Columbia Business School
AT THE VERY CENTER OF BUSINESS™

May 12, 2014

Summary of "Media Coverage and the Cross-section of Stock Returns"[1]

Media coverage improves investor recognition, extending the breadth of information dissemination. Stocks with little coverage tend to have a narrow investor base, within which the idiosyncratic risks are not diversified away, so higher average returns are offered to compensate investors. Diversified investors can earn premium by holding stocks with low recognition.[2] This paper identifies the outperformance of companies with no media coverage over companies with high media coverage.

For a sample of NYSE and 500 randomly selected NASDAQ companies, the authors obtain a time series of company-specific coverage as the number of articles on newspapers about each company every month.[3] As expected, large firms are more likely to be covered, while controlling for size, firms with high book-to-market ratios receive more attention. Stocks less covered by analysts or with higher individual ownership are more likely to be featured in the media. This suggests that analyst coverage and media exposure are substitutes for the overall investing community while media seems to cater individual investors particularly. Media coverage is also a stable firm characteristic: 83% of stocks with no coverage in a given month stay absent from the media in the next month.

In each month, stocks with no coverage are first identified; the remaining stocks are divided into the low- and high-coverage groups using the median. The average monthly returns for stocks with no-, low-, and high-media coverage are 1.35%, 1.11%, and 0.96%, respectively. The difference between the no- and high-coverage groups, i.e. the "no-coverage premium", is 0.39% per month (4.8% per year), which is also the average return to a strategy that longs stocks with no coverage and shorts stocks with high coverage. This long-short strategy delivers statistically significant CAPM alpha of 45bp per month. The alpha decreases to 23bp after controlling for size, book-to-market, momentum, and liquidity factors, because of the strategy's exposure to small, value, and momentum stocks.[4]

This no-coverage premium is particularly large among small stocks, illiquid stocks,[5] stocks with low analyst coverage, stocks primarily owned by individuals, and stocks with high idiosyncratic volatility.[6] In these subsamples, the alpha of the long-short strategy ranges from 8% to 12% per year. The media coverage is more likely to play an important role in information dissemination for stocks with poor information environment proxied by low analyst coverage and high individual ownership. Idiosyncratic volatility captures diversifiable risk. Thus, these results support the claim that poor information dissemination restricts the investor base and leads to higher average return to compensate for undiversified idiosyncratic risks. A lack of adequate market liquidity helps explain why the premium is not arbitraged away by diversified investors.

An interesting question is how the media effect is related to the "volatility puzzle" that firms with higher idiosyncratic volatility tend to have lower returns. Double sorting stocks by media coverage and idiosyncratic volatility, the authors find volatility leads to lower return in high-coverage group but higher return in no-coverage group, both statistically significant. It suggests that the idiosyncratic volatility puzzle may be limited to stocks with overall good information dissemination and possibly a

broader investor base. On the other hand, no-coverage premium is only statistically significant in high-volatility group.

The premium of the long-short strategy is primarily driven by the long positions in the neglected stocks. Therefore, this no-coverage premium is distinct from the return reversal due to the buying pressure of attention grabbing stocks (Barber and Odean, 2008).[7] Chan (2003) documents that among stocks with low past returns (losers), those with headline news tend to experience negative return in 12 months (drift) while those without news tend to recover in a month (reversal).[8] However, losers' drift and short-lived reversal are unlikely to be the explanation, because the no-coverage premium is not derived from selling high-coverage stocks and it stays stable over 12 months. The authors also show that Chan's classification of new/no-news does not overlap with coverage/no-coverage.

The authors perform a series of robustness checks. They calculate the returns using ask-bid midpoints to avoid the concern that the no-coverage premium is due to ask-bid bounce. To check that their results are not driven by post-earnings announcement drift or IPO underperformance, they exclude earnings-related media coverage and all IPO stocks. To avoid delisting bias, the missing delisting returns are replaced by with -30% for delisting codes of 500 or 520-584 following Shumway (1997).[9] Finally, they exclude the stocks in the tech-sector that experienced a dramatic rise and fall during the sample period. The media effect is robust to these alternative specifications.

---

[1] Fang, Lily, and Joel Peress, 2009, *Journal of Finance* 64, 2023-2052.

[2] For theoretical analysis, please refer to Robert C. Merton's Presidential Address at the American Finance Association: A simple model of capital market equilibrium with incomplete information, 1987, *Journal of Finance* 42, 483-510.

[3] They use the LexisNexis database and focus on four daily newspapers with nationwide circulation: New York Times (NYT), USA Today (USAT), Wall Street Journal (WSJ), and Washington Post (WP). These four newspapers account for 11% of total daily circulation in the United States. They only retain articles with the LexisNexis-defined "relevance score" of at least 90% for company's keywords in order to make sure the articles primarily focus on a given company. The "number of articles" is the circulation-weighted average over the four newspapers. The authors emphasize the focus to be on the media coverage instead of news, because with 74% overlap between WSJ and the other newspapers, a higher coverage measure does not necessarily mean more genuine news. Their sample starts from 1993 and ends in 2002 to avoid the impact of the rising internet as mainstream media on the print media.

[4] For details of the factors, please refer to: Fama, Eugene F., and Kenneth R. French, 1993, Common risk factors in the returns on stocks and bonds, *Journal of Financial Economics* 33, 3-56; Carhart, Mark M., 1997, On persistence in mutual fund performance, *Journal of Finance* 52, 57-82; Pástor, Luboš, and Robert F. Stambaugh, 2003, Liquidity risk and expected stock returns, *Journal of Political Economy* 111, 642-685.

[5] Illiquidity measures are Amihud illiquidity ratio, bid-ask spread, dollar trading volume, and price level. For the definition of Amihud illiquidity ratio, please refer to: Amihud, Yakov, 2002, Illiquidity and stock returns: Cross-section and time-series effects, *Journal of Financial Markets* 5, 31-56.

[6] Firms' idiosyncratic volatility is estimated as the standard deviation of daily abnormal stock returns relative to the Fama- French three-factor model. For more details, please refer to: Ang, Andrew, Robert J. Hodrick, Yuhang Xing, and Xiaoyan Zhang, 2006, The cross-section of volatility and expected returns, *Journal of Finance* 61, 259-299.

[7] Barber, Brad, and Terry Odean, 2008, All that glitters: The effect of attention and news on the buying behavior of individual and institutional investors, *Review of Financial Studies* 21, 785-818.

[8] Chan, Wesley, 2003, Stock price reaction to news and no-news: Drift and reversal after headlines, *Journal of Financial Economics* 70, 223-260.

[9] Shumway, Tyler, 1997, The delisting bias in CRSP data, *Journal of Finance* 52, 327-340.