

Diversifying Among Investing Styles: The James O'Shaughnessy Approach

By Maria Crawford Scott

One of the longest-running debates among stockpickers concerns whether selection criteria should focus on growth characteristics or value characteristics. In other words, should you buy stocks for their superior growth potential, or because they are undervalued?

James O'Shaughnessy, president of the investment advisory firm O'Shaughnessy Capital Management, set out several years ago to try to settle the argument once-and-for-all by testing a series of growth and value screens on a sufficiently large database of stocks (S&P's Compustat data for stocks of \$150 million or greater market capitalization) that covers a long time period—40 years. His goal also was to determine which screens within each strategy produced the best returns.

The results of his analyses were published in the highly popular "What Works on Wall Street: A Guide to the Best-Performing Investment Strategies of All Time" (McGraw-Hill, \$29.95), which is the primary source for this article. More recently, he has started a mutual fund based on his approach.

What Works? O'Shaughnessy's Philosophy

Based on his analyses, O'Shaughnessy developed an approach that diplomatically marries the two strategies. He found that both strategies can work, but they work best on different kinds of stocks. A value strategy tends to work best on large-capitalization stocks, while a more growth-focused approach is useful for a stock universe that emphasizes smaller stocks. He also found the two strategies to be complementary, with the value strategy offering less volatility, and the growth strategy offering greater potential for capital appreciation.

Within each strategy, O'Shaughnessy found the most effective approach was to use "multifactor" screens, and he therefore advises that investors seek stocks that pass several criteria, including at least one value screen that prevents an investor

from paying too much for a stock.

O'Shaughnessy states, however, that the most important aspect is discipline—sticking with a proven strategy over long periods of time, even when going through rough times. And simpler strategies, he notes, are easier to stick with than complex strategies. Simple, disciplined strategies work because they take the emotions out of stock investing and force an investor to buy stocks at those times when they offer the best buys.

Universe of Stocks

O'Shaughnessy suggests that investors select stocks from two different universes, depending on their investment style.

For value-based strategies, O'Shaughnessy suggests buying stocks in firms with a large market capitalization, similar to those in the S&P 500; within his own database, this group consisted of roughly the top 16% of all companies.

For growth-based strategies, he suggests investors broaden their focus to encompass smaller stocks as well as larger-capitalization stocks, rather than focusing exclusively on small firms. However, he puts a floor of \$150 million (which should be adjusted for inflation) on smaller stocks.

Why? Ironically, O'Shaughnessy found that the largest gains came from the smallest stocks—those that are below \$25 million in market capitalization (these figures are adjusted for inflation, since the study covers 40 years of data). However, he argues that the extremely large number of stocks within this category—over 2,000 in the Compustat database—makes it very difficult for an investor to choose among. In addition, O'Shaughnessy is concerned with higher trading costs associated with very small-capitalization stocks, although his focus is more on institution-sized investors. He notes that professional money managers would have difficulty investing in stocks below \$150 million in market capitalization, and he therefore suggests investors concentrate on stocks with market capitalizations above \$150 million.

Maria Crawford Scott is editor of the AAII Journal.

What Works: Value Strategies

Value strategies seek to identify out-of-favor investments that are attractively priced in relation to some measure of value for the firm. O'Shaughnessy tested a number of basic value strategies on stocks of all market capitalizations, and he found that most of these screens were effective in identifying both winners and losers—the best-valued portfolios tended to produce the highest returns, and the worst-valued portfolios tended to produce the lowest returns. There were differences among the screens, however:

- **Price-earnings ratios:** Low price-earnings ratios were most effective as a screen for large-capitalization stocks, which O'Shaughnessy believes is due to the fact that many smaller firms are more likely to have strong earnings growth several years running, and are therefore likely to have higher price-earnings ratios. On the other hand, buying stocks with the highest price-earnings ratios is a losing proposition regardless of firm size.
- **Price-to-book-value ratios:** Low price-to-book-value ratios were most effective as a screen for large-capitalization stocks, although it worked with smaller firms as well. On the other hand, high price-to-book-value is closely associated with growth stocks, and O'Shaughnessy suggests that high ratios alone should not keep you from buying a stock.
- **Price-to-cash-flow (income before extraordinary items plus depreciation and amortization):** Low ratios were effective as a screen for both small- and larger-capitalization stocks. High ratios should be avoided unless there are other compelling reasons for purchase, such as strong growth that can mitigate some of the cash-flow risk.
- **Price-to-sales ratios:** O'Shaughnessy found this to be a very effective screen for stocks of all sizes. Low ratios consistently produced higher returns, and high ratios are "toxic" and should be avoided.
- **Dividend yield:** High yields were very effective as a screen for large-capitalization stocks and not at all effective for smaller stocks. O'Shaughnessy suggests that investors who use this screen stick to larger, better-known companies with strong balance sheets and longer operating histories. For small stocks, O'Shaughnessy warns that high dividend yields may be a sign of more trouble to come.

O'Shaughnessy states that value screens tend to reward investors who stick with them through all kinds of market environments, and thus they are particularly useful for more risk-averse investors. Conversely, he warns that highly valued stocks tend to go through certain periods of spectacular returns, which often prove enticing to investors who do not focus on the longer term.

The best approach, O'Shaughnessy argues, is to require that a stock pass several screens. In addition, he suggests that value strategies work best with large-capitalization stocks. Based on his analysis of various combinations, he recommends what he terms the Cornerstone Value Approach—a portfolio of large market-leading stocks with high dividend yields:

- Large (higher than average) market capitalizations—These firms are less volatile, tend to have long operating histo-

- ries, and are more likely to survive adverse environments.
- More common shares outstanding than average—This offers excellent liquidity for investors.
- Higher-than-average cash flows—This helps screen out potentially weak companies that may cut dividends, a conditioning screen for a high dividend yield criteria.
- Sales that are 1.5 times the average—This helps identify market-leading companies.
- High dividend yields—This is the best value screen for large-capitalization stocks, although other value criteria could be substituted. This screen should be performed after the list of market leading firms is identified using the first four screens. In his analysis, O'Shaughnessy selected the 50 highest-yielding stocks, but excluded utilities.

This kind of portfolio, he argues, tends to provide considerable downside protection during bear markets, yet can provide competitive returns during bull markets. For that reason, it is particularly well-suited for risk-averse investors.

What Works: Growth Strategies

Growth strategies seek to invest in companies that will continue to produce above-average earnings growth. O'Shaughnessy tested a number of basic growth strategies on stocks of all market capitalizations, including high rates of one- and five-year earnings growth, high profit margins, high returns on equity and high relative strength. Most of these simple growth strategies proved to be very risky—although growth stocks go through spurts when they produce very high returns, especially during bull markets, they also go through very bearish periods. And over the long term, the returns do not adequately compensate for the high risk. The exceptions, however, were relative strength and persistent earnings growth:

- **Earnings growth:** O'Shaughnessy found that purchasing firms with the largest increases in earnings growth, whether over one year or five, is a losing proposition—investors, he says, tend to pay too much for these stocks. On the other hand, stocks that show persistent earnings growth—yearly increases over a five-year period—appeared to do well when combined with other screens.
- **Relative strength (one-year price changes):** Stocks with the highest relative strength (the highest price changes over the prior year) produced the highest returns the following year. O'Shaughnessy found this screen to be one of the most effective for stocks of all sizes, although he warns that it is a very volatile approach that can severely test investor discipline. Why does a momentum indicator work? O'Shaughnessy speculates that the market is simply "putting its money where its mouth is." Conversely, O'Shaughnessy suggests that investors avoid the biggest one-year losers, since most likely they will continue to lose.

Growth strategies, O'Shaughnessy notes, are more consistent with smaller stocks, although he prefers not to exclude large firms from consideration. And although the magnitude of growth appears to be of little use in identifying high-returning stocks, persistent earnings growth and high relative strength both

provide useful growth screens. O'Shaughnessy combines these factors with a low price-to-sales screen for his Cornerstone Growth Approach—a portfolio of stocks with:

- Market capitalization of \$150 million or greater
- Earnings gains five years in a row
- Price-to-sales ratios of 1.5 or below—O'Shaughnessy relaxes this value criteria slightly to allow more of the “growth stocks with persistent earnings to make the final cut,” yet ensure that valuations are not extreme
- Ranking among the highest in one-year price increase for all stocks

The low price-to-sales ratio requirement combined with the high relative strength screen assures that growth stocks are bought when they are cheap, but at a time when the market is starting to realize that they have been overlooked.

O'Shaughnessy warns that this growth approach tends to be volatile, but its higher returns compensate for the greater risk. Thus, the approach is more useful for investors who can tolerate higher risk.

Portfolio Strategies

O'Shaughnessy argues that investors should not choose between growth versus value, but rather they should invest in both—they are complementary. Thus, an investor is best served by diversifying among these two styles—dividing a stock portfolio into two parts, one focusing on finding value among market-leading companies, and the other seeking growth among consistently growing firms with low price-sales ratios and high price momentum. The value portion of an investor's portfolio offsets

“What Works”: James O'Shaughnessy's Approach

Philosophy and style

There is no single strategy that works best at all times and for all stocks. Both value and growth strategies can be useful, as long as the approach is consistently applied, is disciplined, and uses rules that have been proven to be successful over long time periods. Value strategies tend to work best on large-capitalization stocks, while a more growth-focused approach is useful for a stock universe that emphasizes smaller stocks. Successful value and growth strategies are complementary, with the value strategy offering less volatility and the growth strategy offering greater potential for capital appreciation.

Universe of stocks

- For value-based strategies: Stocks in firms with a large market capitalization (greater than overall average), similar to those in the S&P 500; within his own database, this group consisted of roughly the top 16% of all companies.
- For growth-based strategies: All stocks greater than \$150 million in market capitalization (adjusted for inflation).

Criteria for initial consideration

Cornerstone Value Approach (market-leading stocks with high dividend yields):

- Large market capitalizations (greater than overall average)
- More common shares outstanding than average
- Sales that are 1.5 times the average
- Higher-than-average cash flows (to screen out potentially weak companies that may cut dividends)
- High dividend yields (should be performed after the list of market-leading firms is identified using the first four screens); exclude utilities. This proved to be the best value screen, but other value criteria could be substituted.

Cornerstone Growth Approach (growth stocks that are purchased at reasonable valuations):

- Market capitalization of \$150 million or greater
- Earnings gains five years in a row
- Price-to-sales ratios of 1.5 or below
- Ranked among the highest in one-year price increase for all stocks

Stock monitoring and when to sell

Investors should diversify among growth-based and value-based approaches. For risk-tolerant investors, a 50/50 split among the two strategies is a starting point; risk-averse investors should weight their portfolios more heavily with stocks selected using the value approach. Do not use strategies that encourage frequent trading, which will increase costs. Use simple rules that can be consistently applied. The rules for portfolios used in O'Shaughnessy's analyses included:

- Each portfolio consisted of 50 stocks held in equal amounts
- Portfolios were rebalanced annually—stocks that no longer met the criteria were dropped and those that did were added
- Although investors may not want to hold as many as 50 stocks, academic studies indicate a minimum of 16 stocks in various industries are required to achieve adequate diversification

the volatility produced by the growth portion, which introduces the potential for greater gains. O'Shaughnessy recommends a 50/50 split for risk-tolerant investors, while risk-averse investors should weight their portfolios more heavily with stocks selected using the value approach.

O'Shaughnessy does not suggest specific rules for portfolio size and when to sell a stock. But he strongly argues against strategies that encourage frequent trading due to the costs, which are a drag on returns, and he emphasizes the importance of consistently following a relatively simple approach. Presumably, an investor could do well adopting the simple rules he used for the portfolios in his analyses:

- Each portfolio was rebalanced once a year, dropping stocks that no longer met the criteria, and adding those that did.
- Each portfolio consisted of 50 stocks held in equal amounts. He does mention that investors need not hold as many as 50 stocks per portfolio, but he points out that academic studies indicate a minimum of 16 stocks in various industries are required to achieve adequate diversification. Thus,

at a minimum, an investor purchasing individual stocks who combines a growth portfolio with a value portfolio would need to hold at least 32 stocks.

In Summary

O'Shaughnessy's examination of investment screens is a useful guide for any investor who picks his own stocks. And he stands firmly in the stock-picking camp, arguing that it is possible to beat the market as long as a disciplined and emotion-free approach is followed.

O'Shaughnessy suggests that investors be guided by Taoist concept of Wu Wei—let things occur as they are meant to occur. Translated into investment terms, this means:

"Pick good strategies, understand their nature and let them work. Don't try to second-guess or outsmart them. Don't abandon them because they're experiencing a rough patch. Take ego out of decisions. Don't make the simple complex. And most of all, be consistent."



www.aaii.com

Check out our Web site and you'll find:

An education section with continually changing links to AAIJ Journal articles on eight investing topics.

A publications section that enables subscribers to read the latest as well as past articles from AAIJ.

- AAIJ Journal articles—current issue and archives back to 1992
- *Computerized Investing* articles—current issue and select archives
- *Quarterly Low-Load Mutual Fund Update*—current issue with data
- *Stock Investor*—current SI News, troubleshooting tips and tech support, stock screening articles and product information

A research area where you can:

- Check for stock & mutual fund quotes
- Monitor AAIJ members' views on the market in member pulse

A community area where you can:

- Visit message boards
- Send comments and questions to AAIJ staff
- Download investing shareware and spreadsheets as well as upload files of your own

An events area where you can:

- Find out about local chapter meetings
- Check on upcoming events in our calendar

Access the Web Site Using Your AAIJ Member Number.

Access to certain areas of the site require your AAIJ member number (from the mailing label on your *AAIJ Journal*). Be sure to use your entire eight-digit number (with no extra spaces) as your user name/login and password when prompted.

