The January Effect: Not Dead Yet, But Not at All Well

by Mark W. Riepe, CFA

Seasonal variations are impossible... If a seasonal variation in stock prices did exist, general knowledge of its existence would put an end to it." The previous quotation seems like it might be from a rabid, efficient-markets type. In fact, it was written 75 years ago by Richard N. Owens and Charles O. Hardy. These days, practitioner-oriented research publications frequently publish articles about day-of-the-week effects, turn-of-the-month effects, and others. Since this is being published in January, I thought I might discuss the latest on the granddaddy of all seasonal anomalies—the January effect.

What Is the January Effect?

To briefly recap, the January effect refers to the phenomenon in which stocks, particularly those of smaller companies, have enjoyed much higher rates of return in January than in any other month. First suggested in 1942 and more rigorously demonstrated in the late 1970s and early 1980s, this effect is now common knowledge among practitioners. In fact, my colleague, Darryl Forman, tells me that a Web search on the term reveals 400,000 matches.

Many hypotheses about the January effect have been thrown out into the marketplace of ideas. They can be grouped into two broad categories.

Measurement problems. The theory here is that the extra return of small companies is either (a) an illusion caused by poor measurement of the return of these companies or (b) the return is simply compensation for the extra risk investors bear when investing in these stocks at this time of year. The fact that the extra risk doesn't show up in many studies is due to the difficulty of measuring risk in a comprehensive way for these smaller firms.

Buying pressure. These theories all provide reasons why both individuals and institutions have a greater incentive to invest in smaller companies at the beginning of the year. This tidal wave of buying boosts prices. The explanations for individual investors typically are of the nature that individuals have more idle cash available at the beginning of the year that they want to put into the market. The source of this cash is purportedly everything from year-end bonuses, to tax-loss sales and holiday gifts. The explanations for institutions typically are variations on the theme that institutional managers engage in a lot of window dressing near the end of the year and the trades in January are reversals of that late-in-the-year activity. Another explanation for buying pressure is the psychological disposition to be more optimistic as the new year dawns.

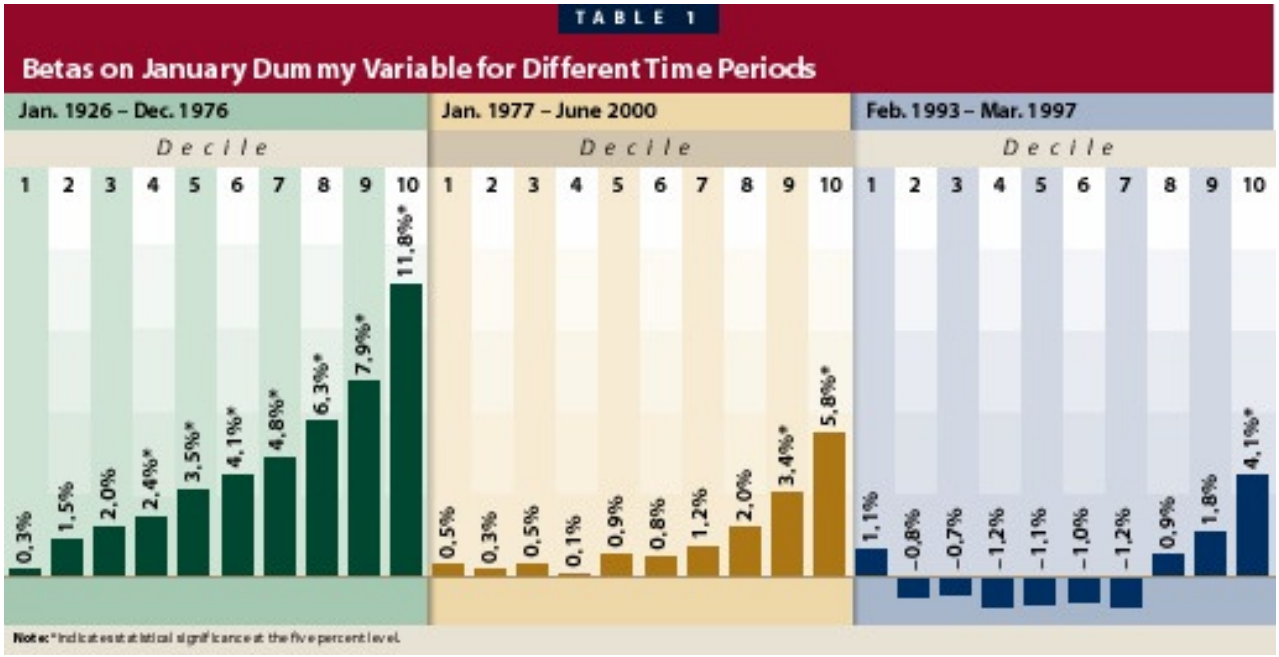
Is the January Effect Weakening?

These are all good theories, but what I'm most interested in is whether more recent data supports the continued existence of this effect. Going back to the Owens and Hardy hypothesis, one would think that the effect should dissipate over time as more people become aware of its existence and have mechanisms to exploit it.

Table 1 reports the results of some statistical tests to shed some light on this issue. "Deciles" are specially constructed portfolios of stocks. At the end of each calendar year, all stocks are ranked by their market capitalization. The largest ten percent of the companies are placed in decile 1, the second largest ten percent are placed in decile 2, and so on. The performance of each decile is tracked on a monthly basis for one quarter. At that time, the stocks are re-ranked and new deciles are formed. With a time series of returns in place for all ten deciles from January 1926 to June 2000, my colleague, Julieta Garcia, estimated the following linear regression:

$$r_{it}=\alpha_i+\beta_i J_t+\varepsilon_t$$

where r_{it} is the total return to decile i in month t and J_t is a dummy variable that is equal to 1 if month t is January and 0 if it is any other month.



If January is irrelevant—that is to say the returns of decile i are independent of whether or not the month is January—then β_i should be equal to 0, or if not 0, at least close enough to 0 that we cannot say whether its positive value is because of a real January effect or simply chance. If we multiply 1 by the beta for a given decile, we get an estimate of the extra return earned by that decile solely because the month was January.

Table 1 shows that for the years 1926–1976, the beta for decile 1 is 0.3 percent. The fact that there's no asterisk next to the result indicates that the 0.3 percent is not significantly different from zero. This result is in sharp contrast to what we see in deciles 4 through 10 (the so-called mid-, small- and micro-cap sectors of the market). In these deciles the betas are much larger and significantly different from zero at high levels of statistical confidence.

As we move to more recent periods, though, notice that the betas tend to get smaller and the number of statistically significant results dwindle to almost nothing. In fact, by the most recent period (the period since the Chicago Mercantile Exchange launched its Russell 2000 futures contract), there appears to be a January effect for only the smallest of companies (decile 10). In fact, even that result is somewhat suspect in that the reported beta of 4.1 percent is boosted by 1994, a year in which decile 10 stocks in January had a 7.9 percent return while the average monthly return for the rest of the year was –0.22 percent. Throw 1994 out and the January effect for decile 10 stocks is cut in half.

The Bottom Line

In my opinion, the bottom line is that we can assign the January effect to the historical curiosity section of the financial research shelf. Sure, it still shows up for extremely small companies, but given that these aren't relevant for most investors and most small-cap mutual funds, it hardly seems worth discussing any longer.

Mark W. Riepe, CFA, is vice president of the Schwab Center for Investment Research, a division of Charles Schwab & Co., Inc. Member SIPC/NYSE (0000-10268).