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What is the value of sell-side analysts? Evidence from coverage changes – A discussion



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ABSTRACT

Li and You (this volume) study public firms' common stock return reactions to two events: when analysts' initiate coverage of the firm and when they terminate coverage. They test the returns for evidence of three sources of value added by analysts: (1) more monitoring of the firm, (2) reduced information asymmetry about the firm, and (3) greater demand for the firm's common stock. They find consistent support for analysts adding value by increasing demand, but not monitoring or by reducing information asymmetry. Their findings also indicate that analysts' initiations supply little new information. I review these findings, put them in perspective with related research, and note research directions.

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1. Introduction

There is growing interest among researchers for a better understanding of the principal sources of value produced by the activities of sell-side security analysts who are employed at large brokerage firms. The empirical evidence about whether and how analysts add value is still evolving. Li and You (2015) (this issue) report new findings that add to our understanding of the economic significance of four possible sources of value produced by analysts. To assess analysts' value productivity from each of the sources, they examine the abnormal return reaction to announcements of analysts' initial coverage of the firm, which prior studies show has a significantly positive impact on firm value, on average. They focus explicitly on three of the sources: monitoring the followed firm, reducing information asymmetry about the firm, and increasing investor demand for the firm's common stock. Their findings also inform the debate over the fourth source, in which analysts discover new information that has been neglected by investors in an inefficient securities market, and then distribute the information to clients through their reports. Together, the new findings expand the evidence of research analysts' significant economic roles in securities markets.

2. The contributions

This section discusses four of the possible sources for value added by analysts, and notes relevant evidence associated with each source.

2.1. Four sources of value

One source of value that could be signaled when analysts announce their initial coverage is the benefit produced by the analysts' new and likely long-term monitoring of the followed firm and its management. For instance, analysts' future forecasts of earnings is likely to expose the firm's earnings performance and intensify investor scrutiny of the firms' management and their operating performance. Under the monitoring rationale, the new coverage announcement therefore increases investor expectations for improved management and better operating performance, and to the extent it is not anticipated, the announcement of the initiation increases the value of the newly followed firm. The monitoring benefit hypothesis therefore predicts that the new coverage will be associated with unexpected future earnings improvements that are positively correlated with the return reaction to the initiation announcement.¹

A second way that analysts' initiations could add value is by reducing the economic impact of information asymmetry about the firm. Reduced asymmetry is a product of the analyst's persistent pursuit of publicly available information, which helps distribute it more evenly across the market. A reduction in the degree of information asymmetry among investors could lower the firm's cost of equity; this, in turn, would increase the stock price reaction to the initiation announcements, ceteris paribus. The information asymmetry hypothesis therefore predicts that the initiation announcement abnormal return should be positively correlated with the reduction in information asymmetry that follows the announcement.²

The third source of value is an increase in investor demand for the newly followed firm's common stock. One likely effect of the demand increase is to expand trading in the stock, thereby enhancing its liquidity and consequently also lowering the cost of equity and causing stock price to rise at the initiation announcement, all else the same. The authors ascribe the increased demand for the shares to analysts' new marketing efforts that broaden recognition of the firm's stock, noting how more recognition increases demand for a stock in Merton's (1987) setting of capital market equilibrium with incomplete information. The increased demand (or recognition) hypothesis predicts the new initiation should expand the demand for the firm's stock, and the initiation announcement return reactions should be positively correlated with the changes in demand.³ Note this increase in demand does not necessarily require a reduction in the information asymmetry between investors, or a change in operating performance.

The fourth source of analysts' value is the discovery of new information itself. The information could come from private sources, such as inside information, which is scarcer after the Global Research Analyst Settlement (April 2003) and the enactment of Regulation FD (October 2000). An additional source of new information noted by a number of authors is the discovery of public information that has not been incorporated in stock prices because it is neglected by investors in an inefficient market. While the explanation for how analysts can identify neglected information that is not already incorporated in stock price is typically unclear, authors commonly assume that analysts are able to process public information to find the neglected information, then, having discovered the new information, supply it to their brokerage firm and its clients.

Note also that to the extent there are improvements in future operating performance and cash flows following analysts' initiations, without more those findings alone agree with both the monitoring hypothesis and the informed analyst hypothesis, and thus would not uniquely distinguish either story.

2.2. The main findings

The main findings indicate that analysts' recommendations initiations consistently add value through investor recognition, but not through the other sources. The hypotheses are tested using linear regressions in which the dependent variable is the abnormal return reaction to the initiation announcement. Li and You report evidence of increased demand for the stock after analysts' new following is announced, and they show the announcement abnormal return is significantly positively correlated with the demand increase. Further results from the same regression model reveal the return reaction is not consistently significantly associated with familiar measures of benefits from analyst monitoring of firm management. Using the same regression model, the authors also report there is a lack of consistent statistically significant evidence indicating a meaningful reduction in the asymmetry of information about the firm after the initiations. To be clear, of the over a dozen multivariate regression tests of the initiation announcement return (in Tables 2B–5C), more than 80% of the tests support the recognition hypothesis at the 1% level, 100% of the tests reject the monitoring hypothesis at the 1% level, and over 74% of the tests do not support the asymmetry hypothesis at the 1% level (most of the remaining 20% are significant at the 10% level).

¹ The monitoring benefits from security analysts, identified early by Jensen and Meckling (1976), is widely recognized. For example, see Bhushan (1989), Moyer et al. (1989), Chung and Jo (1996), Yu (2008), Demiroglu and Ryngaert (2010), Altınkılıç et al. (2013), Kim and Song (forthcoming), and Derrien and Kecskes (2013).

² Several authors report that analysts provide brokerage clients with new information, and some note this could reduce information asymmetry. For example, see Womack (1996), Barber et al. (2001), Gleason and Lee (2003), Ivkovic and Jegadeesh (2004), Jegadeesh et al. (2004), Barber et al. (2007), Bowen et al. (2008), Cohen et al. (2010), Derrien and Kecskes (2013), and Bradley et al. (2014).

³ Authors who note that analysts' activities could expand demand for the followed firms stock include Demiroglu and Ryngaert (2010) and Derrien and Kecskes (2013). Also see Barber and Odean (2008).

2.3. Evidence on the informed analysts hypothesis

The results from testing the first three hypotheses for analysts' value added also contain relevant evidence concerning the effectiveness of the fourth way that analysts could produce value: acting as information intermediaries who first discover new information, then supply it to their brokerage firm and its clients.⁴ The initiation announcement returns are also not reliable leading indicators of improved future operating performance, which disagrees with both the information discovery and monitoring roles. In addition, the initiations are found to be unreliable predictors of the near future, contrary to information discovery. Collectively, these findings disagree with the conclusion that analysts' initiation reports add value by supplying their investor clients with significant new information.

Another dozen tests of these hypotheses are performed in a separate parallel sample of coverage terminations that is described below. The results from the termination sample tests are similar to those from the initiations sample, and they support similar conclusions.⁵

3. Reconciling the new results with previous contributions

The Li and You findings differ in several important ways from results in earlier studies of the impact from analysts' initiations. First, Li and You report new results that support the marketing role for analysts. Second, their results do not agree with the view that analyst reduction of information asymmetry at initiations is economically important. Third, further findings are reported that do not support the notion that analysts' initiations are connected with future monitoring that significantly impacts the firm's operations or its management. Lastly, the collective findings do not concur with the informed analyst view in which analysts frequently supply economically important new information to their brokerage firm clients.

Note, however, that these new results alone do not provide a sufficient basis for overruling the evidence in the earlier studies. For example, several of the different new findings could reflect notable differences between the settings of the new tests and those in the earlier studies. Here I elaborate on how Li and You address some of the differences and other concerns.

3.1. The insignificance of information asymmetry

The lack of a consistently significant relationship between information asymmetry following the initiations and the return reaction to their announcement contrasts with the evidence of a significant negative relationship reported by Kelly and Ljungqvist (2012). A distinguishing feature of the Kelly and Ljungqvist sample is that it consists entirely of terminations of analysts existing reports that are caused by the dismissals of the analysts when the brokerage firm merges, or because the brokerage fires the analysts during its closure in the financial crisis period. Their sample construction is thus similar to the terminations sample examined by Hong and Kacperczyk (2010), who study how competition among analysts impacts the tendency to produce favorably biased earnings forecasts, where they use analysts' coverage as the proxy variable for competition.⁶ As Hong and Kacperczyk point out, using the sample of terminations offers the advantage of providing a natural experiment that controls for concerns with causality between analysts' report changes and changes in the followed firms' future performance. In that sample, coverage terminations are a result of exogenous shocks caused by the merger or closure of the brokerage firms, and are not changes that can be easily attributed to the followed firms' subsequent operating performance.

The Li and You results from the terminations sample generally support their findings from the tests using the initiations sample. In particular, they find that the demand for the followed firms' stock falls significantly after the terminations, that information asymmetry reduction is not a reliably important determinant of the price reactions to the terminations, and that analyst monitoring does not seem to contribute significantly the initiation announcement returns.

The most influential difference between the Kelly and Ljungqvist findings and Li and You's investigations is that they use different and more complete regression model specifications. The Kelly and Ljungqvist specification regresses the return reactions to the coverage changes on their independent proxy variable for information asymmetry. This regression model excludes other independent proxy variables that reflect the two other respective sources of benefits that could be signaled simultaneously by the coverage news: unexpected changes in future demand for the covered firm's stock (investor recognition), and additional monitoring produced by the new analysts that likely continues after the initiations. Noting this fundamental specification difference with the Kelly and Ljungqvist analyses, Li and You conduct further tests of the initiation announcement return using a univariate regression model that is specified like the Kelly and Ljungqvist model, including the asymmetry proxy variable among the independent variables while excluding any proxy variables for recognition and for monitoring. Some of these univariate test estimations reveal that information asymmetry has a significantly negative impact on the initiation announcement return reaction. Thus, the authors do find some evidence of a significant information

⁴ For more recent discussions about security analyst as an information intermediary see Altınkılıç and Hansen (2009), Altınkılıç et al. (2013), Bradley et al. (2014), Kim and Song (forthcoming), and Altınkılıç et al. (forthcoming). Healy and Palepu (2001) provide a review of analyst vis-á-vis information.

⁵ For earlier discussions of analyst coverage initiations see Bhushan (1989), Kim et al. (1997), Branson et al. (1998), Irvine (2003), Demiroglu and Ryngaert (2010), Ertimur et al. (2011), and Crawford et al. (2012).

⁶ Other studies that focus on terminations of analysts' coverage due to unexpected mergers or closures that follow the Hong and Kacperczyk method include Derrien and Kecskes (2013) and Chen et al. (2015). For a discussion of analysts' bias see Cowen et al. (2006).

asymmetry effect that is qualitatively similar to the Kelly and Ljungqvist finding when they use the simple specification. However, that estimated asymmetry relationship is usually present when that source of analysts' value added is included alone in the regression, while omitting the two other simultaneous sources of value from the regression that reflect broadened recognition and additional monitoring. Li and You show further that this result in the univariate model is not robust to multivariate specifications. For example, information asymmetry is not significant in the full regression specification of independent variables that simultaneously includes proxy variables for recognition and monitoring.

3.2. The insignificant monitoring benefits

Li and You also provide new evidence from tests for benefits produced by analysts' monitoring of the firm following the initiation. Chen et al. (2015) pursue evidence of the analyst monitoring hypothesis by focusing particularly on changes in the governance structure of the firms that could be attributed to analysts' new monitoring of managers when the initiations are announced. They report evidence that agrees with effective improvements in governance-related indicators, including the value of cash holdings, which are more likely to be vulnerable to managers' expropriation than other assets, the behavior of CEOs' excess compensation which should fall due to the new monitoring, and other indicators that include the likelihood that managers will engage in value-destroying acquisitions, and that they will manage earnings. However, they do not report evidence of operating performance improvements that could be related to better analysts' monitoring.

Li and You empirically test the monitoring hypothesis along a different and more direct tack. They reason that if analysts' new following lowers the firm's agency problems, then a likely consequence is that the firm will later experience previously unanticipated operating improvements after the effective monitoring begins. Their tests for benefits from the analysts' new monitoring therefore focus on identifying operating improvements that are likely correlated with the benefits from the post-initiation monitoring. In particular, they focus on improvements in earnings that should follow previously unexpected reductions in agency problems at newly followed firms. They find broad evidence across multiple tests that shows analysts' initiations do not have an economically significant impact on changes in subsequent operating return performance. These findings are not consistent with the monitoring hypothesis.

In addition to pursuing evidence for analysts' monitoring through adjustments in governance-related features rather than operating performance improvement, there are other differences between the analyses of Chen, Harford, and Lin and those of Li and You. For example, Chen, Harford, and Lin focus on changes in existing analyst coverage (i.e., terminations), not on their initial coverage. The nature of the agency problems and corporate governance issues in less seasoned firms that are likely to be somewhat common among firms receiving analysts' initial coverage, could differ from the nature of agency problems that confront management of more established firms that have been followed by many analysts for some time. For example, more concentrated management ownership of the firm's common stock and less reliance on debt financing could be more common in less seasoned firms, than in seasoned firms, both of which would suggest less influence of agency costs in the announcement return cross-section behavior for the initiations firms. Li and You report finding no reliable evidence of the monitoring hypothesis in parallel tests using their terminations sample.

Chen, Harford, and Lin also do not control for concurrent event news, which could confound stock return reactions to changes in analyst following. Moreover, their tests do not consider a multivariate regression model specification that jointly includes proxy variables for all three simultaneous sources for analyst value added.

3.3. Evidence on the informed analyst hypothesis

Analysts' supply of little new information at initiations is of interest for the debate over analysts' role as information intermediaries. In the current study, new evidence bearing on information discovery is reported from three separate tests that do not require detailed intraday timing of the analyst's report announcement and proximate events. First, the Li and You article uncovers little evidence of an impactful change in information asymmetry after the initiation announcements, which suggests the analysts are not providing meaningful information to uninformed investors. Second, the findings indicate that the initiations do not provide significant new information about future earnings. Third, the authors note that the initiations are unable to predict the future. Collectively, these findings are consistent with analysts' reports not providing new information for average investors. Li and You consequently agree with the conclusions reached in recent studies that analysts' reports release little new information for the average investor.

4. Methodology

Another possible explanation that could reconcile the new Li and You findings about information asymmetry and monitoring benefits with the divergent findings in earlier studies is that the Li and You tests themselves could be misspecified, or that they overlooked significant errors in the key proxy variables. Here I note the findings have proven to be robust to several significant measurement concerns.

⁷ Yu (2008) reports that more analyst coverage is associated with reduced earnings management.

4.1. Endogeneity

One important concern that is pointed out in a number of the earlier studies is that analysts' coverage could be at least partially endogenous. For example, perhaps some analysts are more likely to initiate following of firms that are experiencing above average improvements in operating performance, or they tend to self-select toward emerging unfollowed firms that have fewer agency problems. These tendencies could contribute to spurious correlation between firm performance and analysts' coverage that biases estimations towards indicating that coverage causes performance improvements. Li and You address this causality concern by following the earlier studies and appeal to comparisons in parallel tests that are performed on both the initiations sample and a second similar sample made up of terminations of analyst coverage that are caused by brokerage mergers or their closures. Because these coverage terminations are the result of an exogenous shock, the termination itself does not plausibly cause changes in expected future operating performance.

The findings from the parallel tests using the terminations sample essentially replicate the findings from the tests using the initiations sample.

4.2. Anticipation

Another relevant concern is that the announcement return regression estimates actually reflect the abilities of more savvy investors to anticipate analysts' initiations. This suggests it is likely that initiations are somewhat predictable using observable indicators. For example, among unfollowed firms, those with predictably encouraging growth in operating performance could be more likely to receive coverage initiations. The predictability, albeit imperfect, would suggest the benefits for the more predictable initiation firms are partially anticipated by investors before the initiations are announced. This could contribute to the appearance of causality, showing for example that operating performance improves after initiation and is thus caused by it, even when no meaningful causality is present. The authors address the anticipation concern in two ways. First, they reexamine the findings after the key explanatory variables have been detrended from their respective expected values, and they consider their surprise component in the linear initiations' regression model for the abnormal returns. This approach seeks to neutralize the possible spurious association between operating performance due to the predictable nature of initiations. For example, these tests consider the impact of coverage on unexpected operating improvements.

The second way to neutralize the anticipation concern is to rely on a set of parallel tests using the terminations sample. Due to the structural shock origin of the terminations, the changes in the firms' future operating performance has little if any ability to predict the terminations of some analyst following. Thus, the terminations sample is already reasonably free of the anticipation concern.

In both sets of tests, after detrending the three key independent variables for their expectations and when using the terminations sample, the article's main findings are replicated in both the initiations add termination sample.

4.3. Further concerns

Throughout the article, the authors address several other concerns with the estimation. They employ benchmark samples constructed using Propensity Scoring to control for selection effects that could commonly arise even without the initiation. While the initial estimates measure coverage impacts during the year after the initiations that could be attributed to the initiations, further tests measure coverage impacts for longer durations of two and three years. The tests report similar findings across the different time periods. There could also be possible errors in the three proxy variables for asymmetric information, recognition, and monitoring. The results are shown to be robust to using plausible alternative measures for these independent proxy variables. For example, to proxy for changes in information asymmetry the authors consider changes in the probability of informed trade (PIN), changes in the Amihud's (2002) illiquidity measure, changes in the bid-ask spread, and the number of days with zero or missing returns. Their results using each of these proxies are qualitatively the same. They report that qualitatively similar results are obtained using other alternative proxies for changes in recognition and for changes in fundamental performance.

The authors report their findings are robust across the two major kinds of analyst reports. Most of the published initiation studies focus on initiations of analysts' recommendation reports, and most of the published studies of coverage changes focus on initiations of analysts' earnings forecasts. The authors perform another battery of the same tests using a separate sample of initiations of analysts' earnings forecasts. They report the findings from the additional tests are qualitatively similar to the findings from the tests using the recommendations sample.

Finally, the authors address the concurrent events concern by removing reports with concurrent events from the sample.

5. Implications for future research

The Li and You study provides interesting new results that expand our understanding of how security analysts could add value. Their tests reveal a principal way that value is added at the coverage initiation stage is by broadening demand for and holding of the firm's shares. They report no significant evidence of value added by analyst monitoring of the followed firm and its management. Nor do they uncover significant support for value added by reducing information asymmetry, or by

supplying new information to investors. To the extent the new demand for the firm's shares is a result of analysts' marketing effort, there is interest for further evidence revealing analysts' contribution in the marketing role.

To motivate the finding that analysts are able to expand the demand for the followed firm's stock, one example the authors note is Merton's (1987) model, which assumes that investors only own stocks they know. Under this assumption, by expanding the number of investors who know the stock, analysts' coverage could lead investors to hold more of the stock. However, the Merton model does not include intermediary agents like analysts, and it does not allow that many investors actually don't know very much about the stocks they own. For example, investors often invest in mutual funds or retirement funds without knowing much about the stocks held by the funds. A plausible alternative interpretation that appears to agree reasonably with the Li and You findings is that investors delegate the act of knowing available information about a stock to agents specialized in firm-specific research, like security analysts. From this viewpoint, investors choose funds that hold stocks which are followed by sell-side analysts. Through this alternate channel analysts behave as competitive custodians of public information, in addition to any supply of non-public information (see also footnote 2 of the article). From this perspective, the initiations would spur the demand for shares of the newly followed firms and boost the share price, independent of possibilities for asymmetry of information about the firm between various shareholders. This would suggest that further investigation could reveal that initiation triggered demand increases are greater for those funds and large investors who have a revealed preference, if not a policy, for tending to hold followed, rather than unfollowed stocks.

The findings also raise questions about the influence of the analyst's brokerage firm on the economic impact of the initiations. Arguably, the coverage decision is the product of a brokerage team that includes relevant brokerage employees in addition to the analyst who will follow the firm. This would suggest that some credit for the certification of, and the broader demand for, newly covered stocks derives from internal staff and brokerage firm resources, which are ultimately linked to brokerage firm reputation, in addition to credit for the analyst chosen to follow the firm. The team perspective raises interest for more evidence that distinguishes and identifies the relative benefits from initiations that are attributable to the brokerage firm itself and those that should be credited to the covering analyst.

The evidence indicating little new information release from security analysts' coverage initiations should be of interest to researchers who hypothesize that analysts are information intermediaries who regularly discover useful new information about the followed firm, and then supply that information to their profit-seeking clients. The evidence of little information revelation at initiations is qualitatively similar to findings in other recent studies that suggests analysts supply little new information for the average investor (Altınkılıç and Hansen, 2009; Altınkılıç et al., 2013; Kim and Song, forthcoming; Altınkılıç et al., forthcoming). It points to the prospect that too many economic barriers are present that make it too costly for the intermediary process to consistently supply new information in the real world. For example, the supply of neglected information that is often suggested as a by-product of informationally inefficient markets might simply be too limited and unpredictable. Market inefficiency could be too weak to repeatedly supply enough neglected information to support so many analysts' recommendations, particularly in the supercomputer era where the rise of algorithmic trading and decimalization have greatly lowered transaction costs, speeding up the inclusion of information in security prices.⁸ It is also possible that analysts actually have very weak abilities to identify clearly what parts of public information are, in fact, not reflected in stock price, and how they should measure the value of that information. While it is often presumed that analysts are endowed with these special abilities – for example they are often assumed to be able to "process public information" to discover unused information – there is little evidence showing that analysts have this knowhow.

Supply side obstacles could also interfere with effective information intermediation that might help explain the lack of significant evidence of analysts' information. This is particularly relevant for analysts who might supply several subscribing clients with the information through reports provided to all clients at the same time. In this case, the reports broadcast the new information to all clients simultaneously, and if publicly announced, to all other investors. However, such wide dissemination would seem to quickly cause any new information to be incorporated in stock price, greatly reducing if not eliminating the chances for the clients to benefit from trading on the analysts' advice, which they have purchased from the brokerage firm. One might suggest that analysts could attempt to pursue tactics that discriminate among their clients, in effect providing much if not all of their new information to a select few clients before revealing their reports to regular clients, perhaps through tipping to pre-selected clients or through other economically equivalent tactics. However, such discrimination would also suggest the brokerage firm is supporting a deliberate effort to deceive many of its clients by selling them stale information. In the competitive brokerage industry, this behavior would seem to ultimately lead to damaging the brokerage firm's reputation for telling the truth to its clients.

The evidence of analysts' contributions to corporate monitoring is still emerging. While Chen, Harford, and Lin provide evidence indicating that analyst following effectively impacts corporate governance attributes, further information revealing how analysts' monitoring of followed firms impacts firm value would be welcome.

Finally, the findings also raise interest in evidence bearing on analysts' ability to impact the operating performance of followed firms. For example, the new finding of analyst value added through increased demand for shares following the

⁸ For one discussion of changes in the economic environment for analysts' discovery of new information see Altınkılıç et al. (forthcoming). For evidence of lower transaction costs and greater liquidity, and their impact in the supercomputer era, see Hendershott et al. (2011), Angel et al. (2012), and Chordia et al. (2014).

⁹ For analyses of competition in the investment banking see Hansen (2001), and a discussion of the role of brokerage reputation see Jackson (2005). See also Cowen et al. (2006), and Fernando et al. (2012, forthcoming).

initiation also suggests that a related reduction in the cost of capital could follow, all else the same. If the cost of capital were to drop enough, that could expand the profitable investment opportunities available to management of the newly covered firms. However, Li and You raise doubt about analysts' having a meaningful impact on investment and financing decisions, as they find no significant operating improvement in firm performance following the initiation of analysts coverage. This finding seems in contrast with Derrien and Kecskes (2013), who report finding that terminations of analysts' coverage cause the formerly followed firms to scale back their real investment and financing activity.

6. Conclusions

The evidence from Li and You is a welcome addition to the literature focused on understanding the sources of value added by security analysts. The findings raise awareness of the contributions from security analysts in the case of initiation events. They show that in the case of their first coverage of a public firm, a principal addition to value is an increase in investor recognition for the firm's stock. The new findings also add understanding of analysts' relatively low impact on information asymmetry and monitoring of the followed firms in the early coverage period. Finally, Li and You also contribute evidence indicating analysts' reports are not particularly informative for the average investor.

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