

# The Effect Of A Firm's Financial Condition On The Market Reaction To Company Layoffs

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## Abstract

*Prior research has presented two conflicting hypotheses regarding the effect of a firm's financial condition on the market reaction to announcements of company layoffs. The "financial distress" hypothesis states that the market reaction to layoffs for financially weak firms will be more negative than for financially healthy firms, because the layoff announcement reveals and/or confirms the problems that led to the layoff. On the other hand, the "potential benefit" hypothesis states that the market reaction for financially weak firms will be more positive than for financially healthy firms, because the financially weak firms have a greater potential to benefit from the layoff. Two prior studies, Iqbal and Shetty (1995) and Worrell, Davidson, and Sharma (1991); examine stock price reactions to announcements of company layoffs and how those reactions are related to the financial condition of the firm at the time of the layoff. They reach different conclusions, however, as to the effect of financial condition. Iqbal and Shetty find evidence supporting the potential benefit hypothesis, whereas WDS find evidence supporting the financial distress hypothesis.*

*The current study offers an alternative hypothesis for the effect of a firm's financial condition on the market reaction to layoffs. Instead of concluding that the financial distress and potential benefit hypotheses are mutually exclusive and competing, this study provides evidence that these hypotheses simultaneously explain concurrent and additive effects on the stock price reactions to layoff announcements. These results have implications both for investors and management regarding the market's reaction to announcements of employee layoffs.*

## I. Introduction

Announcements of company downsizings have been and continue to be prevalent. However, news stories in the business press associated with layoff announcements often reach different conclusions as to the market's *perception* of these events (as

*Readers with comments or questions are encouraged to contact the authors via email.*

measured by stock price reactions). For example, these quotes from recent business press releases imply that investors tend to react positively to news of a corporate layoff:

"There's not much that's predictable about Wall Street, but one chain of events has been practically paint-by-number for the last few years: Nearly every time a major corporation

announces large numbers of layoffs, its stock price rises. It happened again with AT&T earlier this month. No sooner did the telephone company announce it was axing 40,000 jobs, many of them white-collar workers in New Jersey, than its stock price rose about 5%, to more than \$68." (Cynthia Mayer, *The Des Moines Register*, January 14, 1996).

"Investors love layoffs. Heartless as it sounds, a corporate announcement of a big lay-off, write-off or restructuring often sends a company's stock soaring." (John Dorfman, *Wall Street Journal*, *Heard on the Street*, December 10, 1991).

"But what's sour medicine for the rank and file seems to be viewed as a miracle cure on Wall Street. With few exceptions, the stock prices of these companies have risen on the day of the layoff announcement." (Fefer, 1994).

On the other hand, other business news stories paint a much more negative picture of the market's reaction to layoff announcements. For example, a study conducted by Mitchell & Company (*Wall Street Journal*, December 10, 1991), suggested that over a period of one to three years, layoffs and write-offs are actually a strong sell signal for stocks, with the stock price usually falling behind its peers by about 23 percentage points by the end of two years following the lay-off announcement.

Thus, the question is raised as to the market's true perception of layoffs. Does the layoff announcement provide a signal about the present and/or future financial condition of the firm, and if so, does the firm's *pre-existing* financial condition affect the market's reaction to the announcement? In other words, does the market view a layoff as either (1) a signal of financial distress, and therefore respond negatively, or (2) the fix to an existing problem, and therefore respond positively? These two alternatives form the basis for hypotheses presented in prior research regarding the relationship between a

firm's financial condition and the stock price reaction to an announcement of a layoff.

The "financial distress" hypothesis is based on the premise that the signal provided by a lay-off announcement tends to reinforce knowledge about the current poor financial condition of the downsizing firm. A layoff by a financially weak firm signals management's view that the firm's current financial problems are real and long-lasting. Share price reactions are expected to be negative for these firms. Shareholders' reactions to layoffs by financially healthy firms also can be negative to the extent that the layoff signals expected financial difficulties in the future. However, the severity of the current and future financial problems is expected to be more pronounced for financially weak firms than for financially healthy firms. Therefore, the financial distress hypothesis states: *Stock price reactions to layoff announcements are more negative for financially weak firms than for financially healthy firms.*

An alternative hypothesis for the effect of financial condition is the "potential benefit hypothesis," which is based on the premise that to some extent all layoffs are an attempt to cut costs and improve earnings. However, the stockholders' assessment of the potential benefit that a layoff will provide in lowering costs and improving earnings depends on the financial condition of the firm at the time of the layoff. Firms that are financially troubled have more to gain, including the potential for a larger increase in future profits. The layoff may even help the firm avoid bankruptcy. Thus, it can be argued that the potential benefits of layoffs are greatest to the stockholders of financially weak firms. The potential benefit hypothesis states: *Stock price reactions to layoff announcements are more positive for financially weak firms than for financially healthy firms.*

The following section presents a summary of prior research.

## II. Summary Of Prior Research Findings

Worrell, Davidson and Sharma (WDS, 1991) examined 194 layoff announcements that appeared in the Wall Street Journal for the years 1979 to 1987. Using mean cumulative prediction errors, they found a significantly negative overall stock price reaction over the eleven day period surrounding the date of the announcement. In addition, they found that (1) firms stating the layoff was due to financial distress had a significantly more-negative return than firms stating the layoff was due to restructuring or consolidation that did not result from financial difficulties, and (2) firms defined as financially poor performers prior to the layoff announcement had significantly more-negative returns than financially healthy firms. WDS concluded that the layoff announcement was viewed as a signal that the firm's problems were serious, and thus was perceived negatively by the market. Their results support the financial distress hypothesis.

Iqbal and Shetty (1995) examined 187 layoff announcements that appeared in the Wall Street Journal over the period 1986 to 1989. Using cumulative average prediction errors, they found a significantly negative overall stock price reaction over the two-day event window surrounding the layoff announcement date. These results are consistent with Worrell, Davidson and Sharma. Iqbal and Shetty also examined differences in stock price reactions to the layoff announcements of financially weak firms and financially healthy firms. They found that financially weak firms had a significantly *more-positive* stock price reaction than financially healthy firms. These results conflict with the results of Worrell, Davidson and Sharma, who found that financially weak firms had a *more-negative* stock price reaction. Iqbal and Shetty attributed their findings to the potential benefit hypothesis.

In a study examining the effect of a firm's financial condition on the market's reaction to plant closing announcements, Gombola and Tsetsekos (1992) hypothesized that the stock price

reaction to such announcements would be significantly more-negative for firms in poorer financial condition than for firms in better financial condition. The researchers examined 282 announcements of plant closings. Their results support their hypothesis, and provide further support for the financial distress hypothesis.

## III. Discussion Of Prior Research Findings

These prior studies are similar in one major respect. They consistently find a significant and negative *overall* stock price reaction to announcements of corporate layoffs. However, those researchers who examined the pre-existing financial condition of downsizing firms reached conflicting conclusions regarding the effect of financial condition on the market's reaction to layoff announcements.

One explanation for the difference in results between (1) WDS and Gombola and Tsetsekos, and (2) Iqbal and Shetty is that sample differences exist among the three studies. WDS examined the layoff announcements of 117 firms that listed the reason for the layoff as either financial distress or restructuring or consolidation. These firms were further divided into two groups: firms with poor prior performance and firms without poor prior performance. WDS defined poor prior performance as negative earnings per share in the year prior to the layoff announcement *or* a decrease in earnings per share of 30 percent or more in the preceding two years. Iqbal and Shetty studied layoff announcements by 79 firms that they classified as financially weak or financially healthy. They defined financially weak firms as those having negative ROEs in each of the two years prior to the layoff *and* a bond downgrading anytime during this two-year period. Financially healthy firms were those with positive ROEs in each of the two prior years and no bond downgrading during the period. Gombola and Tsetsekos grouped 105 downsizing firms according to their bond ratings--AAA, A or AA, and BAA or below. They considered firms with bond ratings of BAA or below to be

financially weak, and firms with higher ratings to be financially healthy. In addition to using different methods to identify financially weak and financially healthy firms, WDS, Iqbal and Shetty, and Gombola and Tsetsekos studied lay-off announcements that were made in different time periods: 1979-1987, 1986-1989, and 1980-1986, respectively.

Given the conflicting results of these three studies--WDS and Gombola and Tsetsekos finding support for the financial distress hypothesis and Iqbal and Shetty support for the potential benefit hypothesis--replication of the studies should provide insights into the reasons for the conflict. We assume that each study used an effective means to differentiate financially weak and financially healthy firms. Thus, if the difference in results was sample-driven, replication of the studies using a *common sample* should provide consistent results regardless of the means used to categorize firms. But if replication results are similar to those of the original studies, this would provide evidence that the conflict is not sample-driven. In that case, the conflict may be due to the methodologies used to test the alternative hypotheses. The following section presents replications of the WDS, Iqbal and Shetty, and Gombola and Tsetsekos studies.

**IV. Replication Of Prior Research**

*Sample Selection*

To obtain data on firms that announced layoffs, a search was performed using the Dow Jones News Retrieval Database. A word search to identify firms announcing layoffs was conducted on announcements that appeared in the Wall Street Journal and Wall Street Journal Index during the period 1987-1994.

The search yielded 991 separate announcements of corporate layoffs. In order to be included in the final sample, a downsizing firm had to have financial statement information available on the Compustat Database and daily

stock return information available on the CRSP data tapes for the periods of the required analyses. These conditions resulted in a final sample of 604 announcements for the analysis of daily abnormal returns.

*Data Collection*

For each layoff announcement in the sample, the following information was obtained:

- the date the announcement first appeared in the Wall Street Journal,
- the absolute number and/or percentage of employees laid off,
- the reason/reasons given by management for the layoff,
- COMPUSTAT data necessary to calculate financial condition variables,
- CRSP data necessary to calculate abnormal returns.

*Measuring Stock Price Reaction*

Stock price reactions to the layoff announcements are calculated using an event study methodology commonly employed in financial research. To calculate a series of expected returns, a market model was used that regresses security returns against the overall return of the market. A given firm's expected return over period *t* (ER<sub>it</sub>) is calculated as:

$$ER_{it} = \alpha_i + \beta_i R_{mt} + e_{it},$$

where:

- ER<sub>it</sub> = the expected return for firm *i* over period *t*,
- R<sub>mt</sub> = the market return over period *t*,
- e<sub>it</sub> = a disturbance term

The coefficients  $\alpha_i$  and  $\beta_i$  are the estimated values of the market model parameters. The coefficients are estimated for the 200-day period from Day -220 to Day -21, with Day 0 being the day the layoff announcement appeared in the Wall Street Journal. The expected return

for firm *i* over period *t* was then compared to the actual return in order to compute the prediction error as follows:

$$PE_{it} = R_{it} - (\alpha_i + \beta_i R_{mt}),$$

where:

- PE<sub>it</sub> = the prediction error for firm *i* over period *t*, and
- R<sub>it</sub> = the actual return for firm *i* over period *t*.

Daily prediction errors for each firm were calculated over the period Day -20 to Day +20 using the formula above. Mean prediction errors were computed by summing the prediction errors across all *N* firms for each time period *t* as follows:

$$PE_t = \frac{\sum_{i=1}^N (PE_{it})}{N}$$

Mean cumulative prediction errors, MCPE, over various intervals T<sub>1</sub> to T<sub>2</sub>, were then computed as:

$$MCPE_{T_1 T_2} = \sum_{t=T_1}^{T_2} (PE_t)$$

Overall Stock Price Reaction

The mean cumulative prediction errors for various event windows surrounding the date of the layoff announcement are presented in Table 1. For example, the mean cumulative prediction error for the six-day period beginning five days prior to the announcement and ending on the day of the announcement (Day -5 to Day 0) is -.0094367, which is significantly negative with a t-statistic of -2.428.

The two-day event window of Day -1 to Day 0 has a mean cumulative prediction error of -.0118073. As Table 1 shows, each event window ending on Day 0 has a significantly negative MCPE. The MCPEs of event windows ending two days or more prior to the layoff announcement are not significantly different than zero. These results from Table 1 indicate that the reaction to the layoff announcement occurs mostly in the two-day period of Day -1 to Day 0, or the day prior to and the day of the layoff announcement. Thus, MCPEs for the two-day event window ending on Day 0 are used in subsequent analyses.

Table 1  
Mean Cumulative Prediction Errors for  
Various Event Windows Surrounding the Layoff Announcement Date <sup>1</sup>

Event Window	Mean Prediction Error	Standard Error	t-stat	% of Firms with Negative Returns
Day -4	.0005417	.0014641	.370	52.0
Day -3	.0003451	.0014379	.240	53.9
Day -2	.0018635	.0013698	1.360	51.0
Day -1	-.0074559	.0022301	-3.343*	56.0
Day 0	-.0043515	.0020001	-2.175*	54.2
Days -20 to -4	-.0061596	.0050975	-1.208	51.5
Days -20 to -3	-.0061076	.0049896	-1.224	51.0
Days -20 to -2	-.0042007	.0051131	-.822	51.3
Days -20 to -1	-.0117030	.0054563	-2.145*	51.9
Days -20 to 0	-.0160880	.0058642	-2.743*	53.4
Days -5 to 0	-.0094367	.0038863	-2.428*	53.8
Days -4 to 0	-.0094559	.0034510	-2.740*	54.6
Days -3 to 0	-.0099976	.0031738	-3.150*	53.3
Days -2 to 0	-.0103426	.0029720	-3.480*	52.2
Days -1 to 0	-.0118073	.0029127	-4.054*	54.9

<sup>1</sup> Day 0 corresponds to the date the layoff announcement appeared in the Wall Street Journal.

\* Significant at the .05 level.

*Results of Replications*

Table 2 presents results of replications of the WDS, Iqbal and Shetty, and Gombola and Tsetsekos studies. The methodology and variable definitions that were used in each original study remain the same. However, all three studies were replicated using the common sample of layoff announcements described earlier. This use of a common sample aids in explaining differences in the studies' results.

Panel A presents replication results for the Iqbal and Shetty study. Firms identified by Iqbal and Shetty as financially weak have a positive MCPE of .0193076. Firms identified as financially healthy have a negative MCPE of -.0034071. The difference in MCPE between the two groups indicates that financially weak firms have a significantly *more-positive* stock price reaction than financially healthy firms. These results are consistent with those originally reported by Iqbal and Shetty.

Panel B presents results of the replication of the WDS study. Firms identified by WDS as having poor prior performance have a negative MCPE of -.0246499. Firms without poor prior performance have a negative MCPE of -.0097805. The difference between the MCPEs, .0148694, is significant at the .05 level. Thus, firms with poor prior performance have a significantly *more-negative* stock price reaction than firms without poor prior performance. These results are consistent with those originally reported by WDS.

Panel C presents replication results for the Gombola and Tsetsekos study. The group of firms with bond ratings of AAA has a negative MCPE of -.0057891. Firms with bond ratings of AA or A have a negative MCPE of -.0023045, and firms with bond ratings of BAA or below have a negative MCPE of -.0116530. These results are consistent with those originally reported by Gombola and Tsetsekos; they indicate that the stock price reaction for firms with the lowest bond ratings is significantly more-

negative than the reaction for firms with the highest bond ratings.

Gombola and Tsetsekos also tested a regression model with a dummy variable representing bond rating. Panel D presents results of a replication of this regression. The dummy variable for bond rating (a proxy for financial condition) is significant at the .05 level. (A variable for the percent of workforce downsized was included to be consistent with the original study.) The negative direction of the bond rating coefficient indicates that firms with lower bond ratings have significantly more negative stock price reactions, which is consistent with the original Gombola and Tsetsekos study.

Each replication of a prior study provides results and conclusions that are consistent with those of the original study. Because a common sample was used in the replications, the conflict between their findings is not due to sample differences. This conflict could be caused by differences in the variables used to identify financially weak and financially healthy firms. But it also could be caused by the methods used in the studies to test the assumption that a layoff announcement provides *either* a negative signal *or* a positive signal about the firm. In the following section, alternative hypotheses are developed that incorporate aspects of *both* the financial distress *and* the potential benefit signaled by layoff announcements. These alternative hypotheses reconcile the apparent conflict between the findings of the prior studies.

**V. Hypothesized Differences Between Positive And Negative Reactions**

One limitation of the methodology used by prior studies to examine the effect of financial condition on the stock price reaction to layoff announcements is that the financial distress and potential benefit hypotheses were tested as *separate* hypotheses. In these studies, stock price reactions to layoff announcements were examined to determine whether financially weaker firms had either more-negative or more-positive reac-

Table 2  
Replication of Prior Research:  
Results Using A Common Sample

Prior Study	Categories of Firms Examined	MCPE	t-value	# of Firms in Subset		
<b>Panel A:</b>						
Iqbal & Shetty, (1995) <sup>1</sup>	Financially Weak Firms	.0193076	1.28655	215		
	Financially Healthy Firms	-.0034071	-1.84817	47		
	Difference	-.0227147	-2.97858*			
<b>Panel B:</b>						
Worrell, Davidson & Sharma, (1991) <sup>2</sup>	Firms With Poor Prior Performance	-.0246499	-3.66438*	263		
	Firms Without Poor Prior Performance	-.0097805	-2.60887*	261		
	Difference	.0148694	1.95016			
<b>Panel C:</b>						
Gombola & Tsetsekos, (1992) <sup>3</sup>	Firms Rated AAA (Category 1)	-.0057891	-1.13708	31		
	Firms Rated AA or A (Category 2)	-.0023045	-1.04264	263		
	Firms Rated BAA or Below (Category 3)	-.0116530	-2.09296*	188		
<b>Panel D:</b>						
Gombola & Tsetsekos, (1992) <sup>4</sup>	MCPE = $\alpha + \beta 1$ (percent of workforce downsized) + $\beta 2$ (bond rating)					
	$\alpha$	$\beta 1$	$\beta 2$	$n$	$F$	$\text{Prob} > F$
	-.00228	-.04363	-.01069	343	2.98	.0520
	(-.666)	(-.833)	(-2.135)*			

- <sup>1</sup> Financially weak firms defined as having negative ROE in years t=-1 and t=0 and a bond downgrading anytime during this two-year period. Financially healthy firms have positive ROEs both years and no bond downgrading.
  - <sup>2</sup> Poor prior performance is defined as having negative earnings per share in the year prior to the layoff announcement or a decrease in EPS of 30 percent or more over the preceding two years.
  - <sup>3</sup> Categories are determined by bond rating in the year prior to the layoff announcement.
  - <sup>4</sup> MCPE = mean two-day cumulative prediction error, day -1 to 0.  
Percent of workforce downsized = # of employees laid off / total # of employees.  
Bond rating = dummy variable of 0 if bond rating is A or higher and 1 if BAA or lower.
- \* Significant at the .05 level.

tions than financially stronger firms, thus providing support for either the financial distress or the potential benefit hypothesis, respectively. This approach assumes that the two hypotheses are competing, and thus mutually exclusive.

However, it is possible that these two hypotheses are not mutually exclusive, but rather that the market reaction to a layoff announcement is a function of both effects. For example, the announcement of the layoff may signal both an underlying negative state of nature (financial distress) and at the same time signal the expected positive effects, such as reduced costs and increased profits, that the layoff provides (the potential benefit). Thus, there could be both a negative and a positive component to the stock price reaction at the date of the announcement.

To the extent the announcement provides a signal about previously unknown financial distress associated with the layoff, there will be a negative component to the stock price reaction. But to the extent this information is known and has already been incorporated into the stock price, and to the extent the market now expects a benefit from the layoff, there will be a positive component to the stock price reaction. *The net stock price reaction will be a function of which effect dominates.* Although each component of the reaction is separately unobservable, the net effect is observable, thus signalling the dominant effect.

Assume for a given firm that the financial distress effect dominates and there is a negative stock price reaction to a layoff announcement.

The market is incorporating previously unknown negative information about financial distress, which results in the negative reaction. The greater the financial distress, the more-negative the stock price reaction, other things being equal. Because financially weak firms are more susceptible to events that cause financial distress than financially healthy firms, it is hypothesized that the weaker the financial condition of the firm, the more negative the stock price reaction. Specifically, the first hypothesis is:

**Hypothesis 1:** For firms experiencing a negative stock price reaction at the date of a layoff announcement, financially weak firms experience a *more-negative stock price reaction than financially healthy firms*.

Now assume for a given firm that the potential benefit effect dominates and there is a positive stock price reaction to the layoff announcement. The market is incorporating previously unknown positive information about the benefits to be achieved by the layoff, which results in the positive reaction. The greater the benefit that can be achieved for a firm, the more positive the stock price reaction, other things being equal. Because firms in poor financial condition have greater potential to gain from a layoff than financially healthy firms, it is hypothesized that the weaker the financial condition of the firm, the more positive the stock price reaction. Specifically, the second hypothesis is:

**Hypothesis 2:** For firms experiencing a positive stock price reaction at the date of a layoff announcement, financially weak firms experience a *more-positive stock price reaction than financially healthy firms*.

Evidence supporting both these hypotheses would indicate that the financial distress and potential benefit hypotheses are not mutually exclusive, but rather that they provide complementary

explanations for the overall stock price reactions to layoff announcements. In order to provide such evidence, the WDS, Iqbal and Shetty, and Gombola and Tsetsekos studies are again replicated, but in this case on two subgroups of firms separately: (1) the subgroup of firms with a negative stock price reaction to the layoff announcement, and, (2) the subgroup of firms with a positive stock price reaction. The following section presents the results and implications of these replications.

## **VI. Replication Of Prior Research, Categorized By Stock Price Reaction**

Table 3 presents results from the replication of the WDS, Iqbal and Shetty, and Gombola and Tsetsekos studies using the two subgroups of firms categorized by direction of stock price reaction. In each case, the methodology and variable definitions of the original study is used. Results in Table 3 are presented in a format similar to that of Table 2, except for the separation of the two subgroups of firms.

Panel A presents replication results for the Iqbal and Shetty study. Examine the sample of firms with negative MCPE. Firms defined by Iqbal and Shetty as financially weak have a negative MCPE of -.04259. Firms identified as financially healthy have a negative MCPE of -.01918. The difference in MCPE between the two groups indicates that financially weak firms have a significantly *more-negative* stock price reaction than financially healthy firms. Now consider the sample of firms with positive MCPE. Firms defined as financially weak have a positive MCPE of .06960. Firms identified as financially healthy have a positive MCPE of .01626. The difference shows that financially weak firms have a significantly *more-positive* stock price reaction than financially healthy firms.



Table 3  
Replication of Prior Research: Results Using a Common Sample  
Divided Into Subgroups According to Stock Price Reaction

Prior Study	Categories of Firms Examined	Firms With Negative PE <i>it</i>		Firms With Positive PE <i>it</i>		
		MCPE	t-value	MCPE	t-value	
<b>Panel A:</b>						
Iqbal & Shetty, (1995) <sup>1</sup>	Financially Weak Firms	-.04259	-5.025	.06960	3.779	
	Financially Healthy Firms	-.01918	-10.901	.01626	9.753	
	Difference	.02341	4.169	-.05334	-5.817	
<b>Panel B:</b>						
WD & Sharma, (1991) <sup>2</sup>	Firms With Poor Prior Performance	-.06669	-7.474	.03666	9.039	
	Firms Without Poor Prior Performance	-.03633	-6.995	.02183	8.018	
	Difference	.03036	2.904	-.01483	-3.110	
<b>Panel C:</b>						
Gombola & Tsetsekos, (1992) <sup>3</sup>	Firms Rated AAA (Category 1)	-.02117	-3.943	.01267	2.747	
	Firms Rated AA or A (Category 2)	-.02292	-9.177	.02041	10.243	
	Firms rated BAA or Below (Category 3)	-.04548	-5.673	.02781	8.735	
<b>Panel D:</b>						
Gombola & Tsetsekos, (1992) <sup>4</sup>	MCPE = $\alpha + \beta 1$ (percent of workforce downsized) + $\beta 2$ (bond rating)					
	$\alpha$	$\beta 1$	$\beta 2$	n	F	Prob > F
Firms With Neg. MCPE:	-.02194 (-4.643)	-.03153 (-.440)	-.02144 (-2.976)	186	5.24	.006
Firms With Pos. MCPE:	.01688 (9.773)	.01508 (.588)	.00430 (1.775)	156	1.75	.178

- <sup>1</sup> Financially weak firms are defined as having negative ROE in years t = -1 and t = 0 and a bond downgrading anytime during this two-year period. Financially healthy firms have positive ROEs both years and no bond downgrading.
- <sup>2</sup> Poor prior performance is defined as having negative earnings per share in the year prior to the layoff announcement or a decrease in EPS of 30 percent or more over the preceding two years.
- <sup>3</sup> Categories are determined by bond rating in the year prior to the layoff announcement.
- <sup>4</sup> MCPE = mean two-day cumulative prediction error, day -1 to day 0, Percent of workforce downsized = # of employees laid off / total # of employees. Bond rating = dummy variable of 0 if bond rating is A or higher and 1 if BAA or lower

Panel B presents replication results for the WDS study. Note the sample of firms with negative MCPE. Firms defined by WDS as having poor prior performance have a negative MCPE of -.06669. Firms without poor prior performance have a negative MCPE of -.03633. The difference indicates that firms with poor prior performance have a significantly *more-negative* stock price reaction. Now focus on the sample of firms with positive MCPE. Firms with poor prior performance have a positive MCPE of .03666. Firms without poor prior performance have a positive MCPE of .02183. The difference signifies that firms with poor prior performance have a significantly *more-positive* stock price reaction than firms without poor

prior performance. *The results of WDS are now consistent with those of Iqbal and Shetty when the effect of financial condition is separately examined for firms with positive and with negative stock price reactions.*

Panel C presents replication results for the Gombola and Tsetsekos study. Examine the sample of firms with negative MCPE. Firms with bond ratings of BAA or below have a negative MCPE of -.04548. Firms with bond ratings of AAA have a negative MCPE of -.02117. The difference indicates that firms with low bond ratings have a significantly *more-negative* stock price reaction than firms with high bond ratings. Now consider the sample of firms with positive MCPE. Firms with bond ratings of BAA or below

have a positive MCPE of .02781. Firms with bond ratings of AAA have a positive MCPE of .01267. The difference shows that firms with low bond ratings have a significantly *more-positive* stock price reaction than firms with high ratings. Again, these results are consistent with those of the other two studies.

Finally, Panel D presents replication results using the regression methodology of the original Gombola and Tsetsekos study. Note the sample of firms with negative MCPE. The dummy variable for bond rating (a proxy for financial condition) is significant at the .05 level. The negative direction of the bond rating coefficient indicates that firms with low bond ratings have significantly *more-negative* stock price reactions. Now consider the sample of firms with positive MCPE. The dummy variable for bond rating is not significant at the .05 level. However, the positive direction of the bond rating coefficient shows that firms with low bond ratings have *more-positive* stock price reactions. In addition, tests indicate that the bond rating coefficients for the two regression models are significantly different. Thus, the effect of financial condition on MCPE is different for firms with negative MCPE than for firms with positive MCPE.

In the case of each replication of a prior study, results of Table 3 indicate the following:

- For firms experiencing a negative stock price reaction at the date of the layoff announcement, financially weak firms experience a significantly more-negative stock price reaction than financially healthy firms. Thus, for announcements in which the signal about *financial distress* dominates, the stronger the negative signal, the more-negative the stock price reaction. This evidence supports Hypothesis 1 of the current study.
- For firms experiencing a positive stock price reaction at the date of the layoff announcement, financially weak firms experience a significantly more-positive stock price reaction than financially healthy firms. Thus, for announcements in which the signal about the *potential benefit* of the layoff dominates, the stronger the positive signal, the more-positive the stock price reaction. This evidence supports Hypothesis 2 of the current study.

## VII. Summary

For firms experiencing a negative stock price reaction at the date of the layoff announcement, financially weak firms experience a significantly more-negative reaction than financially healthy firms. Thus, for some firms the negative effect of the financial distress signalled by the layoff dominates the positive effect of the potential benefit of the layoff, and the market incorporates the previously unknown negative information into the stock price. The result is a negative stock price reaction. For firms experiencing a positive stock price reaction at the announcement date, financially weak firms experience a significantly more-positive reaction than financially healthy firms. The potential benefit effect dominates; the market incorporates the previously unknown positive information about the benefits to be achieved by the layoff, which results in the positive stock price reaction. Thus, the current study offers an alternative explanation for the effect of a firm's financial condition on the market reaction to layoffs. Instead of considering the financial distress and potential benefit hypotheses to be mutually exclusive and competing, this study provides evidence that these hypotheses are complementary, explaining *concurrent* and *additive* effects on the stock price reaction to announcements of company layoffs. □

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