The Shine of Star: The Effect of Star Analyst Title on Market Reaction to Financial Analysts' Stock Recommendations

Siyu Chen
Department of Economics
National University of Singapore
chensynus1220@gmail.com

Runjing Lu
Department of Economics
University of California, San Diego
rul053@ucsd.edu

Abstract

This paper studies how the award-winning titles of financial analysts affect the market reaction to their recommending stocks using a regression discontinuity (RD) design and a novel dataset. We find that, right after the award ceremony, investors react positively to the stocks previously recommended by winners, but negatively to the stocks recommended by finalists who fall short of being winners (failed finalists). We provide suggestive evidence that informed traders may know the list of finalists and buy their recommending stocks in the week before the ceremony, but sell the stocks by failed finalists after the ceremony. We further show that both the initial negative reaction to failed finalists and the positive reaction to winners completely reverse back to zero within six weeks after the ceremony. However, the market continues reacting more positively to subsequent stocks recommended by winners within one year after the ceremony, though the effect is much smaller. The short-term overreaction to star title and the speculative tradings around the announcement indicate that the star analyst award is a new factor generating excessive volatility and inefficiency in the market.

Keywords: financial analyst, title effect, institutional investors

JEL classification: G14, G20, G24

1. INTRODUCTION

Sell-side financial analysts play a key role in collecting, interpreting, and disseminating company and market information to investors. Issuing "buy" and "sell" recommendations is an important part of an analyst's job and one of the most visible ways for them to express their opinions on the stocks and markets they cover. In an information market such as the one of financial analysts, since the product is ex-ante hard to evaluate, investors may reply on outside certification, such as award-wining status of an analyst, to infer the quality of his or her recommendations. In line with this argument, a large body of literature in finance and accounting have documented that investors react abnormally more to stock recommendations by award-winning financial analysts (hereafter "star analysts") than those by other analysts.[1]

However, precisely due to the correlation between analysts' quality and the star analyst title, it is empirically challenging to cleanly identify the impact of star analyst award per se on the market. In other words, whether and how much do investors react differently to observably similar stocks recommended by similar analysts who only differ in star analyst title? Answers to this question have implication for the role of star analyst award in the market. If there is no significant difference in the market reaction between the recommendations by the two groups of analysts, we may interpret that investors react mostly to the underlying quality of stock recommendations rather than the star analyst title regardless of the quality. Then, the star analyst award facilitates the price discovery process by identifying better financial analysts and attracting investors to these analysts' higher quality recommendations which duly reflect market fundamentals. In contrast, if significant difference exists, investors are reacting to the star title regardless of the quality of analysts' recommendations. Then, the star analyst award is a new factor generating short-term excessive volatility and

[1]For price reaction to stock recommendations see Stickel (1995); Leone and Wu (2007); Loh and Stulz (2011); Balakrishnan, Schrand, and Vashishtha (2011). For profitability of stock recommendations see Emery and Li (2009); Fang and Yasuda (2014); Kucheev, Ruiz, and Sorensson (2016).

inefficiency in the market, the role of which has not been documented and identified in previous literature. Such disturbing effect will be even larger in emerging financial markets, like the one in China, where analysts' recommendations are distorted by conflict of interests (O'brien, Mcnichols, and Lin 2005; Agrawal and Chen 2008), where the market is dominated by individual investors who are not sophisticated enough to distinguish informative recommendations versus biased analyst opinions (Jiang, Lu, and Zhu 2014), and where short-sales are restricted (Xiong 2013). The goal of this paper is to tackle the identification challenges and quantify the impact of star analyst award on the market.

The test bed for our analysis is the "Star Financial Analyst" ranking by *New Fortune* (N/F) magazine. This ranking is the most recognizable competition among sell-side financial analysts in China, and is very similar to "All American Financial Analyst" in the U.S. Each year, N/F magazine ranks participating analysts according to votes from institutional investors, privately notifies finalists around one week before the ceremony, and reveals ranked winners and finalists in a widely publicized ceremony in the end of November. From now on, the Saturday the week before ceremony is referred to as "notification day", the week between notification and ceremony is referred to as "notification week", the day of public ceremony is referred to as "ceremony day". The winners will experience increasing media coverage, special treatment from listed companies, and a huge pay rise of over half million. In contrast, analysts who are right below the announcement cutoff (hereafter "nobodies"), i.e., neither winners nor finalists, remain unknown to the public.[2] With the proprietary data on unpublished ranking and analysts' personal information from N/F magazine, we are able to exploit the quasi-random assignment of analysts' winning statuses right at the cutoffs and estimate the first quasi-experimental estimate of the effect of star title on the market reaction to stock recommendations.

Under the RD design, we compare the market reaction to stocks recommended by analysts

[2]The public can back out who enter the competition but do not make it to the finalist stage by comparing the list of participating analysts and the list of announced finalists.

above and below the announcement cutoffs. Since announced analysts can be either winners or finalists, there are two potential cutoffs — cutoff of winner and cutoff of finalist. Which cutoff matters more to the investors is an empirical question, and we will examine both in this paper. To lower the probability that analysts change stock recommending strategy after they know the award results, we focus on the latest stocks recommended by an analyst before notification day or before ceremony day, and examine the market reaction to the stocks after these information events.[3]

Our results show that star title does matter in the market, regardless of the quality of the analyst. Right after the ceremony, investors look back and react more to previously stocks recommended by winners. The 2-day CAR on the first trading day after the ceremony to the latest stocks recommended by analysts just above the cutoff of winner is 0.66% more than those just below, almost the same size as the baseline mean. One possible channel for this increase is "attention shock" channel proposed by Barber and Odean (2008). Retail investors who face time and attention limit in picking which stocks to purchase are net-buyers of attention-grabbing stocks. The high publicity of the star analyst award may induce retail investors to search and purchase winners' latest recommending stocks. The higher market reaction concentrates in stocks recommended by first-time winners and by female winners. In addition, we find that the average 2-day CAR during the notification week for stocks previously recommended by analysts above the cutoff of finalist is 0.5% more than those by analysts right below. However, the difference in 2-day CAR on the Monday after the ceremony flips to negative 0.6%, when the low-ranking finalists are revealed as losing the title of winner ("failed finalists"). A potential channel for this pattern of market reaction to stocks by failed finalist is "coordinating device" channel, empirically supported by Balakrishnan, Schrand, and Vashishtha (2011). In the notification week, brokerage houses and financial

[3]Papers like Emery and Li (2009), Fang and Yasuda (2009), and Fang and Yasuda (2014) provide evidence that analysts change strategies of recommending stocks after they are awarded. Since different cutoffs are revealed through different information events, we choose different stock sampling and outcome windows for each cutoff. We will further explain our choices later.

analysts may notify their connected traders of their finalist status. The informed traders can then buy in stocks by finalists ahead of time and sell stocks recommended by failed analysts once the actual ranking is revealed. We provide suggestive evidence that the higher CAR in the notification week and the lower CAR after the ceremony of stocks recommended by finalists are mostly driven by stocks recommended by analysts in brokerages with higher mutual fund trading commission.[4] The abnormal market reaction to winners and failed finalists of star analyst award completely reverses back to zero within six weeks from the ceremony. The abnormal reaction and the subsequent reversal confirms that the star analyst award indeed generates short-term excessive volatility and inefficiency in the market.

We also show that investors continue to react more to star analysts' stocks recommended within one year from the ceremony even after the initial over-reaction has already dissipated. Furthermore, the positive abnormal market reaction to winners' recommended stocks in the longer term is not justified by winners' higher ability, proxy by analyst's annual forecast error.

The paper directly adds to a large body of literature in finance and accounting on the relationship between the star title of analysts and the price reaction to their stock recommendations (Stickel 1995; Leone and Wu 2007; Loh and Stulz 2011; Balakrishnan, Schrand, and Vashishtha 2011), and the relationship between the star titles and the profitability of the recommendations (Emery and Li 2009; Fang and Yasuda 2014; Kucheev, Ruiz, and Sorensson 2016). Most papers consider winning award in a certain year as an annual treatment and compare various performance of star analysts with all other non-star analysts in the year after the award, controlling for as many observables as possible or using various fixed effects. Their underlying assumptions are that winning the award is exogenous and is not correlated with time-varying unobservables. In contrast, we bypass these assumptions

[4] Mutual funds are primary institutional investors in China (Firth, Lin, and Zou 2010). Trading commissions on average constitutes about half of a brokerage firm's operating income. Mutual funds can thus exert substantial influence over brokerages and brokerages have incentive to curry favor their connected mutual funds (Gu, Li, and Yang 2012; Firth, Lin, Liu, and Xuan 2013).

and employ an RD design with a focus on the market reaction immediately after the award announcement to stocks recommended before the announcement. This paper thus provides the first quasi-experimental estimates of how star title affects short-term market reaction to stock recommendations.

This paper contributes to the literature on the factors causing instability and inefficiency in the financial market. Biases in information transmission between investors and financial intermediaries can lead to bubbles and crises in the market. Naïve investors may not recognize distortions in analysts' recommendations and follow whichever analysts with better titles. Meanwhile, sophisticated investors who can recognize the distortions and discount the recommendations may take advantage of the naïve ones through speculation (Malmendier and Shantikumar 2007), which contributes to the instability of the market. The star analyst award induces speculative tradings and is a new factor amplifying the disturbing effect of biased information transmission, and causing excessive volatility and inefficiency. Our paper is the first to identify this role of star analyst award in the market.

This paper also speaks to a broader class of economics literature on the effect of title in various contexts. In the school accountability literature, information on school ranking may affect children's school choices and their performance in school (Hastings and Weinstein 2008; Andrabi et al. 2007; Camargo et al. 2017; Mizala and Urquiola 2013). In the restaurant setting, information on restaurant ranking (Luca 2016), dish ranking (Cai et al. 2009) and hygiene report cards (Jin and Leslie 2003) can change customers' patronizing behaviors. In the academic setting, scientists selected to be Howard Hughes Medical Institute Investigator see an increase in the citation of their previous papers (Asoulay et al. 2013). However, the stock market is a different context than the above to study the title effect. First, investment decisions in the financial market are high-stake compared to consumption decisions in most other contexts. Second, the financial market is built upon beliefs. Investors may follow the recommendations by star analysts, not because they think the recommendation matches fundamentals, but because they believe that other investors will do the same

(higher-order beliefs), and they'd better follow first and gain from later price momentum. Such "coordinating device" channel rarely exists in other contexts studying the title effect.[5]

Taken together, this paper quantifies the impact of the star analyst award on the market. Given the short-term overreaction to star titles and the potential speculative behaviors of sophisticated traders during the award period, the star analyst award is a potential new factor generating excessive volatility and inefficiency in the market.

2. BACKGROUND AND DATA

2.1. "Star Financial Analyst" Competition

The "Star Financial Analyst" ranking competition by N/F magazine is the earliest and the most recognizable competition among sell-side financial analysts in China. Starting from 2003, N/F magazine has ranked and publicized top financial analysts in each industry each year.

The time line of the annual competition is summarized in Figure 1. Each year around August, large institutional investors, such as mutual fund managers managing over a certain amount of fund, register to be voters for the competition. In September, individual analysts (or teams) apply to be candidates for certain industries for that year. In mid- to late-October, registered institutional investors rank top five financial analysts (or teams) from a list of candidates for each industry.[6] For a given voter and N/F industry, the analyst that he or she ranks first in the industry gets five vote counts, second gets four vote counts, ..., and fifth gets one vote count. All the vote counts are then weighted by the amount of

[5] Balakrishnan, Schrand, and Vashishtha (2011) provide evidence that analyst recommendations influence traders' higher-order beliefs, and that stock downgrades by all-star analysts appear to be coordinating event leading investors' trading strategies to become common knowledge and induce the dot-com crash in 1999/2000.

[6] In practice, there are two types of industries, one with more than 20 candidates, and the other with fewer than 20 (the number of candidates in these industries is usually lower than 15). For the larger industries, voters rank top five analysts, and N/F magazine announces top five winners and top seven finalists. For smaller industries, voters rank top three analysts, and N/F announces top three winners and top five finalists. We focus on the larger industries in this paper, because investors pay more attention to these industries and star titles.

fund the voter is managing.[7] N/F magazine sums up all the weighted vote counts that an analyst (or team) gets in a certain industry, and rank the analysts (or teams) by their total vote counts from top to bottom in each industry. In about one week before the ceremony, namely the notification week, N/F magazine privately informs analysts who are finalists without revealing the their actual rankings.[8] In late November or early December, always a Friday or a Saturday afternoon, N/F magazine announces the actual ranking and total vote counts for top seven finalists to the public and gives physical award to the top five winners in a widely publicized award ceremony. In contrast, analysts who are right below the announcement cutoff remain unknown to the general public.[9] From now on, we refer to top seven analysts as finalists, top five analysts as winners, sixth to seventh analysts as failed finalists, and analysts below seventh as nobodies.

2.2. Data Sources

The first data comes from N/F magazine. N/F magazine provides us with proprietary data for top 15 financial analysts (or teams) in each N/F industry from 2005 to 2014. The data contains information on the year of the competition, the industry and brokerage firm the analyst (or team) works for, the vote count and ranking the analyst (or team) gets, as well as demographic information, such as the analyst' name, gender, highest academic degree, and work history up till the point when he or she last submitted application to N/F.

The second dataset we use is the China Stock Market Accounting Research (CSMAR) database, which is widely used in research on the Chinese financial market. CSMAR contains almost all publicly available Chinese analyst reports.[10] Both institutional investors and retail

[7]The voting scheme only changes slightly from year to year, and we use year fixed effects to control for these changes.

[8]The general retail investors do not have access to this information. We search on major financial websites in China, and do not find public articles on the finalist name list for "Best financial analyst" award before the day of ceremony during 2005-2014. The N/F magazine does not keep track of the exact day of notice, but they say the notification is usually within one week before the award ceremony. And the magazine specifically asks the notified brokerages and analysts not to give out the information of finalists.

[9]In theory, investors can back out analysts who are N/F candidates but are not finalists by comping the list of candidates and finalists.

[10]98% of the analysts in the final sample have recorded recommendations in CSMAR during the same

investors are able to gain access to the recommendation reports studied here. We obtain all stock recommendations on A share companies listed on the Shanghai Stock Exchange and the Shenzhen Stock Exchange from 2005 to 2014. Each stock recommendation consists of a unique report ID, names of the analysts, the brokerage firm the analysts work for, the date of issuance, stock ID, rating of the stock, and the expiration date of the rating. The rating is standardized to a five-point scale: strong sell=1, sell=2, neutral=3, buy=4, and strong buy=5. We also extract daily stock price, daily and monthly stock returns with reinvestment of cash dividends, quarterly market values and annual book values of listed companies from CSMAR.

The third dataset is the work history of N/F candidates that we manually compiled from various online sources. We extract data from resumes of licensed analysts posted on the Security Association of China (SAC) (`http://www.sac.net.cn/xxgs/cyryxxgs`), home pages of brokerage firms, personal web pages of the analysts, and online resume sites for financial industry, such as *Golden Compass* (`http://stock.sohu.com/s2011/jlp`) and *Ifeng Finance* (`http://star.finance.ifeng.com`). These data are publicly available, and subject to verification from SAC, brokerage firms, analysts and the public. This information supplements the work history provided by N/F magazine.

The forth dataset is Choice Financial Terminal (Choice). Choice compiles information from mandatory filings of brokerage firms and mutual fund companies in China as mandated by the China Securities Regulatory commissions (CSRC). We obtain the semi-annual/annual amount and composition of revenue for each brokerage house, the total amount of stock trading commissions payments to each brokerage, the distribution of the commissions among brokerages, and the stock holdings of each mutual fund.

year of competition. And the probability of analysts having recommendations recorded in CSMAR changes smoothly across the cutoff of winner and finalist.

2.3. Sample Construction

First, we split the N/F ranking data from team level to analyst level and CSMAR stock recommendation data from report level to analyst level.[11] We then assign each N/F candidate a unique ID using information on demographic and work history from N/F magazine and from online sources. We cannot distinguish two analysts who share the same name and who work in the same brokerage firm at the same time, so we assume them to be the same person following Cohen et al. (2010). With this unique analyst id, we can merge analysts' N/F vote counts and rankings to their stock recommendations in CSMAR.[12] Over 98% of N/F candidates in our sample are matched with their outcomes in the CMSAR.

Next, we follow Loh and Stulz (2011) and Daniel et al. (1997) to calculate two-day cumulative abnormal return (CAR) for the recommended stocks. To avoid confounding factors brought by stock suspensions, we treat the value of CAR as missing from one day before to one day after the suspension period. We take the opposite sign of a stock's CAR on a certain day if the rating in the recommendation is less than or equal to neutral.[13] A positive CAR for a stock on a certain day implies that the performance of that stock cannot be replicated by a portfolio of stocks with the same market value, book-to-market ratio, and momentum on that day. In other words, the market responds abnormally more to this stock.

We have three regression samples in this paper. The first one is constructed to study the immediate effect of star titles on market reaction at the cutoff of winner. We examine the two-day CAR on the first trading day (Monday) after the ceremony of the latest stocks recommended by the analysts within 1-30 days before the ceremony. Our second sample is used to identify the immediate market effect at the cutoff of finalist. Since finalists are privately informed of their status around one week before the ceremony, analysts above and below the cutoff of finalist may change recommendation behaviors discontinuously given the

[11]When splitting the N/F ranking data, we assign the same rank to all analysts in one N/F team, under the assumption that investors perceive analysts on the same N/F team as having equal ability.

[12]If an analyst participates in more than one N/F industry competition in a certain year, we only keep his or her main industry in which they issue the most stock recommendations during the year of the competition.

[13]More detailed construction of CAR is in the appendix.

information.[14] To alleviate this concern, we focus on latest stocks recommended by analysts within 1-30 days before the notification day, i.e., the Saturday strictly before ceremony. Because not all analysts issue recommendations during this period, and not all recommended stocks have valid CAR on the day we examine, 41% and 33% of observations (or 27% and 21% of unique analysts) are dropped from the sample for the cutoff of winner and the sample for the cutoff of finalist. This selection will not invalidate our RD design, as long as analysts are dropped almost randomly around the cutoffs. Table A1 in the appendix show that there is no significant discontinuity in the probability of being dropped at either cutoff and no significant difference in observable between the dropped and the remaining sample. The selection is mainly due to analysts issuing reports at different frequency in the study period (the number of annual reports in remaining v.s. dropped group is 68 v.s. 53). After selection, we end up with 1,157 uniquely identified analysts issuing 1,927 recommendations for 717 stocks from 41 brokerage firms and across 27 N/F industries in the sample for the cutoff of winner, and 1,252 uniquely identified analysts issuing 2,337 recommendations for 769 stocks from 42 brokerage firms and across 27 N/F industries in the sample for the cutoff of finalist.

The third sample is used to study market reaction to subsequent stock recommendations issued in varying periods after the ceremony. We consider two-day CAR on the issuance date of each stock recommendation. We only keep a recommendation if its authors either do not enter N/F ranking competition or win the same ranking in the same N/F industry in a certain year, so that one stock recommendation is assigned with only one ranking.4% of stock recommendations are dropped, because one recommendation may be written by multiple analysts who won different rankings in the previous year. After selection, the sample contains 60,975 stock recommendations issued by 1,559 unique analyst groups from 45 brokerage firms and across 26 N/F industries.

[14]This is not a problem at the cutoff of winner, because failed finalists and successful winners cannot tell each other apart; even if there is strategical change, the change should not be discontinuous at the cutoff. We will formally test this claim in RD robustness section.

2.4. Descriptive Statistics

Table 1 presents the descriptive statistics for our three regression samples: panel A is for the main RD sample for cutoff of 5 (winners), including the latest one recommended stocks issued within 1-30 days before the award; panel B is for the main RD sample for cutoff 7 (finalists), including the latest one stocks recommended within 1-30 days before the notification, that is, 8-37 days from the ceremony; panel C is for the RD sample, including subsequent stock recommendations issued after the award. The first two samples are at the analyst-stock-date level, and the third one is at group-stock-date level.

It is worth noting that the majority of rating in recommendations are buy and strong buy in our sample (mean rating ≥ 4). The lack of lower ratings and rating change is mainly due to the tension between analysts, listed firms, and institutional investors, amplified by the existence of short-sale constraints in China. In this study, we take all stock recommendations as events, including reiterations of the same rating. The notion that even reiteration of same recommendation can generate market reaction is supported both theoretically by Dontoh, Ronen, and Sarath (2003) and empirically by Chen, Jung and Ronen (2016) with U.S. data. The rationale is that a reiteration constitutes a confirmation of the past recommendation, serving to resolve some information uncertainty surrounding the value of the stock. Moreover, even recommendation rating is the same, the report may include new information such as industry news and management forecasts.[15]

3. IMMEDIATE MARKET REACTION

3.1. Empirical Strategy

In this section, we use an RD design to examine whether the title of star analyst influences market reaction to one's previously recommended stocks right after the announcement events.

[15]Nonetheless, there is argument that stock prices should impound the information content of the news upon first revelation and will not react to repeated news, under efficient market assumption. Past studies like Francis and Soffer (1997), and Asquith, Mikhail, and Au (2005) show that reiterations of recommendations are not associated with market reactions after controlling for changes in recommendations and revisions in earnings forecasts.

The analyst-stock-date level regression equation is as follows:

$$CAR_{stibjy} = \beta_1 Win_{ijy} + \beta_2 Win_{ijy} f(X_{ijy}) + \beta_3 f(X_{ijy}) + \gamma_1 DayToAnnounce_{sti} + \alpha_y + \alpha_b + \alpha_j + \alpha_{j_s} + \epsilon_{stibjy} \quad (1)$$

When we examine the effect at the cutoff of winner, the announcement event is defined as the public ceremony that hands out physical awards to the top five winners. The latest stocks recommended within 1-30 days before the ceremony are included in the analysis. CAR_{stibjy} is the two-day CAR on the Monday after the ceremony of stock s recommended on date t by analyst i from brokerage b participating in N/F industry j in year y. $DayToAnnounce_{sti}$ is the number of days from the recommendation date to the ceremony date, which controls for the recency of the recommendation. Win_{ijy} equals one if the analyst is a top five winner. X_{ijy} is the share of the analyst's votes divided by the sum of votes from all analysts participating in a certain N/F industry in a certain year, and is normalized to zero at the threshold of winner (*vote share*).[16] $f(.)$ is a function of first order polynomial. We allow different slopes on either side of the discontinuity by including the interaction between $f(.)$ and Win. α_y, α_b, α_j and α_{j_s} represent year, brokerage, N/F industry and stock industry fixed effects, respectively. ϵ_{stibjy} is the error term. The regression is estimated using local linear with triangular weights and IK bandwidths. All standard errors are clustered at the brokerage level.

Since N/F magazine privately notifies finalists of their status in the notification week, and then reveals whether the finalists are actual winners in the ceremony, when we examine the effect at the cutoff of finalist, we have two announcement events — the notification (assumed to be Saturday before the ceremony) and the ceremony[17]. The latest stocks recommended

[16] We use vote share as the running variable, because it is continuous at the cutoff and is easy to interpret. We tried other running variables, such as rank, and results are available upon request.

[17] N/F magazine did not record the exact date of notification, but they confirmed that all notification occurred within one week before the ceremony. Therefore, we pick the earliest day to avoid contamination from analysts' behavioral changes after they receive the notification.

within 1-30 days from the notification are included in the analysis. CAR_{stibjy} is either the average 2-day CAR on Monday through Thursday during the notification week or the 2-day CAR on the next Monday after the ceremony[18]. $DayToAnnounce_{sti}$ is the number of days from the recommendation date to the notification date. Win_{ijy} equals one if the analyst is a top seven finalist and X_{ijy} is normalized to zero at the threshold of finalist. All other specifications are the same as those for winner.

β_1 is the coefficient of interest which measures the extra market reaction right after the announcement events to the stocks previously recommended by the analysts just above the cutoff of winners (or finalists) than those just below. The identifying assumption is that an analyst's winning status around the cutoffs is quasi-randomly assigned, so the analysts around the cutoffs should be similar except that one side wins whereas the other side losses. We further examine the validity of RD design in the following section.

3.2. Validity of RD Design

In this section, we test the identifying assumptions of our RD design. We first show that there is no significant difference in market reaction to stocks recommended by analysts right above and below the cutoffs on the day when they first issued the recommendations. We then provide evidence that the baseline characteristics of analysts, the stocks they recommend, and the brokerage houses they work for do not exhibit significant discontinuity at the cutoffs, either.[19]

Figure 2 displays the RD graphs using the 2-day CAR on the actual recommendation issuance day, which is before the ceremony day or before the notification day. The slope of the market reaction tilts slightly upward, implying that the higher vote share indeed reflects higher market attention and reaction to the analysts' recommending stocks. Importantly, there is no discontinuous jump at either the cutoff of winner nor finalist. The market did not

[18]We do not know the exact day of notification, so we stack 2-day CAR on each day from Monday to Thursday in the notification week, and let regression take average.

[19]The analysts examined here are those in our RD regression samples.

react differently to analysts across the cutoffs before the information of award is released. Table 2 reports the corresponding regression results. The small and insignificant coefficient on Win dummy in column (1) confirms the findings from the RD graphs.

We further examine (1) the baseline characteristics of analysts, such as gender, education, experience and whether passing the cutoffs last year; and (2) the weighted average of the characteristics of stocks recommended in the year prior to the award, such as market capitalization, beta, and P/E ratio. All characteristics change smoothly across the cutoffs. Regression results are in Table 2.

It is possible that bribing occurs at the brokerage level rather than at the analyst level. If a brokerage always bribes to be above the cutoffs in a certain industry but the analysts it sends to the competition are similar in observables to other analysts, the above test will not pick up the manipulation. If the brokerage manipulation does exist, the number of distinct brokerages per rank×industry across years should drop abruptly as we move from the losing side to the winning side of a cutoff. Table 3 column (1) suggests that no significant discontinuity exists in the diversity of brokerages around the cutoffs. We also test other brokerage level characteristics in Table 3 column (2)-(8), such as whether the brokerage has analysts passing the cutoff in the same industry in the previous year. None of the tested observables change discontinuously across either cutoff.

3.3. Effect at the cutoff of winner

We now move on to discuss the effect at the cutoff of winner. Figure 3 displays the market reaction on the Monday after the ceremony to the latest one stocks recommended by analysts just above and below the cutoff of winner within 1-30 days before the ceremony, controlling for year fixed effects. CAR on the next Monday of the stocks recommended by analysts right above the cutoff is higher than those right below. Table 4 reports the regression results. Our preferred specification in column (3) shows that the CAR on the next Monday of stocks recommended by analysts right above the cutoff of winner is 0.66% more than those by analysts right below, which is about 1.2 times of the baseline mean. The estimates fluctuate

only slightly when we include more fixed effects and when we change the bandwidths. Note that we only include the latest one stocks recommended within 1-30 days before the ceremony in the sample, because investors might not look back to all stock recommendations by an analyst due to time and attention limit. Nonetheless, we report regression results for the sample consisting of all stocks and the latest seven stocks recommended within 1-30 days before the ceremony in Table A3. The RD estimates for the two samples are marginally insignificant, which is consistent with the hypothesis that investors not being able to follow all previous stocks. From now on, we will focus only on the sample consisting the latest one stocks recommended by an analysts.

One point worth mentioning is that both successful winners and failed finalists do not know which category they belong to until the day of ceremony, even though they receive private notification of their finalist status from N/F magazine in the notification week. Therefore, even if analysts change their recommendation strategy after the notification, which may contribute to abnormal return on the Monday after the ceremony, the changes in strategy should not be discontinuous at the cutoff of winner. We formally test this claim in Table A4. Column (1) and (2) show that analysts just above the cutoff of winner are no more likely to issue recommendations in the notification week than those just below, and they are no more likely to initiate new stock coverage conditional on issuing recommendations in the notification week. The insignificant interaction terms in column (3)-(7) also suggest no differential change at the cutoff of winner in the types of stocks recommended in the notification week versus 8-60 days before the ceremony.

We also test whether the market reacts differently to stocks by analysts above the cutoff of winner than those below in the notification week. Table A5 shows that no significant discontinuity exists at the cutoff of winner using the average of 2-day CARs on Monday through Thursday in the notification week as outcomes.

3.4. Effect at the cutoff of finalist

We now discuss the effect at the cutoff of finalist. Due to the difference in the time of notification and ceremony, we use market reaction at different times to measure the effect — the average of 2-day CARs on Monday through Thursday in the notification week and the 2-day CAR on the Monday after the ceremony. We focus on only the latest one stocks recommended in 1-30 days before the notification to alleviate the concerns that notified analysts change recommending behavior in the notification week. Figure 4 panel A displays the average of market reaction in the notification week, and panel B displays the market reaction on the Monday after the ceremony for stocks recommended by analysts just above and below the cutoff of finalist, controlling for year fixed effects. Panel A shows that the stocks recommended by analysts right above the cutoff of finalist has significantly higher average 2-day CAR than those below the cutoff in the notification week. However, panel B shows that the discontinuity flips its sign on the Monday after the ceremony. The corresponding regression results in Table 5 confirms the above pattern. In Table 5 column (3), the average 2-day CAR in the notification week of stocks recommended by mere finalists is around 0.51% higher than those by mere nobodies, which is about 1.05 times of the baseline mean. In contrast, column (3) in Panel B shows that the 2-day CAR on the Monday after the ceremony of stocks recommended by analysts above the cutoff is 1.03% lower than those by those below. The market adjusts down over half of its reaction in the notification week on the day right after the ceremony (50%=1.03%(0.51%*×4)).[20]

The above findings naturally leads to two questions. First, how does the information of finalist leak to the market and which investors contribute to the excessive market reaction to finalists' stocks in the notification week?[21] Second, what contributes to the negative market reaction to stocks recommended by finalists right above the cutoff versus those right below after the ceremony?

[20]Note that we stack 2-day CAR on each day from Monday to Thursday as the outcome and let regression do the average job in Panel A. Therefore, the sample size in Panel A is larger than that in Panel B.

[21]N/F magazine specifically asks the privately notified analysts not to disclose the information to others.

Regarding the first question, notified analysts and brokerages may leak the information to related market participants, especially institutional investors like mutual funds who contribute both trading commissions and votes to the brokerages.[22] The incentive to leak the information should be larger when the importance of trading commissions as a source of income increases.[23] We thus split brokerages by the percentage of annual trading commissions from mutual funds over the total operating income into above- and below-median groups. We then use average 2-day CAR in the notification week as outcome and repeat regression (1) separately for stocks recommended by analysts in the above-median brokerages and those in the below-median ones. Results from Table 6 column (1)-(2) support our hypothesis. The market reaction in the notification week is mainly driven by stocks recommended by analysts in the above-median brokerages[24].

To answer the second question, we use the 2-day CAR on the Monday after the ceremony as outcome and run regression (1) for above- and below-median groups separately. Table 6 column (3) and (4) show that the point estimate for the above-median brokerages is larger than that for the below-median ones, but we lack precision for the former and we cannot statistically distinguish the coefficient in column (3) from that in (4). Various stories may explain the results here. One possibility is that investors take failed finalists as bad news and sell their recommending stocks, because these analysts are emphasized as not getting the winner title. Another possibility is that informed investors sell failed finalists' recommending stocks that they bought in the notification week, when the investors find out these analysts are not winners.

[22]Analysts may tip their institution clients prior to releasing reports. Irvine, Lipson, and Puckett (2007) document abnormally high institutional buying beginning five days before recommendations are publicly released, and abnormal profits associated with such buying. Busse, Green, and Jegadeesh (2012) also find that institutions are significant net sellers over the five-day period prior to downgrades.

[23]This hypothesis is consistent with Cowen, Groysberg, and Healy (2006) showing that analysts' reports are more overoptimistic in brokerage houses relying more on trading commission.

[24]The coefficient in column (1) is not statistically different from that in column (2).

3.5. Heterogeneity Effect

In this section, we split the sample by whether analysts are first-time winners and whether analysts are female. As shown in Table 7 and Table 8, the effect at both cutoffs is mostly driven by first-time winners rather than repeated winners, and by female analysts rather than male analysts (though we do not have enough power to statistically distinguish the effect in different samples). We speculate that the attention shock for retail investors for fist-time winners is larger so the increase in market reaction to winners' stocks on the next Monday is larger. In addition, first-time winners may value their winning and votes from institutional investors more than repeated winners, and thus more likely to notify institutional investors ahead of time. Therefore, the increase and subsequent decrease in the market reaction to first-time finalists' stocks is also larger than their repeated counterparts.

3.6. Robustness Checks

It is possible that two analysts with different ranks, or even different winning statuses, cover the same latest stock. Then, we will assign different right-hand side variables to the same outcome. However, as long as the stock coverage across ranks and winning statuses does not perfectly overlap, we can still identify the difference in weighted average of CAR for stocks recommended by different groups. In Table A6 and A7, we drop stocks recommended by more than one analysts as their latest stocks, drop stocks that are recommended by non-N/F candidates on the Saturday through Tuesday after ceremony, or drop stocks recommended by other analysts on the Saturday through Tuesday after notification. The RD estimates at the cutoff of winner becomes even larger and remains significant. The RD estimates at the cutoff of finalist also remain largely similar to the original ones, except that the estimate using average CAR in notification week as outcome and dropping overlapped stocks decreases a little and becomes insignificant.

Since the cutoff of winner and the cutoff of finalist are close to each other, the effect estimated at either cutoff is a comparison between all three groups, i.e., successful winners, failed finalists, and nobodies, rather than a comparison between only two groups. Figure A1

overlays the percentage of failed finalists in each of 10 bins on the left of the cutoff when we estimate the effect at the cutoff of winner, and on the right when we estimate the effect at the cutoff of finalist. The pattern of CAR does not seem to be driven by uneven distribution of failed finalist across vote share.[25]

4. DYNAMICS OF MARKET REACTION AROUND THE AWARD PERIOD

So far, we have examined how the market reacts to the information of winners and finalists immediately after the information is revealed. Now, we will discuss how the market reaction fluctuates in a longer period before and after the revelation of the information. we face the common challenge of having greater noise in long-horizon returns, which reduces the power of statistical tests. Nevertheless, we present in Figure 5 the time series plot of average CAR of stocks recommended by different groups of analysts starting from the Monday two weeks before the ceremony to the Friday six weeks after. The sample used in panel A and B is the same RD sample used to estimate the effect at the cutoff of winner and at the cutoff of finalist, respectively.

Figure 5 panel A shows that the CAR of both stocks recommended by analysts above and by those below the cutoff of winner stays close to zero in the first week, when no information on the ranking is revealed. The CAR for both groups starts taking off in the middle of the notification week, when the information of finalists is privately revealed to part of the market. Since only informed traders, most likely sophisticated institutional investors, can trade on the private information of finalist, the increase in CAR in this week hints at the coordinating device channel of title effect. The informed investors may strategically buy stocks recommended by all finalists to profit from the anticipated positive market reaction to winners' stocks after the ceremony. One point worth mentioning is that no discernible difference exists between the CAR of stocks recommended by the two groups of analysts in

[25]Due to small sample size, restricting rank to be above 7 when estimating the effect at the cutoff of winner, and restricting rank be below 6 when estimating the effect at the cutoff of finalist both lead to imprecise estimates.

the first two weeks. This pattern is consistent with the fact that notified analysts do not know whether they are successful winners or failed finalists yet.

The CAR of stocks recommended by analysts above the cutoff of winner increases sharply on the Monday after the ceremony and gradually decreases to zero after six weeks. The pattern of CAR suggests that though investors may look back to the winners' previous recommendations, they do not digest more information in these recommendations and thus no new information enters the market. In contrast, the CAR of stocks recommended by analysts below the cutoff of winner decreases sharply after the ceremony, but converges back to zero within six weeks. The immediate decrease in CAR speaks to the coordinating device channel of title effect. Informed traders may sell the stocks recommended by failed finalists after the actual ranking is revealed. The reversal of CAR further suggests that the negative market reaction to stocks recommended by these analysts is not due to fundamental reasons.

Figure 5 panel B shows that the CAR of stocks recommended by analysts above the cutoff of finalist shows similar pattern as that in panel A. The CAR of stocks recommended by analysts below the cutoff stays close to zero in the first week, decreases in the notification week, and converges to zero afterwards. Since the list of analysts who did not make it to the finalist stage is not announced privately or publicly, the decrease in CAR of their recommending stocks is likely to be a byproduct of informed traders' speculative trading on the information of finalist[26]. The CAR of stocks recommended by analysts below the cutoff does not continue to decrease and converges to zero after the ceremony, which further supports that the decrease in CAR is mostly driven by informed traders. One possible explanation for informed traders' selling behavior is that they need money from selling other stocks to perform the speculative trading. Another explanation is that informed traders change their perception of losing analysts and thus sell their recommending stocks.[27]

[26]In theory, institutional investors who are also registered voters of the N/F competition have access to the list of all N/F candidates and thus can back out who are the analysts that are not finalists.

[27]Nearly 77% covered firms have issued firm news, which may help explain the reversal of stock price to fundamentals of the firms.

We formalize the dynamics of market reaction by estimating regression (1) with 1-day AR on the Monday two weeks before the ceremony to 1-day AR on the Friday six weeks after the ceremony[28]. The coefficients on Win dummy and their 95% confidence intervals are plotted in Figure 6. Overall, the pattern of RD estimates corresponds well with the time series plot of CAR.

5. LONG-TERM MARKET REACTION AND ANALYST PERFORMANCE

5.1. Empirical Strategy

In the previous sections, we have shown that market does react more to above-cutoff analysts' previously recommended stocks in the short-run. A natural question that follows is whether the market reacts more to their subsequent recommending stocks long time after the ceremony. To answer these questions, we run the following regression:

$$Y_{stgbjy} = \beta_1 Win_{gjy} + \beta_2 Win_{gjy} f(X_{gjy}) + \beta_3 f(X_{gjy}) + \alpha_y + \alpha_m + \alpha_{dow} + \alpha_{js} +_g + \alpha_b + \alpha_j + \epsilon_{stgbjy} \quad (2)$$

where Y_{stgbjy} is the two-day CAR on date t for stock s in stock industry j_s recommended on date t by analyst group g from brokerage b participating in N/F industry j in year y[29] This analysis is conducted at the group-recommendation-date level. Win_{gjy} is one if at least one analyst in the group is a top five winner or top seven finalist, depending on whether we examine the cutoff of winner or finalist, and zero otherwise. α_y, α_m, α_{dow}, α_g, α_b, α_j and α_{js} represent year, month, day-of-week, analyst group, brokerage, N/F industry and stock industry FE, respectively. All the others are similar to regression (1). β_1 is the coefficient of interest, which measures the extra market reaction to the stock recommendations issued after the ceremony by analysts above the cutoffs than those below.We cannot claim that

[28]Due to small sample size, the estimate on different days are not statistically different from each other

[29]If the recommendation date is not a trading day, then we assign two-day CAR on the next trading day to that recommendation.

the extra market reaction here stems only from analysts' star titles, because endogenous behavioral changes may occur among all market participants once the award is revealed.

To test whether analysts improve their forecast ability after wining awards, we replace the dependent variable with $Forecast\ Error_{gjy}$, namely, the average forecast error for the latest earning forecasts for each stock covered by an analyst group g from brokerage b participating in N/F industry j in the year following the ceremony[30]. All other specifications are the same as above.

5.2. Results

Table 9 panel A column (1) shows that the 2-day CAR is 1.3% more for stock recommendations within 0-30 days after the ceremony by analysts just above the cutoff of winner than by those just below, though imprecisely estimated due to small sample size. As we extend the analysis period to 0-365 days after the ceremony, the magnitude of estimates decreases to 0.25% but the level of significance increases due to larger sample size[31]. The market does react more to stocks recommended by winners long after the ceremony. However, such higher market reaction is not justified by winners' higher research quality, which is proxy by the average forecast error in the year after the ceremony (Table 10 panel A). Table 9 panel B columns (1)-(6) show that the negative reaction to stocks recommended by failed finalists disappears or even reverse as time progresses. The estimates at the cutoff of finalist change from around -2% to 0.15% as the time extends from 0-30 days to 0-365 days after the ceremony.

Table 9 column (7) includes only stocks recommended after the market completely reverses its initial overreaction to the title of winners and finalists as shown in Figure 5[32]. Even after the complete reversal, the 2-d CAR to stocks by winners is still 0.28% higher

[30]The detailed construction of forecast error is in Appendix A2.

[31]The estimates here are larger than those in Table 4, because we examine the market reaction on the day of recommendation issuance rather than several days later. The effect here contains both reaction to fundamentals and to title.

[32]It takes the market about six to eight trading weeks, namely one and a half to two months to correct the overreaction. Thus, we focus on the period during 60-365 days after the ceremony.

than those by failed finalists. Such higher market reaction is again not justified by better forecast ability (Table 10 panel A column 7). Although failed finalists perform slightly better in forecast accuracy than losers (Table 10 panel B column 7), the market does not react more to their stock recommendations (Table 9 column 7). These findings suggest that the market does not learn its lesson even after the reversal of initial overreaction.

6. Discussions and Conclusions

This paper quantifies the impact of star analyst award per se on the market and identifies a new role of star analyst award generating excessive volatility and inefficiency in the market. We show that, right after the award ceremony, investors look back and react to the winners' latest recommendations issued before the ceremony. We also find that market reacts positively to stocks recommended by finalists during the notification week but negatively to those by failed finalist after the ceremony. We provide suggestive evidence that part of the market, most likely brokerage firms' related institutional investors, buy stocks recommended by finalists in the week before the announcement. The initial abnormal reaction completely reverses back to zero within six weeks after the ceremony, but the market continues reacting more to subsequent stock recommendations issued by winners after the ceremony, but the effect decreases as time goes by. However, winners do not seem to improve their research quality as proxy by average forecast error in the year after the ceremony.

Moving forward, we plan to investigate the trading behaviors of institutional investors and retail investors around the award announcement period. This exercise can examine the difference in reaction and in the timing of reaction between sophisticated investors, like institutional investors, and retail investors.

Taken together, this paper shows that award title does matter in the stock market. Given the short-term overreaction to star titles and the speculative behaviors of some informed traders during the award period, regulators need to stress the importance of recommendations quality and guide retail investors in how to follow recommendations. Such regulation

and guidance are especially important in emerging financial markets (like China) where most retail investors have low level of financial literacy.

References

[1] Agrawal, Anup, and Mark A. Chen. "Do analyst conflicts matter? Evidence from stock recommendations." The journal of Law and Economics 51, no. 3 (2008): 503-537.

[2] Andrabi, Tahir, Jishnu Das, Asim Ijaz Khwaja, Tara Vishwanath, and Tristan Zajonc. "Learning and Educational Achievements in Punjab Schools (LEAPS): Insights to inform the education policy debate." World Bank, Washington, DC (2007).

[3] Asquith, Paul, Michael B. Mikhail, and Andrea S. Au. "Information content of equity analyst reports." Journal of financial economics 75, no. 2 (2005): 245-282.

[4] Azoulay, Pierre, Toby Stuart, and Yanbo Wang. "Matthew: Effect or fable?." Management Science 60, no. 1 (2013): 92-109.

[5] Balakrishnan, Karthik, Catherine Schrand, and Rahul Vashishtha. "Analyst recommendations and higher order beliefs: Explaining bubbles and price drift." Available at SSRN (2011).

[6] Busse, Jeffrey A., T. Clifton Green, and Narasimhan Jegadeesh. "Buy-side trades and sell-side recommendations: Interactions and information content." Journal of Financial Markets 15, no. 2 (2012): 207-232.

[7] Camargo, Braz, Rafael Camelo, Sergio Firpo, and Vladimir Ponczek. "Information, Market Incentives, and Student Performance: Evidence from a Regression Discontinuity Design in Brazil." Journal of Human Resources (2017): 0115-6868R1.

[8] Cai, Hongbin, Yuyu Chen, and Hanming Fang. "Observational learning: Evidence from a randomized natural field experiment." The American Economic Review 99, no. 3 (2009): 864-882.

[9] Chan, Louis KC, Jason Karceski, and Josef Lakonishok. "Analysts' conflicts of interest and biases in earnings forecasts." Journal of Financial and Quantitative Analysis 42, no. 4 (2007): 893-913.

[10] Chen, Jing, Michael J. Jung, and Joshua Ronen. "The Confirmation Effect of Analyst Recommendation Reiterations." Journal of Accounting, Auditing Finance (2016): 0148558X16662577.

[11] Christensen, Hans Bonde, Eric Floyd, Lisa Yao Liu, and Mark G. Maffett. "The real effects of mandated information on social responsibility in financial reports: Evidence from mine-safety records." (2016).

[12] Cohen, Lauren, Andrea Frazzini, and Christopher Malloy. "Sell-side school ties." The Journal of Finance 65, no. 4 (2010): 1409-1437.

[13] Cowen, Amanda, Boris Groysberg, and Paul Healy. "Which types of analyst firms are more optimistic?." Journal of Accounting and Economics 41, no. 1 (2006): 119-146.

[14] Daniel, Kent, et al.,. "Measuring mutual fund performance with characteristic-based benchmarks." The Journal of Finance 52, no.3 (1997): 1035–1058.

[15] Dontoh, Alex, Joshua Ronen, and Bharat Sarath. "On the rationality of the post-announcement drift." Review of Accounting Studies 8, no. 1 (2003): 69-104.

[16] Emery, Douglas R., and Xi Li. "Are the Wall Street analyst rankings popularity contests?." Journal of Financial and Quantitative Analysis 44, no. 02 (2009): 411-437.

[17] Fang, Lily, and Ayako Yasuda. "The effectiveness of reputation as a disciplinary mechanism in sell-side research." Review of Financial Studies 22, no. 9 (2009): 3735-3777.

[18] Fang, Lily H., and Ayako Yasuda. "Are stars' opinions worth more? The relation between analyst reputation and recommendation values." Journal of Financial Services Research 46, no. 3 (2014): 235-269.

[19] Firth, Michael, Chen Lin, and Hong Zou. "Friend or foe? The role of state and mutual fund ownership in the split share structure reform in China." Journal of Financial and Quantitative Analysis 45, no. 3 (2010): 685-706.

[20] Firth, Michael, Chen Lin, Ping Liu, and Yuhai Xuan. "The client is king: do mutual fund relationships bias analyst recommendations?." Journal of Accounting Research 51, no. 1 (2013): 165-200.

[21] Francis, Jennifer, and Leonard Soffer. "The relative informativeness of analysts' stock recommendations and earnings forecast revisions." Journal of Accounting Research 35, no. 2 (1997): 193-211.

[22] Green, Clifton, Narasimhan Jegadeesh, and Yue Tang. "Gender and job performance: Evidence from Wall Street." Financial Analysts Journal 65, no. 6 (2009): 65-78.

[23] Gu, Zhaoyang, Zengquan Li, and Yong George Yang. "Monitors or predators: The influence of institutional investors on sell-side analysts." The Accounting Review 88, no. 1 (2012): 137-169.

[24] Harrison, J. Michael, and David M. Kreps. "Speculative investor behavior in a stock market with heterogeneous expectations." The Quarterly Journal of Economics 92, no. 2 (1978): 323-336.

[25] Hastings, Justine S., and Jeffrey M. Weinstein. "Information, school choice, and academic achievement: Evidence from two experiments." The Quarterly journal of economics 123, no. 4 (2008): 1373-1414.

[26] Hong, Harrison, and Jeffrey D. Kubik. "Analyzing the analysts: Career concerns and biased earnings forecasts." The Journal of Finance 58, no. 1 (2003): 313-351.

[27] Huberman, Gur, and Tomer Regev. "Contagious speculation and a cure for cancer: A nonevent that made stock prices soar." The Journal of Finance 56, no. 1 (2001): 387-396.

[28] Irvine, Paul, Marc Lipson, and Andy Puckett. "Tipping." The Review of Financial Studies, 20, no. 3 (2007): 741–768

[29] Jin, Ginger Zhe, and Phillip Leslie. "The effect of information on product quality: Evidence from restaurant hygiene grade cards." The Quarterly Journal of Economics 118, no. 2 (2003): 409-451.

[30] Leone, Andrew J., and Joanna Shuang Wu. "What does it take to become a superstar? Evidence from institutional investor rankings of financial analysts." (2007).

[31] Lin, Hsiou-wei, and Maureen F. McNichols. "Underwriting relationships, analysts' earnings forecasts and investment recommendations." Journal of Accounting and Economics 25, no. 1 (1998): 101-127.

[32] Loh, Roger K., and René M. Stulz. "When are analyst recommendation changes influential?." Review of Financial Studies 24, no. 2 (2011): 593-627.

[33] Kucheev, Yury O., Felipe Ruiz, and Tomas Sorensson. "Do Stars Shine? Comparing the Performance Persistence of Star Sell-Side Analysts Listed by Institutional Investor, the Wall Street Journal, and StarMine." Journal of Financial Services Research (2015): 1-29.

[34] Mackinlay. "Event Studies in Economics and Finance" Journal of Economic Literature (1997): 13-39.

[35] Luca, Michael. "Reviews, reputation, and revenue: The case of Yelp. com." (2016).

[36] Malmendier, Ulrike and D. Shantikumar (2007), "Are investors naive about incentives?" Journal of Financial Economics 85, 457-489.

[37] Mizala, Alejandra, and Miguel Urquiola. "School markets: The impact of information approximating schools' effectiveness." Journal of Development Economics 103 (2013): 313-335.

[38] O'BRIEN, PATRICIA C., Maureen F. McNichols, and Lin Hsiou-Wei. "Analyst impartiality and investment banking relationships." Journal of Accounting Research 43, no. 4 (2005): 623-650.

[39] Stickel, Scott E. "The anatomy of the performance of buy and sell recommendations." Financial Analysts Journal 51, no. 5 (1995): 25-39.

[40] Xiong, Wei. Bubbles, crises, and heterogeneous beliefs. No. w18905. National Bureau of Economic Research, 2013.

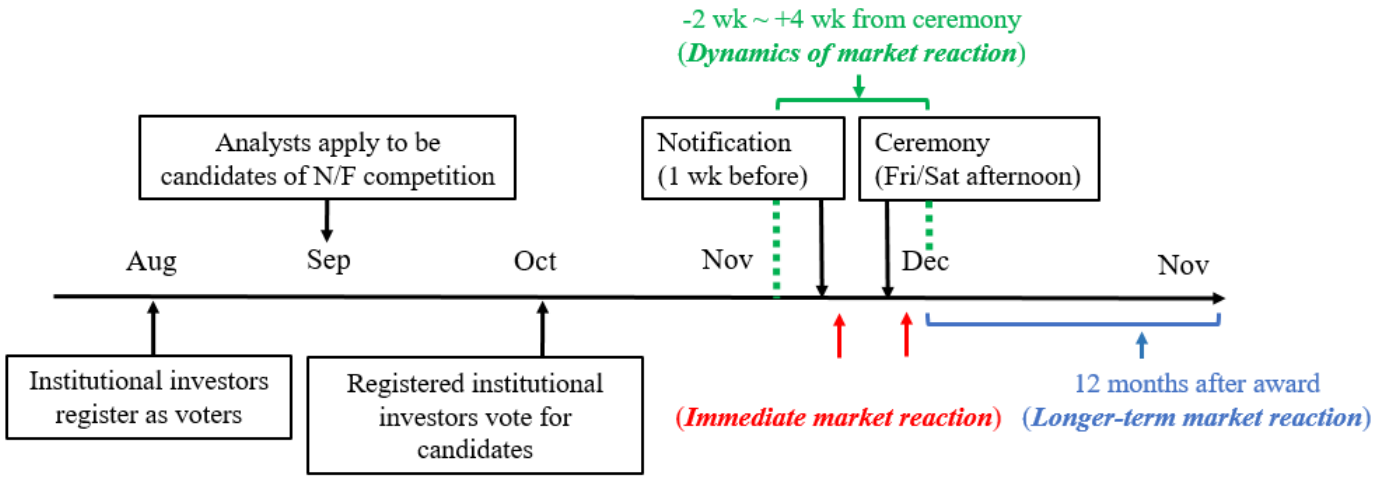
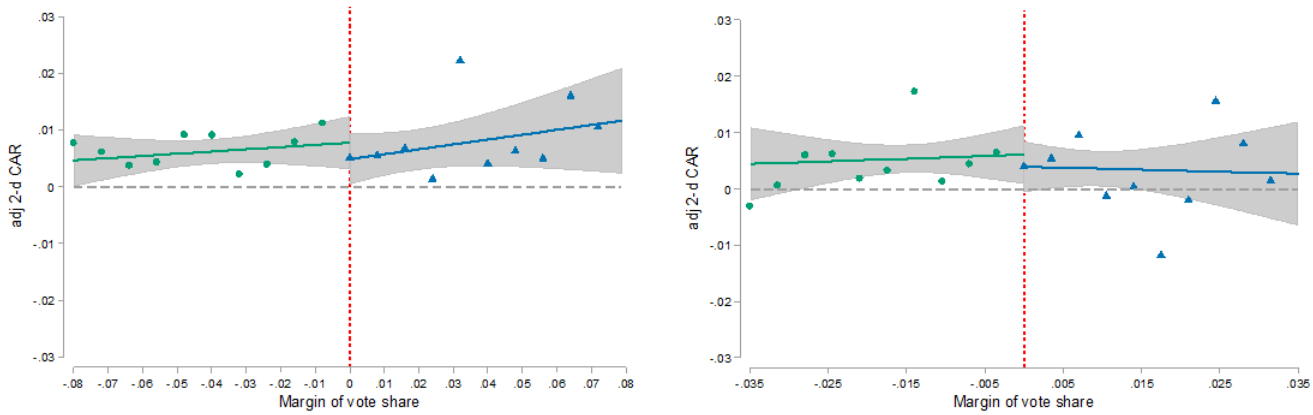


Figure 1: Time Line of "Star Analyst" Competition



Panel A: cutoff = top 5 winners

Panel B: cutoff = top 7 finalists

Figure 2: Placebo – Reaction on Issuance Day to Stocks Recommended before Announcement

Each data point is the average two-day CAR on the issuance day of recommendation in a 0.008 vote share bin (panel A) or a 0.0035 bin (panel B) for the latest one stock recommended by an analyst within 1-30 days before ceremony (panel A) or before notification (panel B). Shaded area is the 95 percent confidence interval. Solid lines are linear fit lines estimated with triangular weights and IK bandwidth of 0.08 (panel A) or 0.035(panel B) on each side. Dashed vertical lines denote the vote share at the cutoff of winner (panel A) or the cutoff of finalist (panel B), normalized to 0 for each N/F industry in each year.

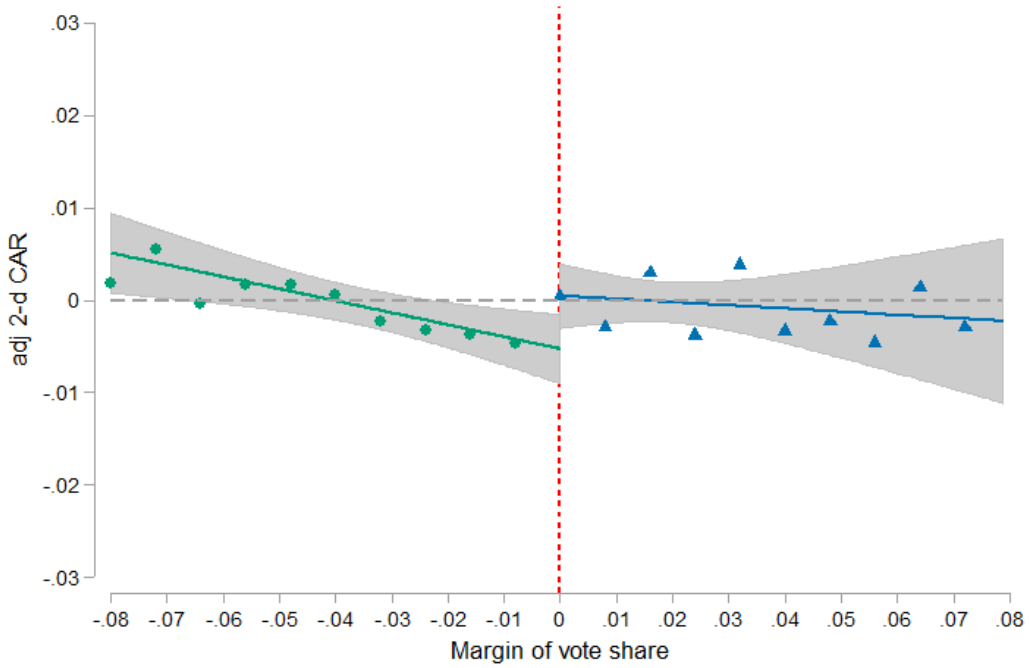
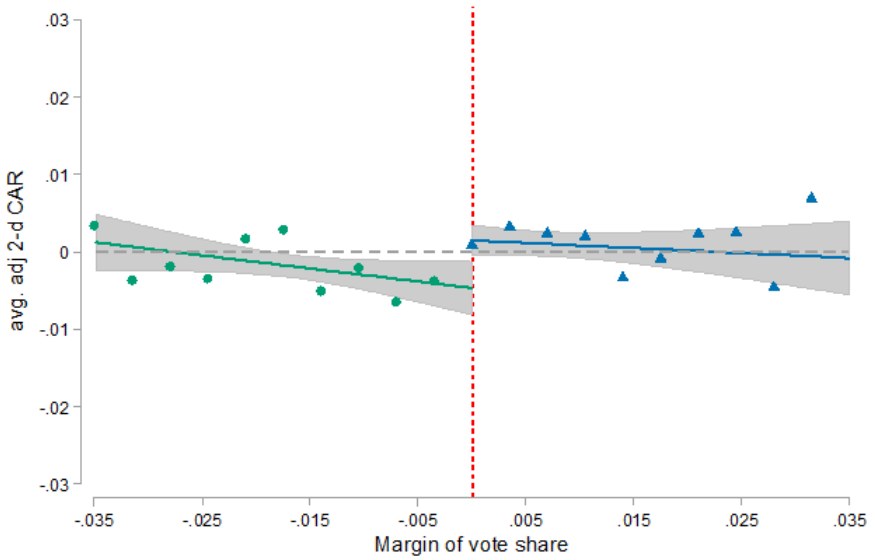
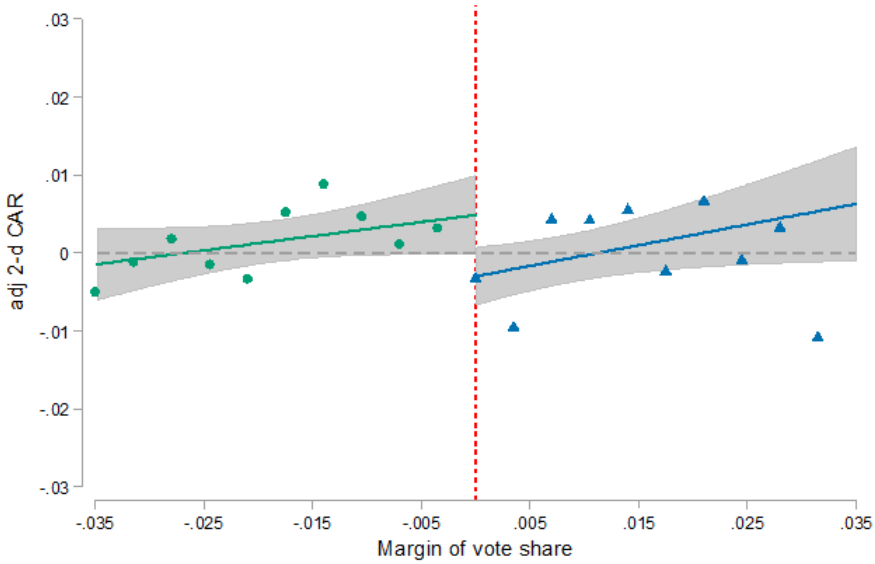


Figure 3: Main Result – Reaction on Next Monday to Stocks Recommended before Ceremony Cutoff of Winner

Notes: Each data point is the average two-day CAR on the Monday after the ceremony in a 0.008 vote share bin for the latest one stock recommended by an analyst within 1-30 days before the ceremony. Shaded area is the 95 percent confidence interval. Solid lines are linear fit lines estimated with triangular weights and IK bandwidth of 0.08 on each side. Dashed vertical line denotes the vote share at the cutoff of winner, normalized to 0 for each N/F industry in each year.



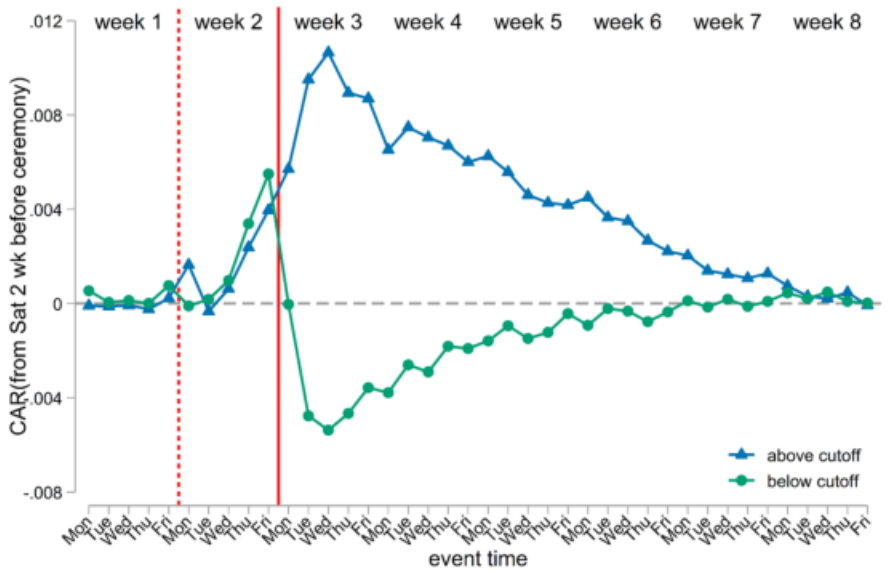
Panel A: average in notification week



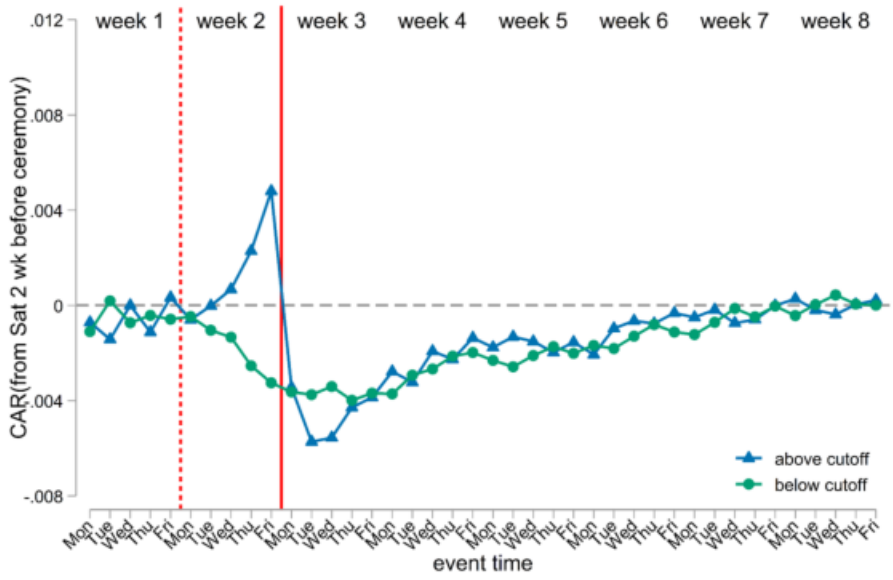
Panel B: Monday after ceremony

Figure 4: Main Result – Reaction to Stocks Recommended before Notification Cutoff of Finalist

Notes: Each data point is the mean two-day CAR averaged from Monday to Thursday in the notification week (panel A) or the average two-day CAR on the Monday after the ceremony (panel B) in a 0.0035 vote share bin for the latest one stock recommended by an analyst within 1-30 days before the notification. Shaded area is the 95 percent confidence interval. Solid lines are linear fit lines estimated with triangular weights and IK bandwidth of 0.035 on each side. Dashed vertical lines denote the vote share at the cutoff of finalist, normalized to 0 for each N/F industry in each year.



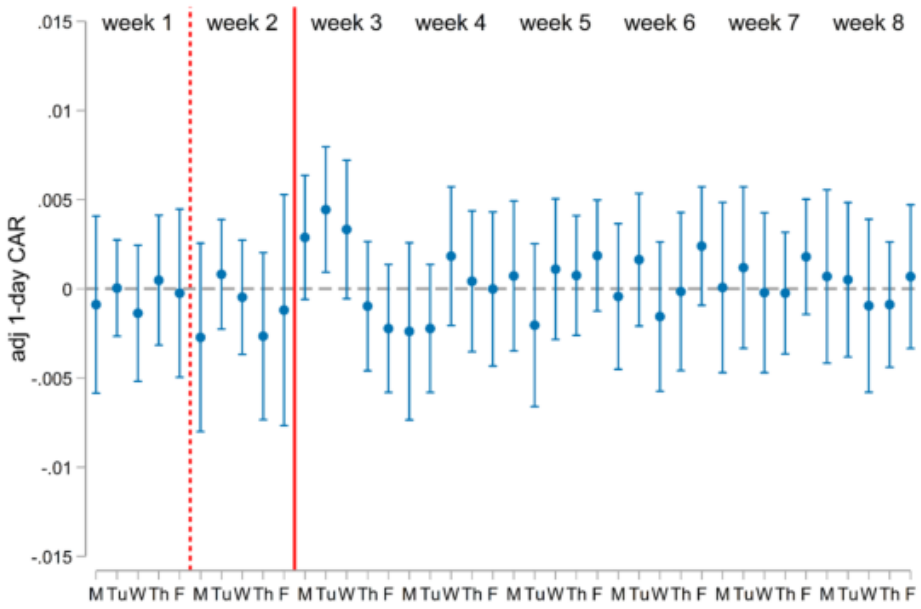
Panel A: cutoff = top 5 winners



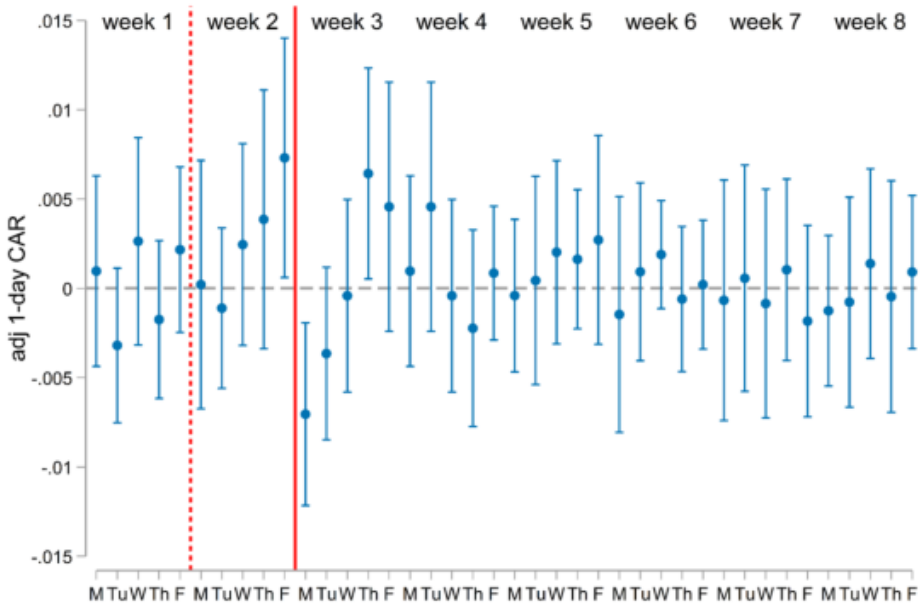
Panel B: cutoff = top 7 fialists

Figure 5: Event Study – Cumulative Abnormal Return during -2 to +6 weeks from Ceremony

Notes: The figure depicts the cumulative abnormal return from 2 weeks before to 6 weeks after the ceremony with the Saturday 2 weeks before as the starting point. Solid vertical lines denote the ceremony date. Area between the dashed vertical line and solid vertical line denotes the notification week.



Panel A: cutoff = top 5 winners



Panel B: cutoff = top 7 fialists

Figure 6: Dynamics – Reaction on Each day during -2 to +6 weeks from Ceremony

Notes: The figure plots the RD estimates and their 95 percent confidence intervals from regressions using 1-day AR on each day from 2 weeks before ceremony to 6 weeks after as outcomes. Stock sample and regression specification are the same as those used for the main results. Solid vertical lines denote the ceremony date. Area between the dashed vertical line and solid vertical line denotes the notification week.

Table 1: Summary Statistics

VARIABLES	Mean	Std.Dev.	Min	Max
Panel A: sample for immediate effect cutoff of winner				
CAR(t)	-0.00022	0.02840	-0.14148	0.17709
Forecast error(t)	0.05353	0.40385	0.00108	17.27627
Vote share	0.07553	0.06007	0.00173	0.29861
Prob. of being top 5 winner	0.38869	0.48758	0	1
Stock rating	4.31240	0.63799	1	5
Total obs	1,927			
Analysts				
Being male	0.72727	0.44556	0	1
Having master/above degree	0.88079	0.32418	0	1
Unique analysts	1,057			
Other Stats				
Unique stocks	717	-	-	-
Unique stock industries	67	-	-	-
Unique brokerages	41	-	-	-
Unique N/F industries	27	-	-	-
Panel B: sample for immediate effect cutoff of finalist				
CAR(t)	0.00014	0.02707	-0.14148	0.13121
Forecast error(t)	0.05846	0.50500	0.00106	17.27627
Vote share	0.07471	0.05921	0.00173	0.29861
Prob. of being top 7 winner	0.53059	0.49917	0	1
Stock rating	4.28926	0.62772	1	5
Total obs	2,337			
Analysts				
Being male	0.72704	0.44567	0	1
Having master/above degree	0.87732	0.32822	0	1
Unique analysts	1,252			
Other Stats				
Unique stocks	769	-	-	-
Unique stock industries	66	-	-	-
Unique brokerages	42	-	-	-
Unique N/F industries	27	-	-	-

Table 1: Summary Statistics

VARIABLES	Mean	Std.Dev.	Min	Max
Panel C: sample for longer-term effect				
CAR(t+1)	0.00502	0.03755	-0.20463	0.31784
Forecast error(t+1)	0.05201	1.01911	0	67.40070
Vote share	0.08052	0.05941	0.00122	0.32268
Prob. of being top 7 finalist	0.57735	0.49398	0	1
Prob. of being top 5 winner	0.42147	0.49380	0	1
Stock rating	4.30232	0.61850	1	5
Total obs	71,945			
Group				
Group size	1.55556	0.69958	0	5
Unique groups	2,614			
Other Stats				
Unique stocks	1,559	-	-	-
Unique stock industries	78	-	-	-
Unique brokerage	45	-	-	-
Unique N/F industries	26	-	-	-

Notes: Sample period is from 2005 to 2014. Each observation is at the analyst × stock × date level. *CAR(t)* is two-day CAR on the Monday after ceremony (Panel A), on Monday-Thursday before ceremony and on Monday after ceremony (Panel B), or on issuance day in the year after ceremony (Panel C). *Forecast error(t)* is the absolute value of predicted earning per share (EPS) minus actual EPS, scaled by firm's book value of equity per share, in the year before the ceremony (Panel A and Panel B) or in the year after ceremony (Panel C). *Vote share* is the analyst's scores divided by the sum of scores from all analysts participating in a N/F industry in a year. *Stock rating* is standardized at a 1-5 scale — strong sell=1, sell=2, neutral=3, buy=4, and strong buy=5.

Table 2: RD Validity – Analyst Characteristics

	Placebo	Personal information					Recommended stocks				
VARIABLES	2-d CAR	F-error	Win(t-1)	Male	Master+	Experience	Mcap	Undervalued	PE	Beta	Return
Panel A: Cutoff=5											
Win(t)	-0.00134	-0.02115	-0.04744	-0.02482	-0.01036	0.07658	0.51181	0.00182	0.02176	-0.01240	-0.00209
	(0.00359)	(0.02593)	(0.05876)	(0.02264)	(0.02386)	(0.19715)	(0.53795)	(0.02329)	(11.47983)	(0.01759)	(0.00797)
Baseline mean	0.00511	0.05353	0.28110	0.73263	0.91235	3.2946	4.41523	0.39924	52.17809	1.11272	0.00446
Observations	1,394	1,773	1,704	1,612	1,620	1,704	1,704	1,704	1,704	1,704	1,704
R-squared	0.177	0.038	0.159	0.082	0.092	0.109	0.694	0.694	0.152	0.743	0.767
Num of clusters	36	42	37	36	36	37	37	37	37	37	37
IK Bandwidth	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080
Panel B: Cutoff=7											
Win(t)	-0.00501	0.03894	-0.07300	0.01673	-0.03527	-0.34317	0.18886	0.05291	-8.06192	0.02751	0.00123
	(0.00361)	(0.03157)	(0.06562)	(0.04819)	(0.03848)	(0.22389)	(0.48011)	(0.03436)	(10.61453)	(0.01763)	(0.00652)
Baseline mean	0.00483	0.05846	0.35553	0.72206	0.90806	3.34924	4.29382	0.39327	48.83205	1.09279	-0.00490
Observations	1,010	1,150	1,111	1,047	1,055	1,111	977	977	977	977	977
R-squared	0.208	0.039	0.185	0.142	0.139	0.121	0.789	0.699	0.202	0.759	0.809
Num of clusters	33	38	34	32	32	34	32	32	32	32	32
IK bandwidth	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Brokerage FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NF industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes:*** p<0.01, ** p<0.05, * p<0.1. *Win(t)* and *Win(t-1)* equals 1 if the analyst passes the cutoff of winner (Panel A) and finalist (Panel B) in year t and in year t-1, respectively. The outcome for column (1) is 2-day CAR on issuance day of the latest one stock recommended by an analyst within 1-30 days before the ceremony (panel A) or before the notification (panel B). *F-error* is EPS forecast error to stocks recommended by analysts in the year before the ceremony. *Male* equals 1 if the analyst is male. *Master+* equals 1 if the analyst has master or above degree. *Experience* is the number of years since an analyst first appeared in CSMAR till 2014. Column (7) to (11) measures the average of characteristics of stocks recommended by an analyst between December in year t-1 and November in t, weighted by frequency of covering the stock. *Mcap* is the 3rd-quarter market capitalization in 1 billion RMB. *PE* is the the 3rd-quarter PE ratio. *Undervalued* is 1 if the 3rd-quarter BM ratio$\leq$ 1. *Return* is the stock return with cash dividend reinvestment in October. *Beta* is from CAPM regression using daily data in the past 250 trading days starting from October 31^{st}. This is a strict sub-sample of the main RD sample, because not all analysts have baseline characteristics. All specifications are local linear regressions with triangular weights. Bandwidths are IK bandwidths from main RD regressions. Standard errors are clustered at the brokerage level.

Table 3: RD Validity – Brokerage Characteristics

VARIABLES	Distinct num	Win(t-1)	Total asset	Net profit	Listed	Analyst	Report	Held by Fund
Panel A: Cutoff=5								
Win(t)	-0.28039	-0.04087	0.50465	0.03228	0.00504	0.90121	-5.15948	0.02513
	(0.33625)	(0.06047)	(0.42081)	(0.02458)	(0.06012)	(1.84837)	(32.46777)	(0.06136)
Baseline mean	3.12281	0.24461	3.8536	0.18433	0.41603	52.57905	1035.549	
Observations	228	1,067	932	931	1,048	1,012	1,012	690
R-squared	0.659	0.174	0.099	0.100	0.091	0.207	0.323	0.265
Num of clusters	27	27	32	32	36	35	35	32
Bandwidth	4.34(rank)	0.080	0.080	0.080	0.080	0.080	0.080	0.080
Panel B: Cutoff=7								
Win(t)	0.32965	-0.10461	-0.22154	-0.03682	0.02768	0.13008	-9.05546	-0.07912
	(0.33758)	(0.08618)	(0.40441)	(0.03890)	(0.07602)	(2.36257)	(45.01010)	(0.06626)
Baseline mean	3.46369	0.33140	3.62108	0.16713	0.38495	51.38897	1009.049	
Observations	179	688	600	600	678	653	653	438
R-squared	0.715	0.183	0.133	0.125	0.116	0.217	0.296	0.297
Num of clusters	27	27	28	28	32	32	32	30
Bandwidth	3.81(rank)	0.035	0.035	0.035	0.035	0.035	0.035	0.035
Year FE	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Brokerage FE	No	No	No	No	No	No	No	No
NF Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: *** p<0.01, ** p<0.05, * p<0.1. Column (1) is at NF industry x rank level; Column (2)-(8) is at brokerage x NF industry x year level. *Distinct num* is the average number of distinct brokerages per rank across years and industries. *Win(t-1)* for brokerage equals 1 if it has at least one analysts pass the corresponding cutoff in the same industry last year. *Total asset* and *Net profit* are measured in 1 billion RMB. *Listed* equals 1 if the brokerage firm is a listed company. *Analyst* and *Report* represent the number of employed analysts and the number of stock recommendations issued in each year, respectively. *HeldByFund* is 1 if a brokerage has mutual fund as its shareholder. Sample varies due to the availability of outcome variables. All specifications are local linear regressions with triangular weights. Running variable is rank (column 1) or vote share (column 2-8). Bandwidths are IK bandwidths from main RD regressions. Standard errors are clustered at the N/F industry level.

Table 4: RD Main Result – Market Reaction to Stocks Recommended before Ceremony Cutoff of Winner

VARIABLES	2-d CAR	2-d CAR	2-d CAR
Win(t)	0.00591**	0.00504**	0.00659***
	(0.00265)	(0.00212)	(0.00227)
Baseline Mean	0.00511	0.00511	0.00511
Observations	1,535	1,535	1,535
R-squared	0.012	0.082	0.183
Year FE	Yes	Yes	Yes
Brokerage FE	No	Yes	Yes
NF Industry FE	No	Yes	Yes
Stock Industry FE	No	No	Yes
Num of clusters	37	37	37
Bandwidth	0.080	0.080	0.080

Notes: *** p<0.01, ** p<0.05, * p<0.1. Regression is at the analyst × stock × date level. The outcome is two-day CAR on the next Monday after the ceremony of the latest one stock recommended by an analyst within 1-30 days before the ceremony. *Win(t)* equals 1 if the analyst passes the cutoff of winner in year t. All specifications are local linear regressions with triangular weights, controlling for margin of vote share, *Win(t)*×margin of vote share, and the number of days from the recommendation date to ceremony date. Bandwidths in column (1) through (3) are IK bandwidths. Standard errors are clustered at the brokerage level.

Table 5: RD Main Result – Market Reaction to Stocks Recommended before Notification Cutoff of Finalist

VARIABLES	2-d CAR	2-d CAR	2-d CAR
Panel A: Avg M-Th in notification wk			
Win(t)	0.00643***	0.00595**	0.00506**
	(0.00206)	(0.00228)	(0.00223)
Baseline Mean	0.00483	0.00483	0.00483
Observations	4,308	4,308	4,308
R-squared	0.013	0.052	0.097
Num of clusters	34	34	34
Bandwidth	0.035	0.035	0.035
Panel B: Monday after ceremony			
Win(t)	-0.00782***	-0.00926***	-0.01034***
	(0.00267)	(0.00289)	(0.00359)
Baseline Mean	0.00483	0.00483	0.00483
Observations	1,095	1,095	1,095
R-squared	0.019	0.125	0.228
Num of clusters	34	34	34
Bandwidth	0.035	0.035	0.035
Year FE	Yes	Yes	Yes
Brokerage FE	No	Yes	Yes
NF Industry FE	No	Yes	Yes
Stock Industry FE	No	No	Yes

Notes: *** p<0.01, ** p<0.05, * p<0.1. Regression is at the analyst × stock × date level. The outcome is average two-day CAR on Monday to Thursday in the notification week (panel A) and reaction on the Monday after the ceremony (panel B) of the latest one stock recommended by an analyst within 1-30 days before the notification. *Win(t)* equals 1 if the analyst passes the cutoff of finalist in year t. All specifications are local linear regressions with triangular weights, controlling for margin of vote share, *Win(t)*×margin of vote share, and the number of days from the recommendation date to beginning of notification week. Bandwidths in column (1) through (3) are IK bandwidths.Standard errors are clustered at the brokerage level.

Table 6: RD Mechanism – Market Reaction to Stocks Recommended before Notification by Trading Commission from Mutual Fund

	Avg 2-d CAR Notification week		2-d CAR Monday after ceremony	
VARIABLES	Above median	Below median	Above median	Below median
Win(t)	0.00638*	0.00233	-0.00931	-0.00773*
	(0.00342)	(0.00272)	(0.00683)	(0.00409)
Baseline Mean	0.00483	0.00483	0.00483	0.00483
Observations	1,834	2,446	466	622
R-squared	0.115	0.093	0.315	0.312
Year FE	Yes	Yes	Yes	Yes
Brokerage FE	Yes	Yes	Yes	Yes
NF industry FE	Yes	Yes	Yes	Yes
Stock industry FE	Yes	Yes	Yes	Yes
Num of clusters	22	22	22	22
Bandwidth	0.035	0.350	0.035	0.035

Notes: *** p<0.01, ** p<0.05, * p<0.1. Regression is at the analyst × stock × date level. The outcome is the average two-day CAR on Monday through Thursday in the notification week (column 1-2) or the two-day CAR on the Monday after the ceremony (column 3-4) to the latest one stocks recommended in 1-30 days before the beginning of notification. *Win(t)* equals 1 if the analyst passes the cutoff of finalist in year t. Stocks in *above median* group are by analysts in brokerages whose average proportion of total trading commission over total operating income is above median in a certain year; vice versa. All specifications are local linear regressions with triangular weights, controlling for margin of vote share, *Win(t)*×margin of vote share, and the number of days from the recommendation date to beginning of notification week. Bandwidths are IK bandwidths from main RD regressions. Standard errors are clustered at the brokerage level.

Table 7: RD Heterogeneity - Market Reaction to Stocks Recommended by Various Types of Analysts, Cutoff of Winner

VARIABLES	First time winner	Repeated winner	Female	Male
Win(t)	0.00895**	0.00582*	0.01331*	0.00452
	(0.00407)	(0.00312)	(0.00726)	(0.00343)
Baseline Mean	0.00511	0.00511	0.00511	0.00511
Observations	1,119	1,386	256	929
R-squared	0.237	0.205	0.550	0.266
Year FE	Yes	Yes	Yes	Yes
Brokerage FE	Yes	Yes	Yes	Yes
NF industry FE	Yes	Yes	Yes	Yes
Stock industry FE	Yes	Yes	Yes	Yes
Num of clusters	37	37	28	36
Bandwidth	0.080	0.080	0.080	0.080

Notes: *** p<0.01, ** p<0.05, * p<0.1. Regression is at the analyst × stock × date level. The outcome is two-day CAR on the next Monday after the ceremony of the latest one stock recommended by an analyst within 1-30 days before the ceremony. *Win(t)* equals 1 if the analyst passes the cutoff of winner in year t. All specifications are local linear regressions with triangular weights, controlling for margin of vote share, *Win(t)*×margin of vote share, and the number of days from the recommendation date to ceremony date. Bandwidths in column (1) through (3) are IK bandwidths. Standard errors are clustered at the brokerage level.

Table 8: RD Heterogeneity - Market Reaction to Stocks Recommended by Various Types of Analysts, Cutoff of Finalist

	Avg 2-d CAR in notification wk				2-d CAR on next Mon			
VARIABLES	First time winner	Repeated winner	Male	Female	First time winner	Repeated winner	Male	Female
Win(t)	0.00693**	0.00207	0.00368	0.00943	-0.01062*	-0.00865**	-0.01185**	-0.01816***
	(0.00285)	(0.00247)	(0.00277)	(0.00785)	(0.00561)	(0.00323)	(0.00481)	(0.00573)
Baseline Mean	0.00483	0.00483	0.00483	0.00483	0.00483	0.00483	0.00483	0.00483
Observations	2,743	3,699	2,534	811	696	939	644	205
R-squared	0.130	0.105	0.122	0.278	0.320	0.255	0.347	0.724
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Brokerage FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NF industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Stock industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of clusters	34	33	32	26	34	33	32	26
Bandwidth	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035

Notes: *** p<0.01, ** p<0.05, * p<0.1. Regression is at the analyst × stock × date level. The outcome is average two-day CAR on Monday to Thursday in the notification week (panel A) and reaction on the Monday after the ceremony (panel B) of the latest one stock recommended by an analyst within 1-30 days before the notification. *Win(t)* equals 1 if the analyst passes the cutoff of finalist in year t. All specifications are local linear regressions with triangular weights, controlling for margin of vote share, *Win(t)*×margin of vote share, and the number of days from the recommendation date to beginning of notification week. Bandwidths in column (1) through (3) are IK bandwidths.Standard errors are clustered at the brokerage level.

Table 9: RD Main - Market Reaction to Subsequent Stock Recommendations

VARIABLES	0-30d 2-d CAR	0-60d 2-d CAR	0-120d 2-d CAR	0-180d 2-d CAR	0-270d 2-d CAR	0-365d 2-d CAR	60-365 2-d CAR
Panel A: Cutoff=5							
win(t)	0.01383	0.00781	0.00703*	0.00557**	0.00399***	0.00248**	0.00280**
	(0.02236)	(0.00845)	(0.00390)	(0.00233)	(0.00136)	(0.00103)	(0.00107)
Observations	1,105	2,707	7,617	16,788	25,226	44,804	33,589
R-squared	0.656	0.369	0.205	0.121	0.099	0.079	0.082
Num of clusters	31	33	33	34	34	41	37
IK Bandwidth	0.047	0.042	0.039	0.041	0.043	0.058	0.046
Panel B: Cutoff=7							
Win(t)	-0.02104	0.00083	0.00231	0.00297	0.00191	0.00154	0.00098
	(0.01345)	(0.00680)	(0.00249)	(0.00197)	(0.00127)	(0.00146)	(0.00143)
Observations	1,260	3,268	11,291	22,876	33,062	34,253	32,721
R-squared	0.652	0.373	0.190	0.112	0.097	0.085	0.086
Num of clusters	32	34	38	38	39	43	43
IK Bandwidth	0.043	0.043	0.052	0.050	0.050	0.034	0,036
Baseline Mean	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502
Group FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Day-of-week Fe	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Brokerage FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NF Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Stock Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: *** p<0.01, ** p<0.05, * p<0.1. Sample period is from 2005 to 2014. Each observation is at group × stock × date level. The dependent variable is two-day CAR for the stock recommended by an analyst within a certain period after the announcement. *Win(t)* equals 1 if the analyst ranks top 5 (Panel A) or ranks top 7 (Panel B) in the year of award. All specifications are local linear and control for margin of vote share, *Win(t)*×margin of vote share, and the number of days from the date of recommendation to the date of announcement. Bandwidths are the IK bandwidths. Standard errors are clustered at the brokerage level.

Table 10: RD Main - Forecast Error to Subsequent Stock Recommendations

VARIABLES	0-30d F_error	0-60d F_error	0-120d F_error	0-180d F_error	0-270d F_error	0-365d F_error	60-365d F_error
Panel A: Cutoff=5							
win(t)	-0.01793	-0.02857	0.01366	0.00815	-0.00174	-0.00359	-0.00352
	(0.04746)	(0.01776)	(0.00852)	(0.01207)	(0.00356)	(0.00396)	(0.00466)
Observations	819	1,788	6,252	5,411	12,445	13,279	11,805
R-squared	0.782	0.574	0.300	0.249	0.175	0.137	0.146
Num of clusters	30	32	33	30	35	35	35
IK Bandwidth	0.035	0.029	0.042	0.017	0.037	0.031	0.028
Panel B: Cutoff=7							
Win(t)	0.02918	0.00168	-0.00565	0.01000	0.00302	0.02061	0.02569*
	(0.02405)	(0.01028)	(0.00770)	(0.01207)	(0.00874)	(0.01285)	(0.01441)
Observations	1,210	3,022	8,722	5,878	10,069	10,324	9,798
R-squared	0.821	0.579	0.295	0.247	0.104	0.115	0.123
Num of clusters	32	34	37	34	37	36	36
IK Bandwidth	0.046	0.047	0.052	0.016	0.024	0.019	0.019
Baseline Mean	0.05201	0.05201	0.05201	0.05201	0.05201	0.05201	0.05201
Group FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Day-of-week Fe	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Brokerage FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NF Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Stock Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: *** p<0.01, ** p<0.05, * p<0.1. Sample period is from 2005 to 2014. Each observation is at group × stock × date level. The dependent variable is forecast error for the stock recommended by an analyst within a certain period after the announcement. *Win(t)* equals 1 if the analyst ranks top 5 (Panel A) or ranks top 7 (Panel B) in the year of award. All specifications are local linear and control for margin of vote share, *Win(t)*×margin of vote share, and the number of days from the date of forecast to the date of announcement. Bandwidths are the IK bandwidths. Standard errors are clustered at the brokerage level.

AppendixA. Variable Definition

2-day Cumulative Abnormal Return (CAR): We first form the DGTW benchmarks. Based on firm size, book-to-market ratio, and momentum (the prior year 12 months return of the stock), we classify the universe of A shares listed from the Shanghai Stock Exchange and the Shenzhen Stock Exchange into three quintile groups. As a result, this 5*5*5 sorting gives a total of 125 passive portfolios. Then we calculate the DGTW return for each of these portfolios by equal weighting the stocks in the portfolio. After contrasting the benchmark portfolio, in each month we match each stock evaluated by participating in N/F analysts to a benchmark according to the stock's market value of equity, book-to-market, and prior-year return. We define a two-day event window from t=0 to t=1. Then the two-day CAR is the difference between the product of daily returns from day 0 to day 1 and that of its benchmark. Note that day 0 (t=0) refers to the recommendation date or the next trading date for recommendation on non-trading days or recommendations between 4:30 PM and 11:59 PM on a trading day.

We list the formula below for reference:

$$CAR_{it} = \prod_{t=0}^{1}(1 + R_{it}) - \prod_{t=0}^{1}(1 + R_{it}^{DGTW}) \tag{A.1}$$

where R_{it} is the daily return of stock u on day t. R_{it}^{DGTW} refers to the daily return on the DGTW benchmarks for stock i. Note that $t = 0$ is the recommendation day or the next trading day (for recommendations on non-trading days or hours). We make CAR=-CAR if rating less than or equal to neutral and CAR=CAR if rating is buy or strong buy.

Forecast Error: Forecast error for the forecast by analyst i for stock s in fiscal year t:

$$Forecast\ Error_{ist} = \frac{\mid EPS\ Forecast_{ist} - Actual\ EPS_{st} \mid}{\mid Book\ Value_{s,t-1} \mid} \tag{A.2}$$

where $Book\ Value_{s,t-1}$ is firm s's book value of equity per share at the year end of fiscal year $t-1$. EPS_s is earning per share for stock s.

Vote share: We standardize raw scores analysts for each N/F industry in each year, and then calculate vote share according to the following equation:

$$X_{ibjt} = \frac{std.score_{ijst}}{\sum std.score_{ijst} \text{ in industry j}} \tag{A.3}$$

where X_{ibjt} is the vote share obtained by analyst i from brokerage firm b in N/F industry j in year t. It is defined as the share of standardized score analyst i gets over the sum of standardized scores from all analysts in N/F industry j

Buy/Sell ratio: Buy/Sell ratio = (Buy volume - Sell volume) / Total trading volume. Buy volume is the volume of trading initiated by traders posting higher-than-market buy price; sell volume is the volume of trading initiated by traders posting lower-than-market sell price; the sum of these two parts is the total trading volume. Generally speaking, when buy volume is higher than sell volume, more people are actively purchasing a stock, the market

attitude towards a stock is more positive, and its price is likely to rise.[33] The correlation between daily price change and 1{buy volume > sell volume} is 0.16.

Mcap: Within each year, we rank stocks by their third-quarter market capitalization (Mcap=total number of shares × share price) from companies' financial reports. Mcap indicates the size (or value) of the company. Dummy *Mcap*=1 if the Mcap of a stock is above median in that year.

PE: Within each year and industry, we rank stocks by their third-quarter price-earnings ratio (PE ratio=share price / earnings per share) from companies' financial reports.[34] PE ratio indicates the dollar amount an investor can expect to invest in a company in order to receive one dollar of that company's earnings. Companies with higher PE ratio means that investors expect higher earnings growth in the future compared to those with a lower PE ratio. Dummy *PE ind/year*=1 if the PE ratio of a stock is above median in that industry and year.

Undervalued: We calculate third-quarter book-to-market ratio (BM ratio=book value / market capitalization) of each stock. BM ratio greater than 1 indicates that the cost to replace a firm's assets is greater than the value of its stock, which mean the stock is undervalued by the market. Dummy *Undervalued* is 1 if the BM ratio of a stock is greater than 1.

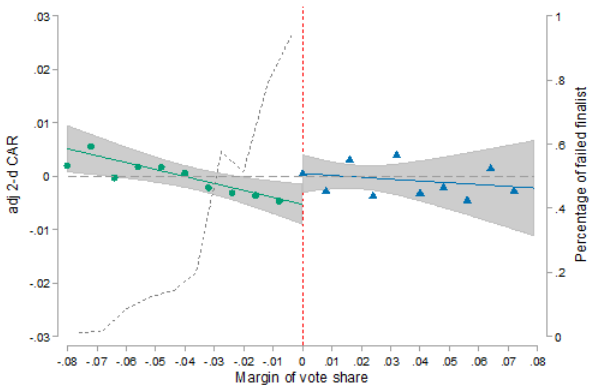
Return: is the monthly stock return with cash dividend reinvestment in each October.

Volatility: is the volatility of daily log return in the past 250 trading days starting from October 31st.

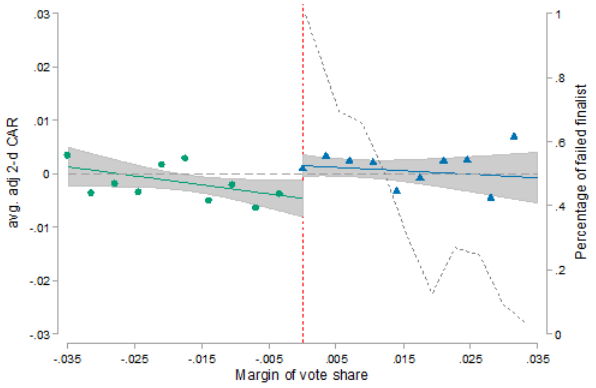
Beta: is from CAPM regression using daily data in the past 250 trading days starting from October 31st, where daily stock yield is the daily yield with cash dividend reinvestment, daily yield of market portfolio is value–weighted daily yield with cash dividend reinvestment, and daily risk free rate is calculated from fixed annual interest rate.

[33]However, it is possible that large investors post several sell requests at very low price, and simultaneously post buy requests to purchase stocks from themselves. Such trading strategy can make buy volume larger than sell volume and create false impression that people want to buy the stocks, which attracts naive investors to follow.

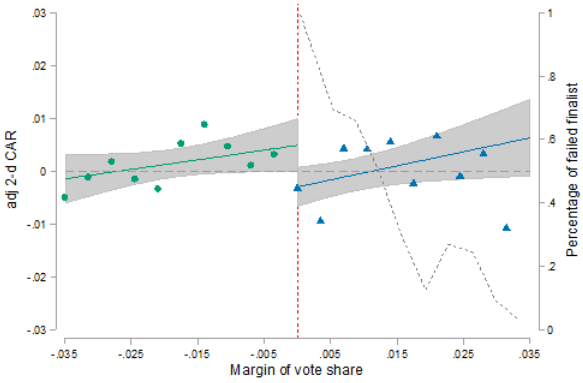
[34]PE ratio is set to be missing if negative.



Panel A: cutoff = top 5 winners, Monday after ceremony



Panel B: cutoff = top 7 finalists, notification week



Panel C: cutoff = top 7 finalists, Monday after ceremony

Figure A1: Market Reaction Overlaid with Density of Failed Finalists

Notes: The figure overlays the density of failed finalists (analysts who rank 6^{th} and 7^{th}) on the main RD results. The density of failed finalists is plotted on the left of the cutoff of winner in a 0.008 vote share bin (Panel A) and on the right of the cutoff of finalist (Panel B, C) in a 0.0035 vote share bin.

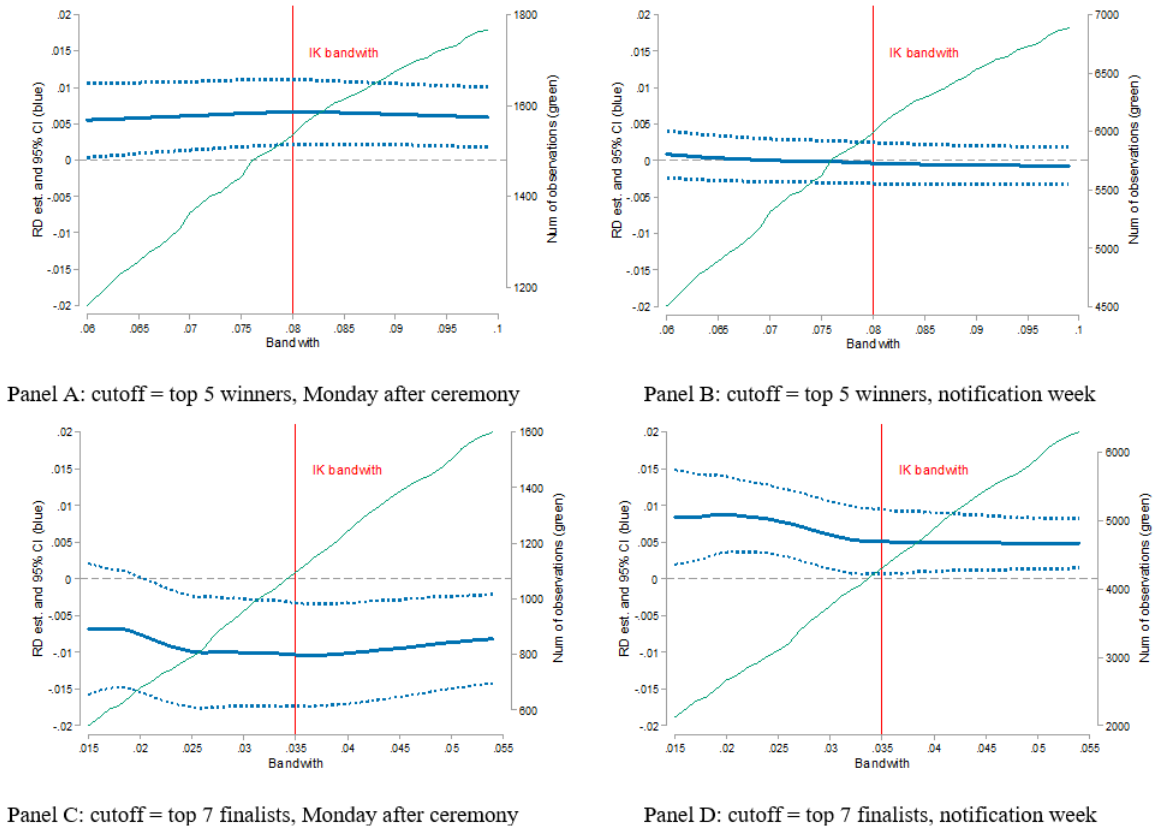


Figure A2: RD Estimates for Various Bandwidths

Notes: The figures plot the RD estimates and 96% confidence interval from main RD regressions. The specification is the preferred full specification and only the bandwidth is varying.

Table A1: Sample Selection - Probability of Entering RD Samples from Raw Sample

VARIABLES	U_id	Main RD sample
Panel A: Cutoff=5		
Win(t)	-0.00030	-0.00446
	(0.00578)	(0.05371)
% Raw sample	0.97	0.57
Observations	2,973	2,973
R-squared	0.038	0.123
Number of clusters	40	40
IK bandwidth	0.080	0.080
Panel B: Cutoff=7		
Win(t)	0.02057	0.08716
	(0.01258)	(0.05294)
% of Raw sample	0.97	0.65
Observations	1,746	1,746
R-squared	0.059	0.162
Number of clusters	37	37
IK bandwidth	0.035	0.035
Year FE	Yes	Yes
Brokerage FE	Yes	Yes
NF industry FE	Yes	Yes

Notes: *** p<0.01, ** p<0.05, * p<0.1. Regression is at the analyst×year level. The outcome is a dummy equalling 1 if a N/F candidate appears in a certain sample in a certain year. *Win(t)* equals 1 if the analyst passes the cutoff of winner (Panel A) and the cutoff of finalist (Panel B) in year t. All specifications are local linear regressions with triangular weights, controlling for margin of vote share, *Win(t)*×margin of vote share, and the number of days from the recommendation date to the ceremony (panel A) or to the beginning of notification week (panel B). Bandwidths are IK bandwidths from main RD regressions. Standard errors are clustered at the brokerage level.

Table A2: Sample Selection - Comparison of Summary Statistics between Raw and Other Samples

VARIABLES	Raw	U_id	RD sample cut5	RD sample cut7
Panel A: Analyst				
Male	0.72446	0.72400	0.72240	0.72717
	(0.00858)	(0.00862)	(0.01145)	(0.01051)
		[0.9699]	[0.8859]	[0.8415]
Master/above	0.89262	0.89262	0.90160	0.90084
	(0.00534)	(0.00534)	(0.00666)	(0.00628)
		[1.0000]	[0.2978]	[0.3222]
Experience	3.18954	3.189534	3.26222	3.25814
	(0.04005)	(0.04005)	(0.05241)	(0.04905)
		[1.0000]	[0.2697]	[0.2781]
Win(t-1)	0.18058	0.18252	0.19596	0.18928
	(0.00634)	(0.00641)	(0.00861)	(0.00796)
		[0.8300]	[0.1471]	[0.3911]
Finalist(t-1)	0.24531	0.24794	0.25799	0.25278
	(0.00710)	(0.00716)	(0.00949)	(0.00882)
		[0.7942]	[0.2824]	[0.5084]
Ttoal obs	3,667	3,638	2,128	2,425
Unique analyst	1,591	1,588	1,157	1,252
Panel B: Brokerage				
Total asset (10b RMB)	3.04059	3.05305	3.09709	3.0704
	(0.20846)	(0.20907)	(0.21197)	(0.20934)
		[0.9664]	[0.8497]	[0.9199]
Net profit (10b RMB)	0.13969	0.14023	0.14346	0.14179
	(0.13556)	(0.13605)	(0.14023)	(0.13838)
		[0.9730]	[0.8468]	[0.9138]
Listed	0.33641	0.33796	0.34804	0.34300
	(0.03215)	(0.03226)	(0.03343)	(0.03307)
		[0.9727]	[0.8020]	[0.7108]
Analysts (100)	0.43896	0.43924	0.44784	0.44644
	(0.01246)	(0.01252)	(0.01286)	(0.01277)
		[0.9874]	[0.6203]	[0.4260]
Reports (1000)	0.81440	0.81761	0.84590	0.84137
	(0.03083)	(0.03081)	(0.03138)	(0.03106)
		[0.9413]	[0.4745]	[0.5383]]
Total obs	244	243	213	217
Unique brokerage	44	44	41	42

Notes: *** p<0.01, ** p<0.05, * p<0.1. Each observation is at the analyst×year level (panel A) or at the brokerage×year level (panel B). Variables are measured in the same year as the N/F competition, unless noticed otherwise. *Male* equals 1 if the analyst is male. *Master+* equals 1 if the analyst has a master or above degree. *Win(t-1)* equals 1 if the analyst passed the cutoff of winner (column 3) or the cutoff of finalist (column 4) last year. *Total asset*) and (*Net Profit*) are in the unit of ten billion RMB. *Listed* equals 1 if the brokerage is a listed company. *Analysts* is the number of analysts employed by a brokerage in the unit of 100 people. *Reports* is the number of stock recommendations issued by a brokerage in the unit of 1,000. Standard errors are in the parentheses. P-values for the difference in mean are in the square brackets.

Table A3: Robust Check - Market Reaction on Next Monday to Stocks Recommended before Ceremony
Cutoff of Winner

VARIABLES	2-d CAR	2-d CAR	2-d CAR	2-d CAR	2-d CAR	2-d CAR
Panel A: All stocks within 30 days						
Win(t)	0.00338	0.00257	0.00266	0.00336*	0.00286	0.00243
	(0.00229)	(0.00180)	(0.00179)	(0.00184)	(0.00181)	(0.00173)
Baseline Mean	0.00511	0.00511	0.00511	0.00511	0.00511	0.00511
Observations	5,752	5,752	5,752	4,396	5,193	6,257
R-squared	0.006	0.041	0.089	0.101	0.094	0.086
Num of clusters	37	37	37	33	34	38
Bandwidth	0.080	0.080	0.080	0.060	0.070	0.090
Panel B: Latest 7 stocks within 30 days						
Win(t)	0.00333	0.00253	0.00311	0.00373*	0.00332	0.00288
	(0.00250)	(0.00202)	(0.00203)	(0.00207)	(0.00205)	(0.00196)
Baseline Mean	0.00511	0.00511	0.00511	0.00511	.00511	0.00511
Observations	5,046	5,046	5,046	3,855	4,556	5,503
R-squared	0.007	0.046	0.094	0.107	0.099	0.090
Num of clusters	37	37	37	33	34	38
Bandwidth	0.080	0.080	0.080	0.060	0.070	0.090
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Brokerage FE	No	Yes	Yes	Yes	Yes	Yes
NF Industry FE	No	Yes	Yes	Yes	Yes	Yes
Stock Industry FE	No	No	Yes	Yes	Yes	Yes

Notes: *** p<0.01, ** p<0.05, * p<0.1. Regression is at analyst×stock×date level. The outcome is the two-day CAR on next Monday after the award ceremony for all stocks (Panel) and for latest seven stocks (Panel B) recommended by an analyst within 30 days before the ceremony. *Win(t)* equals 1 if the analyst passes the cutoff of winner in year t. All specifications are local linear regressions with triangular weights, controlling for margin of vote share, *Win(t)*×margin of vote share, and the number of days from the recommendation date to ceremony date. Bandwidths in column (1) through (3) are IK bandwidths. Bandwidths are changed in column (4) to (6) for robustness check. Standard errors are clustered at the brokerage level.

Table A4: Robustness Check - Stock Recommendation Strategy

VARIABLES	Within7	New Rec	Mcap	Undervalued(B/M)	P/E	Beta	Monthly return
Win(t), cut=5	-0.04889	9.73762	-0.12175	0.02159	-9.94685	-0.00543	0.00599
	(0.04385)	(12.86793)	(0.72619)	(0.02360)	(16.33868)	(0.01512)	(0.00694)
Win(t)× Post			0.48916	-0.05824	-11.32989	0.02953	0.02060
			(0.88421)	(0.07861)	(32.15783)	(0.04158)	(0.02296)
Post			-2.13851**	-0.01401	-3.91559	-0.03463	0.00172
			(0.83889)	(0.06356)	(29.15320)	(0.03051)	(0.01801)
Dept.Var mean	0.288344	52.68555	4.20782	0.36164	54.04098	1.11815	0.01880
Observations	1,141	512	2,934	2,934	2,911	2,919	2,925
R-squared	0.074	0.418	0.510	0.535	0.060	0.564	0.623
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Brokerage FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NF Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Num of clusters	43	29	39	39	39	39	39
Bandwidth	0.080	0.080	0.080	0.080	0.080	0.080	0.080

Notes:*** p<0.01, ** p<0.05, * p<0.1. Regression is at the analyst×period×year level. Period is defined by *post* dummy which equals 1 if the stock is recommended within 1-7 days before the ceremony, and 0 if 8-60 days before the ceremony. $Within7$ is 1 if an analyst issues reports within 1-7 days before the ceremony. *New Rec* is 1 if an analyst initiates new cover of stocks in 1-7 days before ceremony, conditional on $Within7$=1. *Mcap* is the average 3rd-quarter market capitalization in 1 billion RMB in pre and post periods. *Undervalued* is the average of indicator of whether the 3rd-quarter BM ratio$\leq$ 1 in pre and post periods. *PE* is the average 3rd-quarter PE ratio in pre and post periods. *Beta* is fthe average in pre and post periods. *Montly Return* is the average of October stock return with cash dividend reinvestment in pre and post periods. *Win(t)* equals 1 if the analyst is above the cutoff of winner in year t. Specifications in column 1-2 are local linear regressions with triangular weights, controlling for margin of vote share, *Win(t)*×margin of vote share, and the number of days from the recommendation date to ceremony date. Specifications in column 3-7 are RD-DID with full interactions between *Post*, Win and *Vote Share*. Bandwidths are from main RD regression at the cutoff of winner. Standard errors are clustered at the brokerage level.

Table A5: Placebo – Market Reaction to Stocks Recommended before Ceremony Cutoff of Winner

	Monday in notification wk			Avg Mon-Thur in notification wk		
VARIABLES	2-d CAR	2-d CAR	2-d CAR	2-d CAR	2-d CAR	2-d CAR
Win(t)	0.00300	0.00228	0.00280	-0.00026	-0.00128	-0.00034
	(0.00256)	(0.00243)	(0.00271)	(0.00151)	(0.00165)	(0.00143)
Baseline Mean	0.00511	0.00511	0.00511	0.00511	0.00511	0.00511
Observations	1,478	1,478	1,478	5,985	5,985	5,985
R-squared	0.020	0.109	0.180	0.012	0.043	0.083
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Brokerage FE	No	Yes	Yes	No	Yes	Yes
NF Industry FE	No	Yes	Yes	No	Yes	Yes
Stock Industry FE	No	No	Yes	No	No	Yes
Num of clusters	37	37	37	37	37	37
Bandwidth	0.080	0.080	0.080	0.080	0.080	0.080

Notes: *** p<0.01, ** p<0.05, * p<0.1. Regression is at the analyst × stock × date level. The outcome is the two-day CAR on the Monday in the notification week (column 1-3) and the average two-day CAR on Monday through Thursday in the notification week (column 4-6) of the latest one stock recommended by an analyst within 1-30 days before the ceremony. *Win(t)* equals 1 if the analyst passes the cutoff of winner in year t. All specifications are local linear regressions with triangular weights, controlling for margin of vote share, *Win(t)*×margin of vote share, and the number of days from the recommendation date to ceremony date. Bandwidths in column (1) through (3) are IK bandwidths. Bandwidths are changed in column (4) to (6) for robustness check. Standard errors are clustered at the brokerage level.

Table A6: Robustness Check – Market Reaction to Stocks Recommended before Ceremony Cutoff of Winner

VARIABLES	Control for firm announcement 2-d CAR	Drop by>1 analysts 2-d CAR	Drop by others on Sat-Tu 2-d CAR
Win(t)	0.00659***	0.01282***	0.00705***
	(0.00227)	(0.00313)	(0.00249)
Observations	1,535	785	1,347
R-squared	0.183	0.282	0.186
Year FE	Yes	Yes	Yes
Brokerage FE	Yes	Yes	Yes
NF industry FE	Yes	Yes	Yes
Stock industry FE	Yes	Yes	Yes
Number of clusters	37	34	37
Bandwidth	0.08	0.08	0.08

Notes: *** p<0.01, ** p<0.05, * p<0.1. Regression is at the analyst × stock × date level. All specifications are the same as main RD regression at the cutoff of winner, unless noted otherwise. Column (1) includes a dummy controlling for firm announcement during last Friday through next Tuesday. "By>1 analysts" refers to dropping stocks recommended by more than one analysts in the original RD sample; "Others on Sat-Tues" refers to dropping stocks recommended by other non-N/F candidates on the Saturday through Tuesday right after the ceremony.

Table A7: Robustness Check – Market Reaction to Stocks Recommended before Ceremony Cutoff of Finalist

	Control for announcement		Drop by >1 analysts		Drop Sat-Tu	Drop last Sat-Tu
VARIABLES	2-d CAR	avg CAR	2-d CAR	avg CAR	2-d CAR	avg CAR
Win(t)	-0.01009***	0.00509**	-0.01070***	0.00329	-0.01111***	0.00732***
	(0.00361)	(0.00222)	(0.00373)	(0.00283)	(0.00370)	(0.00254)
Observations	1,095	4,308	678	2,666	983	3,435
R-squared	0.229	0.098	0.279	0.105	0.235	0.103
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Brokerage FE	Yes	Yes	Yes	Yes	Yes	Yes
NF industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Stock industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Number of clusters	34	a	33	33	34	34
Bandwidth	0.035	0.035	0.035	0.035	0.035	0.035

Notes: *** p<0.01, ** p<0.05, * p<0.1. Regression is at the analyst × stock × date level. All specifications are the same as the main RD regression at the cutoff of finalist, unless noted otherwise. Column (1) include a dummy controlling for firm announcement during last Friday through next Tuesday, and column (2) controls for firm announcement in notification week. "Drop by>1 analysts" refers to dropping stocks recommended by more than one analysts in the original RD sample; "Drop Sat-Tu" refers to dropping stocks recommended by non-N/F candidates on the Saturday-Tuesday after the ceremony; "Drop last Sat-Tues" refers to dropping stocks by non-N/F candidates on the Saturday-Tuesday in notification week. The outcome is the 2-day CAR on next Monday (2-d CAR) or the average of 2-day CAR in notification week (avg CAR).

Table A8: Robustness Check - Market Reaction to Subsequent Stock Recommendations
Cutoff of Winner

Bandwidth	0.040	0.050	0.060	0.070	0.080	0.090	IK
Win(t), 0-30 days	0.01682	0.01301	0.00398	0.00144	0.00097	0.00092	0.01383
	(0.02348)	(0.02142)	(0.01754)	(0.01635)	(0.01496)	(0.01388)	(0.02236)
Observations	995	1,163	1,396	1,631	1,813	1,91 0	1,105
Win(t), 0-60 days	0.00786	0.00472	0.00190	0.00048	-0.00077	-0.00117	0.00781
	(0.00868)	(0.00798)	(0.00679)	(0.00641)	(0.00601)	(0.00563)	(0.00845)
Observations	2,602	3,042	3,588	4,227	4,664	4,965	2,707
Win(t), 0-120 days	0.00737*	0.00568*	0.00434	0.00345	0.00285	0.00246	0.00703*
	(0.00385)	(0.00322)	(0.00273)	(0.00235)	(0.00214)	(0.00206)	(0.00390)
Observations	7,829	9,304	10,865	12,739	13,979	14,991	7,617
Win(t), 0-180 days	0.00567**	0.00470**	0.00444***	0.00397***	0.00367**	0.00336**	0.00557**
	(0.00241)	(0.00176)	(0.00153)	(0.00142)	(0.00138)	(0.00134)	(0.00233)
Observations	16,355	19,433	22,872	26,690	29,141	31,299	16,788
Win(t), 0-270 days	0.00426***	0.00378***	0.00324***	0.00275**	0.00242**	0.00214**	0.00399***
	(0.00151)	(0.00124)	(0.00116)	(0.00110)	(0.00106)	(0.00103)	(0.00136)
Observations	23,296	27,746	32,645	38,015	41,592	44,773	25,226
Win(t), 0-365 days	0.00366***	0.00303***	0.00237**	0.00198*	0.00170*	0.00145	0.00248**
	(0.00112)	(0.00105)	(0.00102)	(0.00101)	(0.00101)	(0.00098)	(0.00103)
Observations	32,827	38,941	45,862	53,448	58,662	63,288	44,804
Baseline Mean	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502
Group FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Day-of-week Fe	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Brokerage FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NF Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Stock Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: *** p<0.01, ** p<0.05, * p<0.1. Regression is at the group×stock×date level. The outcome is two-day CAR for the stock recommended by an analyst in certain period after the ceremony. *Win(t)* equals 1 if the analyst passes the cutoff of winner. All specifications are local linear regressions with triangular weights, controlling for margin of vote share, *Win(t)*×margin of vote share, and the number of days from the recommendation date to ceremony date. Bandwidths vary from 0.04 to 0.09 in column 1-6 and are IK bandwidth for the corresponding sample in column 7. Standard errors are clustered at the brokerage level.

Table A9: Robustness Check - Market Reaction to Subsequent Stock Recommendations
Cutoff of Finalist

Bandwidth	0.040	0.050	0.060	0.070	0.080	0.090	IK
win(t), 0-30 days	-0.02220	-0.01728	-0.01196	-0.00979	-0.00874	-0.00611)	-0.02104
	(0.01401)	(0.01188)	(0.00996)	(0.00845)	(0.00816)	(0.00814)	(0.01345)
Observations	1,171	1,396	1,555	1,689	1,798	1,850	1,260
win(t), 0-60 days	0.00080	0.00019	0.00002	0.00017	0.00039	0.00034	0.00083
	(0.00702)	(0.00641)	(0.00585)	(0.00521)	(0.00485)	(0.00459)	(0.00680)
(0.00197)							
Observations	3,051	3,620	4,085	4,400	4,674	4,804	3,268
win(t), 0-120 days	0.00370	0.00255	0.00164	0.00103	0.00089	0.00087	0.00231
	(0.00255)	(0.00249)	(0.00247)	(0.00227)	(0.00218)	(0.00211)	(0.00249)
Observations	9,234	10,986	12,400	13,393	14,178	14,604	11,291
win(t), 0-180 days	0.00413*	0.00297	0.00207	0.00130	0.00109	0.00106	0.00297
	(0.00218)	(0.00197)	(0.00189)	(0.00180)	(0.00176)	(0.00174)	(0.00197)
Observations	19,316	22,876	25,752	27,829	29,461	30,412	22,876
win(t), 0-270 days	0.00225	0.00194	0.00143	0.00099	0.00093	0.00095	0.00191
	(0.00136)	(0.00127)	(0.00124)	(0.00118)	(0.00114)	(0.00111)	(0.00127)
Observations	27,778	32,868	36,991	39,950	42,177	43,474	33,062
win(t), 0-365 days	0.00148	0.00158	0.00157	0.00143	0.00144	0.00149	0.00154
	(0.00136)	(0.00122)	(0.00114)	(0.00107)	(0.00105)	(0.00103)	(0.00146)
Observations	39,160	46,357	52,292	56,522	59,649	61,416	34,253
Baseline Mean	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502	0.00502
Group FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Day-of-week Fe	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Brokerage FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NF Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Stock Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: *** p<0.01, ** p<0.05, * p<0.1. Regression is at the group×stock×date level. The outcome is two-day CAR for the stock recommended by an analyst in certain period after the ceremony. *Win(t)* equals 1 if the analyst passes the cutoff of finalist. All specifications are local linear regressions with triangular weights, controlling for margin of vote share, *Win(t)*×margin of vote share, and the number of days from the recommendation date to ceremony date. Bandwidths vary from 0.04 to 0.09 in column 1-6 and are IK bandwidth for the corresponding sample in column 7. Standard errors are clustered at the brokerage level.

Table A10: RD Dynamics, AR

VARIABLES	cutoff of winner	cutoff of finalist
-2w Mon	-0.00088	0.00097
	(0.00245)	(0.00262)
-2w Tues	0.00004	-0.00320
	(0.00133)	(0.00213)
-2w Wed	-0.00137	0.00264
	(0.00188)	(0.00285)
-2w Thurs	0.00048	-0.00175
	(0.00180)	(0.00217)
-2w Fri	-0.00024	0.00217
	(0.00232)	(0.00228)
-1w Mon	-0.00272	0.00021
	(0.00261)	(0.00342)
-1w Tues	0.00082	-0.00111
	(0.00152)	(0.00221)
-1w Wed	-0.00047	0.00245
	(0.00158)	(0.00278)
-1w Thurs	-0.00266	0.00386
	(0.00231)	(0.00356)
-1w Fri	-0.00119	0.00731**
	(0.00320)	(0.00329)
+1w Mon	0.00289	-0.00704***
	(0.00172)	(0.00252)
+1w Tues	0.00444**	-0.00365
	(0.00173)	(0.00237)
+1w Wed	0.00333*	-0.00041
	(0.00192)	(0.00265)
+1w Thurs	-0.00097	0.00643**
	(0.00179)	(0.00290)
+1w Fri	-0.00222	0.00457
	(0.00177)	(0.00343)
+2w Mon	-0.00238	0.00097
	(0.00245)	(0.00262)
+2w Tues	-0.00222	0.00457
	(0.00177)	(0.00343)
+2w Wed	0.00183	-0.00041
	(0.00192)	(0.00265)
+2w Thurs	0.00042	-0.00223
	(0.00195)	(0.00271)
+2w Fri	-0.00001	0.00086
	(0.00213)	(0.00184)
Year FE	Yes	Yes
Brokerage FE	Yes	Yes
NF Industry FE	Yes	Yes
Stock Industry FE	Yes	Yes
Bandwidth	0.080	0.035

Notes: *** p<0.01, ** p<0.05, * p<0.1. The outcome is 1-day AR on the Monday 2 weeks before to the Friday 2 weeks after the ceremony of the latest one stock recommended by an analyst within 1-30 days before the ceremony (column 1) or before the notification (column 2). All specifications are local linear regressions with triangular weights, controlling for margin of vote share, *Win(t)*×margin of vote share, and the number of days from the recommendation date to ceremony (column) or notification (column 2). Bandwidths are from main RD regressions. Standard errors are clustered at the brokerage level.