




Research Report | March 2015

# Does Company Culture Pay Off?

## Analyzing Stock Performance of “Best Places to Work” Companies

---

By Andrew Chamberlain, Ph.D.  
Chief Economist, Glassdoor

A solid green horizontal bar at the bottom of the page, with a diagonal line pattern on the left side.

# Overview

We conducted three tests to evaluate how company culture and stock performance might be linked. This includes:

- 1 Whether companies on [Glassdoor's "Best Places to Work" list](#) and Fortune's 100 "Best Companies to Work For" list outperform the overall stock market through three possible portfolios.
- 2 Whether being named to the annual Glassdoor list affects short-term stock prices.
- 3 Whether being low rated according to company reviews on Glassdoor is associated with lower stock returns than the overall stock market.

## Key Findings

Based on three different portfolios, we find companies named to Glassdoor's "Best Places to Work" list broadly outperformed the S&P 500 from 2009 to 2014. A simple portfolio of each new class of winners exhibits higher returns than the overall market in 5 out of the past 6 years.

Since 2009, a portfolio of Fortune's "Best Companies to Work For" companies outperformed the S&P 500 by 84.2 percent, while a similar portfolio of Glassdoor's "Best Places to Work" outperformed the overall market by 115.6 percent.

Using a method known as an "event study" we find being named a "Best Place to Work" leads to a roughly 0.75 percent jump in stock returns during the ten days after the announcement—a small but statistically significant effect.

As a robustness check, we examined stock returns among public companies with the lowest employee ratings on Glassdoor. We find a portfolio of the 30 lowest-rated public companies on Glassdoor broadly underperformed the market from 2009 to 2014.

These results suggest an important economic link between company intangibles, such as employee satisfaction, and broader financial performance among large publicly held companies.

- 3 Introduction
- 4 Stock Market Performance of "Best Place to Work" Companies
  - 4 Portfolio 1: Buy and Hold the Original Class of "Best Places to Work"
  - 4 Portfolio 2: Buy and Hold Annual Winners of "Best Places to Work"
  - 5 Portfolio 3: Buy and Hold Repeated Winners of "Best Places to Work"
  - 6 Stock Performance Results
- 10 Comparison to Fortune's "100 Best Companies to Work For"
- 12 Event Study: Does Earning a "Best Places to Work" Award Affect Company Stock Prices?
  - 12 Does Low Employee Satisfaction Predict Poor Stock Returns?
  - 13 The Event Study Model
  - 14 Event Study Results
- 18 Conclusion

# Introduction

Since 2009, Glassdoor has announced its annual “[Employees’ Choice Award Winners](#)” highlighting the nation’s “Best Places to Work.” The awards are designed to recognize leading companies, based on several criteria, including overall employee job satisfaction, sentiment toward career opportunities, compensation, work-life balance and approval of company leadership. Company rankings are based on anonymous employee reviews posted on Glassdoor during the previous year. Since the inaugural awards in 2009, more than 150 U.S. companies have been recognized from a variety of industries including retail, technology, manufacturing, energy and natural resources, media, entertainment and more.<sup>1</sup>

A key question is whether companies named as “best places to work” are also high-performing companies. That is, do companies with more positive employee reviews on Glassdoor outperform the overall stock market? Are intangible company assets such as employee satisfaction reflected in company valuations in the broader stock market?

A handful of previous studies have examined the impact of employee satisfaction on stock prices. For example, a 2011 study by Alex Edmans of the University of Pennsylvania found that companies on Fortune’s list of “100 Best Companies to Work for in America” significantly outperformed the overall market in recent years.<sup>2</sup> Although several informal analyses of Glassdoor’s “Best Places to Work” have suggested similar outperformance by winning companies, there has been no systematic study of whether Glassdoor ratings are an important economic indicator of company value or whether being named among the “best places to work” is reflected in equity prices.

This report provides the first systematic analysis of stock returns for the full list of U.S. companies appearing on Glassdoor’s “Best Places to Work” list since 2009. Using daily stock returns data and the timing of each year’s award announcements, we examine two related questions: Do Glassdoor’s “Best Places to Work” companies outperform the overall stock market? Do stock prices exhibit a short-term bump when companies are named among the “Best Places to Work”?<sup>3</sup>

---

<sup>1</sup> More information about Glassdoor’s “Employees’ Choice Awards” is available at <http://www.glassdoor.com/about/best-places-to-work.htm>.

<sup>2</sup> See Alex Edmans (2011). “Does the Stock Market Fully Value Intangibles? Employee Satisfaction and Equity Prices,” *Journal of Financial Economics*, Vol. 101, No. 3.

<sup>3</sup> Several informal analyses of stock returns among Glassdoor’s “Best Places to Work” companies have been conducted; see for example, [www.glassdoor.com/blog/investing-places-work-good-morale/](http://www.glassdoor.com/blog/investing-places-work-good-morale/); similar analyses by the investment website Motley Fool are available at [www.fool.com/investing/general/2011/06/08/can-this-simple-strategy-give-you-70-annual-return.aspx](http://www.fool.com/investing/general/2011/06/08/can-this-simple-strategy-give-you-70-annual-return.aspx) and [www.fool.com/investing/general/2014/04/26/great-leaders-drive-great-stock-performance.aspx](http://www.fool.com/investing/general/2014/04/26/great-leaders-drive-great-stock-performance.aspx).

# 1. Stock Market Performance of “Best Places to Work” Companies

We first examine the stock market performance of Glassdoor’s “Best Places to Work” companies. To do so, we constructed three realistic investment portfolios of award winning company stocks and followed their performance over time relative to the overall stock market.

## Portfolio 1: Buy and Hold the Original Class of “Best Places to Work”

---

Our first portfolio is based on the initial class of companies from [Glassdoor’s 2009 “Best Places to Work” list](#), released in December 2008. The portfolio buys all public companies on the list and holds them through December 2014. The portfolio consists of 36 public companies. We examine both an equally weighted portfolio in which an equal investment is made in each company, and a weighted portfolio in which investment proportions are based on each company’s Glassdoor rating in 2008.<sup>4</sup> We’ll refer to this as the “original class” portfolio.

## Portfolio 2: Buy and Hold Annual Winners of “Best Places to Work”

---

Our second portfolio is based on each year’s winners of the annual award. Starting in 2009, this portfolio invests in each new class of “best places to work” companies for the following year, rebalancing to the newest class of winners each January. The portfolio consists of between 32 and 42 public companies each year, depending on the number of publicly traded companies on the list. As above, we examine stock returns for equally weighted and ratings-weighted portfolios. We refer to this as the “rebalancing” portfolio.

---

<sup>4</sup> Portfolio weights are defined as  $w_i = r_i / \sum_{j=1}^N r_j$ , where  $r_i$  is the Glassdoor rating of company  $i$  (on a scale from 1 to 5), and  $N$  is the number of companies in the portfolio.

## Portfolio 3: Buy and Hold Repeated Winners of “Best Places to Work”

Our final portfolio is based on repeated winners of the “Best Places to Work” award. It begins by investing in the full initial class of 2009 winners, dropping from the portfolio companies that fail to win the subsequent year. The portfolio begins with the initial class of 36 public companies, shrinking to just 5 that have appeared on the list every year by 2014 (Apple, Chevron, Google, National Instruments, and Qualcomm). We examine both unweighted and ratings-weighted portfolios. We refer to this strategy as the “elimination” portfolio.

Table 1 summarizes the three portfolios examined in this study. It shows the number of stocks in each by year, and the buy and sell dates used. For simplicity, we calculate stock returns based only on prices and ignore the effects of dividends and taxes equally in both the portfolios and in the S&P 500. We assume all portfolios are rebalanced annually to remain true to the investment rules listed above that define them. All stock returns are based on daily closing stock prices.

**Table 1.** Details of the Three “Best Places to Work” Stock Portfolios

	2009	2010	2011	2012	2013	2014
<b>Number of Stocks</b>						
Portfolio 1: “Original Class”	36	36	36	36	36	36
Portfolio 2: “Rebalancing”	36	42	32	32	33	37
Portfolio 3: “Elimination”	36	22	10	9	6	5
Buy Date	1/2/09	12/31/09	12/31/10	12/30/11	12/31/12	12/31/13
Sell Date	12/31/09	12/31/10	12/30/11	12/31/12	12/31/13	12/31/14

*Note: Full list of portfolio companies is available from the author upon request.  
Source: Glassdoor Economic Research.*

## Stock Performance Results

---

Table 2 shows the overall performance for the three portfolios between 2009 and 2014. As a benchmark, we compare performance to the S&P 500, a broad-based stock index that is commonly used as a baseline in financial economics research, which is based on the market capitalizations of 500 large U.S. companies listed on the NYSE and NASDAQ exchanges. For each portfolio, the table shows stock returns and standard deviations for both weighted and unweighted portfolios.

The S&P 500 earned a total return of roughly 121 percent during the period from 2009 to 2014, more than doubling in value. That amounts to an annualized average rate of return of 14.1 percent for the overall market.<sup>5</sup> As is clear from the table, all three portfolios of “best places to work” companies outperformed the S&P 500.

The best performing strategy is the “original class” portfolio, which buys and holds the entire 2009 class of award winners. It earned a total return of 243.3 percent or 22.8 percent per year for the weighted portfolio, and 236.6 percent or 22.4 percent per year for the equally weighted portfolio. This represents an outperformance compared to the overall stock market of between 115.6 and 122.3 percent.

The second best strategy is the “rebalancing” portfolio, which buys each new class of award winners and holds them for one year. It earned a total return of 218.5 percent or 21.3 percent per year for the weighted portfolio, and a nearly identical return for the unweighted portfolio. This amounts to an outperformance of 97.5 percent compared to the overall market. Although this strategy performs below the “original class” portfolio, it’s a more realistic *ex ante* investment strategy; it would have been nearly impossible for investors in 2009 to have known what a strong investment the initial class of winners would turn out to be.

---

<sup>5</sup> Annualized returns are given by  $r = (1 + R)^{1/N} - 1$ , where  $R$  is the total return over  $N$  years.



**Table 2.** Stock Returns for the Three “Best Places to Work” Portfolios vs. S&P 500

Portfolio	2009-2014 Stock Return	Average Annualized Return	Standard Deviation
<b>“Original Class”</b>			
Weighted Portfolio	243.3%	22.8%	0.219
Unweighted Portfolio	236.6%	22.4%	0.215
<b>“Rebalancing”</b>			
Weighted Portfolio	218.5%	21.3%	0.206
Unweighted Portfolio	218.3%	21.3%	0.203
<b>“Elimination”</b>			
Weighted Portfolio	179.7%	18.7%	0.196
Unweighted Portfolio	174.1%	18.3%	0.190
<b>S&amp;P 500</b>	121.0%	14.1%	0.098

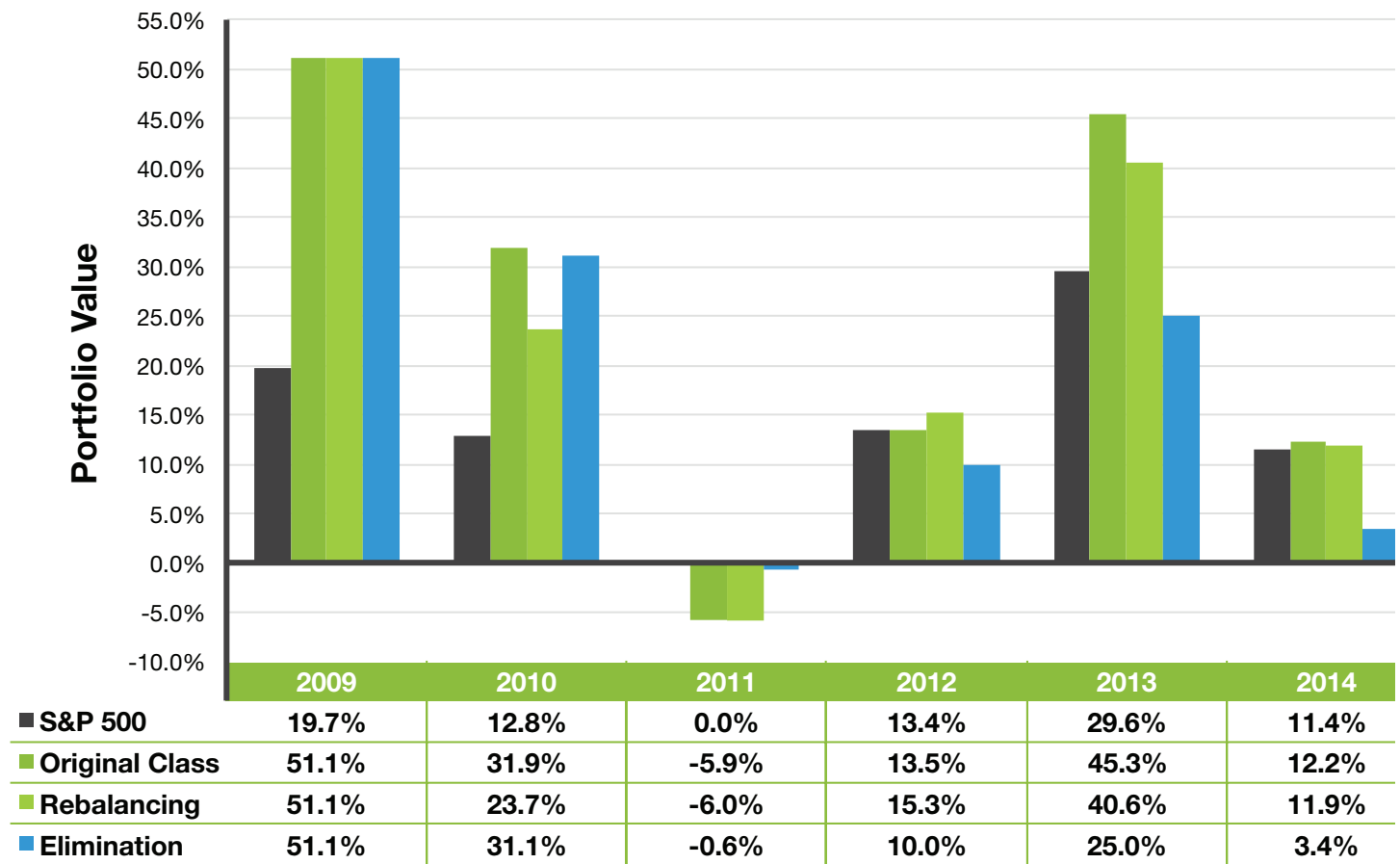
*Note: Stock returns are based on daily closing prices.  
All share price data are from Google Finance (google.com/finance).  
Source: Glassdoor Economic Research.*

The lowest performing portfolio we examined is the “elimination” strategy, although it still significantly outperforms the S&P500. It invests in only repeat winners of Glassdoor’s “Best Places to Work” award, eliminating those that fall off the list each year. It earned a total return of 179.7 percent or 18.7 percent per year for the weighted portfolio, and 174.1 percent or 18.3 percent per year for the unweighted portfolio. That amounts to an outperformance of between 53.1 and 58.7 percent compared to the overall market.

Although all three “best places to work” portfolios outperformed the market in recent years, it is important to note that they are considerably more volatile on a year-to-year basis. The standard deviation for the annual return of the S&P 500 is about 0.098 since 2009, while the standard deviations for the three portfolios we examined range from 0.190 to 0.219. Partly this is due to the simple fact that smaller portfolios are less diversified and are on average more volatile than large portfolios. The consequence is that Table 2 hides considerable year-to-year volatility in the “best places to work” portfolios vs. the S&P 500.

To illustrate year-by-year performance, Figure 1 shows the decomposition of total returns into annual figures for the three portfolios. In general, the three “best places to work” portfolios strongly outperform the S&P 500 in good years while underperforming in bad years. In 2009 and 2010 all three portfolios outperformed the market. However, when fears of a spreading European debt crisis and the downgrading of the U.S. credit rating led to essentially flat overall stock market returns in 2011, all three portfolios underperformed the market.

**Figure 1.** Annual Stock Returns for the Three “Best Places to Work” Portfolios vs. the S&P 500



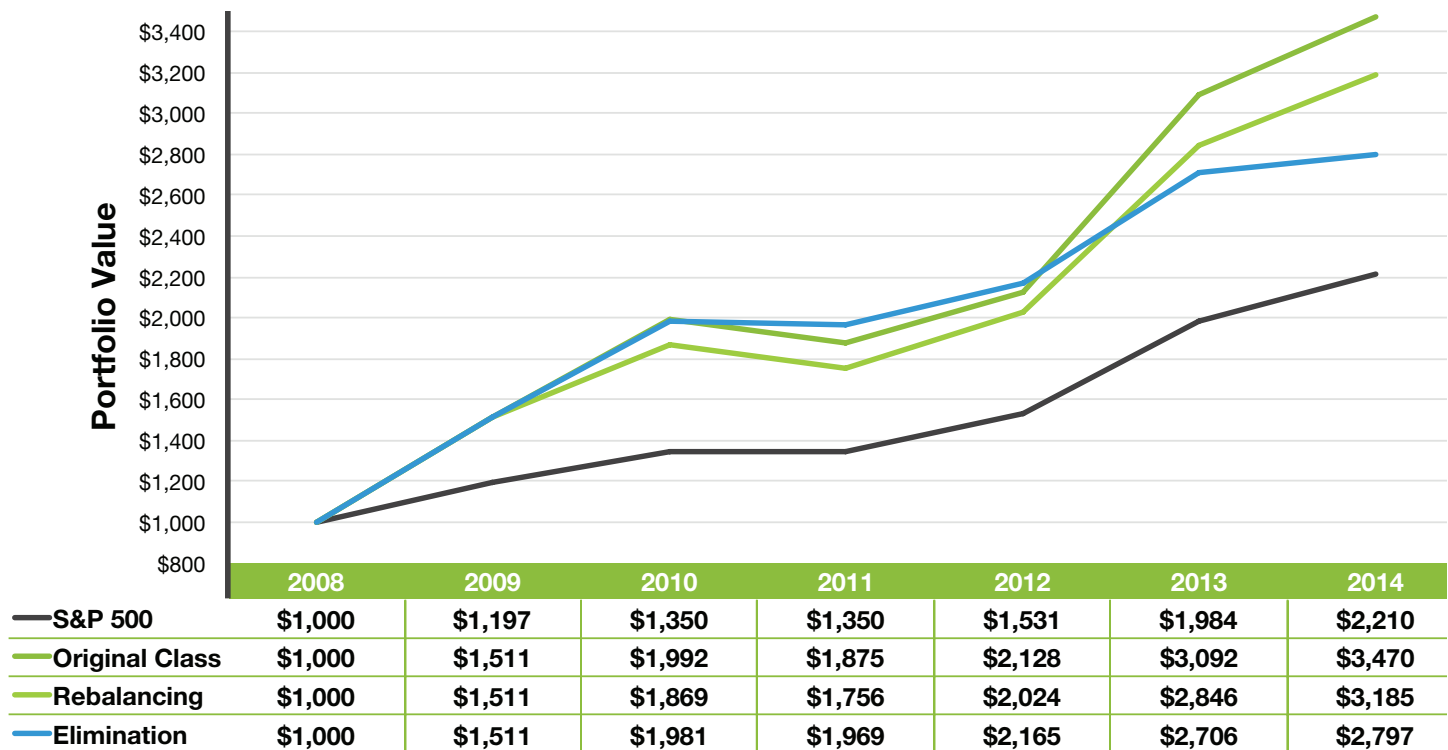
*Note: Annual returns are based on daily closing prices and assume annual rebalancing to reflect portfolio definitions.  
Source: Glassdoor Economic Research.*



Since 2011, returns for the three portfolios have diverged. The “original class” and “rebalancing” portfolios have continued to outpace the S&P 500 in 2012 to 2014. However, the “elimination” portfolio has earned lower returns than the overall market every year since 2011. Taken together, the “original class” and “rebalancing” portfolios have outperformed the market in 5 out of the last 6 years. By contrast, the “elimination” portfolio has only outperformed the S&P 500 in 2 of the past 6 years, and has consistently underperformed since 2011.

One way to visualize the performance of these portfolios over time is to ask: If an investor were to place \$1,000 in each of the above portfolios in January 2009, what would the value have grown to by 2014? Figure 2 shows the relative value of a \$1,000 investment in each of the three portfolios over time, along with the S&P 500.<sup>6</sup>

**Figure 2.** Relative Value of “Best Places to Work” Stock Portfolios vs. the S&P 500



*Note: Annual returns assume annual rebalancing to reflect portfolio definitions.*

*Source: Glassdoor Economic Research.*

<sup>6</sup> All calculations in Figure 2 are based on annual stock returns for ratings-weighted portfolios.

As discussed above, the overall best performing strategy is to have bought and held the original class of 2009 winners. A \$1,000 investment in this portfolio would have grown to \$3,470 by the end of 2014. That represents a dramatic improvement over the S&P 500, which would have led a \$1,000 investment to grow to just \$2,210 during the same period.

The second best strategy is the “rebalancing” portfolio that holds each new class of winners. A \$1,000 investment in this portfolio would have grown to \$3,185 over the six-year period. Finally, the “elimination” portfolio performed worst: investing \$1,000 in this portfolio would have grown to \$2,797. Despite its recent underperformance, even this strategy would have represented a 26.6 percent improvement over the S&P 500.

### Comparison to Fortune’s “100 Best Companies to Work For”

---

As noted above, Glassdoor’s “Best Places to Work” list is not the only collection of companies that has been studied by researchers. Another well-known list is Fortune’s “100 Best Companies to Work For” award, released annually since 1998.<sup>7</sup> The award is based on employee surveys administered by the Great Place to Work Institute at roughly 250 large U.S. companies, which have submitted an application. A 2011 academic study found that companies on the Fortune list significantly outperform the overall stock market.<sup>8</sup>

In Table 3, we compare stock returns for companies on the two lists. The left-hand columns show stock returns for all publicly traded companies on Fortune’s 2009 class of “100 Best Companies to Work For” list from 2009 to 2014. The right-hand columns show comparable returns for the “original class” portfolio of Glassdoor award winners from above. There is significant overlap between the two lists: of the 39 companies on Fortune’s list, 15 were also winners of Glassdoor’s award in the same year. However, it’s important to note that there are a variety of methodological differences between the two lists.<sup>9</sup>

---

<sup>7</sup> More information about Fortune’s “100 Best Companies to Work For” list is available at <http://fortune.com/best-companies/>.

<sup>8</sup> See Alex Edmans (2011), “Does the Stock Market Fully Value Intangibles? Employee Satisfaction and Equity Prices,” *Journal of Financial Economics*, Vol. 101, No. 3.

<sup>9</sup> There are at least three significant differences in coverage and definitions between the two lists. First, the Fortune list is based on surveys administered to companies that apply to participate each year, while Glassdoor’s list is based on reviews by individuals who select into online contribution. Second, the Fortune list is based on a sample of roughly 250 companies, while the Glassdoor list is derived from its full database of company ratings. Finally, the Fortune list is based on surveys of a sample of current employees, while Glassdoor reviews capture sentiment of a sample of both current and former employees.

Overall, both lists significantly outperformed the overall stock market between 2009 and 2014. The Fortune “Best Companies” portfolio earned a 205.2 percent return over the period, compared to 121 percent return for the S&P 500. Similarly, the Glassdoor “Best Places” portfolio earned a total return of 236.6 percent over the period, a somewhat higher overall return than even the Fortune list. Consistent with past research, we find both portfolios of “best” U.S. companies have significantly outperformed the overall market in recent years.

**Table 3.** Comparison of Stock Returns for 2009 Winners of Fortune’s “100 Best Companies to Work For” and Glassdoor’s “Best Places to Work”

2009 Fortune “100 Best Companies to Work For”	Buy Price (Jan. 2, 2009)	Sell Price (Dec. 31, 2014)	2009-2014 Stock Return	2009 Glassdoor “Best Places to Work”	Buy Price (Jan. 2, 2009)	Sell Price (Dec. 31, 2014)	2009-2014 Stock Return
Accenture	33.67	89.31	165%	Accenture	33.67	89.31	165%
Adobe Systems	23.02	72.7	216%	Adobe	23.02	72.7	216%
Aflac	46.28	61.09	32%	American Express	19.33	93.04	381%
Alcon Laboratories	49.54	92.66	87%	Apple	12.96	110.38	752%
Build-A-Bear Workshop	4.66	20.1	331%	Best Buy	29.02	38.98	34%
Camden Property Trust	29.81	73.84	148%	Capital One	33.31	82.55	148%
CARMAX	8.32	66.58	700%	Caterpillar	46.91	91.53	95%
Chesapeake Energy	17.27	19.57	13%	Chevron	76.52	112.18	47%
Cisco Systems	16.96	27.82	64%	Cisco Systems	16.96	27.82	64%
Devon Energy	68.49	61.21	-11%	Citrix Systems	24.36	63.8	162%
DreamWorks Animation SKG	26.18	22.33	-15%	Continental Airlines	11.87	66.89	464%
eBay	14.66	56.12	283%	EMC	10.86	29.74	174%
EOG Resources	35.2	92.07	162%	FactSet	45.6	140.75	209%
FedEx	64.44	173.66	169%	FedEx	64.44	173.66	169%
Genentech	19.02	33.99	79%	Genentech	19.02	33.99	79%
General Mills	30.18	53.33	77%	General Mills	30.18	53.33	77%
Goldman Sachs	86.76	193.83	123%	Goldman Sachs	86.76	193.83	123%
Google	160.82	530.66	230%	Google	160.82	530.66	230%
Herman Miller	13.64	29.43	116%	Intuit	24.4	92.19	278%
Intuit	24.4	92.19	278%	Juniper Networks	18.39	22.32	21%
Juniper Networks	18.39	22.32	21%	Lockheed Martin	85.55	192.57	125%
Marriott International	20.06	78.03	289%	Marriott	20.06	78.03	289%
Microsoft	20.33	46.45	128%	MetLife	35.97	54.09	50%
National Instruments	15.93	31.09	95%	National Instruments	15.93	31.09	95%
NetApp	14.77	41.45	181%	NetApp	14.77	41.45	181%
Nordstrom	14.55	79.39	446%	Netflix	29.87	341.61	1044%
Novo Nordisk	26.41	42.32	60%	NIKE	26.53	96.15	262%
NuStar Energy	43.56	57.75	33%	Nordstrom	14.55	79.39	446%
Paychex	26.94	46.17	71%	Paychex	26.94	46.17	71%
Principal Financial Group	23.6	51.94	120%	Procter & Gamble	62.8	91.09	45%
QUALCOMM	37.05	74.33	101%	QUALCOMM	37.05	74.33	101%
salesforce	8.5	59.31	598%	Salesforce	8.5	59.31	598%
Stanley	7.94	38.16	381%	Schlumberger	45.62	85.41	87%
Starbucks Coffee	9.84	82.05	734%	Texas Instruments	16.04	53.46	233%
Texas Instruments	16.04	53.46	233%	Wells Fargo	30	54.82	83%
The Men’s Wearhouse	14.19	44.15	211%	Whole Foods	4.94	50.42	921%
Umpqua Bank	14.36	17.01	18%				
Valero	23.24	49.5	113%				
Whole Foods Market	4.94	50.42	921%				
<b>2009-2014 Portfolio Return</b>			<b>205.2%</b>				236.6%
<b>Annualized Return</b>			<b>20.4%</b>				22.4%

Notes: Stanley Associates was acquired by CGI group in 2010 (GIB: NYSE), and Alcon Laboratories was merged into Novartis in 2011 (NVS: NYSE). All stock returns are based on daily closing prices from Google Finance (google.com/finance.).

Source: Glassdoor Economic Research.

## 2. Event Study: Does Earning a “Best Places to Work” Award Affect Company Stock Prices?

To help untangle whether there is evidence of a direct link from being named a Glassdoor “Employees’ Choice Award Winner” to a short-term stock return of the winning public companies, we conducted what’s known as an “event study,” a commonly used method economists use to estimate the impact of “surprise” news and other events on company stock prices.<sup>10</sup>

### Sidebar: Does Low Employee Satisfaction Predict Poor Stock Returns?

The focus of this study is whether companies with high employee satisfaction outperform the overall stock market. But is the reverse also true? That is, do companies with low employee ratings underperform the market?

To examine this question, we compiled stock returns for the 30 publicly traded companies on Glassdoor with the lowest overall employee rating. From our full database of company reviews, we sorted employers based on overall rating and chose the bottom 30 companies for which publicly traded stock price information is available. We then examined how a portfolio of these stocks performed relative to the S&P 500 from 2009 to 2014.\*

As expected, low-rated companies significantly underperform the market. Between 2009 and 2014 the S&P 500 earned a return of 121 percent. By contrast, an equally weighted portfolio of low-rated companies earned just 88.5 percent, or 91.5 percent for a ratings-weighted portfolio—additional evidence of an economic link between employee satisfaction and company financial performance.

### Stock Returns for the 30 Lowest-Rated Companies on Glassdoor

Portfolio	2009-2014 Stock Return	Average Annualized Return
Weighted Portfolio	91.5%	11.4%
Unweighted Portfolio	88.5%	11.1%
S&P 500	121.0%	14.1%

*Note: Company ratings are based on Glassdoor overall employee ratings as of January 2015. Stock returns are based on closing prices for the same dates used throughout Section I of this study (January 2, 2009 through December 31, 2014.)*

*Source: Glassdoor Economic Research; Google Finance.*

*\*Company names have been withheld for privacy reasons; the full list of 30 company stocks examined is available upon request.*

<sup>10</sup> For background on the event study methodology, see A. Craig MacKinlay (1997), “Event Studies in Economics and Finance,” *Journal of Economic Literature*, Vol. 35, No. 1.

## The Event Study Model

---

An event study uses a simple two-step procedure to estimate the effect of receiving a “Best Places to Work” award on company stock prices.

First, we estimate a company’s “normal” or predicted stock returns during a 10-day window immediately after each year’s media release. We do this using an approach known as a “market return” model. It assumes a stable linear relationship between company stock prices and the overall market, which can be used to predict normal returns. For each company we estimate,

$$(1) \quad R_{it} = \alpha_i + \beta_i RM_t + \varepsilon_{it}$$

where  $R_{it}$  is the daily stock return of company  $i$  on day  $t$ ,  $RM_t$  is the S&P 500 daily return on day  $t$ , and  $\varepsilon_{it}$  is the usual mean zero error term. This says that a company’s stock return should basically move in tandem with the overall market, plus a company-specific factor given by  $\alpha_i$ .

We estimate this relationship using stock return data during a window of 90 calendar days before each year’s award announcement. The  $\alpha$  and  $\beta$  are estimated via ordinary least squares (OLS), and we use the predicted or “fitted values” from (1) to predict what each company’s daily stock returns should have been during the 10-day event window. We’ll call these “normal” returns  $R_{it}^P$ .

Next, we estimate “abnormal” stock returns for each company during the event window. This is simply the difference between each company’s actual daily stock return  $R_{it}$  and its predicted “normal” return  $R_{it}^P$ , or

$$(2) \quad AR_{it} = R_{it} - E(R_{it} \mid RM_t) = R_{it} - R_{it}^P$$

where  $AR_{it}$  is the “abnormal return” for company  $i$  on day  $t$ . This says that abnormal stock returns for each company following the announcement of award winners is the difference between observed returns and what we’d predict based on movements in the overall market on that day.

Once we've estimated each company's abnormal returns on each day of the event window, we sum them up into what's called a "cumulative abnormal return." On average, abnormal stock returns should roughly cancel each other out for each company. To assess whether an event has caused a significant jump in stock returns, we apply the standard statistical test used in academic event studies to see if cumulative abnormal returns are different from zero. This provides a systematic way of assessing whether the stock market directly values companies named as having outstanding employee satisfaction.

## Event Study Results

Table 4 shows summary statistics for the data used for the event study. We compiled daily stock returns for all 92 public companies that have won "Best Places to Work" awards from 2009 to 2015. Stock returns are based on daily closing prices. The average daily stock return for the "best places" companies was 0.065 percent per day over the period, while the S&P 500's mean daily return was 0.030 percent per day. For the event dates, we coded the release dates for each year's award from Glassdoor media releases. In total, the data cover 221 company-event combinations over seven years.

**Table 4.** Summary Statistics for the Event Study

Variable	Observations	Mean	Std. Deviation	Min	Max
Company ID	376,787	n.a.	n.a.	1	92
Award Year	376,787	n.a.	n.a.	2009	2015
Events Per Company	376,787	2.4	1.5	1	7
Daily Stock Returns	376,787	0.065%	0.025	-89.8%	87.0%
Daily S&P 500 Returns	376,787	0.030%	0.014	-9.0%	11.6%

*Notes: List of companies and the timing of award releases is based on 2009-2015 "Best Places to Work" press releases available at [glassdoor.com/press](http://glassdoor.com/press). Daily company and S&P 500 stock returns are drawn from Google Finance at [google.com/finance](http://google.com/finance).*

*Source: Glassdoor Economic Research.*

Table 5 presents the basic event study results. It shows the standard statistical test for whether companies named to Glassdoor’s “Best Places to Work” list exhibit statistically significant cumulative abnormal stock returns over the ten days following award announcements. The average cumulative abnormal return over all 92 companies and 221 events is 0.751 percent, with a standard error of 0.43 percent. For the test, we use a highly conservative choice of standard error: heteroskedasticity robust and grouped at the company level.<sup>11</sup> The estimated cumulative abnormal return is statistically different from zero at the 10 percent significance level (*P*-value = 0.086) suggesting that being named a “best place to work” indeed has a small direct effect on company stock prices.

**Table 5.** Event Study Results: Cumulative Abnormal Stock Returns Among “Best Places to Work” Award Winners

Variable	Coefficient	Lower 95 Percent	Upper 95 Percent
Cumulative Abnormal Returns	0.00751* (0.00432)	-0.00108	0.01609
<i>t</i> Statistic	1.74		
<i>P</i> -Value	0.086		
Observations ( <i>n</i> )	221		

*Note:* Clustered standard errors are listed in parentheses, which are heteroskedasticity robust and grouped at the company level.  
*Source:* Glassdoor Economic Research

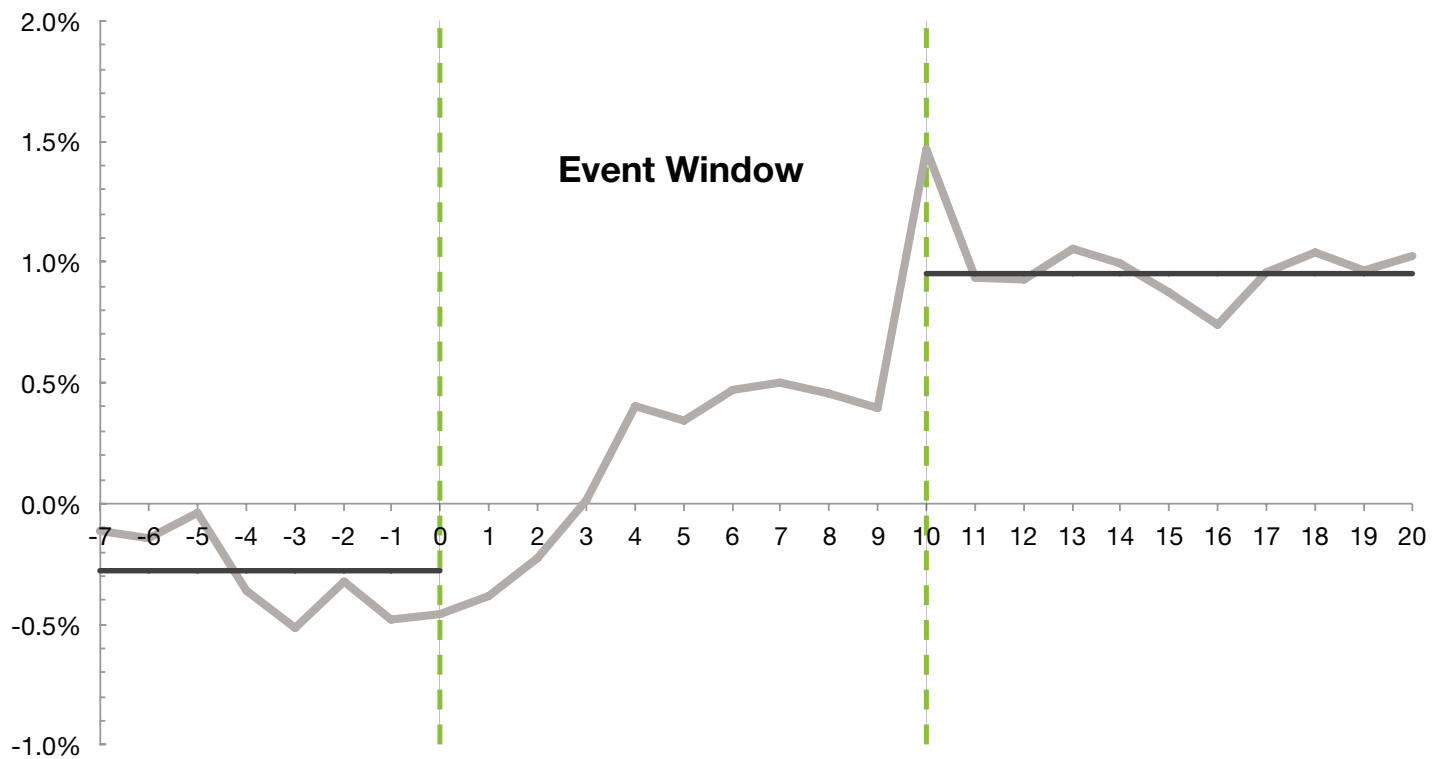
How should we interpret the size of this effect? One way is to compare the effect of the “Best Places to Work” announcement to average daily stock returns for these companies. A 0.75 percent abnormal return is 11.5 times larger than the average daily stock return for these companies of 0.065 percent. Another way is to express the 10-day abnormal return as an equivalent annual rate. For an estimated return of 0.75 percent over the 10-day event window, this is equivalent to an annual average rate of return of  $(1+0.00751)^{(365/10)}-1 = 31.40$  percent.

<sup>11</sup> Reported standard errors are clustered at the company level, to allow for possible auto-correlation among company-level residuals for estimated abnormal returns.



To help visualize this finding, Figure 3 shows the impact of the Glassdoor “Best Places to Work” announcements on company stock prices over time, when averaged across all 92 companies and 221 events in the sample. The horizontal axis shows days since the announcement, and  $t = 0$  is the award date. The vertical green-dashed lines mark the start and end of the 10-day event window. The gray line shows the average cumulative abnormal stock returns before and after the event. The horizontal black lines on either side of the event window mark the average cumulative abnormal returns before and after the event.

**Figure 3.** Cumulative Abnormal Stock Returns Before and After the Event Window

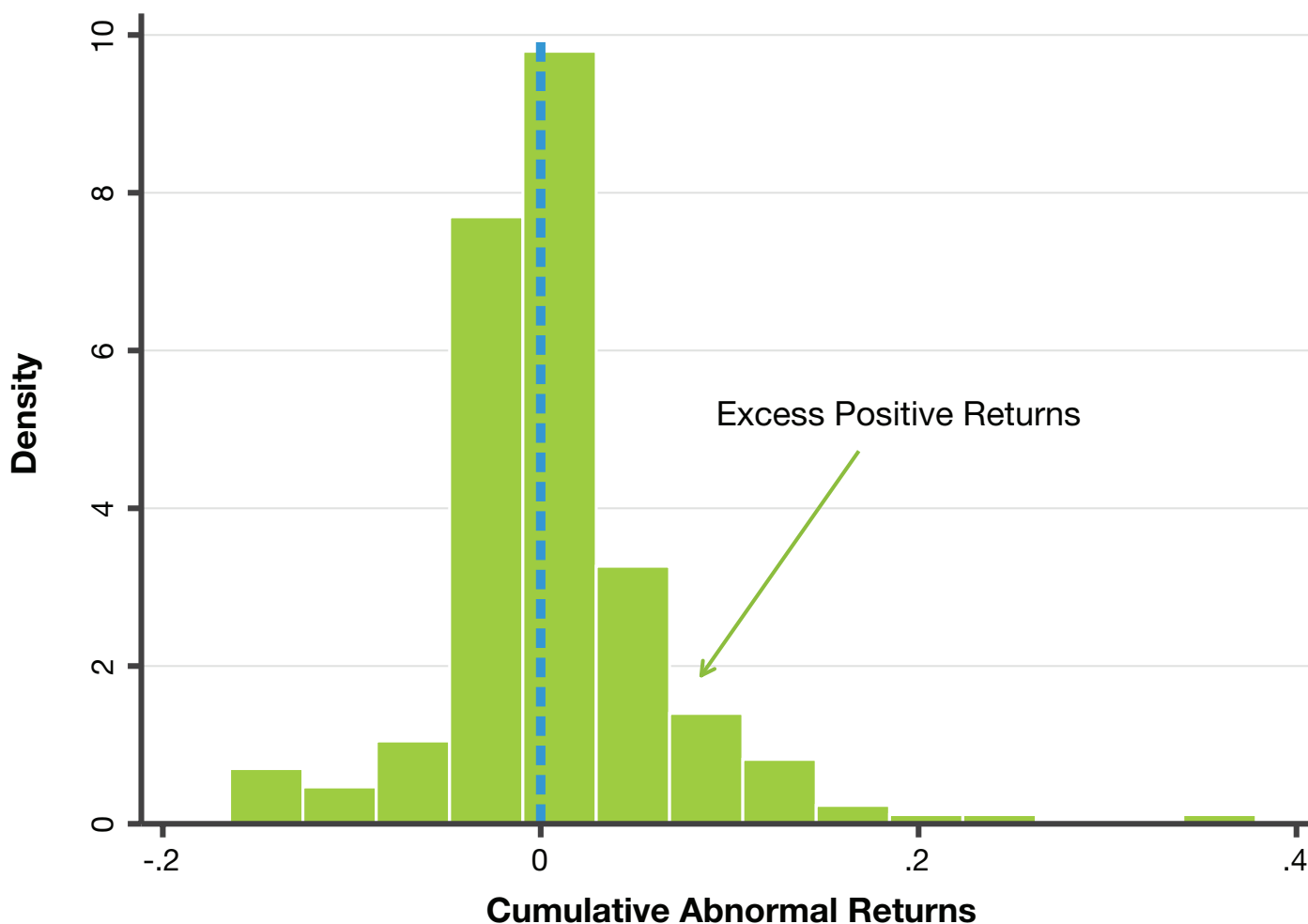


Source: Glassdoor Economic Research.

As is clear from the figure, cumulative abnormal returns were relatively stable and hovered close to zero during the week before the event. At time  $t = 0$ , cumulative abnormal returns begin climbing steadily during the first 4 days of the event window, briefly level off on day 5, and begin climbing again on days 6, 7 and 10. Following the event, cumulative abnormal returns stabilize at a new higher level where they remain for the following ten days. While there is considerable statistical noise in the relationship, the overall effect of award announcements on stock prices is clear in Figure 3.

An alternative way of viewing our results is to show the distribution of cumulative abnormal returns estimated by our event study. If the event has no effect on stock prices, the mean of the distribution should be approximately zero. Figure 4 shows this empirical distribution. As predicted from statistical theory, the distribution follows an approximately bell-shaped “normal” distribution, but is slightly right-shifted away from zero. This slight rightward shift leads to an average cumulative abnormal return just above zero—in our case, 0.75 percent. The statistical test presented in Table 5 verifies that this is just far enough away from zero to conclude that the awards announcement indeed has a positive effect on stock returns. This is the basis for our conclusion that there is a small but significant effect on stock returns from being named as a Glassdoor “Best Place to Work.”

**Figure 4.** Distribution of Estimated Cumulative Abnormal Returns Following Annual “Best Places to Work” Award Announcements



*Note: Figure displays the distribution of cumulative abnormal returns for N = 221 events.*

*Source: Glassdoor Economic Research.*

# Conclusion

This study examines two related questions. Do winners of Glassdoor's "Best Places to Work" award outperform the overall stock market? And do these winners exhibit a short-term bump in stock prices following the announcement? In both cases, we find evidence of an important economic link between this measure of employee satisfaction and company stock performance.

Among the three portfolios of Glassdoor "Best Places to Work" companies we examined, each significantly outperformed the broader stock market between 2009 and 2014. A simple, realistic strategy of buying each new class of winners outperformed the S&P 500 in 5 of the past 6 years. By contrast, a portfolio of the 30 lowest-rated public companies on Glassdoor has dramatically underperformed the market in recent years. Finally, we found that being named among the list of Glassdoor "Best Places to Work" is associated with a 0.75 percent excess stock return over ten days, equivalent to an annualized return of roughly 31 percent.

These results suggest a meaningful economic link between intangible company assets such as employee satisfaction and broader stock market performance among publicly held companies. Like any financial asset, a satisfied and engaged workforce is a potentially valuable attribute of companies. Although this analysis cannot establish a causal relationship between employee satisfaction and stock returns, it clearly suggests the value of employee company reviews as a meaningful predictive indicator of financial performance.

## References

Agrawal, Neeraj and Logan Bartlett. (December 15, 2014). "Why Investing in Best Places to Work is Good for More than Morale," Glassdoor Blog. Available at [www.glassdoor.com/blog/investing-places-work-good-morale/](http://www.glassdoor.com/blog/investing-places-work-good-morale/).

Edmans, Alex. (2011). "Does the Stock Market Fully Value Intangibles? Employee Satisfaction and Equity Prices," *Journal of Financial Economics*, Vol. 101, No. 3

MacKinlay, A. Craig. (1997), "Event Studies in Economics and Finance," *Journal of Economic Literature*, Vol. 35, No. 1

Shaw, Brian. (April 26, 2014). "Glassdoor Ratings Might Predict Stock Market Outperformance," Motley Fool Blog. Available at <http://www.fool.com/investing/general/2014/04/26/great-leaders-drive-great-stock-performance.aspx>.

Stoffe, Brian. (June 8, 2011). "Can This Simple Strategy Give You 70% Annual Returns?," Motley Fool Blog. Available at [www.fool.com/investing/general/2011/06/08/can-this-simple-strategy-give-you-70-annual-return.aspx](http://www.fool.com/investing/general/2011/06/08/can-this-simple-strategy-give-you-70-annual-return.aspx).

© Glassdoor 2015

100 Shoreline Hwy,  
Mill Valley, CA 94941

Web: [glassdoor.com](http://glassdoor.com)

Email: [economics@glassdoor.com](mailto:economics@glassdoor.com)