#### PORTFOLIO STRATEGIES

## To Beat the Market, Invest Differently Than the Market

Decisions based on less than five years of performance returns are mostly based on noise. Many strategies look good over shorter periods, but fare much worse over longer periods.

#### AN INTERVIEW WITH JAMES O'SHAUGHNESSY

Money manager and quantitative analyst James ("Jim") O'Shaughnessy spoke to me recently about the lessons he's learned over his 30-year career and the insights he can share.

—Charles Rotblut, CFA

You've expressed a view that to beat the market an investor needs a portfolio that looks very different than the market.

Active management has a great place to play for a certain segment of the market but, given human nature, it can be very challenging.

Passive investors have one point of failure, which is essentially panicking during a market crisis or bear market and selling out of their positions. This negates all the good work that compounding can do for a passive, low-cost investor.

Active investors face two points of failure. The first is the same point that passive investors face. The second point of failure is if their strategy over shorter periods of time is doing less well than its benchmark. Active investors, for example, could be up 12% annualized for the last three years. If the benchmark they're comparing their returns to is up 13%, they could say, "Well, this really doesn't work. I'm going to sell." Typically, our research has indicated that that type of selling ends up being done at exactly the wrong time.

To beat the market, you need to be different than the market. My opinion is rather self-explanatory. If your portfolio contains a very high number of the names in the same weight as an index, you're going to have a very low tracking error. [Editor's note: Tracking error is a measurement



James O'Shaughnessy is chairman and cochief investment officer of O'Shaughnessy Asset Management (OSAM) and author of "What Works on Wall Street" (4th edition, McGraw-Hill Education, 2011). Find out more at <a href="www.aaii.com/authors/james-o-shaughnessy">www.aaii.com/authors/james-o-shaughnessy</a>.

of how similar or different a strategy's returns are to its benchmark.] But you're also going to have very limited opportunity to do significantly better than that index. Our theory at O'Shaughnessy Asset Management (OSAM) is that if you want to generate long-term outperformance, you need to have a portfolio that is composed of names that are significantly different both in the amount of the holding or the weight in the portfolio or also the name in the portfolio.

As you know, we use a very time-tested disciplined analytical strategy that I wrote about in "What Works on Wall Street" (4th edition, McGraw-Hill Education, 2011) to determine which underlying factors and groups of factors have historically led to outperformance. What we find, for example, is that cheap stocks with high shareholder yield often don't appear at all in indexes. If they do, they don't have a very big weight in the index. We have seen, historically, that this type of portfolio does extraordinarily well. So, our approach to investing is based not so much on what names an index contains, but rather our beginning universe is, say, if it's a large-stock portfolio, then it's all large stocks. If it's a small-cap portfolio to start, it's all small-cap stocks.

Many investors who call themselves active begin not with the entire universe but with the stocks that comprise the index that they're benchmarked against. There's nothing wrong with that; I just think it makes it much more difficult to get enough substantial differences between yourself and the index.

Now, there's a downside. When your portfolio is very different than the index, it can also do significantly worse than the index. We have experienced that over my career—which started in 1987—many times. It is something that I have been comfortable with my entire career because I view my objective as trying to provide my investors a chance at doing significantly better over long periods of time. That's the key: long periods of time.

Because we're temporal creatures, whatever happens right now is given inordinate weight and things that might happen, say, five years from now are discounted to virtually nothing. I think that's exactly the wrong weight to give those factors. I think that essentially in shorter periods of time you're dealing with mostly noise. As you elongate your time horizon, noise changes to signal. That's why we adhere to the management style that we adhere to. And that's why we continue to believe that if you really want to

## O'Shaughnessy's Philosophy in 26 Tweets



# Jim O'Shaughnessy @iposhaughnessy

1 I have been a professional investor for over 30 years. What follows is some things I think I know and some things I know I don't know. Let's start with some things I know I don't know.

10:35 AM - 10 May 2018 | 2,856 Retweets 8,302 Likes

- 2 I don't know how the market will perform this year. I don't know how the market will perform next year. I don't know if stocks will be higher or lower in five years. Indeed, even though the probabilities favor a positive outcome, I don't know if stocks will be higher in 10 yrs.
- 3 I DO know that, according to Forbes, "since 1945 ... there have been 77 market drops between 5% and 10% ... and 27 corrections between 10% and 20%" I know that market corrections are a feature, not a bug, required to get good long-term performance.
- 4 I do know that during these corrections, there will be a host of "experts" on business TV, blogs, magazines, podcasts and radio warning investors that THIS is the big one. That stocks are heading dramatically lower, and that they should get out now, while they still can.

- 5 I know that given the way we are constructed, many investors will react emotionally and heed these warnings and sell their holdings, saying they will "wait until the smoke clears" before they return to the market.
- I know that over time, most of these investors will not return to the market until well after the bottom, usually when stocks have already dramatically increased in value.
- 7 I think I know that, at least for U.S. investors, no matter how much stocks drop, they will always come back and make new highs. That's been the story in America since the late 1700s.
- I think I know that this cycle will repeat itself, with variations, for the rest of my life, and probably for my children's and grandchildren's lives as well.
- 9 Massive amounts of data have documented that while the world is very chaotic, the way humans respond to things is fairly predictable.
- 10 I don't know if some incredible jump in evolution or intervention based upon new discoveries will change human nature but would gladly make a long-term bet that such a thing will not happen. (www.longbets.org)
- 11 I don't know what exciting new industries and companies will capture investor's attention over the next 20 years, but I think I know that investors will get very excited by them and price them to perfection.

do much better over long periods of time, your portfolio is going to have to look a lot different than the index itself.

## That leads to a couple of related questions. The first is what is a fair time to assess a strategy?

Generally speaking, the longer your time horizon, the higher the possibility of success is. Let's say you're 40 years old and want to retire at the traditional age of 65. If you could literally match that horizon to your portfolio, you're going to be able to invest in a variety of strategies that have the highest odds of 10-year win rates.

If you're making decisions based on anything under five years of performance returns, you're really basing things mostly on noise. I can demonstrate lots of strategies that have fantastic three-year periods of performance and fantastic five-year periods of performance. They sound good.

A simple strategy of buying the stocks with the highest percentage gain in revenues sounds like a reasonable strategy. These are companies that must be doing something right. Back in the mid-1960s, this particular strategy just knocked the lights out. It beat virtually every index and every other manager. So, if you didn't have any other information and you were only going on those five years, you probably would have signed up pretty quickly to have your money managed that way.

However, when one tests that strategy over as much data as they have available, you see that it does horribly. Those types of companies get people excited. When people are excited, they bid stocks to unsustainable levels. They price them to perfection and perfection is very rarely obtained.

Everyone tends to fire managers who are underperforming. Almost inevitably the manager that they hire has a very good three-year track record. There's research on this that shows that the managers who get fired go on to outperform the managers who get hired.

I'm often asked: Can you give me just one simple thing that I could do that would improve my portfolio performance over long periods of time? My answer is always the same: rebalance. If you are a classic 60% stock/40% bond

- 12 I do know that perfection is a very high hurdle that most of these innovative companies will be unable to achieve.
- 13 I think I know that they will suffer the same fate as the most exciting and innovative companies of the past and that most will crash and burn.
- 14 I infer this because "about 3,000 automobile companies have existed in the United States" and that of the remaining 3, one was bailed out, one was bought out and only one is still chugging along on its own.
- 15 I know that, as a professional investor, if my goal is to do better than the market, my investment portfolio must look very different than the market. I know that, in the short term, the odds are against me but I think I know that in the long term, they are in my favor.
- 16 I do know that by staking my claim on portfolios that are very different than the market, I have, and will continue to have, far higher career risk than other professionals, especially those with a low tracking error target.
- 17 I know that I cannot tell you which individual stocks I'm buying today will be responsible for my portfolio's overall performance. I also know that trying to guess which ones will be the best performers almost always results in guessing the wrong way.
- 18 I know that as a systematic, rules-based quantitative investor, I can negate my entire track record by just once emotionally overriding my investment models, as many sadly did during the financial crisis.

- 19 I think I know that no matter how many times you "prove" that we are saddled with a host of behavioral biases that make successful long-term investing an odds-against bet, many people will say they understand but continue to exhibit the biases.
- 20 I think I know the reason for the persistence of these "cognitive mirages" is that up to 45% of our investment choices are determined by genetics and cannot be educated against.
- 21 I think I know that if I didn't adhere to an entirely quantitative investment mythology, I would be as likely—maybe MORE likely—to give in to all these behavioral biases.
- 22 I know I don't know exactly how much of my success is due to luck and how much is due to skill. I do know that luck definitely played, and will continue to play, a fairly substantial role.
- 23 I don't know how the majority of investors who are indexing their portfolios will react to a bear market. I think I know that they will react badly and sell out of their indexed portfolio near a market bottom.
- 24 I think I know that the majority of active stock market investors—both professional and aficionado—will secretly believe that while these human foibles that make investing hard apply to others, they don't apply to them.
- 25 I know they apply to me and to everyone who works for me.
- 26 Finally, while I think I know that everything I've just said is correct, the fact is I can't know that with certainty and that if history has taught us anything, it's that the majority of things we currently believe are wrong.

investor and the financial crisis happens, that's going to force you to sell bonds—which have performed well—and allocate more to equities—which have performed poorly. It's exactly the opposite of our intuitive way of investing.

So, my answer is: The longer the time frame that you can really lock yourself into, the better. Anything under five years in my opinion is going to be mostly noise. Yet, who do we celebrate? We celebrate the manager who has done the best for this year. You really can't help it because that's the way that evolution designed us and fighting against your own genes is a pretty difficult thing to do.

## Related to this, how does someone determine when a strategy isn't working or maybe needs to be revised?

We do continual research at the strategy level but also dig very deeply into things like factor definitions. If you go to our website, you'll see a lot of in-depth research done on factors about why particular strategies perform well during certain periods and poorly during others. Our way of looking at the world is that we can always probably improve a

strategy through research, but it has to be kind of an evolution and not a revolution. If you see somebody changing a strategy and they're changing it simply because it has had, let's say, a bad three years or a bad five years, I believe that is an emotional reaction to the underperformance and they're kind of throwing a Hail Mary.

How do we determine if a strategy no longer works? Well, our strategies are pretty elemental. We rely on value, we rely on momentum, we rely on quality and we rely on things like shareholder yield. We have been able to test many of these factors back to the late 1920s. We have seen that they have a high degree of efficacy in terms of all rolling five-, seven- and 10-year base rates against the market. If you tell me that a strategy doesn't work anymore but you couldn't explain why with a very cogent rational response, I'm going to respond by explaining that short-term performance has arbitrarily made that strategy underperform.

I try to use examples and metaphors that are outside of the stock market because people can immediately see why that makes sense. In talks I've given, I've used the reference of a food truck. I'm in Manhattan right now and there's a lot of food trucks. I say to you, "Let's go into business. This food truck has a steady line of customers. I've seen it every day. I've had their food and it's good. Let's talk to the owner." The owner informs us that his revenues are \$100,000 a year. We think that's pretty good. What would be reasonable to pay him for his business? Well if it's a prime and prized location and if we can keep the cooks on and keep making the good food, we might be willing to pay him \$300,000 for his truck—in other words, the equivalent of approximately three years of revenue.

If it was really incredible, we might be able to say that because we get to keep this location forever and because these chefs are young and are willing to stick around, we might even be willing to stretch it up to \$500,000, where we're paying him for five years of revenue. But what if that owner looked at us and said, "I'll sell it to you, but I want \$1 million." We're going to look at him and say "You're insane. There's no way that we could ever economically make that transaction work for us."

In the stock market, you see those kinds of valuations happening every day. It comes from people getting incredibly overexcited about prospects and not thinking economically. Generally speaking, people will always be able to come up with an example where that kind of outlandish valuation actually worked out. Amazon (AMZN) ... Google (GOOGL) ... we know the names. It is yet another fallacy of trying to generalize from the particular.

We do it the other way around. We are absolutely silent on how any single member of a cohort performs. We want to look at the cohort as an entire group—say, the 10% of stocks that are the lowest in valuations versus the 10% of stocks that are the highest in valuations.

How do those cohorts perform? Well, they perform very well if you're in that cheapest 10%; they perform very poorly if you're in the upper 10%. Now, we can take examples from both cohorts and we can find one that was in that most expensive group that went on to do extraordinarily well and one from that cheapest cohort that went bankrupt. To me that's meaningless. Yet, it's also a very human tendency; we prefer colorful stories to numbers. It gets back to our DNA and the way humans communicate and the way we build things.

We think we can continually improve strategies, but we have yet—in my entire career, which is now more than 30 years—to see something that was a great strategy based on fundamental assessments stop working over the long term. For example, by just paying less for stocks, you generally do better than when you pay the moon for them.

Now, if you have found yourself a technical or mathematical anomaly—like, say, arbitrage—the minute that gets found out it disappears. One used to be able to make a very nice living about 100 years ago by buying and selling a

stock in different exchanges. If a stock traded both in New York and London, you might be able to buy it for \$100 in London, using dollars for all amounts, and sell it for \$110 in the U.S., because we didn't have the kind of interconnectedness that we have now. You had to have access to a wire, you had to have a lot of things that most people didn't have. The minute it gets known by others, the technical anomaly is gone. That's why high-frequency traders made a lot

of money when they started out and now it's lessening, because that kind of mathematical anomaly gets arbitrated away. Other players come into the market because they see those fat profit margins; they

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compete against you and the profit margin goes down. If it is that kind of an anomaly, it gets arbed out of the market very quickly. If it's a fundamental behavioral bias type of anomaly, you can scream it from the rooftops and it's not going to change anything.

Over the course of your career, are there any particular factors that stood out to you as either performing better than you thought they would or surprised you by not working like you expected?

Actually, yes. In the first edition of "What Works on Wall Street," I was pretty surprised that things like stocks with really high profit margins didn't do very well in terms of investment performance. I would have naturally assumed that if a company could maintain a very high profit margin, through a moat or other means, that I'd like to own it. That kind of company in private hands probably is very wonderful to own and does terrific things.

With a publicly traded stock, people pile in when they see the high profit margins, sending its valuations to the stratosphere. Ultimately there's a hiccup, the profit margin falls or something doesn't come together just perfectly. Because the stock has been priced so high in terms of investor expectations, it ends up doing very poorly. That's one of the reasons why one of the most common things you'll hear on Wall Street is that a great company does not necessarily make a great stock.

It was the same sort of thing with return on equity: I thought there would be a real edge there, and there wasn't. So, I guess most of my surprises came on the growth side. But the minute you took a look at the valuations of those companies, you said, "Well, of course they performed poorly."

Those are natural things that people intuitively find attractive. They are willing to be a lot less rigorous in terms of their willingness to buy and hold that kind of company, so the valuations creep up and get overpriced. If a stock is

priced to perfection and the company doesn't achieve perfection, its investors are going to be very unhappy.

I thought earnings growth was going to be a big deal, but it's really not. I thought that things like just high dividend yield on their own would do well, such as the Dogs of the Dow. They do well in certain circumstances, but you've got to continually peel the onion. Buying stocks with higher dividends can work very nicely, but you've got to make sure that they also are not richly valued. They should be pretty cheap in terms of price to sales, price to earnings, free cash flow to enterprise value, etc. You've got to find that they're also high quality, meaning that their balance sheets are not being monkeyed with, the financial strength is good and they're not loading up on debt.

There's a lot of things that you think, well, yeah that might work, but as you peel the onion, you see it works if you have these other things in place. Otherwise, it's more hit or miss.

So those are some examples of things that I have seen that first surprised me. But the moment I thought about it, looked at valuations and looked at the secondary and tertiary effects of that original factor, I understood why it ultimately didn't work over long periods of time.

Regarding factors, you preceded what the industry now calls factor investing and smart beta. What's your opinion about the growth of these factor funds that rank companies by valuation, momentum or some other quantitative set of fundamental traits? Are you seeing any signs of a crowding effect in your strategies?

We are not seeing much of a crowding effect in our strategies at all. To go back to your original question and my original answer, our strategies tend to be very different than even other factor strategies. We are designed for alpha, not for assets.

What does that mean? A lot of the factors and smart beta are designed to take huge amounts of assets. The only way to really do that is to weight by capitalization and then have some sort of tilt—sort of cheap done by market cap, sort of high dividend done by market cap. Whereas, using our Market Leaders value strategy, we could easily put \$20 billion or maybe \$30 billion in it but not \$300 billion be-

cause of the way we weight the stock holdings and the multifactor screens that have to be passed.

It's almost as important what stocks you don't own as what stocks you do.

One of our mantras is: It's almost as important what

stocks you don't own as what stocks you do. So, the first half of our process is elimination. And then we don't weight holdings based on their market capitalization.

We're very happy with that result because our mission is clear, we are less concerned with becoming a trilliondollar asset manager or, for that matter, a \$500 billion or \$300 billion asset manager. Our brief is we want to deliver alpha because we're clients too. For everyone in our firm, the equity portion of their portfolio is invested in OSAM strategies; we sit on the same side of the table as our investors. If they feel pain, we feel it.

So, the proliferation of these types of smart beta funds really hasn't had much of a crowding effect on us at all.

Then there are things like price to book, for example. We've done two very in-depth looks at the price-to-book ratio, which you can find on our website (www.osam.com/ commentary). Today, it is a very challenging factor that worked pretty well in an industrial era but does not work nearly as well as a value criterion in the type of company that we're investing in today.

If you use the Fama-French data, they use price to book. [Editor's note: Dartmouth professor Kenneth French maintains an online data library based on the research he and University of Chicago professor Eugene Fama have done at http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/ data library.html.] Some of the big index providers like FTSE Russell use price to book. We're finding that using the price-to-book ratio is really flawed. If they're not changing their definition of price to book, they're leaving a lot of alpha on the table. They're missing a lot of what we call 'veiled valued.' These are stocks that look pricey on a priceto-book basis but really aren't when you look at them using multiple factors.

We think that we are significantly different enough in terms of both the homework that we do on the underlying factors that changes the way we put them into a model and the combination of factors that results in the portfolio holdings. We're not concerned at all about any kind of crowding happening in our little niche area of the market.

There's more on AAII.com! Jim O'Shaughnessy talks about what effect the growth in index funds is having and the importance of understanding market history. He also gives tips for staying disciplined and shares the biggest lesson he's learned over the course of his career.

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