



The Application of Public and Private Information to the Prediction of Abnormal Returns and Portfolio Management

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ABSTRACT

By using the technology of text mining to capture the information content of Chinese news, this paper empirically investigates the correlation between the information content of Chinese news and announcement drift. News announced before the earnings announcement influences investor sentiment and the trend of the stock price. This study applies financial news-corps mining by referring to Vega (2006) and Demers and Vega (2011) to proxy the information content of news, for which the proxy variables are measured by the media coverage (*MEDIA*), public news surprises (*SUR*) and sentiment ratio (*SR*). The probability of informed trading (*PIM*), as proposed by Easley, Hvidkjaer and O'Hara (2002), is adopted as the proxy variable for private information. The abnormal return around the earnings announcement date is calculated by the Fama and French three factors model (1992). The standardized unexpected earnings (*SUE*) and turnover (*TURM*) are regarded as the control variables. The empirical results show that there is a positive (negative) relationship between the sentiment ratio (*SR*) and the cumulative abnormal returns before (after) the earnings announcement. Our results confirm that the market's response to news covers the relevant information regarding the company during the earnings announcement period. The application of public news sentiment to portfolio management suggests that "long stocks with low *SR* and high *SUR*" or "short stocks with high *SR* and high *MEDIA*"