Shareholder Returns for a Catalyst Award

M. M. Arthur
Alison Cook, Utah State University
SHAREHOLDER RETURNS FOR A CATALYST AWARD

Michelle M. Arthur*
University of New Mexico
Anderson Schools of Management
1924 Las Lomas NE
Albuquerque, NM 87131-1221
arthur@mgt.unm.edu
phone: 505-277-7174
fax: 505-277-7108

Alison Cook
Utah State University
College of Business
3555 Old Main Hill
Logan, UT 84322-3555
alison.cook@usu.edu
phone: 435-797-7654
fax: 435-797-1091

*The authors’ names are listed alphabetically for convenience. Both authors contributed equally to this manuscript.
ABSTRACT

Using an event study methodology, we examine firm share price reactions to the designation of a Catalyst Award. We find a positive relationship between the human resource award and share price reactions. In addition, we find varying degrees of support that timing, firm size, and labor force composition moderate share price reactions. Specifically, we find that earlier award announcements generate larger share price reactions than more recent award announcements. We also find support that larger firms reap greater share price reactions than smaller firms. And last, we do not find support that the proportion of women in an industry moderates the award and share price relationship.
INTRODUCTION

Human resource managers are under increased pressure to demonstrate a link between human resource functions and the firm financial performance. Strategic human resource managers have addressed these pressures with several articles showing a positive link between human resource practices and firm performance (e.g., Huselid, 1995). However, few human resource scholars have examined the relationship between human resource awards and firm performance. It is commonly understood that corporate reputations affect firm performance. Specifically, Fombrun (1996) suggests that a good reputation can increase firm profitability by attracting customers to products, employees to jobs, and investors to securities; therefore, it is reasonable to suggest that substantive firm awards which affect firm reputation will affect firm financial performance.

There has been limited research examining the relationship between human resource awards focused on diversity and firm performance (Wright, Ferris, Hiller & Kroll, 1995; Hannon & Milkovich, 1996). At best, the results have been mixed. Given the findings that diversity, if managed well, provides benefits to organizations such as creativity and innovation (Hartenian & Gudmundson, 2000; Richard, 2000), we would expect a positive relationship between awards supporting diversity and firm performance. Our purpose here is to examine an award for which the criteria do not simply require employee diversity, rather it necessitates functional management of diversity. In doing so, we suggest that the previous mixed results may have been an artifact of the type of awards examined.

Inconsistent findings have led researchers to question how firms win human resource awards. There is some speculation that the firms that win awards often do so by means of a biased selection process. Scholars have suggested that awards have little meaning when they
come from *ill-informed* or *self-interested* sources such as consultants, magazine editors, or groups of human resource executives (Hannon & Milkovich, 1996). Others suggest award granting organizations are inherently political and firm advertising budgets in the award granting magazine may increase a firm’s chance of winning (Fombrun, 1996). If, indeed, the human resource award is interpreted by the firms’ stakeholders as not credible, the designation will likely have little effect on reputation as well as firm profitability.

This study extends prior research by addressing those questions within an analysis of Catalyst Award winners. The Catalyst Award is an award presented by the Catalyst organization, a non-profit firm founded in 1962. The general mission of the organization is working to advance women in businesses and the professions. In 1987, the non-profit organization began awarding the Catalyst Award in recognition of companies working toward the advancement of women. On average, three firms receive the award per year. The award honors “innovative approaches with proven results taken by companies to address the recruitment, development, and advancement of all managerial women, including women of color…” (Catalyst, 2006). An example of a strategic approach is “innovative solutions to balancing employees’ work and personal lives; effective programs that not only improve employee morale and quality of life, but also impact productivity and retention” (Catalyst, 2006). Unlike other awards, as part of a strategic approach, Catalyst considers business outcomes. Moreover, the outcomes have specific criteria including reliability, measurability, and accountability.

By examining an award granted by a non-profit organization, we attempt to alleviate some of the prior assertions of *self-interest* in the awarding process. The crux of Catalyst’s mission is “working to advance women in business” (Catalyst, 2006). We suggest a non-
profit organization may have less monetary incentive to select particular firms than for-profit award granting organizations. Furthermore, Catalyst does extensive analyses of firms prior to honoring an organization. The thorough analysis concludes with employee interviews and focus groups during two-day audits at finalist firms. By examining Catalyst Awards, we try to lessen the concern that award granters are ill-informed. The increased extensive internal analysis, strict outcome criteria, and potentially lessened monetary motivation for selecting firms distinguish the Catalyst Award from other awards honoring human resource programs. Thus, it is reasonable to assert that the Catalyst Award, as a credible signal, will affect corporate reputation and firm value.

The Catalyst Award, consistent with its mission statement, signals that the awarded firms value diversity and manage it well. Given the growing body of research demonstrating benefits to organizations for embracing diversity, it is reasonable to assert that constituents would respond favorably to that signal and react to increase firm share price (Frink, Robinson, Reithel, Arthur, Ammeter, Ferris, Kaplan, & Morissette, 2003; Hartenian & Gudmundson, 2000; Richard, 2000; Richard, Barnett, Dwyer, & Chadwick, 2004; Richard & Johnson, 2001).

THEORY AND HYPOTHESES

Studies suggest that achievement of human resource awards may positively affect firm share price (Hannon & Milkovich, 1996; Wright et al., 1995). The rationale is that the award serves as a signal to the organization’s constituents; who, in turn, interpret that signal as symbolic of broader organization characteristics (Spence, 1974). Signaling theory asserts that organizational actions or actions linked to the organization have the potential to send
signals to the firm’s constituencies about its values and intentions (Prabhu & Stewart, 2001). The Catalyst Award, specifically, has the potential to signal to constituents a firm’s commitment to diversity.

This award serves the organization in two ways. First, the award illustrates that the firm has successfully attracted and retained a diverse set of employees. Indeed, the firm has shown that it “does diversity well.” Several scholars have suggested potential benefits of diversity and have linked diverse workforces to enhanced firm performance. Specifically, racial diversity, when in conjunction with an innovation strategy, has been found to offer a competitive advantage (Richard, 2000); gender diversity has been positively connected to increased firm performance (Frink et al., 2003); and productivity benefits to small firms measured as increased revenue and increased CEO compensation have been found when incorporating a diverse workforce (Hartenian & Gudmundson, 2000). Again, these benefits are better realized when a firm cultivates and manages diversity well. And as illustrated by the thorough examination conducted by the Catalyst Organization, this is affirmed through their designation of the award. Second, human resource theorists suggest that through an enhanced reputation, the firm’s future applicant pool will attract an inflated and diverse set of potential hires. If, indeed, talent is normally distributed and selection procedures are reliable, one would expect that firms which attract a broader set of applicants will be able to select more productive and talented individuals to hire (Hannon and Milkovich, 1996). These employees, in turn, should enhance the overall performance for the firm.

Given the Catalyst award signals positive human resource information regarding the firm, it is reasonable to suggest constituents, knowing the benefits, will react favorably by purchasing stock, thus increasing the value of the firm. Scholars suggest that signals in the
information marketplace aid investors by providing accessible information and reducing extensive searches of investment opportunities (Hannon & Milkovich, 1996). Organizations who win awards receive favorable press and heightened visibility (Fombrun, 1996). Furthermore, this enhanced visibility provides information to a more expansive audience, thus increasing potential investment. The Catalyst Award signals a firm’s commitment to diversity. And given the positive benefits to the firm resulting from diversity, constituent interpretation of the award should be positive and result in enhanced reputation for the firm. Further, positive reputation serves as a motivator for potential investors to invest, which will increase demand of the stock resulting in a greater share price. Hence, we suggest that share price reaction to the announcement of the Catalyst Award will be positive. Thus,

*Hypothesis 1: The announcement of a Catalyst Award will positively affect firm share price.*

An award acts as a signal for the winning organization; however, the impact of the award is contingent on the interpretation of the signal by the receiver (Prabhu & Stewart, 2001). Fombrun (1996) suggested that receivers’ interpretations of signals represent their assumptions and beliefs regarding the sender of the signal and what that signal represents. Specifically, the interpretation of the Catalyst Award signal has likely shifted over time as more organizations have women in leadership positions. When Catalyst initially conferred its award, it provided a signal that represented uniqueness in the industry. The award signaled differentiation in that it recognized organizations that worked toward the advancement of women. As more advocacy groups as well as the Department of Labor have encouraged the movement of women into leadership positions, the uniqueness once provided by the Catalyst Award designation has lessened. In effect, the award signals a smaller competitive
advantage. Earlier work supports the notion of a “uniqueness” factor. Arthur and Cook (2004) investigated work-family policy adoption and share price reaction. They examined “pioneering” organizations that were first to implement various work-family initiatives and the corresponding share price on the day of the announcement. Indeed, the uniqueness factor of being an early adopter of work-family policies garnered a greater share price increase for the pioneering organizations than for the other firms who adopted the policies at a later time. Their finding suggests benefits for early signals of differentiation that lessen as more organizations become involved. Therefore, we expect that the Catalyst Award may exhibit a decreasing share price reaction over time. In particular, as more firms are announced as Catalyst Award recipients, constituents’ reactions to the announcement will likely diminish resulting in less significant stock price increases for more recent award winners. Thus,

*Hypothesis 2: The positive share price reactions to the Catalyst Award will decrease over time.*

We expect large organizations to reap greater benefits from a Catalyst Award than smaller organizations. This is primarily a function of their stature and prominence in society. Large organizations, by no other reason than their size, are under greater public scrutiny (Powell, 1991). Relative to small organizations, large firms are more visible and receive greater press attention (Thompson, Olsen, & Dietrich, 1987). Given this heightened public awareness, large organizations’ actions and what the actions signal are especially crucial. For example, researchers have found a positive relationship between the size of a firm and the degree of corporate social responsibility (Buehler & Shetty, 1976; Miles, 1987). This rationale is consistent with the framework of legitimacy theory. Legitimate actions are actions that are considered valued and desired by society (Suchman, 1995). Scholars suggest
that organizations perceived as legitimate receive benefits from their constituencies (Arthur, 2003; Elsbach, 2001). For example, Elsbach (2001) asserted that organizations recognized as legitimate receive unquestioned support and better resources, and Arthur (2003), in her study of work-family policies, found that shareholder reaction increased once the action was deemed as legitimate. This indicates that legitimacy is valued, and as such, is a desired and rewarded characteristic for organizations; that investors will respond to the legitimate signal sent by receiving the Catalyst Award.

Moreover, Goodstein (1994) suggests that legitimacy is “particularly salient for large organizations” (p. 356). For example, large firms are understandably more reliant on a greater number of employees than smaller firms. Therefore, sending appropriate signals to society is imperative for these firms in order to secure talented and productive human capital. The Catalyst Award signals a legitimate action by the firm in that it represents the firm’s commitment to diversity. Mintzberg (1983) suggested that given large organizations’ visibility and accountability to numerous stakeholders, their incentive to engage in legitimate actions is increased. A firm’s commitment to diversity is valued and regarded as socially desirable by society, and as such, regarded as a legitimate action. Therefore, the Catalyst Award and its meaning to diversity, signals a legitimate action by the organization; and as suggested by several scholars, legitimate actions are vital for the survival of large firms (Goodstein, 1994; Mintzberg, 1983). Therefore,

**Hypothesis 3:** The positive share price reactions to the Catalyst Award will be greater for larger firms than smaller firms.

Industry demographic composition may influence constituent interpretation and subsequent share price reactions to a human resource award. As stated by Prabhu and Stewart
(2001), “the context in which signals are sent and received is as much a source of information as the signals themselves, and the context may change the way a signal is interpreted” (p. 64). If an industry is known for recruiting, hiring, and/or retaining women, or being “good” for women, the signal may not provide investors with as much new information as for an industry with fewer women. Therefore, in industries heavily weighted by a female labor force, the signal sent by the Catalyst Award will likely not reap the benefits realized by other industries.

Investors purchase a winning organization’s stock as a result of the reputational signal the award sends and their interpretation of the value of the award (Fombrun, 1996). Specifically, the values and reputation signaled by a Catalyst Award in an industry with few women may provide more meaning to the receivers. For an organization to receive an award by Catalyst in an industry dominated by men, it likely represents solid commitment from management toward the advancement of women, which indicates the presence of high-quality management. Therefore, if an industry has few women, the award signal may be interpreted as more powerful and valuable by its constituents than if the industry has a high percentage of women. The more powerful and valuable the signal, the greater the reputational impact on investors. Hence, the award will likely be more salient when an industry is composed of fewer women.

**Hypothesis 4:** The positive share price reactions will be greater in industries with a low proportion of women than in industries with a high proportion of women.
METHODS

Data

The date and firm data for Catalyst award-winning firms were collected through searches of the *Wall Street Journal*, *New York Times*, and other prominent newspapers. The years examined in the study were 1991 to 2005. While the Catalyst Award began in 1987, the announcements were only available from 1991 to the present. The firms accounting data and stock market performance measures were collected from the Center for Research in Security Prices (CRSP) at the University of Chicago. The data for the proportion of women by industry were collected from the U.S. Bureau of Labor Statistics.

The date examined was the day Catalyst announced the award-winning firms. Typically, the awards have been announced in December or January. There were 50 firms awarded the Catalyst Award over the studied time period. Of those, a sample of 40 publicly traded firms had all the necessary variables for analyses.

Event Study

An event study was used for this analysis. The underlying principal of an event study, based on the efficient market theory, is that once new information regarding a firm is released to the public, investors will adjust their perceptions of the firm’s future cash flows or stock risks (Fama, 1970). In doing so, the investors’ expectations of the firm’s value will increase or decrease the common stock value (Fama, 1970). Given the premise of this paper, we expect news of the award to increase investors’ perceptions of the future value of the firm; hence, increasing common stock price.

While researchers have examined window lengths exceeding a sixty-day time span, we present a maximum window length of 3-days and a minimum of 1-day. Scholars debate the appropriate length of an event study window noting a key concern to be the likelihood of
confounding events existing with longer event windows (McWilliams & Siegel, 1997). If this is the case, the true relationship between the event and shareholder return may be clouded by other information released during the time period.

To further prevent firms with other announcements in the 3-day time period from skewing the results, we conducted a search of each firm using the Dow Jones Interactive Database. We eliminated four firms with confounding events during the award window.

Although event studies use many different techniques, they involve four general steps (see Brown and Warner, 1985). The steps are (1) identify the event; (2) model the normal (expected) shareholder returns; (3) estimate the abnormal (unexpected) shareholder returns; and (4) analyze summary measures for abnormal returns.

(1) Identify the Event

An event date can be one date that affects all firms. For example, a change in health care policy regulations affects all firms on one date or it can be an event that affects one firm at a particular date. We use the later definition of an event. Identifying the event date is crucial. On the event date, the firm’s unexpected shareholder return has a predicted mean of zero. If the return is greater than zero, the firm is said to have an excess return. The excess return is then attributed to a capital market adjustment due to information revealed regarding the firm.

(2) Model the Normal (Expected) Shareholder Returns

To determine whether an excess return exists, we first model the expected or normal shareholder returns for a firm on the day of the event, the two 2-day windows (the day before the event and the day of the event; the day of the event and the day after the event), and the 3-day window (the day before the event, the day of the event, and the day after the event).
This estimation is accomplished by statistically modeling the relation between a firm’s shareholder return over a given time period (1 year or 255 trading days) with the shareholder return for the same time period arising from an index. Following general convention, the baseline index was a value-weighted portfolio of the American Stock Exchange (AMEX), the New York Stock Exchange (NYSE), and the Nasdaq Stock Market (NASDAQ). The 1-year period was modeled with an end date of 30 days prior to the event. Estimating the relationship between each firm and a diversified portfolio of stocks essentially controls for any external shocks or trends in the stock market. Equation (1) below was used to estimate the relationship between a given firm’s return \( R_{it} \) and the market portfolio \( R_{mt} \) where \( i \) represents the firm and \( t \) represents time in trading days.

\[
R_{it} = \alpha_i + \beta_i R_{mt} + \eta_{it}
\]

This estimation gives us the typical relationship, for the last year of trading days, between the firm and the indexed portfolio. In doing so, if the \( \hat{\beta} \) is 1.25, we know that if the market increases 1.00% the investigated firm’s share price should increase 1.25%. Thus, the firm typically outperforms the market. Hence, we would expect the same relationship over the event day or days surrounding the event.

(3) Estimate the Abnormal (Unexpected) Shareholder Returns

If the firm stock price exceeds the 1.25% relationship, the excess or abnormal return is noted as the firm reaction to a Catalyst Award. Excess returns were calculated as the difference between the expected share price of the firm, given the historical relationship between the firm and the weighted portfolio, and the actual share price on the day or days surrounding the event. The time periods examined were 1-day (the day of the event), two 2-
day (the day before and the day of the event; the day of and the day after the event), and a 3-day (one day before the event, the event day itself, and one day following the event) window. The share price is adjusted to account for stock splits and dividends. Equation (2) was used to calculate the excess returns. As with the previous example, if the market goes up 1.00%, firm share price would be expected to go up 1.25%. If the actual share price goes up 3.10%, the excess or abnormal return is calculated as (3.10%-1.25%=1.85%) on the day of the announcement. Hence, the firm excess return attributed to the Catalyst Award is 1.85%.

Equation (2) was used to calculate the excess or abnormal returns deriving from a Catalyst Award.

\[
(2) \quad ER_{it} = R_{it} - (\hat{\alpha}_i - \hat{\beta}_i R_{mt})
\]

In addition to excess returns for each firm, several other statistics were calculated. The average excess returns (AER) were reported. The average excess returns are the sum of the excess returns divided by the number of events (N). The average excess return for day (t) was calculated as:

\[
(3) \quad AER_t = \frac{\sum_{i=1}^{N} ER_{it}}{N}
\]

Further, cumulative average excess returns (CAER) were computed using Equation (4) below. The cumulative average excess returns are the sum of the average excess returns over the days in the event window where \( t_1 \) and \( t_2 \) represent the first day and last day of the event window, respectively. The cumulative average excess returns for the relevant event group were computed as:
(4) Analyze Summary Measures for Abnormal Returns

Following the suggestion of McWilliams and Siegel (1997), two significance tests of the coefficients are presented. First, a standard parametric significance test is presented. The test statistic is for the null hypothesis that the excess return or cumulative average excess return is equal to zero. Second, significance tests for the generalized sign test are reported. The null hypothesis for the generalized sign test is that the fraction of positive returns is the same as in the estimation period. For instance, if 36% of the market model returns are positive in the estimation period, while 50% of firms have positive market model returns on the event day, then the difference between 36% and 50% is analyzed and the test statistic reports whether it is significant (Cowan, 1992).

Regressing Excess Returns on Independent Variables

A second phase of the event study examines the relationship between the excess returns (ER) or cumulative excess returns (CER) and the independent variables of interest. Using OLS, the relationship between the size of the excess return and announcement, firm, and industry characteristics are examined.

Dependent Variables

Dependent Variables. The dependent variables were the excess returns on the day of the announcement, the day after the event, a 2-day window (the day of the event and the day after) and a 3-day window (the day before, the day of, and the day after).
Independent Variables

Independent Variables. The independent variables included in the model were a yearly trend variable, the logarithm of firm size, a one-year lagged value proportion of women, a one-year lagged value of the unemployment rate, and a weight variable.

Trend Variable. The trend variable was included in the model as a continuous variable from 0 to 14 that represents the year the firm was granted the Catalyst Award. The firm sample is the time period from 1991 to 2005. If a firm was named as the Catalyst Award winner in 1991, a value of 0 was assigned to the variable. Similarly, if a firm won the award in 1992 or 1993, the trend variable was assigned the value of 1 and 2, respectively.

Firm Size. Firm size is measured as the number of outstanding shares multiplied by the share price on the event date. The data were collected from the CRSP database. The logged value was included in the model.

Proportion Female. Using the 3-digit SIC code, a 1-year lagged value of the proportion female by industry was collected from the U.S. Bureau of Labor Statistics. The proportion female was included as a percentage.

Unemployment Rate. Using the 3-digit SIC code, a 1-year lagged value of the unemployment rate was collected from the U.S Bureau of Labor Statistics. The unemployment rate was included as a percentage. The unemployment rate was included as a control and proxy variable representing labor market conditions.

Weight Variable. A weight variable was constructed as the inverse of the variance of each firm’s daily stock returns over one year of trading days. The weight variable prevents firms with high variance in returns from being weighed more heavily in the analyses than firms with low variance in returns. The weight variable was included as a control variable.
RESULTS

Table 1 presents financial descriptive statistics and the mean share price reactions for the Catalyst awarded firms. There were 40 publicly traded firms, from 1991 to 2005 with an available award date.

-- Insert Table 1 about here --

We tested Hypothesis 1 by calculating the average excess returns (for the 1-day window) and the cumulative average excess returns (for the 2- and 3-day windows) described above. The hypothesis suggests that the announcement of a Catalyst Award will positively affect share price. The results indicate that share price significantly increases .66% on the day of the event (p < .01). In addition, the 3-day window (the day before, the day of, and the day after) share price reaction of .73% is significant at p < .01. Thus, the results indicate that the reaction of investors to a Catalyst Award announcement is to increase share price.

-- Insert Table 2 about here --

In the second group of hypotheses tests (Hypotheses 2-4), the announcement, firm, and industry characteristics are regressed on excess returns. In doing so, the model tests for potential moderators of the human resource award and share price relationship. Hypothesis 2 suggests that over time share price reaction should decrease. A trend variable is included in the analyses to test for the relationship. The results suggest a negative and significant relationship for four of the four event windows examined. For the 3-day event window, a one-year increase in the award date decreases share price by 0.003. Hypothesis 2 is supported. Therefore, the Catalyst Award becomes less salient over time.

Hypothesis 3 proposes that firm size will be positively related to share price reaction. The results are supported for the day after the event and both multiple day windows (the day
of the event with the day after and the 3-day window). Hence, the analyses provide support for Hypothesis 3. That is, larger firms reap greater share price reactions than smaller firms to a Catalyst Award.

Hypothesis 4 asserts that the proportion of women will moderate the Catalyst Award and share price relationship. Specifically, we suggest that the lower the percentage of women in an industry, the greater the share price reaction to a human resource award. We found a significant negative relationship on the day of the event and for a 2-day window including the day after the event. Thus, our analyses do not support Hypothesis 4. We recognize several limitations of the variable representing the proportion of women. Firm-level data detailing the types of jobs women occupy rather than general industry-level data would provide for a more accurate test of Hypothesis 4. Similarly, examining gender heterogeneity may provide insight into a potentially non-linear relationship between gender diversity and share price reactions.

-- Insert Table 3 about here --

**DISCUSSION**

We find that the designation of a Catalyst Award significantly increases share price on the day of the announcement. Share price reaction on the day of the award announcement is 0.66%. The average dollar value associated with this share price reaction is 21 million dollars. Over the 3-day window, the award increases share price 0.73%, increasing the average firm value approximately 23 million dollars. This finding suggests that organizational constituents do value diversity. The signal sent by the Catalyst Award is that the firm is committed to diversity and manages a diverse work force well. By reacting to increase share
price on the day of the award announcement, organizational constituents are affirming their belief in the benefits of diversity and demonstrating their desire to be involved with firms gaining the most from their human resources.

We also find that the timing of the award and the size of the firm moderate the relationship between the Catalyst Award and firm share price. Applying signaling theory, we suggest that these variables affect the value of the award. Given the timing of the award, the strength of the signal sent to investors is dependent on the extent to which the information is credible and new. Earlier recipients of the award did gain greater share price reactions than more recent award winners. This is an expected finding in that earlier award winners may have been more newsworthy and the award may have had more novelty than in recent years. Based on the current averages of the extraneous variables, we find that using the 1-day and 3-day window model specifications, the Catalyst award will no longer have an effect on share price in the years 2016 and 2010, respectively. Interestingly, though, this award signals a value-in-diversity perspective, and only in the past several years has research demonstrated bottom-line benefits for firms to embrace diversity. Therefore, it may be reasonable to assert that earlier award announcements gained share price increases largely as a function of reputation.

The finding that large firms reap a greater benefit from the award than small firms is consistent with the assertion that legitimacy is of primary importance for visible organizations. Moreover, it affirms the suggestion that human resource policies which support diverse work forces are, indeed, considered legitimate practices by the firm’s constituencies. Specifically, diversity is valued by society and benefits to organizations for managing diversity well are recognized.
Share price reactions to Catalyst Awards tend to be more robust and/or larger than other studies of human resource awards. Wright et al. (1995), examining Department of Labor Awards for Affirmative Action programs, found a share price reaction of .47% on the day of the award announcement with no other significant findings. Hannon and Milkovich (1996) examined firms nominated to the “bests lists.” Specifically, they examined share price reactions of firms that were designated as “Best for Blacks,” “Most Preferred,” “100 Best to Work for,” “Best for Working Mothers,” “Best for Women,” and “Best for Black Engineers.” Of the six reputational signals, only one, “Best for Working Mothers” had a significant effect on firm share price (2.7%) on the day of the announcement. The remaining awards did not significantly affect share price. The authors suggest “the quality and veracity of a signal may affect its importance and influence.” Based on the quality and the depth of the investigation into Catalyst finalists, we suggest that the reputation of the award will affect the signal, hence, the share price and award relationship.

CONCLUSION

There is some speculation that investors no longer respond to awards. That is, firms have been over awarded and each one could claim some distinction if desired. Others suggest that awards are necessary to build company names and reputations (Fombrun, 1996). We argue that not all awards are reputation enhancing. Rather, the signal sent by the award must be deemed credible and valuable by the constituents. Scholars have extensively examined the firm reputation and firm performance relationship. We offer an extension to past studies by enhancing signaling theory to include specifically what the signal represents; in this case, the firm’s commitment to diversity. As illustrated in this study, constituents of Catalyst Award
winning firms indeed interpreted the award as credible and valid, and as such, reacted to
make it one of value.

As human resource scholars face increased pressures to demonstrate a relationship
between human resource activities and firm performance, we shed some light on the debate.
While strategic human resource researchers have focused on synergies between human
resource practices and actual firm performance, our study examines immediate share price
reactions, a complementary measure of firm performance that relies on investor perceptions
of human resource success. Future research should consider both types of firm performance
measures to accurately assess the relationship between human resource practices and firm
performance.
REFERENCES


### TABLE 1

**Descriptive Statistics**
*(standard deviations in parentheses; n=40)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. AER&lt;sub&gt;t=0&lt;/sub&gt;</td>
<td>0.66</td>
<td>(0.015)</td>
</tr>
<tr>
<td>2. CAER&lt;sub&gt;t=-1,+1&lt;/sub&gt;</td>
<td>0.73</td>
<td>(0.039)</td>
</tr>
<tr>
<td>3. Share Price (in dollars)</td>
<td>47.90</td>
<td>(22.68)</td>
</tr>
<tr>
<td>4. Outstanding Shares (in millions)</td>
<td>667840.7</td>
<td>(1658983.5)</td>
</tr>
<tr>
<td>5. Firm Value (in millions)</td>
<td>3233054.1</td>
<td>(62872069.4)</td>
</tr>
</tbody>
</table>
TABLE 2

An Analysis of the Average Excess Returns (AER) and the Cumulative Average Excess Returns (CAER) of the Catalyst Award $^{a,b}$

<table>
<thead>
<tr>
<th>Catalyst Award Reaction (n=40)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AER$_{t=0}$</td>
<td>0.66 $^{***}&gt;&gt;$</td>
</tr>
<tr>
<td>CAER$_{t=-1,0}$</td>
<td>0.91 $^{***}$</td>
</tr>
<tr>
<td>CAER$_{t=0,+1}$</td>
<td>0.47</td>
</tr>
<tr>
<td>CAER$_{t=-1,+1}$</td>
<td>0.73 $^{**}$</td>
</tr>
</tbody>
</table>

$^a$ Significance for the generalized sign hypotheses tests is denoted by $>$$>$,$>$,$>$ at the .10, .05, and .01 levels, respectively.

$^b$ All coefficients are expressed as percentages.

* $p < .10$

** $p < .05$

*** $p < .01$

**** $p < .001$
TABLE 3
Regression Analysis of Excess Returns on Announcement, Firm, Economic and Industry Characteristics\textsuperscript{a,b}

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>AER\textsubscript{t=0}</th>
<th>CER\textsubscript{t=+1}</th>
<th>CER\textsubscript{t=0,+1}</th>
<th>CER\textsubscript{t=-1,+1}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Trend</td>
<td>-0.001\textsuperscript{*}</td>
<td>-0.001\textsuperscript{*}</td>
<td>-0.003\textsuperscript{**}</td>
<td>-0.003\textsuperscript{*}</td>
</tr>
<tr>
<td></td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.001)</td>
<td>(0.002)</td>
</tr>
<tr>
<td>Firm Size (in thousands)\textsuperscript{c}</td>
<td>0.001</td>
<td>0.005\textsuperscript{***}</td>
<td>0.007\textsuperscript{**}</td>
<td>0.009\textsuperscript{*}</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
<td>(0.002)</td>
<td>(0.003)</td>
<td>(0.005)</td>
</tr>
<tr>
<td>Proportion Women\textsubscript{t-1}</td>
<td>-0.042\textsuperscript{*}</td>
<td>-0.017</td>
<td>-0.058\textsuperscript{*}</td>
<td>-0.028</td>
</tr>
<tr>
<td></td>
<td>(0.027)</td>
<td>(0.027)</td>
<td>(0.037)</td>
<td>(0.068)</td>
</tr>
</tbody>
</table>

\textsuperscript{a} n = 40.
\textsuperscript{b} A weight variable, constructed as the inverse of the variance, and an economic indicator were included as control variables. The results were omitted.
\textsuperscript{c} Logarithm.

*p < .10
** p < .05
*** p < .01
**** p < .001