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The changing relationship between job loss announcements and stock prices: 1970–1999☆

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ABSTRACT

We study the reaction of stock prices to announcements of reductions in force (RIFs) using a sample of 4273 such announcements in 1160 large firms during the 1970–99 period collected from the *Wall Street Journal*. We note that the total number of actual announcements for the firms in our sample follows the business cycle quite closely. We then examine changes over time in standard summary statistics (means, medians, fraction positive) of the distribution of stock market reactions, measured by the cumulative excess returns (CER) of firms' stock prices over a 3-day event window centered on the announcement date, as well as changes over time in kernel density estimates of this distribution. We find clear evidence that the distribution of stock market reactions shifted to the right (became less negative) over time. One possible explanation for this change is that, over the last three decades, RIFs designed to improve efficiency have become more common relative to RIFs designed to cope with reductions in product demand. We estimate multivariate regression models of the CER controlling for the stated reason for the announced layoff, industry, and other characteristics of the announced layoff. We find that almost none of the decline in the negative average stock price reaction between the 1970s and 1990s can be explained by these factors.

1. Introduction

There has been substantial discussion in the business press and elsewhere recently about the effects of "downsizing" on firms, workers, and families. While the effects of job loss on workers are clearly negative (see, for example, Farber, 2003), there have been suggestions in the business press and by policy groups that owners of firms profit handsomely as stock prices increase around the time of job loss announcements (Anderson and Cavanagh, 1990; Sloan, 1996). These suggestions persist despite a growing body of empirical work that finds fairly consistent negative reactions of stock prices to announcements of reductions in the labor force (RIFs).

A straightforward interpretation of a negative relationship between announcements of RIFs and stock prices is that the RIFs signal a reduction in product demand relative to existing production capacity. It is more difficult to understand why stock prices might respond positively to announcements of RIFs. One interpretation that resonates with much of the recent attention paid to corporate "downsizing" and "restructuring" is that announcements of RIFs might signal that management has found more efficient ways to produce using less (or cheaper) labor.[1] To the extent that "efficiency" RIFs have become more common relative to "deficient demand" RIFs over the last three decades, we would expect that the average relationship between announcements of RIFs and stock prices would have become less negative (or even positive) over time.

In order to address this issue, we use information from the *Wall Street Journal* to create as complete a list as possible of announcements of RIFs by every firm that was ever listed in the Fortune 500 for each of the 30 years from 1970 though 1999. We collected data on 4273 RIFs. This is about three times more than examined in any previous study, and the 30 years are roughly four times more than any previous work. These data offer us the opportunity to investigate whether and, to some extent, why there has been a changing relationship between share prices and announced RIFs over time.

We were motivated by at least five different questions in this work. While we do not fully develop a single conceptual framework

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[1] See, for example, Dial and Murphy (1995) who present an interesting intensive case study of restructuring at General Dynamics in the early 1990s. They argue that the restructuring, which included RIFs, resulted in efficiency improvements and value creation.

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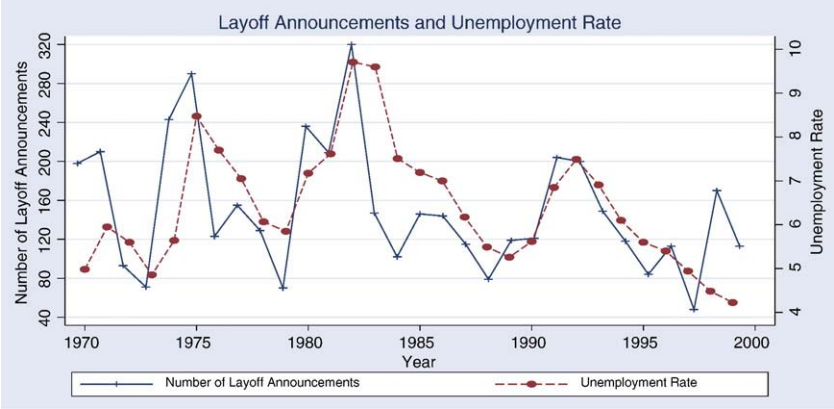

Fig. 1. Number of layoff announcements and unemployment rate, by year.

here, we concentrate on these main areas (and others) throughout the work.

- Has the share price impact of announced employment reductions become less negative over time?
- Has the distribution of reason types changed over time?
- Do stock prices react differently to RIF announcements of different reasons?
- How much of the decline in the share price reaction can be attributed to changes in reasons for layoffs?
- Can changes in other characteristics of announcements account for the decline in the share price reaction?

We find evidence that the stock market reaction to announcements of RIFs has, in fact, changed. The average share price reaction, as measured by the average cumulative excess return (CER) over a three day event window centered on the announcement date, was most negative in the early part of the period covered, and the average reaction has become less negative in more recent years. We estimate the average share price reaction over the entire 1970–1999 period to be −0.315% (s.e.=0.073). Broken down by decade, the average reaction was −0.594 (s.e.=0.113) in the 1970s, −0.240 (s.e.=0.118) in the 1980s, and −0.059 (s.e.=0.152) in the 1990s. We also find 1) that the distribution of announced reasons changed, moving away from "deficient-demand" and toward "restructuring" and "cost issues", and 2) that the stock price reaction to deficient-demand announcements is more negative than the reaction to other announcements. We go on to develop a multivariate regression model of the CER in order to consider whether the mix of reasons for the announced RIFs, the industry makeup and other RIF characteristics have changed over time and whether any of these have any explanatory power in describing the trend in the average CER. We find that very little, if any, of the decline in the negative average stock price reaction between the 1970s and 1990s can be accounted for by changing characteristics of the announced RIFs.

2. Data

Our data come from three distinct sources. The first is a comprehensive set of information collected from the *Wall Street Journal* of every announcement we could find of a job loss in each firm that ever existed in the Fortune 500 over a period of 30 years beginning in 1970. We collect accounting data from Standard and Poor's COMPUSTAT and daily stock return data from the Center for Research in Security Prices (CRSP) at the University of Chicago.

We created our job loss announcement sample by identifying each firm that ever existed in the Fortune 500 from 1970–1999. This left us with a list of 1849 different firm names over the 30 years. For each year, we then searched through the abstracts of each *Wall Street Journal* Index by company name for any announcement of a RIF. When an example was found, we recorded the date of the announcement and then went on and read the full article in order to gather as much information as possible about each announcement. An unusual feature of our data is the long time period. We searched the paper index because, at the time the data were collected, no electronic source would allow us to search as far back as 1970 and we wanted to use a consistent sample throughout the entire time period. Our tabulations of announcements of RIFs compare favorably with Hallock (1998) who has completed the largest previous study (using data from 1987–1995) using data from an electronic source.

There are some potential problems in using data collected from a source such as the *Wall Street Journal* (see Thompson, Olsen, and Dietrich, 1987). For example, it may not be the case either that all RIFs are announced in the *Wall Street Journal* or that the Journal chooses to report all events. But we believe that most events are reported in the *Wall Street Journal*. This is because the original sample consists of firms that are among the largest in the United States, so it makes sense that the *Wall Street Journal* would report news of even quite small events involving these firms. Evidence for this is that there are many instances of very small events reported. In addition, we are primarily interested in investigating the share price reaction to announced RIFs, and RIFs that are not announced are less likely to have substantial effects on share prices.

We recorded 18 different reasons for the announced RIFs, and we were able to identify reasons for over 97% of the observations. For the purposes of our analysis, we collapsed these 18 reasons into five categories (reorganization, plant closing, demand slump, cost issues, and other). We also know the number of workers planned to be let go as part of the RIF for 84.9% of the announcements. While the mean number of workers announced was 2749 (standard deviation of 8410), the median number of workers let go was 700.

We were able to determine whether workers involved were hourly, salaried, or some combination for 25% of the RIFs, and, among these, 35% involved hourly workers, 24% involved salaried workers, and 41% involved both. It is interesting that the composition of RIF announcements changed systematically over the 30 years studied toward inclusion of salaried workers. In the 1970s, 52% of announcements included salaried workers. This increased to 82% in the 1990s. The fraction including hourly workers fell from 82% in the 1970s to 68% in the 1990s.[2] This change is consistent with the finding that job loss among more-skilled workers has become more common in the last twenty years (Farber, 2003).

[2] The form of pay of workers is highly correlated with broad occupation, with salaried workers largely white collar and hourly workers largely blue collar. The sum of the shares including salaried and hourly workers exceeds one because a substantial fraction of announcements include both types of workers.