontier's innovations can be easily understood by comparing our portfolios to those who avoid optimization methods. For nonoptimized strategies, a conservative strategy will have the same level of emerging and small cap, short and long duration bonds, etc., as an aggressive strategy. But both

investment intuition as well as financial theory conform to the notion that conservative and aggressive strategies should have different allocations to higher and lower risk assets. New Frontier's patented optimization process provides the better answer.

<sup>1</sup>Markowitz, Harry and Nilufer Usmen. 2003. "Diffuse Priors vs. Resampled Frontiers: An Experiment." *Journal of Investment Management*, 4th quarter.



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# New Frontier's Optimized Strategic Portfolios

New Frontier invented Michaud optimization, a unique patented technology that addresses the problems of current optimization methods for enhanced investment performance and better risk management. In this section we compare the structure of New Frontier global strategic portfolios to strategic managers who do not use optimization methods. While a traditional manager may have risk-targeted models which, on the surface, look very similar to New Frontier models, the differences become obvious when you examine the underlying asset classes at each risk level:



#### Michaud Portfolio Construction

The asset allocation in these two models clearly reflects two distinct investor objectives. Not only does the 20/80 stock/ bond portfolio contain more bonds and fewer stocks than the 75/25, but the *types* of stocks and bonds tend significantly more towards conservative, defensive asset classes. Conversely, the types of securities in the 75/25 allow it to more aggressively pursue global risk premia.

Our patented optimization allows New Frontier to construct portfolios better tailored to client goals.



#### Traditional Portfolio Construction

Although the 20/80 portfolio contains more bonds and fewer stocks when compared to the 75/25, the two models contain the *same types* of stocks and bonds in the *same ratios*.

For example, a conservative investor in a 20/80 model holds the same ratio of Short-Term Bonds to Long-Term Bonds as a more aggressive investor in a 75/25 model. Intuitively, this does not make sense.





# **About New Frontier**

New Frontier is an employee-owned, Boston-based institutional research and investment advisory firm specializing in the development and application of state-of-the-art investment technology. Our mission is to develop and apply institutional quality investment methods and technology to the practice of asset management. We offer patented research, software built on our research and experience, and investment products developed with our software, and we have been an institutional ETF manager since 2004.

We began with an improvement of mean variance optimization, which had been the standard portfolio optimization process for almost fifty years.

Dr. Richard Michaud and Robert Michaud developed Michaud Resampled Efficiency<sup>™</sup>, a portfolio optimization process that accounts for the uncertainty inherent in investment. In 1998, Dr. Michaud published his findings in *Efficient Asset Management: A Practical Guide to Stock Portfolio Optimization and Asset Allocation* (Harvard University Press, 1998 and Oxford University Press, 2008). The book garnered immediate attention. The following year, the Michauds patented Michaud optimization and founded New Frontier.

Michaud optimization was only the beginning of New Frontier's contributions to modern finance. Since then, New Frontier has been awarded three more patents for innovations in investment management. Other important innovations include the patented Michaud-Esch Rebalancing Test, Forecast Confidence™, and post-optimization tools.

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Financial instruments discussed here may not be suitable for all investors. Before investing in any investment portfolio, the Client and Financial Advisor should carefully consider the Client's investment objectives, time horizon, risk tolerance, and fees. The Financial Advisor assumes full responsibility for determining the suitability and fitness of each portfolio for their clients. Diversification may not protect against market risk. There are risks involved in investing, including possible loss of principal. Past performance does not guarantee future results.