Understanding the science of investing has been the lifelong passion of Jim O’Shaughnessy, whose 1996 book, *What Works on Wall Street*, was among the first to explain the benefits of quantitative, empirical methods. Now, with the hindsight of the two bear markets since, he has refined his approach – rejecting some of his original ideas in favor of improved ways to forecast market performance. His new and improved approach finds that a dividend-oriented global strategy is best in today’s environment.

O’Shaughnessy, the founder and CEO of O’Shaughnessy Asset Management, spoke at the Fortigent Winter Forum on February 16 in Savannah, Georgia.

Last year, O’Shaughnessy published the fourth edition of his bestseller. He compared the recent financial crisis to the historical lows of 1931 – the only calendar year with worse performance than 2008. “This gave us a chance to test a lot of what we previously believed,” he said. “And I am happy that to tell you that most of those were confirmed.”

Most, but not all.

To identify better stocks, O’Shaughnessy found that his original methodology needed four revisions: using longer timeframes for his analysis, emphasizing the importance of composite measurements, relying on new market indicators, and using insights on yields and bonds.

Most of all, however, O’Shaughnessy has redoubled his focus on eliminating subjective human bias from investing.

"We have met the enemy, and it is us," warned O’Shaughnessy. “As long as we don’t change, we are going to continue to make the same mistakes that we made in the past, with new types of companies and new types of situations.”

**Analyzing longer time periods**

“We often feel a little stupid when we try to figure out what the market might do on any given day,” O’Shaughnessy said. To make reasonable inferences, investors must look at performance across longer timeframes, using windows much longer than the routine three- to five-year review period. “The three- to five-year period… is the perfect inverse of what you should be thinking,” he said. “You are looking at the time period that gives you the least amount of good data.” Instead, O’Shaughnessy recommends considering a 20-year
timeframe, whether studying the performance of a specific fund manager or of the entire market.

A central theme throughout O'Shaughnessy’s work has been that the stock market follows familiar patterns. “We believe that history doesn’t repeat, but it rhymes,” he said. “It rhymes because human beings are the agent of changing prices on the stock market.” The market is mean-reverting, he argued; stocks will both over-perform and under-perform their relevant benchmarks, but return to a long-term mean.

For example, at the end of March 2000, real rates-of-return for the prior 20 years were 13.84% per year. “We heard everyone say it is a new economy, that you don’t have to pay attention to things like P/E ratios or dividend yields,” he said.

At that time, O'Shaughnessy predicted that the next 20 years would be spent reverting towards a 7% long-term 20-year mean. Of course, that does not mean he expected stocks to see such horrible performance over the past 11 years. “Because of all the destruction done to the equity market... things are going to get much worse, particularly for large stocks," he said.

He now believes that over the next 20 years we will match the long-term returns during the period beginning with the Great Crash and ending in August 1949 – an all-time low of .29%.

**The importance of composite scores**

In the original edition of *What Works on Wall Street*, O'Shaughnessy wrote that price-to-sales ratios were the key indicator of stock performance. He now says that that a range of other variables move in and out of favor. Instead of looking at a single variable such as the price-to-sales ratio in isolation, O'Shaughnessy has been examining composite measurements.

For example, he has calculated a “value composite” indicator, using five separate ratios – price-to-sales, price-to-earnings, EBITDA-to-enterprise value, free cash flow-to-enterprise value, and shareholder yield. He scored individual stocks based on performance relative to each factor. He discovered that the value composite was the best indicator of future performance; it outperformed all of its underlying components 82% of the time when looking at the 10-year rolling returns.

The value composite not only improved performance, according to O'Shaughnessy – it also improved risk-adjusted rates-of-return. For example, between 1963 and 2010, price-to-sales had rates-of-return of 15% and US all stocks had rates of 11.5%. Yet, when buying the upper decile of the value composite, performance improved dramatically, with a return of 17.6%. It did so with a much higher Sharpe ratio than either the equity universe or the price-to-sales group – clear evidence of risk reduction.
While the value composite works well in the long term, a different indicator – momentum composite – works in the short term, O’Shaughnessy added. In a bear market, momentum inverts, with the best momentum stocks performing poorly and the worst stocks performing exceptionally.

“When you get a severe bear market that is driven by emotion, investors get it wrong,” he said. Companies are incorrectly priced as bankrupt; as soon as they start performing better, their prices get pushed up.

To account for this, O’Shaughnessy added volatility to the momentum-composite score. That score uses three-month, six-month and nine-month momentum, in addition to the 12-month standard deviation of return volatility. Ultimately, he found that choosing stocks with high momentum and lower volatility generated the best performance. “By taming volatility, you are able to get the best of momentum, but without having to pay the price of super-high volatility…. and doing better a vast majority of the time,” O’Shaughnessy concluded.

**New indicators: sector analysis and financial ratios**

O’Shaughnessy also discussed markers of performance he had not examined in the previous editions of *What Works on Wall Street*. For example, for the latest edition he conducted a sector analysis, which found that information technology was the worst-performing sector and consumer staples were the best-performing sector over the past four to six years. “Information technology is the most volatile and the lowest-performing sector because it can be disintermediated at any time,” O’Shaughnessy argued, pointing to the evolution of the computer industry over the past 30 years, where many companies have quickly lost their competitive advantage as technology has changed and new firms entered markets.

Conversely, consumer staples was the best-performing sector because disintermediation is more difficult. “There are not too many people sitting in a garage in Palo Alto trying to come up with a new formula for Coke, but there are all sorts of people trying to figure out a way to take Apple out or to disintermediate Google,” he said.

O’Shaughnessy discussed financial ratios, which allow investors to judge both the quality of financing and the earnings quality of a company – determining which stocks not to buy. First, he looked at financial strength, using external financing, debt-to-cash flow, debt-to-equity, and one-year changes in debt as indicators of strength.

To illustrate the power of financial strength in stock picking, he pointed to Citicorp, which had both high dividend yield and high value at the end of 2007. During the last half of 2007, however, Citicorp stock declined by 40% as the company increased its debt over the previous year. Based on O’Shaughnessy’s calculations, this earned Citicorp a financial
strength score of 98. “Don’t go anywhere near this company,” he said at that time. “And we all know what happened in 2008; it went down about 78%.”

Similarly, earnings quality also helps to identify which stocks to avoid. “A great example here is Enron,” said O’Shaughnessy. “At the end of 2000, Enron was one of the best-performing stocks.” Due to the company’s accounting manipulations, however, its quality of earnings was extremely poor.

Final words on yields and bonds

To conclude, O’Shaughnessy examined two forms of yield, favoring shareholder yield – dividend and yield plus net buyback activities over the past year – in the United States and dividend yield in the global economy. “That makes sense today, as income return accounts for about 40% and price appreciation accounts for 60% of the total return that you enjoy as an investor,” he said. In market environments where expectations call for low real returns, O’Shaughnessy recommended using a global dividend strategy. “It’s important to look for a strategy that allows you to go global to find income in a low-return environment.”

He also said bonds were risky and would underperform. “People don’t understand the true risk in investing in bonds at these yields,” stated O’Shaughnessy. Interest rates on the intermediate-term government bond index are 95% correlated with their returns 10 years later, he said. Given the current interest rate of 2%, investors should expect to earn about 2% per year until the bond matures.

Inflation further erodes income returns, he argued, “insidiously taxing that money’s value away from you.” Thus, given current yields, O’Shaughnessy predicted investors will lose 2.4% per year if they hold a 10-year bond to maturity, through December 2021.

Instead, to build income, he favors equity portfolios with “rock-solid balance sheets and excellent prospects for continuing or increasing their dividend payout.” O’Shaughnessy’s metrics have identified many such companies, including some domiciled in Europe. Those investment candidates, he said, typically have stronger balance sheets than the sovereign in which they are domiciled.