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In search of information content: portfolio performance of *The 100 Best Stocks to Own in America*

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Abstract

Now in its seventh edition, *The 100 Best Stocks to Own in America* is an enduring and lucid reference for the active individual investor. Through the sixth edition, it had reportedly sold over 300,000 copies, indicating that it might contain information content, or stocks that can beat a broad market index on a risk-adjusted basis. Does it? As a response, we compare the out-of-sample Sharpe ratios of 30 portfolios constructed from the first six editions of Walden's rankings to the Sharpe ratios of the S&P 500. We find some evidence of information content and suggest that the individual investor focus on the top five stocks. © 2005 Academy of Financial Services. All rights reserved.

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1. Introduction

Active stock portfolio management requires an effective stock selection strategy. Although the theory of efficient markets suggests that the search for an effective strategy is futile, the individual investor might easily infer otherwise from the wide variety of sources that recommend stocks and stock selection strategies, as found, for example, in *Barron's*, *Business Week*, *U.S.A. Today*, *The Wall Street Journal*, "Louis Rukeyser's Wall Street," Value Line's *Investment Survey*, S&P's STAR Ranking, the *Hulbert Financial Digest*, *The*

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Inefficient Stock Market: What Pays Off and Why (Haugen, 2002), and *The 100 Best Stocks to Own In America* (Walden, 2002).

Many researchers find that these sources do not contain information content; namely, stocks or stock selection strategies that can beat a broad market index on a risk-adjusted basis. For example, Desai and Jain (1995) cannot find much evidence of it in a time series study of *Barron's* Annual Roundtable recommendations. Bauman, Conover, and Cox (2002), analyzing *Business Week*'s small stock recommendations, find negative returns after the publication date. Walker and Hatfield (1996) show that the recommendations of analysts may have some information content but that investors who follow them in the "Market Highlights" section of *U.S.A. Today* are likely to earn inferior returns even before accounting for transactions costs. Metrick (1999) concludes that investment newsletters do not contain superior stock selections beyond what would be expected by chance. Beltz and Jennings (1997), in studying the impact of the television program "Louis Rukeyser's Wall Street" (formerly "Wall $treet Week With Louis Rukeyser"), find little evidence of superior performance—even discovering negative performance—from following the recommendations on the program, the same conclusion that Pari (1987) reaches in an earlier study. Liang (1999) shows that the impact of the *Wall Street Journal*'s "dartboard" column on stock prices is temporary and driven by noise trading. Ferraro and Stanley (2000), using the Sharpe (1966) ratio, conclude that analysts participating in the "dartboard contest" did not beat either a random selection of stocks or the Dow Jones Industrial Average. Chandy, Peavy, and Reichenstein (1993) demonstrate that the Value Line "Stock Highlight" has a positive, but only temporary, impact on stock prices. Choi (2000), in a study of Value Line's ability to identify stocks with superior profit potential, concludes that abnormal profits are likely to be insignificant after accounting for transactions costs. Weigand, Belden, and Zwirlein (2004), using mutual fund data supplied by Morningstar, find that the top holdings among large-cap mutual funds are not likely to produce superior performance.

Other researchers, however, draw different conclusions. For example, Palmon, Sun, and Tang (1994) find evidence of persistent abnormal returns from *Business Week*'s "Inside Wall Street." Adranji, Chatrath, and Shank (2002), in another test of the *Wall Street Journal*'s "dartboard," discover that the risk-adjusted performances of the portfolios of stocks chosen by the stock-picking analysts consistently outperformed those of the randomly selected stocks, the Dow Jones Industrial Average, and the S&P 500. Ferreira and Smith (2003), adjusting for potential bias in event study methods, conclude that the recommendations in the 1997 broadcasts of "Louis Rukeyser's Wall Street" led to excess returns for up to eight quarters. Porras and Griswold (2000), using multifactor modeling, assert that the well-known Value Line enigma continues to hold, attributing it to Value Line's accurate assessment of stocks that are expected to perform poorly. Peterson and Peterson (1995) uncover a permanent price change in the price of stocks included in Value Line's "Stock Highlight" section. Schadler and Eakins (2001) show that Morningstar's cell classification system can guide the assessment of an individual investor's relative risk tolerance, and conclude that stocks from the low-risk categories have the largest wealth enhancement potential. Mulugetta, Movassaghi, and Zaman (2002) find evidence of abnormal returns for stocks that received a large change in rating by S&P 500.

Reinforcing these conclusions, some researchers find that investors can use fundamental

analysis to identify stocks positioned for superior performance. For example, Rich and Reichenstein (1993) conclude that a combination of the market risk premium, dividend yield, and earnings-price ratio with Value Line's market forecasts may enable the individual investor to beat the S&P 500. Haugen and Baker (1996) uncover evidence that ad hoc expected-return factor models based on historical returns, the earnings-price ratio, and cash flow variables can help investors outperform the Russell 1000. Gold and Lebowitz (1999) show that well-known stock selection variables (e.g., earnings growth and price-to-sales), combined with a good stock-screening program, can produce superior risk-adjusted returns. Ahmed and Nanda (2001) demonstrate that stocks with both a high E/P ratio and strong EPS growth—"growth at a reasonable price"—can also produce superior performance. Badrinath and Kini (2001), guided by the findings of Lakonishok, Shleifer, and Vishny (1994), draw a similar conclusion for a contrarian stock selection strategy based on high earnings-price ratios.

In contrast to studies on trade publication reports, newsletters, and broadcast media, researchers have not thoroughly investigated the quality of investment advice in books. There are many, such as *The Motley Fool Investment Guide* (Gardner & Gardner, 1996), *A Nonrandom Walk Down Wall Street* (Lo & MacKinlay, 1999), *What Works on Wall Street: A Guide to the Best-Performing Strategies of All Time* (O'Shaughnessy, 2001), *The Inefficient Stock Market* (Haugen, 2002), *Stocks for the Long Run* (Siegel, 2002), *The 100 Best Stocks To Own in America* (Walden, 1989–2002), *The 100 Best Stocks You Can Buy* (Slatter, 1997–2004), and *Beyond the Random Walk: A Guide To Stock Market Anomalies and Low-Risk Investing* (Singal, 2004).

Now in its seventh edition, *The 100 Best Stocks to Own in America* is an enduring and lucid reference for the active individual investor. Not only does author Gene Walden discuss his methodology in detail, but he also ranks his list of 100 selections. Through the fourth edition, the book had reportedly sold over 150,000 copies and more than 300,000 through the sixth edition, suggesting that a segment of the investing population has believed that Walden's selections can beat a broad market index on a risk-adjusted basis. Advertisements of the book and assertions in it support this belief. The publisher, Dearborn Financial Publishing, which specializes in securities, insurance licensing, and financial education, advertises the author as "The Country's Foremost Independent Expert." In the introduction to the seventh edition, Walden states that, "through seven editions, I've picked the most obvious stock prospects" and have "watched them outperform the overall market consistently" (Walden, 2002, p. xiii). He also mentions that the "secret is in the selection process" (Walden, 2002, xiii).

Despite the number of editions of the book and the strong assertions on its behalf, no one appears to have tested whether Walden's stock selections produce superior risk-adjusted returns. As a result, the profession does not know if his recommendations lead to market-beating results, and therefore does not know where to place his book in the literature. The aim this study is to address this issue. As a guide, we test the following hypothesis:

Ho: portfolios of Walden's stock selections do not consistently outperform a broad market index on a risk-adjusted basis.

We test this by tracking the out-of-sample, risk-adjusted returns of 30 portfolios constructed from the stocks listed in each of the first six editions of the book: 1989, 1991, 1993, 1996, 1998, and 2000. In turn, we compare them to those of a broad market index.

Given that Walden's selections represent a subset of large-cap stocks of well-established companies (e.g., Coca Cola, Gillette, Home Depot, Medtronic, Microsoft, Merck, Philip Morris, and Wrigley), we choose the S&P 500 as the market index. Of the 30 portfolios, 24 contain stocks that are equally weighted and six have stocks that are weighted according to Markowitz's mean-variance criteria.

This study follows the spirit of those by Clayman (1987) and Kolodny, Laurence, and Ghosh (1989). They examine a popular book by Peters and Waterman (1982), *In Search of Excellence: Lessons from America's Best-run Corporations.* Clayman and Kolodny et al. examine whether the stocks of these best-run corporations, on average, realized superior risk-adjusted returns. The authors conclude that they did not. Researchers, however, have yet to address whether the same conclusion holds for Walden's stock selections.

We follow Walden's time frames to track the performance of each set of portfolios. Using the Sharpe ratio, we compare the risk-adjusted returns of each portfolio to the risk-adjusted returns of the S&P 500 from one edition to the next. We use monthly rates of return, as taken from the University of Chicago's Center for Research in Security Prices (CRSP), to build the portfolios and track their respective performances.

Walden reportedly screens approximately 2,000 stocks across the NYSE, AMEX, and NASDAQ exchanges. He examines a company's performance history by using six variables, four of which are financial: earnings per share growth, stock price growth, dividend growth, and dividend yield. He awards points, one through four for each category, depending on the strength of the earnings (e.g., four points for a 10-year earnings per share growth of at least 500%), the stock price (e.g., four points for a 10-year growth rate of at least 600%), the dividend (e.g., four points for a five-year growth rate of at least 160%), and the size of the dividend (e.g., four points for a two-year yield average of at least 4%). To these variables, he adds two qualitative variables, what he calls "consistency" (e.g., companies with strong and steady earnings per share growth), which carries a maximum of four points, and "shareholder perks" (e.g., dividend reinvestment plan), which also carries a maximum of four points. Walden ranks the stocks by these points. The top-ranked stock has the most points; the bottom-ranked stock has the least.

The rest of the paper is organized into four sections. Section 2 explains the portfolio construction methods. Section 3 describes the tracking of the portfolios. Section 4 presents the results and discusses the implications. Section 5 concludes the study.

2. Portfolio construction

Based on Walden's ranking of the stocks in each edition from 1 to 100, the 24 portfolios of equally weighted stocks consist of six portfolios of all 100 stocks and six portfolios each of the top five, 10, and 20 stocks. The size of the subgroups is guided by Walden's suggestion that the individual investor first read through the profile of each company, followed by

reducing the selections to about 10, and even to about five, taking care that the companies are not from the same, or related, sectors.

We build six more portfolios, but allow for unequal weights by applying the approach of Elton, Gruber, and Padberg (1976) (EGP), as illustrated in Chapter 9 of Elton and Gruber (1995), to all 100 stocks in each edition. In theory, their approach produces identical mean-variance efficient portfolios as the full-covariance method of Markowitz (1959) but it is less computationally demanding. In practice, both Burgess and Bey (1988) and Nawrocki (1996) find that it produces acceptable approximations to Markowitz's method. Burgess and Bey also argue that the EGP method, by relying on return-to-beta estimates, is more intuitive than its alternative.

The method has five equations, as follows:

Single-index model:
$$(R_{jt} - R_f) = \alpha_j + \beta_j(R_{mt} - R_f) + \varepsilon_{jt} \quad (1)$$

Excess return to beta:
$$Rrisk_j = \frac{(\bar{R}_j - R_f)}{\beta_j} \quad (2)$$

Cutoff value:
$$C_j = \frac{\sigma_m^2 \sum_{j=1}^{n} \frac{(\bar{R}_j - R_f)}{\sigma_{\varepsilon j}^2} \beta_j}{1 + \sigma_m^2 \sum_{j=1}^{n} \left(\frac{\beta_j^2}{\sigma_{\varepsilon j}^2} \right)} \quad (3)$$

Weights:
$$W_j = \frac{Z_j}{\sum_{j=1}^{n} Z_j} \quad \text{where} \quad (4)$$

$$Z_j = \frac{\beta_j}{\sigma_{\varepsilon j}^2} \left(\frac{\bar{R}_j - R_f}{\beta_j} - C^* \right) \quad (5)$$

and:

R_j = return on stock j;
R_m = return on the market;
$\bar{R}_j$ = expected return on stock j;
R_f = return on a riskless asset;
β_j = beta of stock j;
σ_m^2 = variance of the market;
$\sigma_{\varepsilon j}^2$ = idiosyncratic risk of stock j;
W_j = proportion invested in stock j; and
C^* = maximum value among the C_j's.

Eq. (1) represents the single-index model of Sharpe (1963). We use it to estimate the beta and idiosyncratic risk of each stock. Eq. (2) provides an expected return to beta, a ratio

attributed to Treynor (1965). Eq. (3) determines the stocks that make up the portfolio. It begins with the sorting of the Treynor values from highest to lowest. Eq. (3) is then applied to the ranking, with the rule being that a stock will be included in the efficient portfolio only if its Treynor ratio exceeds its cutoff value, C_j. This rule is similar to including only those stocks that lie above the security market line. Eq. (4) assigns the weight to each stock that is in the efficient portfolio. As the equation shows, a larger (smaller) Z_j means a larger (smaller) weight. Eq. (5) determines the size of Z_j. It shows that the more (less) the excess return to beta exceeds C*, which is the maximum value of C_j, the larger (smaller) Z_j will be. However, as the scalar in front of Eq. (5) indicates, the degree of idiosyncratic risk ($\sigma^2_{\varepsilon j}$) affects the size of Z_j. All else held equal, the larger (smaller) the amount of this risk compared to the beta (β_j), the smaller (larger) Z_j will be, implying a smaller (larger) weight.

3. Tracking the portfolios

We track the performances of the five portfolios between the beginning and ending dates that Walden reports across the editions: first edition, December 19, 1988 through May 1, 1991; second edition, May 2, 1991 through June 1, 1993; third edition, June 2, 1993 through June 1, 1995; fourth edition, June 2, 1995 through August 1, 1997; fifth edition, August 2, 1997 through July 31, 1999; and sixth edition, August 3, 1999 through October 1, 2001.

For each stock in each portfolio, we first aggregate daily rates of return, as taken from CRSP, into monthly returns. We then compute the geometric mean return of the portfolio for the tracking period. Next, we subtract the risk-free rate of return, which is based on the average monthly return on the 30-day Treasury bill, from the geometric mean to arrive at the excess return of a portfolio. We then divide the excess return for the tracking period by the standard deviation to get the Sharpe ratio. For each tracking period, we use the Sharpe ratio of the S&P 500 as the benchmark. This testing approach is not only straightforward, but it also adheres to Walden's time frames, reducing the possibility of data snooping. The only problem encountered is in the first edition. This is because Walden uses closing stock prices across a variety of dates between July and December of 1988. The tracking period begins on December 19, 1988, because it is the earliest date that applies to all 100 stocks.

4. Results

We are able to obtain the necessary data for all 100 stocks in each edition, a total of 600. To apply Eq. (2) of the EGP approach, we need to estimate an expected return for each of the 600 stocks. To do so, we follow Ritter (2002) and use the monthly return that annualizes to the 10-year return that Walden provides for each stock. For example, if Walden reports an annual return of 24% for a stock, we use 1.8088%. We also note that the 10-year historical return, a conspicuous number that likely influences the individual investor's choice of stocks, is one of Walden's major screening criteria and serves as a reasonable and objective number on which to base an expected monthly return.

To estimate Eq. (1), the single-index model, we use the *Beta Book* of Ibbotson Associates

Table 1 Monthly excess returns and risks by edition: *The 100 Best Stocks to Own in America*

	1st ed.	2nd ed.	3rd ed.	4th ed.	5th ed.	6th ed.
Return 100*	0.955%	0.523%	0.484%	1.726%	0.893%	−0.242%
Return 500†	0.799	0.696	0.649	1.984	0.878	−1.262
Risk 100‡	5.195	3.969	2.472	2.988	5.108	4.511
Risk 500§	4.361	3.348	2.604	3.145	5.209	5.138

* Monthly excess return on the 100 stocks for each period between editions.
† Monthly excess return on the S&P 500 for each period between editions.
‡ Monthly standard deviation of the returns on the 100 stocks for each period between editions.
§ Monthly standard deviation of the returns on the S&P 500 for each period between editions.

(2002) as a guide. We use five years of monthly historical returns for each stock and the 30-day U.S. Treasury bill yield as the risk-free rate of return.[1] We include betas significant at the 10% level. Across the 600 regressions, we find that only five betas do not meet this criterion, and more than 95% are significant at the 5% level.

Four acquisitions occurred during the testing periods. To handle them, we compute the monthly returns for the stock in question up to the time in which it was no longer traded, and assume that the portion of the portfolio initially allocated to that stock now holds cash that earns the risk-free rate of return. For example, Pfizer completed its acquisition of Warner-Lambert, which is one of Walden's selections, in June of 2000. We compute the rate of return of the stock up to the final day of trading, and then assume that the risk-free return is earned through October 1, 2001, the remainder of the testing period.

As some insight into the performance of Walden's selections, Table 1 provides the monthly excess returns (i.e., in excess of the 30-day Treasury bill return) and the risks, as measured by standard deviations, for all 100 stocks and the S&P 500 for the tracking period of each edition. The range of the excess returns on the 100 stocks is from −0.242% (sixth edition) to 1.726% (fourth edition), smaller than that of the S&P 500, which is from −1.262% (sixth edition) to 1.984% (fourth edition). The excess returns on the 100 stocks from the first, fifth, and sixth editions are greater than those of the S&P 500. Overall, the average monthly return for the 100 stocks, based on a geometric mean, is 0.721%, which exceeds that of the S&P 500 at 0.619%. At this level, the results suggest that Walden's selections have some potential to outperform the S&P 500.

The risks of the 100 stocks range from 2.472% (third edition) to 5.195% (first edition), a little bit wider than the range of risks of the S&P 500, 2.604% (third edition) to 5.209% (fifth edition). However, the risks of the 100 stocks are lower than those of the S&P 500 for the third through the sixth editions. Thus, the 100 stocks from the fifth and sixth editions have both higher returns and lower risks than those of the S&P 500. Overall, in terms of the sizes of the returns and risks, the 100 stocks appear to offer a small advantage over the S&P 500. Before drawing firm conclusions, however, we turn to more detailed results, as shown in Tables 2–4.

Table 2 reports the monthly excess returns of the top five, 10, and 20 stocks, all 100 stocks, the EGP stocks, and the S&P 500. All of the excess returns from the first and sixth editions of Walden's selections are higher than those of the S&P 500. In fact, the excess return of the top five stocks from the sixth edition exceeds that of the S&P 500 by over two

Table 2 Monthly excess returns by edition: *The 100 Best Stocks to Own in America*

	1st ed.	2nd ed.	3rd ed.	4th ed.	5th ed.	6th ed.
Top 5 stocks	1.414%	0.543%	1.041%	2.568%	1.267%	0.846%
Top 10 stocks	1.603	0.517	0.657	2.304	0.693	0.467
Top 20 stocks	1.321	0.387	0.420	2.090	1.021	0.681
100 stocks	0.955	0.523	0.484	1.726	0.893	−0.242
EGP stocks*	1.212	0.411	0.531	2.224	1.618	−0.683
S&P 500	0.799	0.696	0.649	1.984	0.878	−1.262

* Elton-Gruber-Padberg method of constructing portfolios.

percentage points, 0.846% versus −1.262%, and by nearly two percentage points, 0.681% versus −1.262%, in the case of the top 20 stocks. Combining the results from the fourth, fifth, and sixth editions, we find that the excess returns on the portfolios exceed those of the S&P 500 in 13 of the 15 possible comparisons, or 87%, a compelling percentage for the individual investor. However, we also see that none of the excess returns from the second edition exceeds that of the S&P 500, which tempers this conclusion.

The top five stocks show the strongest performance, exceeding the S&P 500 in every edition except in the second. In contrast, the 100 stocks register the weakest performance, beating the S&P 500 only in the first, fifth, and sixth editions. The excess returns of the top 10, 20, and EGP stocks each exceed those of the S&P 500 in four of the editions. These results support Walden's advice to reduce the number of selections before investing.

The excess returns of the top 5, 10, 20, and EGP stocks are higher than those of the S&P 500 in 17 of the 24 possible pair-wise comparisons, or 71%. When expanding the comparisons to 30 by including the 100 stocks, we find that the portfolios beat the S&P 500 20 times, or 67%. Overall, it is conceivable that some individual investors would find these numbers sufficiently attractive to buy the book.

Table 3 provides the risks of the portfolios based on monthly standard deviations. They range from a low of 2.472% (100 stocks, third edition) to a high of 6.737% (top five stocks, second edition). The fifth edition has the highest standard deviations, with an average of 5.700% across the five portfolios. The third edition has the lowest, with an average of 2.935%. Not surprisingly, by virtue of naïve diversification, the 100 stocks and the S&P 500 generally register the lowest risks on an edition-by-edition basis. In fact, the 100 stocks have the lowest risks in the third through the sixth editions. As expected, the smaller portfolios generally have the highest risks. In fact, by holding portfolios of either the top five or top 10

Table 3 Monthly standard deviations by edition: *The 100 Best Stocks to Own in America*

	1st ed.	2nd ed.	3rd ed.	4th ed.	5th ed.	6th ed.
Top 5 stocks	5.468%	6.737%	3.186%	4.062%	5.839%	5.565%
Top 10 stocks	5.596	4.909	3.070	4.143	6.165	4.930
Top 20 stocks	5.677	4.564	2.936	3.506	5.476	5.349
100 stocks	5.195	3.969	2.472	2.988	5.108	4.511
EGP stocks*	5.143	4.282	3.012	3.105	5.914	6.069
S&P 500	4.361	3.348	2.604	3.145	5.209	5.138

* Elton-Gruber-Padberg method of constructing portfolios.

Table 4 Monthly Sharpe measures by edition: *The 100 Best Stocks to Own in America*

	1st ed.	2nd ed.	3rd ed.	4th ed.	5th ed.	6th ed.
Top 5 stocks	0.259%	0.081%	0.327%	0.632%	0.217%	0.152%
Top 10 stocks	0.286	0.105	0.214	0.556	0.112	0.095
Top 20 stocks	0.233	0.085	0.143	0.596	0.186	0.127
100 stocks	0.184	0.132	0.196	0.578	0.175	−0.054
EGP stocks*	0.236	0.096	0.176	0.716	0.274	−0.113
S&P 500	0.183	0.208	0.249	0.631	0.169	−0.246

* Elton-Gruber-Padberg method of constructing portfolios.

stocks, the individual investor would incur about 25% more risk than if holding the S&P 500, a noticeable increase.

The risks offer a perspective on the results in Table 2, allowing an assessment of the degree to which higher risks accompany higher returns. For example, in Table 2, the top 10 stocks from the fourth edition show a gain of 2.304%, 16% higher than that of the S&P 500 at 1.984%. Yet, the higher gain comes at the price of a standard deviation that is 32% higher than that of the S&P 500, 4.143% versus 3.145%, suggesting that the higher returns are no bargain. For the same edition, however, the EGP portfolio has an excess return of 2.224% that beats that of the S&P 500 of 1.984%, and does so with a lower standard deviation, 3.105% versus 3.145%. The same conclusion holds for the top 10 stocks from the sixth edition and, as previously mentioned, for the 100 stocks from the fifth and sixth editions. The higher returns coupled with lower risks indicate superior performance. To search for additional evidence of it, we turn to the Sharpe ratios, which are in Table 4.

We obtain the Sharpe ratios by dividing the entries in Table 2 by their respective entries in Table 3. We find that the portfolios from the first and sixth editions turn in the strongest performances, beating the S&P 500 10 times out of a possible 10 (but by a very small margin for the 100 stocks, first edition, and the top five stocks, fourth edition). The portfolios from the fifth edition outperform the S&P 500 four times out of a possible five. The portfolios, however, underperform the S&P 500 in the second, third, and fourth editions, showing Sharpe ratios exceeding those of the S&P 500 in only three of the 15 comparisons. All told, the portfolios beat the S&P 500 17 times out of a possible 30, or 57%, not very compelling for the individual investor.

The top five stocks turn in the most impressive performance, beating the S&P 500 in every edition except in the second, and appear to offer some hope to the individual investor searching for market-beating portfolios. The EGP portfolios turn in the second best performance, eclipsing the S&P 500 a total of four times. The top 10 stocks turn in the least impressive performance, outperforming the S&P 500 twice.

To test for information content—whether the Sharpe ratios of the portfolios are greater than those of the S&P 500—we need a formal means to account for the differences. We first note that only six editions of the book apply. As Higgins and Peterson (1998) assert, such a small sample calls into question the assumption of a normal distribution and the power of a "t" statistic. Alternatively, following the suggestions by Higgins and Peterson (1998) and Kolodny, Laurence, and Ghosh (1989), we use the Wilcoxon signed-ranks statistic, a non-parametric measure of some power when making the kind of comparisons done in this

Table 5 Differences in the Sharpe ratios between the portfolios of *The 100 Best Stocks to Own in America* and the S&P 500 using the Wilcoxon Signed-Ranks Statistic

Individual portfolios vs. S&P 500	
p-value, top five stocks	12.5%
p-value, top 10 stocks	49.9%
p-value, top 20 stocks	54.1%
p-value, 100 stocks	62.3%
p-value, EGP stocks†	23.2%
Portfolio growth vs. S&P 500 growth: December 19, 1988-October 1, 2001	
p-value, geometric means	2.2%*

* Indicates significant at the 5% level.
† Elton-Gruber-Padberg method of constructing portfolios.

study. By rejecting the null hypothesis that the Sharpe ratios of any set of portfolios are less than or equal to those of the S&P 500, we would conclude that significant information content exists. To reject the null hypothesis, we look for probability values less than 5%.

We test for information content in two ways. First, we test if any of the portfolios beats the S&P 500, edition by edition. We do so by comparing the Sharpe ratio of each portfolio in each edition to the Sharpe ratio of the S&P 500 in each edition. For example, to search for information content in the top five stocks, we apply the Wilcoxon statistic to the following six pairs: 0.259% and 0.183% (first edition); 0.081% and 0.208% (second edition); 0.327% and 0.249% (third edition); 0.632% and 0.631% (fourth edition); 0.217% and 0.169% (fifth edition); and 0.152% and −0.246% (sixth edition). This test is designed to help the individual investor predict which of the portfolios, if any, is likely to beat the S&P 500 from one edition to the next.

Second, we determine whether the risk-adjusted growth rates of the portfolios, as computed from the Sharpe ratios, exceed that of the S&P 500. Unlike with the first test, which requires five Wilcoxon statistics, one for each portfolio, this test requires only one Wilcoxon statistic. It reveals to what degree, if any, the growth rates in the risk-adjusted returns of the portfolios exceed the growth rate in the risk-adjusted returns of the S&P 500 from December 19, 1988, through October 1, 2001, the beginning and ending dates of the tracking periods. We perform this test to complement the first test, providing the individual investor with another perspective on the efficacy of Walden's selections. To perform it, we first compute the geometric mean of the Sharpe ratios of each portfolio and that of the S&P 500. We then apply the Wilcoxon statistic. For example, the geometric mean for the top five stocks is 0.278% (i.e., the geometric mean of 0.259, 0.081, 0.327, 0.632, 0.217, and 0.152%). For the S&P 500, it is 0.199% (i.e., the geometric mean of 0.183, 0.208, 0.249, 0.631, 0.169, and −0.246%). The geometric means for the top 10, 20, 100, and EGP stocks are 0.228, 0.228, 0.202, and 0.231%, respectively, each of which exceeds that of the S&P 500.

Table 5 reports the results of the tests. In the case of the first test, none of the portfolios registers a probability value, or *p*-value, less than 5%. The top five stocks register the best performance, beating the S&P 500 in five of the six editions and showing a *p*-value of 12.5%. The worst performance is by all 100 stocks, with a *p*-value of 62.3%. The top 10 and top 20 stocks register *p*-values of 49.9% and 54.1%, respectively, and the EGP stocks produce a

p-value of 23.2%. These results indicate that the individual investor's best bet from one edition to the next—one to be placed cautiously, of course—lies with the top five stocks.

The portfolios fare better in the test of portfolio growth. As indicated above, the geometric mean of the Sharpe ratios of every portfolio exceeds that of the S&P 500, leading to a *p*-value of 2.5%, which is less than 5%. This finding suggests that *The 100 Best Stocks to Own in America* contains some information content, and therefore is worth reading for stock selections and investment advice on developing an effective stock selection strategy. However, given the results from the first test, we recommend that the individual investor focus on the top five stocks. They have the largest geometric mean, exceeding that of the S&P 500 by 40% (i.e., 0.278% vs. 0.199%), and they outperform the S&P 500 in five of the six editions. None of the remaining portfolios appears to offer convincing, market-beating results, an observation that is consistent with the hypothesis that guides this study.

5. Conclusions

Gene Walden's *The 100 Best Stocks to Own in America* is an enduring and lucid reference for the active individual investor. Now in its seventh edition, the book has reportedly sold over 300,000 copies through the first six editions, indicating that it might contain information content, or stocks that can beat a broad market index on a risk-adjusted basis. Does it? As a response, we set forth the following hypothesis: portfolios of Walden's stock selections do not consistently outperform a broad market index on a risk-adjusted basis. To test this, using the Wilcoxon signed-ranks statistic, we compare the out-of-sample Sharpe ratios of 30 portfolios constructed from the first six editions of Walden's rankings to the Sharpe ratios of the S&P 500. The 30 portfolios consist of the top five, 10, 20, and all 100 stocks from each edition. They also include portfolios constructed from the Elton-Gruber-Padberg procedure, which is based on Markowitz's mean-variance criteria.

We find some evidence of information content and suggest that the individual investor focus on the top five stocks. The remaining portfolios do not appear to offer risk-adjusted returns that consistently exceed those of the S&P 500. All things considered, we conclude that *The 100 Best Stocks to Own in America* should be classified among the selected trade publications, investment newsletters, and media reports that have the potential to help the individual investor beat a broad market index on a risk-adjusted basis.

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Note

1. The use of five years of data to estimate the betas follows academic as well as practitioner convention (e.g., Markowitz & Xu, 1995; Chan, Karceski, & Lakonishok,

1999; Liew, 2003; Harris, Marston, Mishra, & O'Brien, 2003). However, the justification goes beyond convention. While 10 years of monthly returns, for example, would match the historical return period used to estimate the expected returns in the EGP procedure, a 10-year beta would likely be fouled by stationarity problems and structural shifts because of changing macroeconomic conditions. As a result, we use Value Line as a guide. The company states that a 10-year earnings growth rate, one of Walden's major screening variables, is the most important factor influencing a stock's "timeliness" rank, one of Value Line's most recognized assessment criteria. It estimates a stock's beta, however, from five years of data.

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