

## **Profiting from Investment Theories – Fama and French**



As of today, most of academia recognizes five factors which, when put together, explain over 90% of a company's stock return. These factors are company size, price-relative-to-earnings, profitability, price momentum, and how a stock moves relative to the rest of the market, also known as beta. Each of these factors are measurable, pervasive around the world and persistent over time. Some of these factors are more challenging to ascertain than others. However, in terms of stock predictability, these five factors provide the greatest visibility of where a stock is headed.

What about the other theories we hear? Can they help us make money? Troves of information are available to the average investor. We are constantly barraged with new theories. Stories abound of the next big technology, how to make a fortune with penny stocks, and how to get in on the next hot sector. Bullish chart patterns such as the "double bottom" or "cup-with-handle" emerge and signal investors to buy stocks. Then, they are told to sell by bearish chart patterns known as a "death cross" or through a timing strategy such as "sell in May and go away."

While most of these theories may be chalked up to the media's need to sell stories, what do we make of the occasional one that is backed by statistical data? Could these theories be true? Do they merit a change in strategy as a result?

Sharper Granite advisor Ryan Peabody recently sat down with Eugene Fama, Nobel Prize Winning Professor of Economics at the University of Chicago and Kenneth French, Distinguished Professor of Finance at Dartmouth University to dive deeper into this issue. Professors Fama and French have authored more than 160 papers. They both rank within the top 10 most-cited fellows of the American Finance Association. And both professors have earned numerous awards for their contributions to the fields of finance, economics and investing. Notably, Dr. Fama received the 2013 Nobel Prize in Economics for his work on securities markets.

In the meeting, Professor French acknowledged many trends that are supported by data. However, he explained that a pattern of data does not necessarily indicate proof of a theory. Professor French emphasized that when rigorously testing the trustworthiness of a study, he carefully reviews the data. First, he checks that the data set is complete, making sure nothing was intentionally omitted or accidentally left out. His process includes searching for already-known hidden factors which may explain the result. He also analyzes the time period used in the study to ensure it is of sufficient length and that the authors did not use a selective time period with a particular data set to make their case.



After the study's data passes this inspection, a second screening takes place which he calls the intuition test. As rational decision-makers, any new conclusion we draw should be the product of all our previous experiences and the newly proposed claim. This process helps Professor French sift through the conclusions that may just be coincidental. He gave an example of how this might work. For instance, a claim could be that companies incepted in the month of April consistently outperform companies incepted in all other months. Even with supporting data, theories like this go against common sense. This hypothesis fails the second screen. Therefore, it must be merely coincidental.

Professors Fama and French have identified explanatory factors that have withstood these tests and many others. And it was for the work behind these factors that Dr. Fama was awarded the Nobel prize. Particularly, Fama and French support a system of emphasizing two of the five factors listed above – size and price-relative-to-earnings.

At Sharper Granite, our portfolio models follow this strategy emphasizing small and value stocks within portfolios. Not only are these two factors highly researched and supported by a myriad of studies, but they align with investor intuition. For example, small companies are inherently riskier than large companies which means that they should also have higher expected returns. Professor Fama has proven that additional small-company risk is well compensated with additional returns. And by holding many of these stocks through low-cost ETFs and mutual funds, we also diversify away company-specific risk and lower the cost and tax effects of owning several companies.

One may wonder why we do not use all of the five data-backed factors in our portfolios. Dr. Fama points out that when you tilt a portfolio towards a desired factor, it inherently tilts away from other factors. Also, some factors are easier to implement than others. Therefore, we focus primarily on three factors: size, profitability and price-relative-to-earnings. By doing this we gain significant exposure to the factors most easily implemented in a low-cost, tax-efficient manner.

And while we will continue to do our due diligence and analyze other research studies, we strongly believe in our current methods which are supported by Nobel prize winning research and decades of study. As Professors Fama and French have pointed out, a healthy skepticism of newly positioned claims regarding investment theory is warranted. And until they have proven to be true, it makes no rational sense to change strategy.

Another significant consideration for strategy is the current strong dollar. Just as the strong dollar creates a headwind for U.S. corporations, so too it creates a tailwind for international corporations selling goods to the U.S. This is another important reason for international exposure now. The wrinkle here is that foreign dividends are being paid in local currency. For this reason Sharper Granite is currently hedging some international dividends so that they are paid in dollars rather than euros or yen.

Diversification, global economic cycles, and U.S. dollar strength are all important reasons for current international exposure. Along with the factors discussed above, Sharper Granite investment strategy presently tilts toward international equities, but does so substantially hedging foreign currency. For more details on this strategy and how it may impact your portfolio, please contact your advisor.

All forms of securities investing involve risk of loss for which clients should be prepared. There are no guarantees or insurances of principal preservation and market fluctuations of any level may occur and impact portfolio value. Past performance is not a good predictor of future performance. [Spring 2017]