

S&P Dow Jones Indices

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FA Talks

Factors, Risk, and Why Passive Outperforms over Time



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FA Talks is an interview series where industry thinkers share their thoughts and perspectives on a variety of market trends and themes impacting indexing.

Larry Swedroe is Chief Research Officer of Buckingham Wealth Partners. Since joining the firm in 1996, Larry has spent his time, talent, and energy educating investors on the benefits of evidence-based investing with enthusiasm few can match.

Larry was among the first authors to publish a book that explained the science of investing in layman's terms, "The Only Guide to a Winning Investment Strategy You'll Ever Need." He has since authored seven more books, co-authored eight more, and has had articles published in the Journal of Accountancy, Journal of Investing, AAll Journal, Personal Financial Planning Monthly, and Journal of Indexing.

S&P DJI: You recently participated in a webinar geared toward financial advisors titled "How Did COVID-19 Affect Active vs. Passive Performance?" in which SPIVA® results through the initial wave of the pandemic were analyzed. What were your biggest takeaways from the analysis of this data?

Larry: One of the biggest myths that Wall Street wants and needs investors to believe in order to keep them playing the game of active management and paying higher fees is, "Active management maybe doesn't win in bull markets due to a cash drag, but these managers will protect you in bear markets." I might be willing to accept a lower return in the long run if I get insurance in the really bad market environments, especially if I'm a retiree in the withdrawal phase. The truth is, active managers generally tend to actually do a little bit worse in bear markets than bull markets. One study found¹ that in every single turning point in the market, the average active manager got it wrong. For example, when the market was at a peak in March 2000, active managers had the least amount of cash and at the bottom in 2008-2009, they had the most cash.

¹ Malkiel, Burton G. (2007). [A Random Walk Down Wall Street: The Time-Tested Strategy for Successful Investing](#). In his book, Burton Malkiel takes a closer look at economic studies that examined the success (or lack thereof) of fund managers' attempts to predict stock market movements in the 1970s and 1980s.

This data is in line with the period we examined in the webinar. During the initial stages of the COVID-19 crisis, even though active managers had the ability to go to cash, almost two-thirds still underperformed. Every year, I hear that this is a stock picker's year, but it has never overall been a stock picker's year when you adjust for risk appropriately.

S&P DJI: As Chief Research Officer at Buckingham, you take an evidence-based approach to developing portfolios. Can you explain your approach and what research throughout the years has had a particularly strong influence on your investment philosophy?

Larry: I've been most influenced by the original work by Fama and French² and those that followed from the finance side, as well as Kahneman and Thaler³ on the behavioral side, because as much as Fama might like to think so, we know that markets aren't perfectly efficient. We know there are limits to arbitrage that prevent completely eliminating anomalies even after they are published, so they can persist.

I've also learned that for an investment strategy to work it has to be like a good diet—it only helps if you are able to stick with it. There are lots of behavioral issues, namely relativity and recency, that really cause destruction to investors' ability to stay disciplined. They might look at how investments have performed recently and relative to a benchmark. But, if you believe in diversification, you shouldn't care what your portfolio does against an arbitrary benchmark—you should care how it performs against an appropriate benchmark. You know certain asset classes (like international or emerging markets) are going to experience some periods of long-term underperformance and you shouldn't care how they perform relative to the S&P 500[®], but some people do. Another problem is caused by investors not having knowledge of financial history. That leads them to believe that when it comes to judging the performance of risk assets a three-year horizon is a long time, five years is a very long time, and 10 years is infinity. Economists believe that 10 years in risk assets is nothing more than noise.

Another behavior that negatively affects investor behavior is “resulting,” in which strategy is confused with outcome; i.e., judging the strategy based on the outcome, instead of the quality of the decision making. Recency and relativity cause this “resulting” problem. If you go through a long period of underperformance, you should question your underlying logic. If the logic holds up, the underperformance is likely noise and there was likely nothing wrong with the quality of your decision making.

My biggest influences have focused on not just the finance side (getting the science right), but also realizing that there are a lot of behavioral issues. As an advisor, it doesn't do any good to just give clients facts if they can't stick with the diet. You have to educate the client on these behavioral biases, so that when the issues actually happen, you can remind them that they were expected and built into the plan.

S&P DJI: Can you describe your investment philosophy and how S&P DJI's SPIVA and Persistence Scorecards influence it?

Larry: The SPIVA Scorecard results show us that the most reliable investment strategy is likely to be choosing a passive approach, rather than using active managers. The academic research certainly supports this, and the empirical results in SPIVA continue to illustrate how poorly active managers have performed in different time frames. The Persistence Scorecards show that the persistence of active manager outperformance is less than would be randomly expected, which means it's almost impossible to distinguish luck from skill.

Our philosophy is designed to choose an investment strategy that we believe will give our clients the best odds of success. There is no strategy that will guarantee perfect success. All risk assets go through long periods of poor performance. The S&P 500 went 17 years, from 1966-1982, in which it underperformed totally riskless treasury bills. I would hope that an investor would not have given up on the logic that over the long term it was likely that the S&P 500 would outperform. Seventeen years is usually more than the average investor is willing to put up with.

² Fama, Eugene F., Kenneth R. French. (1992). The Cross-Section of Expected Stock Returns. *The Journal of Finance*, Vol. 47, Issue 2, pp. 427-465.

³ To learn more about Daniel Kahneman and Richard Thaler and their work in behavioral economics, please see Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler. (1991) Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias. *Journal of Economic Perspectives*, Vol. 5, No. 1, pp. 193-206.

Our investment strategy is to invest in funds that utilize strategies that are transparent, rules-based, systematic, and replicable. Because markets are mostly efficient, we believe that it must be true that all risk assets have similar risk-adjusted returns—not similar returns, but similar risk-adjusted returns. If an asset has a higher (lower) risk-adjusted return, assets will likely flow in (out), driving valuations higher (lower) and expected returns lower (higher) until an equilibrium is reached. As a result, in general, we want to diversify across as many different sources of risk as possible. We want to invest in assets/factors that have demonstrated a premium that has been persistent over long periods of time and across different economic regimes. We also want to see evidence of pervasiveness around the globe and industries, robustness to various definitions, implementability (survives transaction costs), and have intuitive risk/return or behavioral explanations for why the premiums should persist. For example, we've observed that value and momentum work across stocks, bonds, commodities, and currencies, as well as all around the globe and across industries. The odds that a factor that meets all the criteria is a result of a data mining exercise really start to collapse when you approach factors through this lens. As an example of robustness, there has been a value premium across different valuation measures like price-to-book ratios (P/B) and price-to-earnings ratios (P/E). As an example of implementability, if there is a micro-cap premium of 4%, but it costs 6% to trade, then it's not relevant for us.

S&P DJI: During the webinar, you mentioned that we need active management for price discovery and efficient markets. A question asked frequently by advisors is, “How large can passive get before it starts to negatively affect how the market functions?” Any thoughts on that topic?

Larry: It's an interesting theoretical question. Let's first look at the empirical evidence and then move into the theoretical. Let's take Mr. Peabody's WABAC machine to the 1950s. At that time, there were less than 100 mutual funds. Even decades ago, the studies showed⁴ that active managers underperformed. There was far less competition with only 100 mutual funds—whereas we have perhaps 10,000 now and an additional 10,000 hedge funds. Active managers didn't perform quite as poorly as they do today, but still underperformed on average. Let's say 30% outperformed in the 1950s, where probably 2% of active managers have statistically significant alpha today. To me, this suggests that passive could grow to make up 90% of the market and it would still operate efficiently if it did.

Another thing to consider is John Bogle's cost matter hypothesis. Think of it as a seesaw. If fewer people are engaged in price discovery through active management, that means that the markets would become less informationally efficient. But if that leads to less trading, then the costs of exploiting those inefficiencies are going to go up. If you are left with only two or three active players, their costs are going to be massive. Who are those players likely to be? Maybe it's Warren Buffett and Peter Lynch, or some equivalent. The people abandoning active management are either those whose luck has run out or those who were smart enough to figure out that it's a loser's game, so the remaining players would likely be the most skillful.

To use a sports metaphor, think about Roger Federer, who in my opinion is the best tennis player to ever live. He has never lost in an opening round grand slam match, where he has played against the top 128 players in the world. This is the world of active investing today. Let's go forward in time to the second round, where 64 players remain who, on average, are more skillful. Federer's odds of winning here are probably 98%. As the field narrows to 32 players, Federer's odds of winning drop to 90%. As we get to the semi-finals, maybe his odds of winning drop to 70% because he is likely playing against one of the other top three players in the world.

The market is going to get more and more efficient, because the players left playing are the best and smartest players in the world. I think we are decades and decades away from the lack of active managers making the markets informationally inefficient.

⁴ For more information about the historical findings in the active vs. passive debate, see Smith, Adam. (1973). [Supermoney](#). *The ABCA Journal of Business Communication*, 10(3): pp. 42-44.

S&P DJI: In your presentation, you talked us through the evolution of factors as a source of returns. What are you doing to identify and capture factor returns in your client portfolios?

Larry: We've now seen a zoo of factors—quoted to be as many as 600. How do you navigate through the zoo to determine which are the true factors?

As we discussed, we want to see evidence of a factor premium that is persistent, pervasive, robust, implementable, and equipped with intuitive and empirical reasons for why it should persist. We have narrowed it down to five equity factors—market beta, size, value, momentum, and profitability (or quality). We don't need any more factors, because these five explain the vast majority of the variation in returns, and adding another factor adds in complexity and trading costs, which might destroy the results.

On the fixed income side, we're only concerned with two factors—term and default. However, on the default side, the evidence is pretty compelling that after costs, there's almost no premium. On top of that, the observed risk tends to show up at exactly the wrong time. For example, in 2008, high yield got crushed just like it did at the start of 2020, which suggests you could be better off sticking with higher quality bonds and just focusing on duration. So, we've narrowed this factor zoo down to five equity factors and one fixed income factor. As a result, we build portfolios that are more focused on risk parity—not dollars of assets invested, but the risk associated with each investment. In a typical 60/40 portfolio, the 60% equities make up 85% of the risk, and we need investors to think of the portfolio in terms of risk.

I see too many advisors focusing on filling in each Morningstar style box, rather than determining the factor loading of the entire portfolio. Investors need to decide which factors they want exposure to, which ones they have the most confidence in, and then build the portfolio, with less emphasis placed on tracking error. If you believe markets are efficient, you want to diversify across as many factors as possible.

S&P DJI: An inside indexing debate is the effectiveness of market capitalization compared with factor weighting or equal weighting. There are many branches of this discussion and debate around concentration risk. How do you reconcile momentum as a factor, when the result is that some positions are becoming larger, perhaps increasingly risky, in the portfolio?

Larry: If your only exposure is to a total market portfolio, there is nothing wrong with that approach; though in my opinion, it is concentrating all of your risk into one systematic factor called market beta. I believe that there is sufficient evidence out there to indicate that you should be thinking about other risks. Once you diversify into small value, emerging markets value, real estate, etc., we feel you may want to market-cap weight each of those individual pieces for the simple reason that any other weighting scheme is expensive. If you use equal weighting, micro-cap stocks get a larger weight and they are expensive to trade. If you are building diversified portfolios, then no one stock is likely to be more than a couple percent of the overall portfolio. If you look at the concentration in the top five names of the S&P 500 today, it is 21%. One way to get around that concentration is to diversify into other areas of the market, which we feel is prudent.

S&P DJI: What do you find works best in client conversations to keep them committed to, or even inspired by, their investments and savings?

Larry: Education is the armor that can protect you from your stomach, and I've yet to meet a stomach that makes good decisions. Heads make much better ones. Most important to us is an upfront education on investment history. We will show the quilt chart of returns that indicates that there is no pattern to when an asset class will perform best. They simply rotate and it's quite random. We teach our clients that asset classes have similar risk-adjusted returns, just like most factors have similar risk-adjusted returns. We lead with the evidence. There will be long periods of outperformance and long periods of underperformance in different asset classes and we don't want to be jumping around chasing performance. We tell our clients that they are going to be challenged and there will be times when they question the strategy, but these are the underlying principles based in history. Staying disciplined is important. As Warren Buffett said, "temperament trumps intelligence." In March 2020, we were buying stocks and in June 2020, we were selling stocks, because it takes about a 20% market move to trigger our rebalance process, which happened in both directions in the first half of the year. We were buying low and selling high, which every investor dreams of doing. Unfortunately, they usually do the opposite.

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