A Rational Take on Risk

Consider this hypothetical investment opportunity, where you're offered a choice between:

1. A large, multi-national restaurant operator with millions of customers served daily by thousands of franchises spread across the world benefiting from decades of global branding (i.e. McDonalds).
2. A speculative, unknown start-up franchise operator with an untested business model, branding strategy, and limited customer base.

If both investment opportunities were priced with the *same expected return*, which one would you choose to invest your long-term savings?

Rationally, you'd invest in #1 because it offers the same expected return as #2, but with substantially less risk – as large, well-established companies offer product and market diversification; greater depth in company management; greater brand awareness and marketing resources; and larger scale in R&D, cost management, and access to capital markets.

What would it take for the smaller company to be an investment rationally comparable to the larger company? *Its equity must be priced in a way that offers a higher expected return than the larger company.*

Known as the small cap premium, this is one of several risk premiums that – if invested in over the long term – offers a higher expected return to compensate for higher risk.

These are the risk premiums 3D Asset Management ("3D") seeks to capture in our portfolios – combining higher-than-expected returns associated with risk, with the discipline of a long-term strategy.

Globally-Diversified, Risk-Based ETF & DFA Portfolios

Indeed, risk-based investing has historically afforded return premiums expected by rational investors for taking on these added risks.

3D's investment approach is to build globally-diversified, risk-based portfolios, using cost-effective exchange-traded funds ("ETFs") or Dimensional Funds ("DFA Funds").

Since several of these risks can exhibit higher volatility than less risky areas of the market, diversification helps balance these ups-and-downs as many of these risks do not move in tandem with each other. And to maximize the probability of capturing these risk premiums – after all, if they were guaranteed they wouldn't be risks – the key is to maintain a strategic, long-term investment horizon.

While these risks are also present in many traditional, actively-managed mutual funds, these tend to be more expensive, less efficient, and less consistent versus a portfolio comprised of risk-based ETFs or DFA Funds.

DFAs: Based on Dimensions of Expected Returns*

According to Dimensional Funds, markets are efficient and priced to reflect that fact. Rather attempting to identify "mispriced" stocks or timing the market, DFA portfolios are constructed using the following *dimensions*, or risk premiums, which have been determined through extensive research and practical application to deliver higher than expected returns:

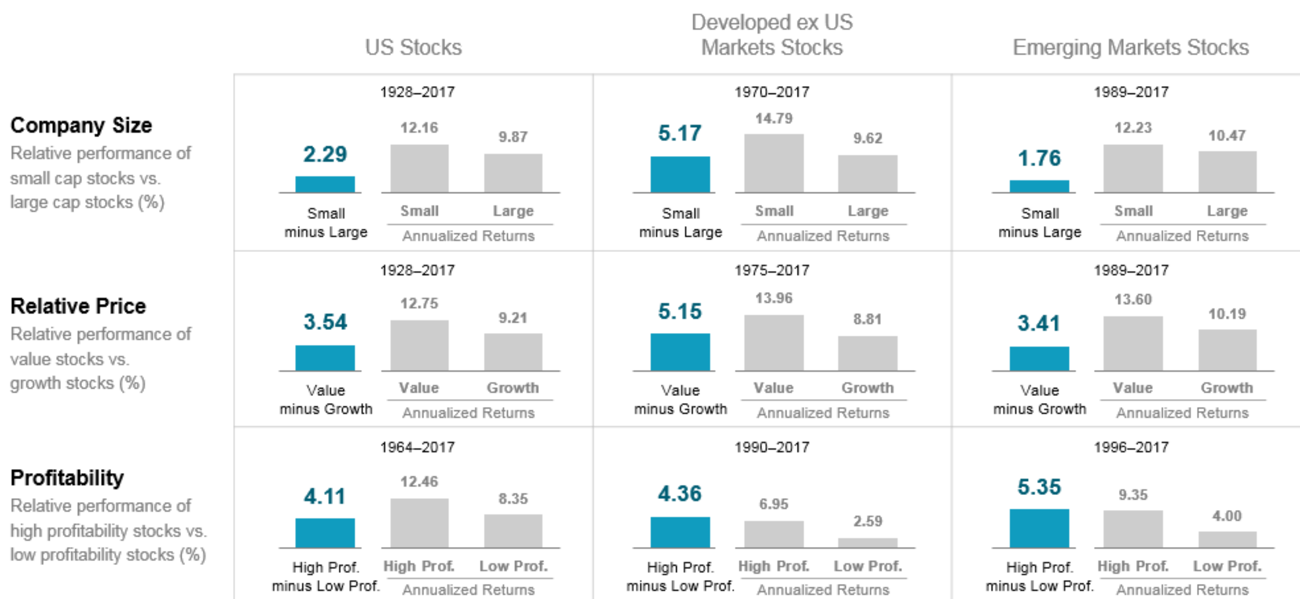
Market: Equity Premium. The overall risk to investing in stocks vs. bonds.

Company Size: Small Cap premium. The risk to investing in smaller companies vs, large companies.

Relative Price or Value. The risk to investing in cheaper companies vs. expensive companies.

Profitability. The risk to investing in more profitable vs. less profitable companies.

Historical Risk Premiums & Returns (Annualized): U.S., Developed ex U.S., & Emerging Markets



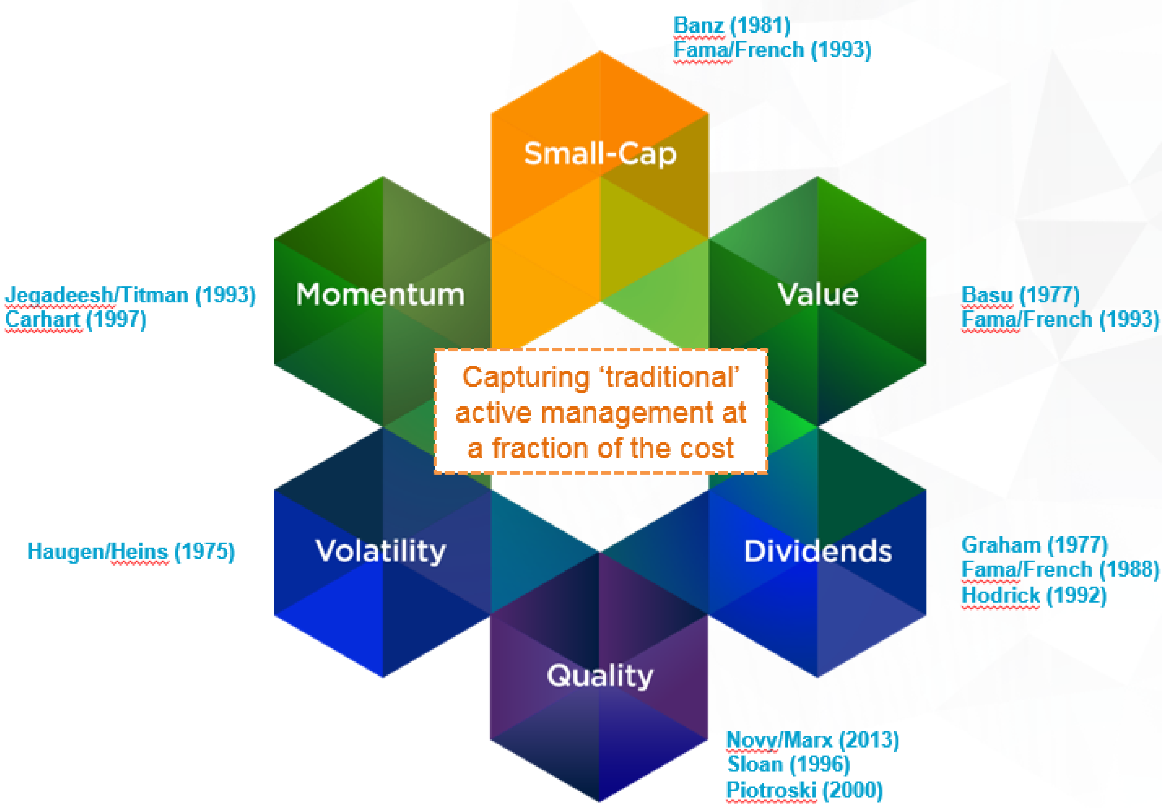
Information provided by Dimensional Fund Advisors LP.
In US dollars. US size premium: Dimensional US Small Cap Index minus S&P 500 Index. US relative price premium: Fama/French US Value Research Index minus Fama/French US Growth Research Index. US profitability premium: Dimensional US High Profitability Index minus Dimensional US Low Profitability Index. Dev. ex US size premium: Dimensional Intl. Small Cap Index minus MSCI World ex USA Index (gross div.). Dev. ex US relative price premium: Fama/French International Value Index minus Fama/French International Growth Index. Dev. ex US profitability premium: Dimensional International High Profitability Index minus Dimensional International Low Profitability Index. Emerging Markets size premium: Dimensional Emerging Markets Small Cap Index minus MSCI Emerging Markets Index (gross div.). Emerging Markets relative price premium: Fama/French Emerging Markets Value Index minus Fama/French Emerging Markets Growth Index. Emerging Markets profitability premium: Dimensional Emerging Markets High Profitability Index minus Dimensional Emerging Markets Low Profitability Index. Profitability is measured as operating income before depreciation and amortization minus interest expense scaled by book. S&P data copyright 2018 S&P Dow Jones Indices LLC, a division of S&P Global. All rights reserved. MSCI data © MSCI 2018, all rights reserved.
Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results. Index returns are not representative of actual portfolios and do not reflect costs and fees associated with an actual investment. Actual returns may be lower. See "Index Descriptions" for descriptions of Dimensional and Fama/French index data. Eugene Fama and Ken French are members of the Board of Directors of the general partner of, and provide consulting services to, Dimensional Fund Advisors LP.

**Source: Dimensional Funds, "Performance of the Premiums (US)"*

ETFs: More Factors, Greater Flexibility

By incorporating ETFs in our model portfolios, 3D has expanded the risk-premium framework beyond the DFA version – including risk premiums, or factors, like Momentum, Volatility, and Dividends, many of which are rooted in academic research. Again, while many mutual fund investors will adopt one or several of these factors as the basis for their own investment processes, ETFs allow 3D to accomplish this more efficiently.

3D's Risk-Based ETF Models: Rewarding Smart Investor Behavior through Factors



3D builds our risk-based portfolios to provide broad diversification across market regions, sectors, and factors to extract long-term risk premia; while being conscious of the price we're paying in the context of the current market environment. In addition, 3D will invest in alternative equity asset classes such as real estate investment trusts (REITs) and commodities if the investment landscape warrants participation in these areas of the capital markets.

The result is a unique set of efficient, cost-effective portfolios that seeks to capture higher-than-expected returns, in the context of disciplined, long-term investment horizons.

To learn more about 3D's investment approach to constructing risk-based portfolios, please contact our business development team at 860-291-1998 (Option 2) or register on our website at www.3Dadvisor.com