



# KRANNERT GRADUATE SCHOOL OF MANAGEMENT

Purdue University  
West Lafayette, Indiana

## REG FD AND THE COMPETITIVENESS OF ALL-STAR ANALYSTS

by

Mark Bagnoli  
Susan G. Watts  
Yong Zhang

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Mark Bagnoli  
Krannert Graduate School of Management  
Purdue University

Susan G. Watts  
Krannert Graduate School of Management  
Purdue University

Yong Zhang  
Department of Accounting  
The Hong Kong University of Science and Technology

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## Reg FD and the Competitiveness of All-Star Analysts

### Abstract

This paper examines the impact of Regulation Fair Disclosure (Reg FD) on the competitive advantage of All-Star analysts. We find that *Institutional Investor* All-Americans, chosen by the votes of institutional investors based on overall helpfulness to the buy-side, experienced a significant increase in turnover during the implementation and immediate aftermath of Reg FD. We do not observe a similar change in the *Institutional Investor* buy-side rankings of non-U.S. analysts or in the *Wall Street Journal's* Best on the Street rankings which are based solely on returns generated from the analyst's public stock recommendations. Furthermore, the significant change in All-American rankings is concentrated in those sectors identified by NIRI and Hutton (2005) as being most affected by Reg FD. By 2003, the competitive environment for All-Americans had stabilized, with turnover returning to (approximately) pre-Reg-FD levels. This suggests that within a few years, All-Americans had built a new competitive advantage stressing aspects of performance less dependent on privileged communication with management.

## Introduction.

In October 2000, the Securities and Exchange Commission (SEC) adopted Regulation Fair Disclosure (Reg FD) in response to public concerns about nonpublic, material communications between corporate officials and financial analysts and institutional investors. The goal of Reg FD is to ensure equal access to material information by requiring public disclosure of any material information privately shared with such market participants. According to Michael Waterman, a market research analyst at Nicholas-Applegate, before Reg FD, many successful analysts focused significant effort on cultivating relationships with management.<sup>1</sup> This is corroborated by survey evidence from the National Investor Relations Institute (NIRI): Before the enactment of Reg FD, 87% of NIRI members reviewed (e.g., commented on material assumptions, checked the reasonableness of) analysts' draft earnings models.<sup>2</sup> Reg FD curtailed such relationship-based analysis and forced analysts to complete what is referred to as a "mosaic" of information from public sources rather than receiving material guidance directly from the company.

In this paper, we examine the impact of this change on the competitive environment of top-ranked, or All-Star, analysts. More specifically, we ask whether the restriction on privileged communication between corporate management and analysts has changed who has a competitive advantage in All-Star ranking systems. We do not limit our analysis to a single ranking system but instead examine two very different systems to highlight different competitive advantages and to determine whether they were differentially affected by the enactment of Reg FD. In particular, we focus on changes in turnover in the top three analysts in the *Institutional Investor* All-America Research Team and the *Wall Street Journal's* Best on the Street Survey in the years surrounding the implementation of Reg FD (1998-2003). By examining turnover, we are able to assess the degree of competition faced by All-Stars and determine whether it changed in the aftermath of Reg FD.

The two ranking systems that we examine determine who is ranked in very different ways. *Institutional Investor* All-Americans are determined annually by the solicited votes

<sup>1</sup> Commentary by Michael Waterman, Nicholas-Applegate, 4/26/2005.

<sup>2</sup> "Guidance for Compliance with Regulation FD," Louis M. Thompson, Jr., National Investor Relations Institute, September 10, 2001.

of buy-side managers (i.e., institutional investors).<sup>3</sup> Survey recipients submit votes for the most helpful or valuable analysts (from the survey recipient's point of view), and analysts are ranked based on numerical scores created from the votes. An important aspect of the score creation is the weighting of the number of votes received for an individual analyst by the size of the voter's institution. Thus, the All-America rankings reflect the *overall* usefulness of sell-side analysts to the buy-side, with emphasis on larger buy-side institutions. The *Wall Street Journal's* Best on the Street Analysts, on the other hand, are ranked based solely on portfolio returns earned by trading on the analyst's published stock recommendations in the year prior to the ranking.<sup>4</sup> Thus, these All-Stars are chosen on the basis of a single aspect of their performance—one that can be easily measured (and mimicked by other analysts) and is of interest to a much broader audience, including individual investors. Furthermore, the *Wall Street Journal* argues that a broader set of analysts are eligible to compete for Best on the Street status, those from smaller regional firms as well as those from larger, more prestigious houses.

We find little overlap in the top-three analysts in the two ranking systems in any given year during our sample period. Thus, the multi-dimensional *Institutional Investor* ranking system, based on buy-side votes, appears to be picking up different aspects of analysts' performance than the more objective, one-dimensional *Wall Street Journal* ranking system. Furthermore, prior to Reg FD, *Institutional Investor* All-Americans were much more likely to remain ranked as one of the top three analysts than were the *Wall Street Journal* Best on the Street Analysts: Only 25% of the All-Americans, on average, fell out of the top three each year compared to 85% of the Best on the Street Analysts.<sup>5</sup> This difference strongly suggests that All-Americans had a greater competitive advantage

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<sup>3</sup> *Institutional Investor* sends their questionnaire to the directors of research and chief investment officers of major money management institutions as well as selected analysts and portfolio managers at many top institutions. According to *Institutional Investor's* description of their methodology, no names of sell-side analysts are pre-listed on the questionnaire. Instead, each respondent writes in names of analysts they wish to vote for and rank.

<sup>4</sup> Until 2001, the *Wall Street Journal* provided two rankings, one based on the profitability of the analyst's stock recommendations in the prior calendar year and one based on the accuracy of his/her earnings estimates in the prior calendar year. Beginning in 2001, rankings were based on stock recommendations in the prior year only. Because earnings estimate rankings are not available during the Reg FD implementation period and immediately thereafter, we study only the stock recommendation rankings in this paper.

<sup>5</sup> Interestingly, Gleason and Lee (2003) document similar, extensive turnover *Wall Street Journal* All-Star earnings estimators during the 1993-1998 period.

over their peers than their Best on the Street counterparts prior to the enactment of Reg FD and is consistent with Gintschel and Markov's (2004) suggestion that All-Americans, who are generally associated with the most prestigious brokerage houses, are more likely to have benefited from selective disclosure practices than other analysts.<sup>6</sup>

Consistent with All-Americans losing a competitive edge during the implementation of Reg FD, we observe a significant increase in turnover in their ranks during that period. In addition, significantly more All-Americans fell in the rankings than expected and significantly fewer retained their previous rank or rose in the rankings than expected during that time. Of those analysts who fell out of the rankings altogether during the Reg FD implementation period, only 10% reappeared among the top three All-Americans in the post-Reg-FD years. Further analysis shows that the increase in turnover is concentrated in those sectors whose firms were most likely to have provided selective disclosures barred by Reg FD (as identified by the 2001 NIRI membership survey referred to earlier and reported by Hutton 2005). We do not observe significant turnover in sectors least likely to have provided such disclosures. Neither do we observe a similar increase in turnover for the Best on the Street Analysts whose rankings depend solely on their stock recommendations. This suggests that the competitive advantage of top stock pickers, unlike that of All-Americans, does not arise from selective disclosure.

As Francis et al. (2004) note, attributing effects to Reg FD is complicated by concurrent macro shocks, such as the sudden unusual economic downturn, that affected the business environment during the implementation of Reg FD. They suggest identifying a control group that is unlikely to have been affected by Reg FD but is likely to have been affected by similar macro factors. In our context, *Institutional Investor* rankings of non-U.S. analysts (i.e., *Institutional Investor's* All-Europe, Asia, Latin America and Japan Research Teams) are such a control group, especially for the All-America Research Team. Interestingly, we find no evidence of increased turnover in the group of non-U.S. analysts during the implementation of Reg FD, a result that provides additional

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<sup>6</sup> Other evidence consistent with this suggestion comes from research on the association between analyst characteristics and forecast accuracy (Clement 1999, Jacob et al. 1999) and the market response to earnings estimate revisions (Clement and Tse 2003, 2005). This research highlights the importance of working for the most prestigious brokerage houses and may, if Gintschel and Markov are correct, partially reflect the benefits from selective disclosure.

assurance that the All-American changes were due, at least in part, to the restrictions on corporate communications imposed by Reg FD.

Finally, stability in the All-American rankings returns by 2003, a result that indicates that within a few years, the All-Americans who lost their competitive advantage in the wake of Reg FD's passage were replaced by All-Americans who developed a comparable competitive advantage based on the new criteria for helpfulness to the buy-side in the post-Reg-FD era.

This paper contributes to two streams of accounting research. First, we add to the extensive literature that examines the economic impact of Reg FD (see Francis et al. 2004 and Gintschel and Markov 2004 for summaries and syntheses of results to date) by providing initial evidence of its impact on analysts' ability to retain All-Star status. As such, our work especially complements the analysis in Gintschel and Markov (2004), who show that the price impact of analysts' earnings forecasts and recommendations dropped after Reg FD in a manner that systematically varied with brokerage house and stock characteristics expected to be related to the level of selective disclosure prior to Reg FD. Second, we contribute to the literature that examines the performance of All-Star analysts (Stickel 1990 and 1992, Leone and Wu 2002, Li 2002, Gleason and Lee 2003, Chen 2004 and Fang and Yasuda 2004, among others) by providing insight into the source of the competitive advantage of analysts who are ranked highly by the buy-side and how it is affected by a regulatory change that restricted their ability to receive private information from the management of the firms that they cover.<sup>7</sup>

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<sup>7</sup> Stickel (1990, 1992) shows that All-Americans issue more accurate and more frequent earnings forecasts than non-All-Americans and that their forecast revisions have a greater impact on security prices than the revisions of non-All-Americans. Leone and Wu (2002) extend Stickel's analysis and find that All-Americans have better forecasting ability, produce better stock recommendation returns and are less optimistically biased in their forecasts than non-All-Americans. They also find evidence of career enhancement from All-American status. Li (2002) studies the relation between All-Star status, performance and career outcome. Gleason and Lee (2003) find that the stock price adjustment to All-Americans' earnings estimate revisions is faster and more complete than it is to revisions made by the *Wall Street Journal* Earnings Estimators. Fang and Yasuda (2004) study All-Americans' performance around IPOs and find that they do not become less accurate forecasters in boom IPO markets. Chen (2004) shows that All-American analysts' earnings estimate bias does not differ from that of unranked analysts conditional on the analysts' investment banking affiliation.

The rest of the paper is organized as follows. In Section 2, we provide motivation for our study and discuss the ranking systems in detail. In Section 3, we present our empirical results. In Section 4, we offer concluding remarks.

## **2. Motivation and Description of Ranking Systems.**

As noted in the Introduction, the purpose of Reg FD was to eliminate selective disclosure by corporate officials to analysts, institutional investors and others who might trade on the information. In this paper, we ask whether this change reduced the competitive advantage of All-Star analysts and whether analyst ranking systems were affected differentially. More specifically, we hypothesize that if a significant portion of a top-ranked analyst's competitive advantage arose from information privately obtained from management, the enactment of Reg FD should have resulted in increased turnover in the All-Star ranks, as these analysts are likely to have lost their competitive advantage over other analysts who had less access to the information. To test this hypothesis, we examine turnover in the top three ranked analysts in the *Institutional Investor* All-America Research Team and the *Wall Street Journal* Best on the Street Analysts. We study these two ranking systems because their ranking criteria and target audiences are very different and thus provide a strong test of whether and how Reg FD affected the competitive environment of top-rated analysts.

*Institutional Investor* All-Americans are chosen each year based on the results of survey questionnaires sent to individuals in major investment management firms throughout the U.S.<sup>8</sup> Eligible job titles/ functions are director of research, chief investment officer, portfolio or fund manager and securities analyst. In its October 2000 issue, for example, *Institutional Investor* discloses that “[t]he opinions of more than 2,500 individuals—representing approximately 90% of the 100 largest U.S. equity managers, as well as more than 300 other key money management firms—were tapped [in determining the 2000 All-America Research Team].” The questionnaire sent to the respondents lists the sectors in which votes may be cast for the “most helpful” (*Institutional Investor*'s terminology) securities analysts. However, it does not list eligible analysts' names; they must be written in by the respondent. Again quoting from the October 2000 issue of

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<sup>8</sup> Institutional Investor does not make the mailing dates for the surveys public, but the conventional wisdom is that they are distributed in the spring or early summer (e.g., April through June). The rankings are published in the October issue of *Institutional Investor* magazine.



*Institutional Investor*, “[r]ankings were determined by using the numerical score each analyst received. Scores were produced by taking the number of votes awarded to an individual analyst and weighting them based on the size of the voting institution and the place that the respondent awarded to the analyst (first, second, third or fourth).”

In addition to asking respondents to vote for analysts, *Institutional Investor* also asks them to rank several pre-specified attributes in order of importance when determining the overall value of a sell-side analyst and his/her firm. We present these attributes and their rankings for each year of our sample period in Table 1. As the table shows, these attributes are both “soft” (e.g., industry knowledge, special services, quality of sales force) and “hard” (earnings estimates and stock selection, the latter of which is the single criterion in the current *Wall Street Journal* ranking system).<sup>9</sup> Furthermore, the number and nature of the attributes that *Institutional Investor* lists, as well as their relative importance to the buy-side, changes over our sample period, with the most significant changes occurring during the implementation and aftermath of Reg FD.<sup>10</sup>

Two aspects of the information in Table 1 are especially important for our purposes. First, excluding attributes that focus on the security firm as opposed to the analyst (e.g., quality of sales force, market making and execution, and primary market services), earnings estimates and stock selection (shaded in the table) generally rank near the bottom of the list—with their numerical ranking dropping as *Institutional Investor* adds more attributes to the list in the years following the implementation of Reg FD.<sup>11</sup> As noted in the introduction, earnings estimates and stock selections can be easily mimicked by other analysts, and so it is not entirely surprising that they are not highly ranked by the buy-side and thus do not provide a strong competitive edge for All-

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<sup>9</sup> Evidence on the value of the “soft” attributes can be inferred from the results reported in Asquith et al. (2005), who find that the details in an Institutional Investor All-American’s analyst’s report provides value relevant information over and above the analyst’s earnings estimates, stock recommendation and target price.

<sup>10</sup> The number of attributes grows from eight in 1998 and 1999 to fifteen by 2003. As *Institutional Investor* explains in its October 2001 and 2002 issues, the changes in attributes are designed to “...better reflect the changing priorities of the buy-side.”

<sup>11</sup> Hong and Kubik (2002) report that forecast accuracy mattered less for analyst career concerns in the 1996-2000 period relative to the 1986-1995 period. They also note that *Institutional Investor* All-Americans’ career concerns are significantly less likely to be adversely affected by poor forecast accuracy than unranked analysts’. Both results suggest that earnings estimates are relatively unimportant compared to other analyst attributes, consistent with what we observe in the *Institutional Investor* analyst/firm attribute rankings.

Americans. Furthermore, the increasing importance of "soft" attributes after Reg FD provides evidence of a changing competitive environment for the top-ranked analysts and might well reflect the effect of restrictions imposed by Reg FD (such as no longer allowing management to provide detailed reviews of analysts' draft earnings estimate models). Second, the new attributes introduced by *Institutional Investor* after 2000 are not dependent on selective disclosure: integrity and professionalism, accessibility and responsiveness, useful and timely calls and visits, independence from management, and the ability to provide the buy-side with access to management (for "kick-the-tires" visits or conversations). In addition, these new attributes appear to be highly valued by the buy-side. These changes in attributes, as well as changes in the weights given to them by the buy-side, suggests that what constitutes a competitive advantage for an analyst aspiring to All-American status changed at the implementation of Reg FD, not only because of the direct effect of the new regulation but also because the buy-side suddenly began to emphasize dimensions of performance that analysts had not previously attended to (e.g., customer service).<sup>12</sup> As a result, we expect to observe increased turnover in the *Institutional Investor* All-American rankings as Reg FD went into effect.

*Wall Street Journal* Best on the Street Analysts, on the other hand, are evaluated on a single criterion: the returns on hypothetical portfolios constructed from the analyst's recommendations during the year prior to the publication of the survey (e.g., 2000 rankings are based on returns generated by recommendations made during 1999). During our sample period, rankings were provided by Zacks until 2001, and thereafter by First Call/Thomson Financial. To be considered, analysts are generally required to cover at least five stocks in a sector/industry. Although this restriction reduces the number of eligible analysts, analysts at regional firms are still able to compete with analysts from big Wall Street firms since rankings depend only on return performance. In contrast to our expectations for the *Institutional Investor* rankings, we do not expect Reg FD to have a significant impact on turnover in *Wall Street Journal* rankings. This difference in expectations arises for two reasons. First, as noted earlier, any advantage associated with differential access to management can only show up in the analyst's published stock recommendations, which can be readily mimicked by his/her competitors. Second, since there is value to placing in the top three spots of the

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<sup>12</sup> We thank Michael Kimbrough for this insight.

rankings, analysts have incentives to make riskier picks, thereby introducing significant noise into their realized returns.<sup>13</sup>

### **3. Empirical Analysis.**

#### **3.1. Data.**

We focus our attention on turnover in the top three *Institutional Investor* All-Americans and *Wall Street Journal* Best on the Street Analysts between 1998 and 2003.<sup>14</sup> We adopt this approach for two reasons. First, the *Wall Street Journal* ranks only the top three analysts in a given sector. Second, although the All-America Research Team includes “runners-up” (i.e., analysts ranked below the top three), their number can and does vary across sectors and across years. Furthermore, when there is more than one runner-up in a sector, they are not ranked relative to one another. Thus, to enhance comparability with the *Wall Street Journal* rankings and to avoid varying numbers of runner-up analysts from year to year, we focus only on the top three *Institutional Investor* All-Americans. Rankings came directly from Institutional Investor, Inc. and from electronic versions of the appropriate issues of the *Wall Street Journal*. When constructing the database, it became clear that an important issue was how to deal with analysts who left the rankings in a given year. In particular, it is possible that an analyst who fell out of the top three (1) remained an analyst but fell out of the rankings, (2) changed jobs within the industry but was no longer analyzing firms and therefore was no longer ranked, or (3) left the industry and therefore necessarily fell out of the rankings. Because of this uncertainty, we manually (electronically) searched analyst report databases and the Web to determine whether each analyst who fell out of the rankings in a given year remained in the industry and if so, his/her affiliation in the first year in which he/she is no longer ranked. We use this information later in our empirical work to perform sensitivity analysis.

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<sup>13</sup> This incentive is similar to the documented incentives fund managers have to select riskier portfolios. See Golec and Starks (2004) and the references therein.

<sup>14</sup> We do not examine turnover beyond 2003 because of confounding effects from the so-called Global Settlement, which was finalized on April 28, 2003. The Global Settlement resolved the enforcement actions against most of the major brokerage firms by the SEC, NASD, NYSE and state securities regulators and produced additional changes in analysts' environment.

On average, analysts in 75 sectors (industries and investment specialties) are ranked in the *Institutional Investor* survey, and analysts in 51 sectors are ranked in the *Wall Street Journal* survey.<sup>15</sup>

### 3.2 Results.

We begin the analysis by examining the overlap in top-ranked analysts in the two surveys, as presented in Table 2. As the table indicates, very few analysts simultaneously attain top status in both rankings: On average, only 9.91% of All-Americans are also Best on the Street Analysts, and only 14.57% of Best on the Street Analysts are also All-Americans.<sup>16</sup> This strongly suggests that the two ranking systems identify different competitive advantages and is consistent with the dramatic difference in how analysts are ranked: Buy-side voting based on multiple criteria that determine the overall “helpfulness” of the analyst to the voting institutional investors versus a one-dimensional, quantitatively determined measure of performance—returns generated from trading on the analyst’s published stock recommendations.

In Tables 3 and 4, we present information about yearly turnover in the top ranks under each system in the form of transition matrices (*Institutional Investor* All-American information is in Table 3, and *Wall Street Journal* Best on the Street information is in Table 4). A generic entry in a transition matrix,  $a_{ij}$ , represents the percent of analysts that had rank  $i$  in one year and rank  $j$  in the next year. An important consideration in calculating these percentages is the fact that sector (industry) composition in the rankings changes as the economy changes. Thus, if we use the raw data without considering this, we would find significant changes in turnover simply because the number of sectors rose or fell across the two years represented in a given transition matrix. We adjust for these differences as follows. If there are fewer sectors in the next year, there will necessarily be fewer analysts ranked. To handle this, we re-allocate these “extra” not-ranked analysts across the categories proportionately, increasing the

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<sup>15</sup> We exclude analysts ranked by *Institutional Investor* in sectors that do not involve following individual firms (e.g., Accounting and Tax Policy, Convertibles, Economics, Equity Derivatives, Portfolio Strategy, Quantitative Research, Technical Analysis and Washington Research). None of these sectors is contained in the *Wall Street Journal* rankings.

<sup>16</sup> Percentages differ because the total number of analysts ranked by *Institutional Investor* exceeds the total number ranked by the *Wall Street Journal*.

number ranked 1, 2 and 3 and reducing the number not ranked. Second, if there are more sectors in the next year, there are likely to be more analysts ranked. To handle this, we reallocate the "extra" ranked analysts across the categories proportionately, reducing the number ranked 1, 2 and 3 and increasing the number not ranked. Both adjustments are made after accounting for any ties in the rankings.<sup>17</sup>

Examination of the transition matrices in Table 3 indicates that, on average, only 25%<sup>18</sup> of *Institutional Investor* All-Americans leave the top three in the following year (although as we discuss later and is evident in Table 3, this percentage shows significant variability during implementation of Reg FD); and if they remain in the top three, they are more likely to stay at the same rank than move up or down. Furthermore, the percentage who leave the industry each year is small and relatively stable (approximately 5% on average).

In contrast, Table 4 shows that the vast majority (79% or more) of Best on the Street Analysts leave the top three in the following year, but similar to what we see in the All-Americans, the percent who leave the industry is small and relatively stable at approximately 4% on average. However, despite differences in the rate of turnover, the top six most frequently represented brokerage houses are the same for the two rankings: Credit Suisse First Boston, Morgan Stanley Dean Witter, Salomon Smith Barney, Merrill Lynch, Goldman Sachs and Lehman Brothers.<sup>19</sup>

Tests for significant changes in turnover are presented in Table 5. For each transition matrix, we test whether the percent of top-three analysts who remain ranked (or not) is significantly different from expected.<sup>20</sup> Transition percentages for the implementation

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<sup>17</sup> In fact, ties are the reason why it is not always the case that 33.33% of analysts are ranked 1, 2 and 3 respectively.

<sup>18</sup> This percentage is the average of the yearly totals of the "Not Matched" columns in Table 3, which is equivalent to averaging the yearly sums of the "no longer ranked" and "left the industry" categories.

<sup>19</sup> This commonality may be related to results in Clement (1999), Jacob et al. (1999) and Clement and Tse (2003, 2005) on the importance of analyst affiliation.

<sup>20</sup> We use prior year percentage turnover to calculate expected turnover for each matrix, with the exception of the first matrix following the implementation of Reg FD, 2001-2002. For that matrix, we calculate expected turnover twice, once based on the prior year observed percentage turnover and once based on two years prior observed percentage turnover, so that we can determine whether post-Reg FD turnover percentages are statistically different from both implementation period and pre-Reg FD levels.

period of Reg FD are in the shaded cells. The tests in the first row of Table 5 focus on *Institutional Investor All-Americans* and show that during the Reg FD implementation period, which is covered by the 2000-2001 transition matrix, significantly fewer analysts remained ranked than the year before. Specifically, the percent remaining ranked dropped to 68.16% in 2000-2001 from 79.27% in 1999-2000. Furthermore, significantly more analysts lost top-three status in 2001 than expected: the percent dropping out of the top three rose to 31.84% in 2000-2001 from 20.73% in 1999-2000. The remaining transition matrices exhibit no such similar change in turnover.

Although this appears to indicate that Reg FD affected All-American turnover, as Francis et al. (2004) and others have pointed out, it is possible that the change that we observe is due to other macro shocks, such as the sudden, unusual economic downturn, that affected the business environment during that same period. In their examination of the effect of Reg FD on U.S. firms' information environments, Francis et al. use a sample of ADR firms to control for events occurring at the same time as Reg FD and which affected all firms' information environments. Following their logic, we take advantage of the existence of *Institutional Investor All-Europe, Asia, Latin America and Japan Research Teams* to form a control group of analyst rankings that are unaffected (or nearly so) by Reg FD but are affected by the same shocks in the global economic and business environments as the All-America analysts. The analysts in these non-U.S. Research Teams are chosen by survey respondents with European, Asian, Latin American or Japanese equity assets under management—and as Francis et al. (2004) note, foreign firms have less incentive to avoid selective disclosure post-Reg FD because of the less stringent disclosure regulations and enforcement in their home countries. Thus, if we also observe a significant increase in turnover in these non-U.S. Research Teams in 2000-2001, it is less likely that Reg FD was the driver of the change in turnover in the All-America Research Team.

Tests for significant changes in turnover of the non-U.S. Research Teams are in the second row of Table 5. As is evident from these tests, there is no significant change in turnover for these analysts during the Reg FD implementation period (i.e., in the 2000-

2001 matrix). Thus, we can be more confident that the change we see in the All-Americans during 2001 is due, at least in part, to Reg FD.<sup>21</sup>

Tests for significant changes in turnover in the *Wall Street Journal* Best of the Street Analysts are in the third row of Table 5. The information in this row, like the information in Table 4, clearly illustrates the consistently high level of churn in this group of analysts. Interestingly, turnover is statistically different (lower) than expected in 2000-2001 transition matrix: 79.87% fell out of the rankings during that period versus 87.88% in the previous matrix. However, the rankings in 2000-2001 matrix are based on stock recommendations made in 1999 and 2000, and so they do not provide a good test of the impact of Reg FD.<sup>22</sup> For our purposes, the relevant matrix is the one covering 2001 and 2002 and thus based on stock recommendations made during the Reg FD implementation period of 2000 and 2001. As Table 5 shows, turnover in this matrix (86.00%) is statistically indistinguishable from the turnover in the 2000-2001 and 1999-2000 matrices. Thus, it does not appear that the competitive advantage of the Best on the Street Analysts changed significantly during the implementation of Reg FD, a finding that contrasts with what we observe for the All-Americans.

Before leaving the discussion of the transition matrices, we recognize that how we handle the ranked analysts who left the industry could affect our inferences. In particular, it is possible that if those analysts had remained in the industry, they would have also remained ranked. Therefore, we need to determine whether our results are driven by our considering those analysts as essentially having fallen out of the rankings in Table 5. The bottom two sections of Table 5 contain sensitivity analysis of our results based on making different assumptions about the analysts who left the industry. In the first set of tests, we assume that All-Americans and Best on the Street Analysts who left the industry would have remained ranked in the top three if they had stayed in the industry. In the second set, we compare only analysts who remain ranked in the

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<sup>21</sup> Table 5 shows that non-U.S. turnover declines in the post-Reg FD period, approaching the rate for the All Americans. Casual examination suggests that this is likely to be the result of a change in how *Institutional Investor* defines categories for their All-Europe Team. In particular, coincident with the decrease in turnover is the elimination of separate U.K. and Continental Europe sectors and the related expansion of the number of separate industry sectors.

<sup>22</sup> The 2000-2001 transition matrix is the relevant matrix for the *Institutional Investor* All-Americans because the rankings for that matrix were published in October 2000 and October 2001 and were based on buy-side surveys taken sometime in the late spring or early summer of 2000 and 2001.

following year with those who remain in the industry but fell out of the top three (in other words, we exclude the analysts who left the industry from the analysis). As those tests show, our results remain unchanged. We continue to observe a significant increase in turnover in the All-Americans during the Reg FD implementation period but not otherwise, regardless of the assumption made. Likewise, we do not observe significant changes in turnover in the Best on the Street Analysts in the 2001-2002 matrix, but the significant drop remains in the 2000-2001 matrix.

To provide more insight into the changes in turnover, we present an analysis of movements up in the rankings, retention of the previous ranking, and movements down in the rankings for the All-Americans and Best on the Street Analysts in Table 6. Focusing first on the All-Americans at the top of the table, we observe a significant drop in the percent rising in the rankings during the 2000-2001 period (11.51% in 2000-2001 versus 15.48% in 1999-2000 and 16.68% in 1998-1999), consistent with more All-Americans losing their competitive edge during the enactment of Reg FD. Significantly more All-Americans also fell in the rankings than expected during that period (45.65% in 2000-2001 versus 34.01% in 1999-2000 and 36.61% in 1998-1999), and significantly fewer retained their previous rank (42.84% in 2000-2001 versus 50.51% in 1999-2000 and 46.71% in 1998-1999), providing further indication of loss of competitive advantage during the implementation of Reg FD. In addition, those analysts who fell out of the rankings during the Reg FD implementation period generally did not regain their competitive advantage: only 10% reappeared in the top three in the post-Reg-FD years.

Interestingly, the percent falling in the 2002 rankings continues to be significantly higher than it was prior to Reg FD (40.67% in 2001-2002), and the percent retaining their previous rank continues to be smaller (40.65% in 2001-2002). This suggests that by 2002, the competitive environment facing All-Americans had not yet completely stabilized. On the other hand, the percent rising in the 2002 rankings increases to 18.69%, a finding that suggests that some of the All-Americans were beginning to exploit their new-found competitive edge and/or the buy-side was becoming increasingly aware of which analysts were most helpful after Reg FD. The lack of significant changes in turnover in the 2002-2003 transition matrix indicates that by 2003, the competitive environment for All-Americans had stabilized, with turnover returning to (approximately) pre-Reg-FD levels.



In addition, as the second set of test in Table 6 shows, there are no significant changes in the percent of All-Europe, Asia, Latin American and Japan analysts moving up or down in the rankings or remaining at the same rank during the 2000-2001 Reg FD implementation period. This provides additional evidence that the Reg FD-imposed restrictions on manager-analyst communications played a role in changing the competitive edge of All-Americans.

The third and last set of tests in Table 6 shows no significant changes in the percent of *Wall Street Journal* Best on the Street Analysts moving up or down in the rankings or maintaining their previous rank in any of the transition matrices. Thus, the evidence continues to indicate that the *Wall Street Journal* rankings were not significantly affected by Reg FD.

Finally, if Reg FD did in fact play a role in increasing turnover in All-Americans in 2001, we should expect to see the increase concentrated in the sectors most likely to be affected by the restrictions imposed by Reg FD. To test this possibility, we rely on the information in Hutton (2005) to structure cross-sectional tests of turnover in each transition matrix. Hutton's paper is particularly helpful because she is able to identify firms that provided guidance (i.e., information intended to guide analysts' earnings estimates, including detailed reviews of analysts' draft earnings estimate models) prior to Reg FD through access to the proprietary data collected for the 2001 NIRI Reg FD survey. Furthermore, she presents industry membership data for survey respondents, separated by whether or not they provided guidance prior to Reg FD, in Table 3 of her paper. We use the information in this table to determine which sectors in each year's rankings are most, somewhat and least likely to have provided private guidance before Reg FD. The number of sectors in each category varies slightly from year to year (e.g., the number of sectors ranges from 28 to 32 and from 11 to 15 in the "most likely" and "least likely" categories, respectively) because of changes in the *Institutional Investor* sector line-up.<sup>23</sup>

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<sup>23</sup> "Most likely" sectors are generally high-tech sectors whereas "least likely" sectors are generally basic materials or mature industries, a finding that is consistent with Gintschel and Markov's (2004) documentation of a greater effect from Reg FD on stocks that are hard to value with public information (i.e., growth or low book-to-market stocks).

In Table 7, we present tests of turnover for the sectors most and least likely to have provided guidance as determined by the NIRI data. If Reg FD had a significant impact on All-American turnover, we would expect to see significantly more turnover in those sectors most likely to have provided guidance before its enactment than in those sectors least likely to have provided it. Table 7 shows that the data are consistent with this expectation. In particular, in those sectors most likely to have provided guidance pre-Reg-FD, there is a significant drop in the percent of All-Americans that remain ranked in the top three in 2000-2001 (59.54% in 2000-2001 versus 73.96% in 1999-2000 and 71.11% in 1998-1999). In addition, significantly more drop out of the top three during that same period (40.66% in 2000-2001 versus 26.04% in 1999-2000 and 28.89% in 1998-1999). We do not observe significant changes in other years for these sectors; nor do we observe significant changes for the sectors *least* likely to have provided guidance before Reg FD.<sup>24</sup> Thus, the evidence continues to suggest that Reg FD affected the competitive environment of All-Americans.

#### 4. Conclusions.

In October 2000, the Securities and Exchange Commission adopted Regulation Fair Disclosure to allay concerns about the fairness of selective disclosure of material information by corporate officials to analysts and institutional investors. In this paper, we assess the impact of Reg FD on the competitiveness of All-Star analysts—analysts who are likely to have greater access to management than analysts with less influence on investor perceptions (Gintschel and Markov 2004). We focus on two analyst rankings, *Institutional Investor All-Americans* and the *Wall Street Journal Best on the Street Analysts*. *Institutional Investor* surveys buy-side investors and ranks analysts on the basis of their overall helpfulness to the buy-side whereas the *Wall Street Journal* ranks analysts based on returns that First Call/Thomson Financial (and earlier, Zacks) computes using the analyst's public stock recommendations. Our key findings are that immediately after the implementation of Reg FD, there is a significant increase in turnover among the All-America analysts and a significant increase in the number whose ranking falls. Further, after categorizing sectors by whether they were most or least likely to offer guidance prior to Reg FD based on results from the NIRI 2001 survey as

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<sup>24</sup> There is a cyclical pattern to turnover in the "least likely" sectors, but the changes from matrix to matrix are not statistically significant, perhaps because of the relatively small number of sectors in this category.

reported in Hutton (2005), we find that the change in turnover is concentrated in those sectors most likely to have offered guidance pre-Reg FD. We do not find similar patterns in turnover among the Best on the Street analysts (who are ranked only on one dimension: the profitability of their stock recommendations) or in *Institutional Investor's* non-U.S. Research Teams (who are not, in general, affected by the restrictions imposed by Reg FD). By 2003, however, the competitive environment for All-Americans had stabilized, with turnover returning to (approximately) pre-Reg-FD levels. Taken together, these results indicate that Regulation Fair Disclosure did impact the ability of some analysts to provide useful services to buy-side investors. However, our evidence also suggests that the new All-Americans built a new competitive advantage stressing other aspects of performance less dependent on privileged communication with management.

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Table 1  
 "What Investors Really Want": Ranks of Attributes by Respondents to the Institutional Investor Survey

1998		1999		2000		2001		2002		2003	
Overall Rank	Attribute	Overall Rank	Attribute	Overall Rank	Attribute	Overall Rank	Attribute	Overall Rank	Attribute	Overall Rank	Attribute
1	Industry knowledge	1	Industry knowledge	1	Industry knowledge	1	Industry knowledge	1	Industry knowledge	1	Industry knowledge
2	Stock selection	2	Written reports	2	Special services*	2	Accessibility & responsiveness	2	Integrity & professionalism	2	Integrity & professionalism
3	Written reports	3	Special services*	3	Financial models	3	Independence from corp. finance	3	Accessibility & responsiveness	3	Accessibility & responsiveness
4	Special services*	4	Servicing	4	Written reports	4	Useful & timely calls & visits	4	Useful & timely calls & visits	4	Useful & timely calls & visits
5	Earnings estimates	5	Stock selection	5	Earnings estimates	5	Special services*	5	Management access	5	Management access
6	Servicing	6	Earnings estimates	6	Servicing	6	Written reports	6	Independence from corp. finance	6	Special services
7	Quality of sales force	7	Quality of sales force	7	Stock selection	7	Management access	7	Special services*	7	Written reports
8	Mkt. making & execution	8	Mkt. making & execution	8	Quality of sales force	8	Financial models	8	Written reports	8	Independence from corp. finance
				9	Mkt. making & execution	9	Earnings estimates	9	Financial models	9	Communication skills
				10	Primary mkt. services	10	Stock selection	10	Communication skills	10	Financial models
				11		11	Quality of sales force	11	Stock selection	11	Stock selection
				12		12	Mkt. making & execution	12	Earnings estimates	12	Earnings estimates
								13	Quality of sales force	13	Quality of sales force
								14	Mkt. making & execution	14	Mkt. making & execution
								15	Primary mkt. services	15	Primary mkt. services

Footnote on the following page.

**Footnote to Table 1:**

\* Company visits, conferences, etc.

The information in this table is gathered from October issues of *Institutional Investor* magazine. *Institutional Investor* asks respondents to the All-America Research Team survey to rank specified attributes in order of importance in assessing the worth of an equity analyst and his/her firm. As the table shows, the number of specified attributes changes in 2000, 2001 and 2002. In 2001, *Institutional Investor* explained that "[t]o better reflect the changing priorities of the buy side, Institutional Investor this year added or redefined several attributes for investors to rank. Among them were accessibility/responsiveness, independence from corporate finance, useful and timely calls and visits, and management access." In 2002, Institutional Investor explained that this year, it "... added a new category, integrity/professionalism, to better reflect changing buy-side priorities."

**Table 2**  
**Overlap in Top Three Ranked Analysts in the *Institutional Investor* All-America  
and *Wall Street Journal* Best on the Street Rankings**

<b>Year</b>	<b>Raw Number of Analysts Ranked in the Top Three in Both Surveys</b>	<b>% of Top-Three <i>Institutional Investor</i> Analysts Also in Top Three in <i>Wall Street Journal</i> Survey</b>	<b>% of Top-Three <i>Wall Street Journal</i> Analysts Also in Top Three in <i>Institutional Investor</i> Survey</b>
<b>1998</b>	23	9.54%	15.33%
<b>1999</b>	29	11.79%	17.58%
<b>2000</b>	25	11.21%	15.72%
<b>2001</b>	20	9.26%	13.33%
<b>2002</b>	16	7.73%	10.88%

The *Institutional Investor* All-America Research Team is determined by the votes of buy-side managers surveyed each year by Institutional Investor, Inc. Sectors are pre-specified by Institutional Investor, and analysts' names are written in by the respondents. The *Wall Street Journal* Best on the Street Analysts are determined by the estimated total return (price changes plus dividends) on a hypothetical portfolio computed using the analyst's public stock recommendations in the prior calendar year. Analysts are eligible for *Wall Street Journal* ranking if their coverage of stocks in a sector is sufficient (generally, the analyst must cover at least five stocks in a sector, although this restriction is relaxed in limited circumstances).



**Table 3**  
**Transition Matrices for Institutional Investor's All-American Analyst Rankings**  
**(Adjusted for Changes in the Number of Sectors)**

		1999			Not Matched in 1999	No Longer Ranked	Left the Industry	Total
	Rank	1	2	3				
	1	21.44%	4.85%	2.43%	4.47%	2.98%	1.49%	33.20%
<b>1998</b>	2	7.38%	14.34%	5.74%	6.15%	4.83%	1.32%	33.60%
	3	1.62%	7.69%	10.92%	12.97%	11.67%	1.30%	33.20%
	<b>Total</b>	30.44%	26.89%	19.09%		19.48%	4.11%	100.00%
		2000			Not Matched in 2000	No Longer Ranked	Left the Industry	Total
	Rank	1	2	3				
	1	25.33%	4.98%	1.81%	1.22%	0.67%	0.55%	33.33%
<b>1999</b>	2	4.17%	15.76%	6.49%	6.91%	5.53%	1.38%	33.33%
	3	4.24%	7.07%	9.42%	12.60%	9.95%	2.65%	33.33%
	<b>Total</b>	33.74%	27.80%	17.72%		16.14%	4.59%	100.00%
		2001			Not Matched in 2001	No Longer Ranked	Left the Industry	Total
	Rank	1	2	3				
	1	21.25%	4.62%	4.62%	2.69%	2.02%	0.67%	33.18%
<b>2000</b>	2	6.40%	11.89%	4.57%	10.31%	8.17%	2.15%	33.18%
	3	2.04%	3.06%	9.70%	18.83%	17.61%	1.23%	33.64%
	<b>Total</b>	29.70%	19.57%	18.89%		27.79%	4.05%	100.00%
		2002			Not Matched in 2002	No Longer Ranked	Left the Industry	Total
	Rank	1	2	3				
	1	19.44%	5.83%	3.89%	4.17%	2.08%	2.08%	33.33%
<b>2001</b>	2	8.42%	13.87%	5.95%	5.56%	4.51%	1.04%	33.80%
	3	2.93%	7.33%	7.33%	15.28%	12.66%	2.62%	32.87%
	<b>Total</b>	30.80%	27.04%	17.16%		19.26%	5.74%	100.00%
		2003			Not Matched in 2003	No Longer Ranked	Left the Industry	Total
	Rank	1	2	3				
	1	23.35%	7.96%	1.06%	0.97%	0.36%	0.60%	33.33%
<b>2002</b>	2	6.01%	11.47%	7.65%	8.21%	4.64%	3.57%	33.33%
	3	3.37%	7.86%	9.54%	12.56%	11.38%	1.18%	33.33%
	<b>Total</b>	32.72%	27.29%	18.25%		16.39%	5.35%	100.00%

Footnote on following page.

**Footnote for Table 3:**

The *Institutional Investor* All-America Research Team is determined by the votes of buy-side managers surveyed each year by Institutional Investor, Inc. Sectors are pre-specified by Institutional Investor, and analysts' names are written in by the respondents. Scores are produced by taking the number of votes awarded to an individual analyst and weighting them based on the size of the voting institution and the place (first, second, third or fourth within a sector) that the respondent awarded to the analyst. (Source: *Institutional Investor*)

Analysts who are not ranked in the top three in the second year of a given transition matrix (as represented by the "Not Matched" column) fall into one of two categories: (1) still employed as an analyst but no longer ranked in the top three (as represented by the "No Longer Ranked" column), or (2) no longer in the industry (as represented by the "Left the Industry" column).

If there are fewer sectors in the second year in a matrix, we re-allocate these "extra" not-ranked analysts across the categories proportionately, increasing the number ranked 1, 2 and 3 and reducing the number not ranked. Similarly, if there are more sectors in the second year, we reallocate the "extra" ranked analysts across the categories proportionately, reducing the number ranked 1, 2 and 3 and increasing the number not ranked. Both adjustments are made after accounting for ties. Total (raw) numbers of analysts in each transition matrix are as follows: 241 in the 1998-1999 matrix; 246 in the 1999-2000 matrix; 223 in the 2000-2001 matrix; 216 in the 2001-2002 matrix; and 207 in the 2002-2003 matrix. Analysts covering 75 sectors, on average, are ranked each year.

**Table 4**  
**Transition Matrices for Wall Street Journal Best of the Street Analyst Rankings**  
**(Adjusted for Changes in the Number of Sectors)**

		1999			Not Matched in 1999	No Longer Ranked	Left the Industry	Total
Rank		1	2	3				
<b>1998</b>	<b>1</b>	3.00%	3.00%	0.60%	26.73%	25.36%	1.37%	33.33%
	<b>2</b>	1.80%	1.20%	1.80%	28.53%	27.85%	0.68%	33.33%
	<b>3</b>	1.80%	0.60%	1.80%	29.13%	27.78%	1.36%	33.33%
	<b>Total</b>	6.60%	4.80%	4.20%		80.99%	3.41%	100.00%
		2000			Not Matched in 2000	No Longer Ranked	Left the Industry	Total
Rank		1	2	3				
<b>1999</b>	<b>1</b>	2.02%	1.01%	0.00%	30.30%	29.14%	1.17%	33.33%
	<b>2</b>	2.02%	1.01%	0.00%	30.30%	28.55%	1.75%	33.33%
	<b>3</b>	3.03%	0.76%	2.27%	27.27%	26.69%	0.58%	33.33%
	<b>Total</b>	7.07%	2.78%	2.27%		84.38%	3.49%	100.00%
		2001			Not Matched in 2001	No Longer Ranked	Left the Industry	Total
Rank		1	2	3				
<b>2000</b>	<b>1</b>	2.83%	1.89%	0.94%	27.67%	26.50%	1.18%	33.33%
	<b>2</b>	1.64%	3.27%	3.27%	25.16%	23.99%	1.17%	33.33%
	<b>3</b>	2.70%	1.80%	1.80%	27.04%	24.10%	2.94%	33.33%
	<b>Total</b>	7.16%	6.95%	6.01%		74.59%	5.29%	100.00%
		2002			Not Matched in 2002	No Longer Ranked	Left the Industry	Total
Rank		1	2	3				
<b>2001</b>	<b>1</b>	3.11%	0.78%	0.78%	28.67%	27.36%	1.30%	33.33%
	<b>2</b>	1.60%	1.60%	0.80%	29.33%	28.03%	1.30%	33.33%
	<b>3</b>	2.29%	1.52%	1.52%	28.00%	27.35%	0.65%	33.33%
	<b>Total</b>	7.00%	3.90%	3.10%		82.74%	3.26%	100.00%
		2003			Not Matched in 2003	No Longer Ranked	Left the Industry	Total
Rank		1	2	3				
<b>2002</b>	<b>1</b>	2.04%	2.04%	0.68%	28.57%	26.53%	2.04%	33.33%
	<b>2</b>	1.36%	1.36%	1.36%	29.25%	28.57%	0.68%	33.33%
	<b>3</b>	0.68%	2.72%	3.40%	26.53%	25.17%	1.36%	33.33%
	<b>Total</b>	4.08%	6.12%	5.44%		80.27%	4.08%	100.00%

Footnote on following page.

**Footnote for Table 4:**

The Wall Street Best on the Street Survey was conducted by Zacks Investment Research until 2000 when First Call/Thomson Financial began to conduct the survey. Analysts must meet eligibility requirements, which are intended to ensure that only analysts who thoroughly cover an industry are considered. The major restriction is that the analyst must have followed at least five stocks in the industry/sector during the year (exceptions to this are rare but do occur when analyst coverage in an industry is limited—in such cases, minimum coverage can go as low as two firms). An analyst's stock-picking skill is judged by a hypothetical portfolio based on his/her public recommendations—that is, on the estimated total return (price changes and dividends) on that portfolio. Sectors (industries) for covered stocks were based on company classifications by the *Wall Street Journal* and its parent company, Dow Jones & Co. (Source: The *Wall Street Journal*)

Analysts who are not ranked in the top three in the second year of a given transition matrix (as represented by the "Not Matched" column) fall into one of two categories: (1) still employed as an analyst but no longer ranked in the top three (as represented by the "No Longer Ranked" column), or (2) no longer in the industry (as represented by the "Left the Industry" column).

If there are fewer sectors in the second year in a matrix, we re-allocate these "extra" not-ranked analysts across the categories proportionately, increasing the number ranked 1, 2 and 3 and reducing the number not ranked. Similarly, if there are more sectors in the second year, we reallocate the "extra" ranked analysts across the categories proportionately, reducing the number ranked 1, 2 and 3 and increasing the number not ranked. Total (raw) numbers of analysts in each transition matrix are as follows: 150 in the 1998-1999 matrix; 165 in the 1999-2000 matrix; 159 in the 2000-2001 matrix; 150 in the 2001-2002 matrix; and 147 in the 2002-2003 matrix. Analysts covering 51 sectors, on average, are ranked each year.

Table 5  
Tests for Significant Turnover in Top Three All-Star Analysts

Analyst Group		Transition Percentages				
		1998-99	1999-2000	2000-2001	2001-2002	2002-2003
<i>Institutional Investor</i> All-American Analysts	% remained ranked	76.40%	79.27%	68.16%***	75.00%	78.26%
	% not matched	23.60%	20.73%	31.84%***	25.00%	21.74%
<i>Institutional Investor</i> All-Europe, Asia, Latin America and Japan Analysts	% remained ranked	57.26%	53.42%	52.09%	66.04%***	72.15%*
	% not matched	42.74%	46.58%	47.91%	33.96%***	27.85%*
<i>Wall Street Journal</i> Best on the Street Analysts	% remained ranked	15.60%	12.12%	20.13%**	14.00%	15.65%
	% not matched	84.40%	87.88%	79.87%**	86.00%	84.35%
<b>Sensitivity Check: Assume those who left the industry would have remained ranked in the second year had they not left.</b>						
<i>Institutional Investor</i> All-American Analysts	% remained ranked + left industry	80.51%	83.86%	72.21%***	80.74%	83.61%
	% no longer ranked	19.49%	16.14%	27.79%***	19.26%	16.39%
<i>Wall Street Journal</i> Best on the Street Analysts	% remained ranked + left industry	19.01%	15.62%	25.41%***	17.26%	19.73%
	% no longer ranked	80.99%	84.38%	74.59%***	82.74%	80.27%
<b>Sensitivity Check: Exclude those who left the industry from the comparison.</b>						
<i>Institutional Investor</i> All-American Analysts	% remained ranked	79.68%	83.08%	71.04%***	79.57%	82.69%
	% no longer ranked	20.32%	16.92%	28.96%***	20.43%	17.31%
<i>Wall Street Journal</i> Best on the Street Analysts	% remained ranked	16.15%	12.56%	21.25%***	14.47%	16.31%
	% no longer ranked	83.85%	87.44%	78.75%***	85.53%	83.69%

Footnote on following page.

**Footnote for Table 5:**

Descriptions of the All-American and Best on the Street Analyst selection process are in the footnotes to Tables 3 and 4. *Institutional Investor's* All-Europe, Asia, Latin American and Japan Analysts are chosen by survey respondents with European, Asian, Latin American or Japanese equity assets under management. Transition percentages for the implementation period of Reg FD are in the shaded cells. (For the *Wall Street Journal* rankings, the 2001-2002 cells are shaded because they are based on stock recommendations made during the Reg FD implementation period of 2000 and 2001.)

Analysts who do not are not ranked in the top three in the second year of a given transition matrix are referred to as "not matched".

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.10$ , Chi-square test of difference in expected and observed proportion changing ranks. Expected turnover is the prior year's observed turnover with the exception of 2001-2002. For that matrix, the observed proportions are tested against both the observed proportion one and two years prior. Results using the two years prior expectation model are reported in the table so as to avoid confounding with the impact of Reg FD in the 2000-2001 matrix.

**Table 6**  
**All-Stars' Movements Within Top Three Ranks**

Analyst Group		Transition Percentages				
		1998-99	1999-2000	2000-2001	2001-2002	2002-2003
<i>Institutional Investor</i> All-American Analysts	% rank rose	16.68%	15.48%	11.51%***	18.69%***	17.24%
	% rank unchanged	46.71%	50.51%	42.84%***	40.65%***	44.36%
	% rank fell (includes no longer in top three)	36.61%	34.01%	45.65%***	40.67%***	38.40%
<i>Institutional Investor</i> All-Europe, Asia, Latin America and Japan Analysts	% rank rose	12.72%	13.47%	12.89%	20.51%***	14.52%***
	% rank unchanged	31.53%	27.97%	25.76%	31.47%***	41.53%***
	% rank fell (includes no longer in top three)	55.75%	58.56%	61.35%	48.01%***	43.95%***
<i>Wall Street Journal</i> Best on the Street Analysts	% rank rose	4.20%	5.81%	6.13%	5.41%	4.76%
	% rank unchanged	6.00%	5.30%	7.90%	6.23%	6.80%
	% rank fell (includes no longer in top three)	89.80%	88.89%	85.98%	88.36%	88.44%

Descriptions of the All-American and Best on the Street Analyst selection process are in the footnotes to Tables 3 and 4. *Institutional Investor's* All-Europe, Asia, Latin American and Japan Analysts are chosen by survey respondents with European, Asian, Latin American or Japanese equity assets under management. Transition percentages for the implementation period of Reg FD are in the shaded cells. (For the *Wall Street Journal* rankings, the 2001-2002 cells are shaded because they are based on stock recommendations made during the Reg FD implementation period of 2000 and 2001.)

\*\*\* p < 0.01, \*\* p < 0.05, \* p < 0.10, Chi-square test of difference in expected and observed proportion changing ranks. Expected proportions are the prior year's observed proportions with the exception of 2001-2002. For that matrix, the observed proportion of All-Americans is tested against both the observed proportion one and two years prior. Results using the two years prior expectation model are reported in the table so as to avoid confounding with the impact of Reg FD in the 2000-2001 matrix.

**Table 7**  
**Tests of Significant Turnover in Institutional Investor All-American Analysts**  
**Categorized by Likelihood of Private Guidance in Sector**

Sector Group		Transition Percentages				
		1998-99	1999-2000	2000-2001	2001-2002	2002-2003
All-American Analysts Covering Sectors in Which Private Guidance is Most Likely	% remained ranked	71.11%	73.96%	59.54%***	71.11%	75.00%
	% not matched	28.89%	26.04%	40.66%***	28.89%	25.00%
All-American Analysts Covering Sectors in Which Private Guidance is Least Likely	% remained ranked	73.33%	82.22%	74.36%	86.11%	74.38%
	% not matched	26.67%	17.78%	25.64%	13.89%	25.62%

A description of the All-American analyst selection process is in the footnote to Table 3. Transition percentages for the implementation period of Reg FD are in the shaded cells.

Analysts who do not are not ranked in the top three in the second year of a given transition matrix are referred to as "not matched".

\*\*\*  $p < 0.01$ , Chi-square test of difference in expected and observed proportion changing ranks. Expected proportions are the prior year's observed proportions with the exception of 2001-2002. For that matrix, the observed proportion of All-Americans is tested against the observed proportion two years prior. Sector groups are based on proprietary sector data from NIRI as reported in Hutton (2005). Specifically, we use Table 3 in Hutton (2005) to categorize Institutional Investor's sectors as "most likely", "somewhat likely" and "least likely" to have provided private guidance to analysts prior to Reg FD. We compare transition percentages for the two extreme categories, "most likely" and "least likely." The number of analysts ranked per year in the "most likely" category range from 84 to 96, and the number in the "least likely" category range from 33 to 45.