Which News Moves Stock Prices? A Textual Analysis

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A basic tenet of financial economics is that asset prices change in response to unexpected fundamental information. Since Roll's (1988) provocative presidential address that showed little relation between stock prices and news, however, the finance literature has had limited success reversing this finding. This paper revisits this topic in a novel way. Using advancements in the area of textual analysis, we are better able to identify relevant news, both by type and by tone. Once news is correctly identified in this manner, there is considerably more evidence of a strong relationship between stock price changes and information. For example, market model R-squareds are no longer the same on news versus no news days (i.e., Roll's (1988) infamous result), but now are 16% versus 33%; variance ratios of returns on identified news versus no news days are 120% higher versus only 20% for unidentified news versus no news; and, conditional on extreme moves, stock price reversals occur on no news days, while identified news days show an opposite effect, namely a strong degree of continuation. A number of these results are strengthened further when the tone of the news is taken into account by measuring the positive/negative sentiment of the news story.

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