

Great Company, Great Investment Revisited

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Abstract

Fortune magazine publishes an annual list of America's most-admired companies. These companies' virtues are well known and presumably already factored into stock prices, yet Anderson and Smith (2006) found that a portfolio of the ten most-admired stocks outperformed the overall market by a substantial and statistically significant margin over the first 22 years that the list was compiled. This paper uses 11 additional years of data to see whether this finding is replicated or refuted.

keywords: efficient market hypothesis, most-admired companies

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Since 1983, *Fortune* magazine has published an annual list of the most-admired companies. The efficient market hypothesis suggests that investors are well aware of the traits that make these companies admirable and, therefore, this information should already be embedded in their stock prices by the time *Fortune*'s list is published. Even if valuable new information is revealed in the *Fortune* rankings, the efficient market hypothesis says that stock prices should incorporate this information immediately after the list is published.

Surprising, Anderson and Smith (2006) found that a portfolio of the stocks identified annually as America's ten most admired companies outperformed the market by a substantial and statistically significant margin, whether the stocks were purchased on the magazine's cover date, or 5, 10, 15, or 20 trading days later.

The performance of many promising investment strategies, such as the Foolish Four and the Dogs of the Dow, has turned out to be mediocre after their discovery. Perhaps the surprising success of the most-admired strategy has also self-destructed or was just a coincidence that has now evaporated. This paper revisits the Anderson/Smith finding by incorporating data for the eleven years following their study.

Thirty-Three Years of the Fortune Portfolio

Fortune's rankings are based on a survey of thousands of executives, directors, and securities analysts who rate companies in various areas of leadership, including innovation, quality of management, and quality of products/services. The top ten companies (in order) in 2015 were Apple, Google, Berkshire Hathaway, Amazon, Starbucks, Walt Disney, Southwest Airlines, American Express, General Electric, and Coca-Cola.

Anderson and Smith looked at the top-ten American companies for 1983 through 2004. I've extended their analysis to 2015. The top-ten companies for these 11 additional years are listed in Exhibit 1. Toyota made the list from 2006 through 2010, but was excluded from the analysis because it is not an American company (the results are virtually the same if it is included).

Exhibit 1 The Ten Most Admired Companies, cover date in parentheses

2005 (3/7)	2006 (3/6)	2007 (3/19)	2008 (3/17)
1 Dell	General Electric	General Electric	Apple
2 General Electric	FedEx	Starbucks	Berkshire Hathaway
3 Starbucks	Southwest Airlines	Berkshire Hathaway	General Electric
4 Wal-Mart	Procter & Gamble	Toyota	Google
5 Southwest Airlines	Starbucks	Southwest Airlines	Toyota
6 Fedex	Johnson & Johnson	FedEx	Starbucks
7 Berkshire Hathaway	Berkshire Hathaway	Apple	FedEx
8 Microsoft	Dell	Google	Procter & Gamble
9 Johnson & Johnson	Toyota	Johnson & Johnson	Johnson & Johnson
10 Procter & Gamble	Microsoft	Procter & Gamble	Goldman Sachs
2009 (3/16)	2010 (3/22)	2011 (3/21)	2012 (3/19)
1 Apple	Apple	Apple	Apple
2 Berkshire Hathaway	Google	Google	Google
3 Toyota	Berkshire Hathaway	Berkshire Hathaway	Amazon
4 Google	Johnson & Johnson	Southwest Airlines	Coca-Cola
5 Johnson & Johnson	Amazon	Procter & Gamble	IBM
6 Procter & Gamble	Procter & Gamble	Coca-Cola	FedEx
*7 FedEx	Toyota	Amazon	Berkshire Hathaway
*8 Southwest Airlines	Goldman Sachs	FedEx	Starbucks
9 General Electric	Wal-Mart	Microsoft	Procter & Gamble
10 Microsoft	Coca-Cola	McDonald's	Southwest Airlines

Exhibit 1 (Continued)

2013 (3/18)	2014 (3/17)	2015 (3/1)
1 Apple	Apple	Apple
2 Google	Amazon	Google
3 Amazon	Google	Berkshire Hathaway
4 Coca-Cola	Berkshire Hathaway	Amazon
5 Starbucks	Starbucks	Starbucks
6 IBM	Coca-Cola	Walt Disney
7 Southwest Airlines	Walt Disney	Southwest Airlines
8 Berkshire Hathaway	FedEx	American Express
9 Walt Disney	Southwest Airlines	General Electric
10 FedEx	General Electric	Coca-Cola

*: tie

The daily returns are from the Center for Research in Security Prices (CRSP) data base. The Fortune strategy involves investing an equal dollar amount in each of the ten most admired stocks each year. In one set of calculations, the annual trading day is the cover date; for example, March 7, 2005, for the 2005 list. (Investors can implement this strategy because the magazine goes on sale several days before the magazine's cover date.) I also looked at portfolio trading days that were 5, 10, 15, or 20 market days (approximately 1 to 4 weeks) after the cover date.

The top-ten stocks each year are held for approximately one year. The initial Fortune portfolio is formed on the 1983 trading day; each year thereafter, the portfolio is liquidated on that year's trading day and the proceeds are reinvested in that year's ten most admired companies. For example, the 1983 portfolio is held until the 1984 trading day. The S&P 500 strategy is to be fully invested in the S&P 500 index the entire time. The strategies end on October 31, 2015, the last day with available data when this analysis was done.

Results

Exhibit 2 compares the average daily returns on the Fortune portfolio and the S&P 500 for the 22 years 1983-2004 studied by Anderson and Smith, the next 11 years 2005-2015, and the entire 33-year period.

Exhibit 2 Average Daily Percentage Returns From Purchases
Made n Days After *Fortune*'s Cover Date

1983-2004:

n	Fortune Portfolio	S&P 500 Portfolio	Difference	P-value
0	0.0640	0.0437	0.0204	0.0089
5	0.0653	0.0432	0.0221	0.0045
10	0.0650	0.0433	0.0217	0.0055
15	0.0650	0.0430	0.0220	0.0047
20	0.0646	0.0428	0.0218	0.0049

2005-2015:

n	Fortune Portfolio	S&P 500 Portfolio	Difference	P-value
0	0.0484	0.0266	0.0218	0.0494
5	0.0480	0.0272	0.0208	0.0605
10	0.0492	0.0282	0.0210	0.0577
15	0.0489	0.0290	0.0199	0.0606
20	0.0500	0.0289	0.0210	0.0560

1983-2015:

n	Fortune Portfolio	S&P 500 Portfolio	Difference	P-value
0	0.0587	0.0380	0.0207	0.0012
5	0.0594	0.0379	0.0214	0.0007
10	0.0596	0.0383	0.0213	0.0009
15	0.0596	0.0383	0.0212	0.0009
20	0.0596	0.0382	0.0214	0.0007

Regardless of the time period or the delay in implementing the Fortune strategy, the average difference in daily returns is consistently around 0.02 percentage points. In the remainder of the

paper, I will focus on the results when the strategy is implemented on the cover date since the results are robust with respect to other trading dates. The two-sided p-values in Exhibit 2 are for a matched-pair t test comparing the daily returns on the Fortune portfolio and the S&P 500 portfolio. These p-values are less than 1 percent for the longer time periods, but around 5 percent for the shorter period, 2005 through 2015.

A 0.02 daily percentage-point difference in performance cumulates to a substantial difference over decades. Exhibit 3 shows that the Fortune portfolio beat the S&P 500 by more than five percentage points per year during the initial 1983-2004 study, during the next eleven years 2005-2015, and for the entire period 1983-2015.

The annual revision of the ten-stock Fortune portfolio would incur more transaction costs than a one-time purchase of an S&P index fund; however, these costs should be small for reasonably large portfolios. For example, selling ten stocks and buying ten stocks at \$10 per transaction is a 0.2 percent cost for a \$100,000 portfolio.

Exhibit 3 Fortune Admired Portfolio Versus the S&P 500

	<u>Annualized Rate of Return</u>		
	Fortune	S&P 500	Fortune Wealth/S&P 500 Wealth
1983-2004	15.28%	10.15%	2.72
2005-2015	10.65%	4.60%	1.86
1983-2015	13.72%	8.27%	5.06

This five-percentage-point annual differential caused the Fortune portfolio to grow 172 percent more than the S&P 500 portfolio during the first 22 years, and add another 86 percent during the next 11 years. After 33 years, the value of the Fortune portfolio is five times the size of the S&P 500 portfolio. Exhibits 4 and 5 show the daily movements in the value of these portfolios and in

the value of the Fortune portfolio relative to the S&P 500 portfolio.

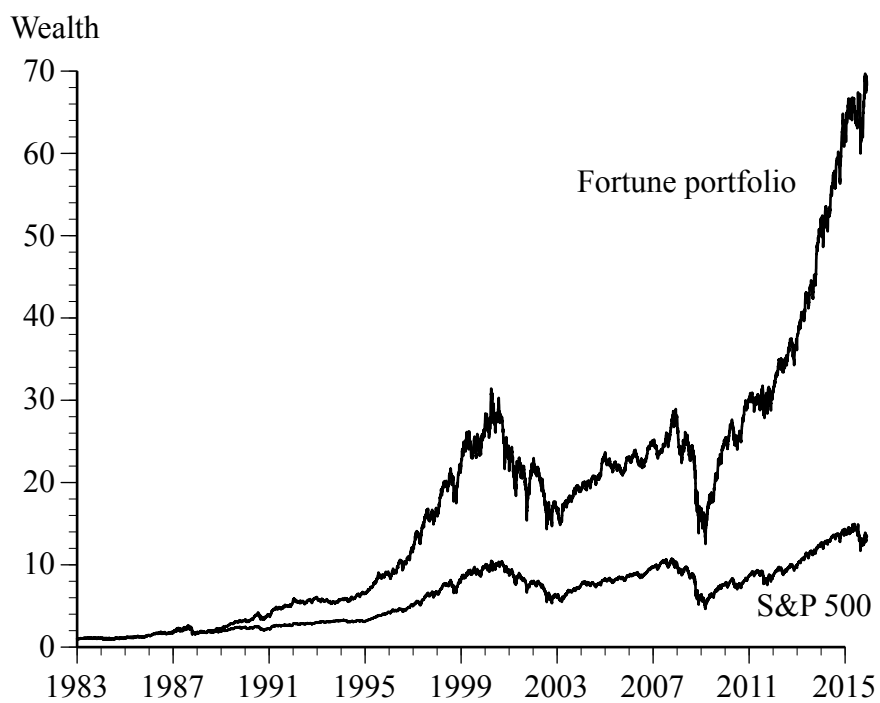


Exhibit 4 The Fortune Portfolio and S&P 500 Portfolio, 1983 - 2015

Fortune portfolio

S&P 500



Exhibit 5 The Fortune Portfolio Relative to the S&P 500 Portfolio, 1983 - 2015

The superior performance of the Fortune portfolio was not due to a handful of extraordinary stocks. Overall, 57 percent of the Fortune stocks beat the S&P 500 in the initial study, 61 percent did so in the subsequent 11 years, and 58 percent did so during the entire period 1983 through 2015 (binomial two-sided p-value = 0.0036).

Nor does the superior performance of the Fortune portfolio appear to be a risk premium. The most admired companies are large and financially sound and unlikely to be considered riskier than average. The standard deviations of the daily returns on the Fortune portfolio and the S&P 500 are similar (0.0012 versus 0.0011), and the Fortune portfolio's beta is 0.96.

I also gauged the riskiness of the Fortune portfolio by estimating the Fama-French (1993) three-factor model augmented by a momentum factor (Carhart 1997)

$$R = \alpha + \beta_1MKT + \beta_2SMB + \beta_3HML + \beta_4UMD + \varepsilon$$

where

R = return on Fortune portfolio minus the return on Treasury bills

MKT = the value-weighted return on all NYSE, AMEX, and NASDAQ stocks (from CRSP) minus the return on Treasury bills

SMB = average return on three small-stock portfolios minus the average return on three large-stock portfolios (size factor)

HML = the average return on two value portfolios minus the average return on two growth portfolios (value factor)

UMD = average return on two high-prior-return portfolios minus the average return on two low-prior-return portfolios (momentum factor)

The factor data were taken from Ken French's web site (2015).

This model reflects the historical evidence that stock returns are affected by common macro factors; small stocks tend to outperform large stocks (Banz 1981; Reinganum 1981); value stocks tend to outperform growth stocks (Rosenberg , Reid and Lanstein, 1985); and stocks that have been doing well tend to continue doing well (Jegadeesh and Titman 1993).

Chan (1988) and Fama and French (1992) argue that these factors must represent risks that matter to investors who consequently must be rewarded for bearing these risks. Others, including Lakonishok, Shliefer, and Vishny (1994) and Smith, Keil, and Smith (2004), argue that market inefficiencies may be involved—for example, value stocks might generally do well because investors overreact to news, causing some stocks to be mispriced temporarily. Either way, the question here is whether the relatively strong performance of the Fortune portfolio can be explained by these four factors.

Anderson and Smith found that for the years 1983 through 2004, the Fortune portfolio had a market-factor coefficient below 1 and had negative coefficients for the other three factors. Exhibit 6 shows that this is also true for the years 2005-2015 and for the period as a whole.

As noted earlier, the single-index model has a beta of 0.96; here the coefficient of the market factor is a bit less than this. The negative coefficient for the size factor is unsurprising since these are large companies. The negative coefficient for the value factor is consistent with the conclusion of Fama and French (1995) that strong firms with consistently strong earnings tend to have negative value coefficients. Anderson and Smith had no prior expectations about the momentum factor and the coefficient is small.

Exhibit 6 Estimates of a Daily Four-Factor Model, daily percentage returns

Alpha	MKT	SMB	HML	UMD	R-squared
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1983-2004	0.025	0.94	-0.33	-0.40	-0.08	0.81
	(3.34)	(88.97)	(23.29)	(20.84)	(6.94)	
2005-2015	0.016	0.87	-0.08	-0.14	-0.07	0.85
	(1.75)	(109.39)	(5.24)	(7.23)	(6.78)	
1983-2015	0.020	0.95	-0.25	-0.32	-0.09	0.82
	(3.42)	(168.70)	(25.29)	(27.64)	(11.13)	

(): t-values

The alpha estimates are roughly consistent, though the alpha estimate is not quite statistically significant at the 5 percent level for the shorter period, perhaps due to the smaller number of observations. A daily alpha of 0.02 is comparable to the 0.02 percentage-point difference in daily returns shown in Exhibit 2.

The bottom line is that, for the period as a whole, the success of the Fortune portfolio is evidently not due to market, size, value, or momentum factors, leaving the large excess returns hard to reconcile with the efficient market hypothesis.

Another possibility is that there is an announcement effect that benefits the top-ten stocks when they are revealed each year. This seems unlikely since the success of the Fortune strategy does not depend on whether the portfolios are formed 0, 5, 10, 15, or 20 days after the cover date. Nonetheless, to examine this issue directly, I calculated the average portfolio returns on each day after the cover date; that is, the average portfolio return the first day after the cover date, the second day, and so on.

Exhibit 7 shows the ratio of the average Fortune portfolio wealth to the average S&P 500 for 1,250 days (approximately five years) after the cover date. The superior performance of the Fortune portfolio does not happen on any single day. It is a cumulative process that continues

long after the announcement of the list.

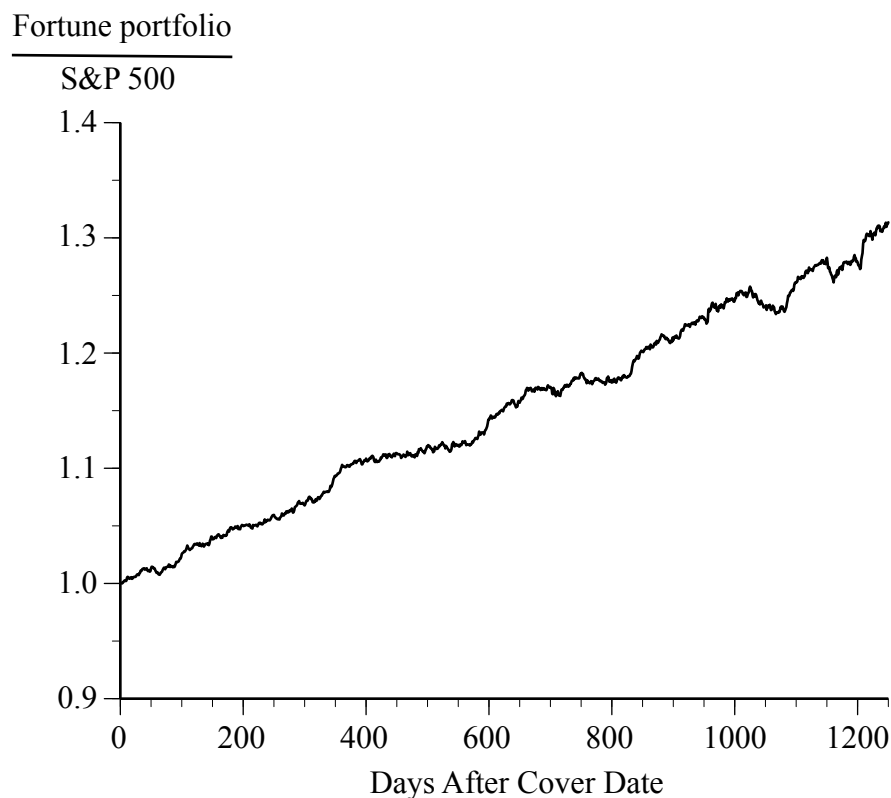


Exhibit 7 The Fortune Portfolio Relative to the S&P 500 Portfolio, After the Cover Date

Conclusion

A portfolio consisting of the stocks identified annually by *Fortune* magazine as America's ten most admired companies outperformed the market, whether the stocks were purchased on the publication date, or 5, 10, 15, or 20 trading days later. This is a clear challenge to the efficient market hypothesis since *Fortune's* picks are presumably based on publicly available information and are, themselves, certainly public information.

Philip Fisher (1958) advocated an investment strategy based on what he called "scuttlebutt," which involves talking to a company's managers, employees, customers, suppliers, and knowledgeable people in the industry. Perhaps he was right and *Fortune's* most-admired survey is a compilation of valuable scuttlebutt that doesn't show up in the balance sheets and other hard

data that investors use to value stocks, and is insufficiently appreciated by investors even after the *Fortune* list is announced. Perhaps investors should consider the useful information conveyed by this survey.

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