Uncovering expected returns: Information in analyst coverage proxies[☆]

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ABSTRACT

We show that analyst coverage proxies contain information about expected returns. We decompose analyst coverage into abnormal and expected components using a simple characteristic-based model and show that firms with abnormally high analyst coverage subsequently outperform firms with abnormally low coverage by approximately 80 basis points per month. We also show abnormal coverage rises following exogenous shocks to underpricing and predicts improvements in firms' fundamental performance, suggesting that return predictability stems from analysts more heavily covering underpriced stocks. Our findings highlight the usefulness of analysts' actions in expected return estimations, and a potential inference problem when coverage proxies are used to study information asymmetry and dissemination.

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1. Introduction

This study examines the implications of analysts' coverage incentives for the information content of standard analyst coverage proxies. We do so by decomposing coverage into an expected component based on observable firm characteristics and an abnormal component, which we show has strong predictive power for returns. Our evidence adds directly to the growing literature on firm-level expected return proxies. In addition, it yields an important insight for the vast literature that uses analyst coverage to study market prices, trading, and liquidity. Specifically, we show that analyst coverage proxies—commonly used to measure information asymmetry and dissemination—also reflect firm-level expected returns.[1]

[1] Throughout, we use the term 'expected returns' to refer to all ex ante predictability in returns, including long-term discount rates and mispricing, although we also devise additional tests to refine this interpretation.

Classical economic models provide a framework for understanding the impact of expected payoffs and resource constraints on individual behavior. In many tests of these models, researchers use proxies for expected payoffs and resource constraints to study individual behavior. In this paper, we reverse the process. Specifically, we use the resource allocation behavior of individual security analysts to reverse engineer their expectations about future payoffs for the firms they choose to either cover or forgo covering. We then examine how these inferred expectations are related to firms' subsequent performance.

Security analysts' decision to either cover or forgo covering a firm presents a particularly interesting setting in which to study constrained resource allocation. This is because the typical security analyst: (a) specializes in providing information to the market, (b) faces nontrivial switching costs when making coverage decisions, and (c) receives a clear payoff from identifying stocks with greater potential upside.[2] Given their incentive structure and their relative sophistication about company prospects, we posit that analysts' choices of which firms to cover contain information useful in forecasting firms' future performance.

Our empirical strategy is based on the premise that when resource-constrained analysts decide how to allocate their time and attention, they will have a strong preference for better performing firms. Prior research offers some support for this view. For example, McNichols and O'Brien (1997) show analysts drop coverage of unprofitable firms and Scherbina (2008) shows analysts are more likely to suppress negative, compared to positive, earnings news. In addition, Das et al. (2006) find that among newly public firms, those with superior prospects receive greater attention from analysts relative to the characteristics of their initial public offering. This evidence is, in part, a reflection of analysts' incentives to generate investment banking deals, brokerage commissions, accurate earnings forecasts, and access to firms' management. As a result, resource-constrained analysts likely prefer covering firms with superior prospects because they tend to have higher valuations, greater trading volumes, more easily forecasted earnings, and a desire to share positive news.

In this study, we develop a simple characteristic-based model to extract expected return information from standard analyst coverage data. Our approach is broadly applicable in cross-sectional tests to over 4,000 firms per month, including firms without analyst coverage, and does not require conditioning on specific firm-events, such as an initial public offering. The key assumption we rely on is that analysts' coverage decisions consist of a component driven by firms' expected performance and a mechanical component summarized by observable firm characteristics. Based on this assumption, our approach seeks to isolate the component of coverage driven by analysts' expectations over firms' future performance.

We measure abnormal analyst coverage for each firm by comparing the observed level against an expected level to remove the mechanical component of coverage attributable to the firm's size, liquidity, and past performance. We proxy for total analyst coverage as the number of unique earnings forecasts summed across all analysts and forecasted fiscal periods (i.e., analyst/forecast pairs, where revisions are single counted). We then calculate abnormal coverage, defined as the residuals from monthly cross-sectional regressions of total analyst coverage on three control variables: firm size, share turnover, and past returns.

Given analysts' role in forecasting firms' earnings, we hypothesize that analysts identify firms' with higher expected returns by forecasting their subsequently reported fundamental performance. We provide support for this hypothesis by showing that abnormal coverage offers strong predictive power for both levels and changes in firms' fundamental performance. These tests suggest analysts anticipate firms' subsequently reported performance and allocate abnormally high coverage to ascending firms.

We next test whether abnormal coverage contains expected return information by examining its predictive power for returns. These tests hinge upon analysts' coverage decisions leading firms' performance and thus the null hypothesis reflects characterizations of analysts in prior research as marketeers or 'trend chasers' that herd toward overvalued, glamour stocks (e.g., Chung and Jo, 1996; Gleason and Lee, 2003; Jegadeesh et al., 2004).

Our findings show abnormal coverage positively predicts firms' monthly returns. On average, firms in the highest decile of abnormal total coverage outperform the lowest decile by 80 basis points per month on a value-weighted basis (t-statistic = 3.45) and 87 basis points on an equal-weighted basis (t-statistic = 7.03). These return patterns are striking in their magnitude and consistency across equal- and value-weighting, suggesting abnormal coverage is associated with an economically large source of predictable returns.

The returns associated with abnormal coverage do not appear to reverse in subsequent months. In fact, we find that abnormal coverage information predicts returns over the next three months. The persistence in return predictability mitigates concerns that our findings stem from transitory price pressure that subsequently reverses.

To mitigate concerns that our findings are driven by an omitted firm fixed-effect, we also show that *within-firm changes* in abnormal coverage predict returns. The predictive power of abnormal coverage for returns is also robust to controlling for firms' exposure to standard asset pricing factors and is distinct from firms' size, momentum, and book-to-market ratio, as well as return reversals, announcement premia, and post-earnings announcement drift. Related tests show the performance information in abnormal coverage is incremental to the predictive power of analyst forecast dispersion and forecasted earnings-to-price ratios. Moreover, our study is the first to establish complementarities between what analysts 'do,' via their

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