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Market reaction to analyst forecasts by analysts with familyship: Evidence from South Korea

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ABSTRACT

Using the surnames of financial analysts in Korea, this paper examines how investors react to forecasts of analysts with familyship. Since Korea has a strong family-centered culture of sharing the surname, it provides a suitable setting for examining whether investors incorporate analysts' personal characteristics into their decision-making. This paper finds that stock recommendations by analysts with familyship elicit stronger market reactions. Additionally, the effect is only observed in the cases of upgrade, hold, and buy recommendations. Finally, the effect is observed only when the stock market was not in recession.

1. Introduction

Financial market participants rely on the information provided by analysts to address information asymmetry and uncertainty in valuation. In addition to the provided information, the characteristics of analysts themselves are identified and interpreted by investors as additional sources of information. Investors make decisions based on limited information and try to incorporate even the smallest piece of obtainable information into their decision-making process. They may respond differently to analyst forecasts depending on the analysts' personal characteristics since their personal preferences and trust toward the analysts affect the perceived credibility of information (Hodge and Pronk, 2006). As such, the existing literature documents that the market response depends on the individual characteristics of analysts such as their appearance (Cao et al., 2020; Li et al., 2020), gender (Gu, 2020; Li et al., 2020), and surname (Jung et al., 2019).

Among the personal characteristics of analysts, the surname refers to their origin and family and is a characteristic representing birth. Globally, it serves as an indicator of a family's ancestry, as well as country of origin. In the case of the United States, there are many immigrants, and thus an individual's country of origin is classified by surname and recognized as a personal characteristic. Several studies have shown that surnames represent personal relationships and affect decision-making. Zhang et al. (2020) show that CEO–board surname ties increase agency costs, and Even-Tov et al. (2022) find that individuals have an affinity for those who share

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first names and suggest that CEOs are more likely to share private information with a matched analyst. This evidence shows that surnames can affect people's decision-making by causing more favorable attitudes when personal relationships or psychological homogeneity exists. Therefore, if surnames are a personal characteristic that represents personal relationships or homogeneity, such as a kinship relationship, the phenomenon of analysts' surnames affecting the market may become more distinct.

Korea is a country with fewer immigrants due to its historically closed policies and has maintained a single ethnic group demographic for a long time. This makes it a society where blood ties are clearly revealed. Historically, Korean families with identical surnames meant shared roots, thus leading to stronger ties than those among American families. This strong family-centered culture can be revealed as sensitive reactions toward family and blood relationships. Relatedly, Jung et al. (2019) demonstrate that forecast revisions by analysts with more favorable surnames elicit stronger market reactions and that the effect is stronger for firms with lower institutional ownership and for analysts with non-American first names. American surnames are diverse and are simple indications of national and personal preferences, but this is not the case in Korea where names are less diverse and strongly related to blood relationships. In Korea, identical surnames imply familyship, which in turn may increase perceived trust in the information provided by individuals sharing the same surnames. Therefore, information users will respond positively in decision-making when they share surnames with analysts. This study tests this hypothesis by examining whether investors respond more favorably to stock recommendations from analysts with the surnames implying familyship with a wider range of the population.

Building upon the findings of Jung et al. (2019), we expect that in the Korean market, investors will exhibit stronger reactions toward forecasts by analysts with the family surnames indicating blood relationships, because blood relationships are considered more binding than ethnicity. We find evidence consistent with our expectation. Additionally, we find that in the case of favorable market reactions, investors' strong reactions to the analysts' surnames are observed only for upgrade, hold, and buy recommendations, not for downgrade ones. This evidence is not observable during external market crisis. Collectively, the results suggest that investors incorporate analysts' surname, as a personal characteristic indicating familyship, into their decision-making process. We believe our study contributes greatly to the field of behavioral finance in that it demonstrates that investors' irrational decision-making occurs primarily in friendly and optimistic situations.

The remainder of the paper is organized as follows: Section 2 presents the empirical methodology, including model specifications and the sample and data sources. Sections 3 and 4 present the results and related discussions, respectively. Section 5 concludes the paper.

2. Methodology

2.1. Investor favorability toward analyst surnames

To measure investors' favorability toward surnames implying familyship, we examine the relative frequency of each surname among all analysts in the sample and report the results in Table 1. We find that Lee, Kim, and Park account for 16.2%, 15.3%, and 8.9%, respectively. Among all analysts, these surnames are consistently dominant relative to the population demographics in Korea (Statistics Korea, 2015). Accordingly, analysts with surnames of Lee, Kim, or Park are regarded as those perceived by the majority of investors as favorably connected. Thus, this study denotes each as a *Top-3 Surname*. Throughout the analyses, the *Top-5 Surname* and *Top-10 Surname* subsets are defined as groups containing analysts with surnames with the five and ten greatest frequencies, respectively, in the sample and are used for robustness verification.

2.2. Model specifications

To test the hypothesis, we estimate the following Eq. (1), based on Jung et al.'s (2019) study, using ordinary least squares at the firm-analyst-year level:

$$BHSAR3_{i,j,t} = b_0 + b_1 Recommend_{i,j,t} + b_2 Top\ Surname_{i,j,t} + b_3 Recommend_{i,j,t} \times Top\ Surname_{i,j,t} + \sum b_k Recommend_{i,j,t} \times Control_{k,i,j,t} + \sum b_k Control_{k,i,j,t} + Firm\text{-}fixed\ effect + Year\text{-}fixed\ effect + Error_{i,j,t} \quad (1)$$

where for firm *i*, analyst *j*, and year *t*, the dependent variable is the size-adjusted buy-and-hold return measured during the 3 days surrounding the analyst's stock recommendation date.[1] *Recommend* is defined as the integer value ranging between 0 and 4, where 0 [4] represents the most unfavorable [favorable] recommendation (i.e., Sell [Strong Buy]).[2] *Top Surname* captures analysts with surnames implying familyship in the sample, assigning either *Top-3 Surname, Top-5 Surname*, or *Top-10 Surname* depending on regression specifications. The test variable of interest is $Recommend_{i,j,t} \times Top\ Surname_{i,j,t}$, which captures an incremental market response to stock recommendations from analysts with familyship. According to the hypothesis, b_3 is predicted to be significantly positive.

In addition, we control for a battery of variables that are shown in prior research (Lim and Jung, 2012; Song et al., 2012; Firth et al., 2013) to be associated with investors' market reaction to stock recommendations. All control variables are measured at the end of the

[1] We find that our results are not sensitive to using the three-day cumulative abnormal returns, whose correlation with the buy-and-hold abnormal returns is 0.99 (p-value < 0.01) in the sample.

[2] Five recommendation types are used in our sample: Sell, Underperform, Hold, Buy, and Strong Buy. These five types are represented by *Recommend* and coded as 0, 1, 2, 3, and 4, respectively.

Table 1
Distribution of analysts' surnames in Korea.

Rank	Surname	# of observations	Percent (%)
1	Lee	76,595	16.16
2	Kim	72,722	15.34
3	Park	42,274	8.92
4	Choi	23,536	4.96
5	Jung	17,276	3.64
6	Kang	15,004	3.16
7	Song	14,537	3.07
8	Jo	14,346	3.03
9	Hwang	13,088	2.76
10	Yoo	12,847	2.71
	etc.	171,887	36.24
	Total	474,112	100.0

Note. This table presents the distribution of analyst surnames in the sample.

fiscal year during the period when analyst forecasts are provided. The detailed definitions of the variables are provided in the Appendix. We include firm- and year-fixed effects. Lastly, we base our statistical inferences on standard errors adjusted for firm-level clustering.

2.3. Sample and data sources

We obtain the data on financial variables, stock market returns, and analysts' stock recommendations from the *DataguidePro* database. We include in the sample analysts' recommendations made for non-financial firms listed on the Korean Stock Exchange and the Korean Securities Dealers Automated Quotation during 2001–2016, resulting in 474,112 firm-analyst-year observations. Table 2 presents the descriptive statistics of the variables used in empirical analyses. We find that *BHSAR3* has a mean value of 0.074, indicating that equity investors, on average, react positively to analysts' stock recommendations. This positive market reaction is consistent with stock recommendations being favorably biased as indicated by the mean (median) value of *Recommend* equal to 2.755 (3.000). Additionally, we find that the test variable, *Top-3 Surname*, has a mean value of 0.404, suggesting that approximately 40% of individual analysts are identified as those with surnames that are likely perceived favorably by investors.

Next, we examine the correlations among the variables used for empirical analyses (untabulated). We find that *BHSAR3* and *Recommend* are positively correlated, consistent with investors reacting positively to favorable stock recommendations. The correlations of *Recommend* or *Top Surname* with other control variables ranges between -0.13 and 0.19, indicating that multicollinearity issues are not a major concern in our analysis.

3. Results

Table 3 shows the results of estimating Eq. (1), where four variants of the test variable are used: *Top Surname* is defined as *Kim* in column (1), *Lee* in column (2), *Top-3 Surname* in column (3), *Top-5 Surname* in column (4), and *Top-10 Surname* in column (5).[3] Notably, the coefficient on *Recommend* is positive and statistically significant at the 1% level across all columns. The coefficient on *Recommend*×*Top Surname* is significantly positive in columns (1) through (4) where *Top Surname* is defined as one for analysts whose surnames are ranked top one, three, and five in terms of the relative frequency in the sample. Consistent with our prediction, these results suggest that investors react more sensitively to stock recommendations provided by analysts whose surnames imply familyship. Notably, the result is not significant in column (4) where *Top Surname* is defined as one for analysts with surnames ranked in the top ten, accounting for approximately 64% of the sample. This additional result indicates that the main results are driven by a few groups of analysts with familyship, not by those simply representing the majority of the sample population.

4. Additional analyses and further discussions

4.1. Upgrade versus downgrade stock recommendations

Given the evidence on investors' biased response to analysts with familyship, we explore the possibility that the response systematically depends on the direction of changes in stock recommendations. Prior research shows that investors exhibit asymmetric responses to earnings news conditional on the news contents (e.g., Conrad et al., 2002; Williams, 2015). We partition the sample into three subgroups: one consisting of upgraded stock recommendations reflecting analysts' optimistic view of stock performance; the second consisting of no-change stock recommendations; and the third consisting of downgraded stock recommendations reflecting

[3] Among the entire population in Korea, Kim is the most populous surname accounting for 21.5%, followed by Lee (14.7%), Park (8.4%), Choi (4.7%), and Jung (4.3%) (Statistics Korea, 2015). The distribution of surnames in the entire population is almost identical to that in our sample, except that Lee is ranked top within the sample, as shown in Table 1.

Table 2
Descriptive statistics.

Variables	Mean	*SD*	Q1	Median	Q3
BHSAR3	0.074	0.260	-0.024	0.004	0.038
Recommend	2.755	0.469	3.000	3.000	3.000
Top Surname	0.404	0.491	0.000	0.000	1.000
Firm Size	14.127	1.788	12.813	14.211	15.498
Firm Coverage	13.772	7.007	9.000	12.000	17.000
Industry Coverage	2.672	1.411	2.000	2.000	3.000
Brokerage Size	23.992	9.424	17.000	22.000	30.000
Analyst Following	20.691	9.442	14.000	22.000	27.000
Career Exp.	4.336	3.400	2.000	4.000	6.000
Firm-specific Exp.	2.574	2.740	1.000	2.000	4.000
Accuracy	-0.054	0.101	-0.058	-0.020	-0.007

Note. This table summarizes the descriptive statistics of the variables in the primary regression model (Model 1) and presents the mean, median, standard deviation, 25th percentile, and 75th percentile values. The definitions of the variables are presented in the Appendix.

analysts' pessimistic view of stock performance. We then estimate Eq. (1) separately for each subgroup.

We report the results in Table 4. We find that the coefficient on *Recommend*×*Top-3 Surname* is significantly positive in the subgroups of upgraded and no-change stock recommendations in columns (1) and (2), but negative and not significant in the subgroup of downgraded stock recommendations in column (3). This evidence implies that the biased reaction of investors to analyst surnames is primarily driven by their desire to seek consistency with the attitudes toward analysts with familyship and the analysts' judgments of stock future performance (Klauer and Stern, 1992).

4.2. Analysis of type-specific stock recommendation

Since in our previous analyses we use *Recommend* which takes a higher value for more favorable stock recommendations, we are unable to pinpoint a specific type of stock recommendations associated with investors' biased reaction to analyst surnames. To address this issue, we introduce five indicators (*Strong Buy, Buy, Hold, Underperform*, and *Sell*) that equal one (1) for each corresponding type of stock recommendations and their interactions with *Top-3 Surname* in the regression. Notably, in the regression, the estimation of the coefficient on the single term *Sell* is omitted because of the perfect linear correlation between *Sell* and the other indicators.

We report the results in Table 5. It is noteworthy that the coefficients on *Strong Buy* and *Buy* are significantly positive, and the former coefficient is greater in magnitude than the latter one. Consistent with our intuition, these results suggest that investors react more positively to more favorable recommendations. More importantly, the coefficient on *Buy*×*Top-3 Surname* is significantly positive, and the coefficients on the interaction terms between *Top-3 Surname* and other types of recommendations are not statistically different from zero. The findings confirm that investors exhibit biased reactions to analyst surnames that imply familyship when buy recommendations are given.

4.3. Moderating effect of the global financial crisis

We further explore whether macroeconomic conditions moderate investors' biased reaction toward analyst surnames. We expect that our results would weaken in recession periods if they are driven by investors who selectively trust analysts with familyship to justify their optimistic views on stocks with favorable recommendations. To test this expectation, we define *GFC* as one for 2007–2008 when stock markets suffered due to the global financial crisis and estimate Eq. (1) separately for two subgroups with $GFC = 0$ and $GFC = 1$. We find that the coefficient on *Recommend*×*Top-3 Surname* is significantly positive only during the non-financial-crisis period but not during the financial-crisis period (untabulated). We also estimate Eq. (1) after including *GFC* and its interactions with *Recommend* and *Recommend*×*Top-3 Surname* using the full sample. We find a significantly positive coefficient on *Recommend*×*Top-3 Surname* but a significantly negative coefficient on *Recommend*×*Top-3 Surname*×*GFC* (untabulated). The results indicate that investors' biased reaction significantly decreases during the financial crisis period.

4.4. Other additional analyses

We perform the following additional analyses without tabulation and confirm the robustness of our findings. First, we examine whether the accuracy and optimism in analyst forecasts are systematically different between analysts with and without familyship. We find no significant difference in such forecast attributes, suggestive of our results not driven by investors' response to the forecast attributes. Second, we perform the main analysis after excluding analysts with the most dominant surname "Kim" or "Lee". The results remain unchanged, indicating that the results are driven only by analysts with the most dominant surname. Lastly, we perform the analysis after replacing year fixed effects with year×industry fixed effects to control for time-varying industry-specific economic conditions and find similar results.

Table 3
The effect of analysts' surnames on market reaction to stock recommendations.

Dep. Variable =	*BHSAR3*									
Top Surname =	*Kim*		*Lee*		*Top-3 Surname*		*Top-5 Surname*		*Top-10 Surname*	
	(1)		(2)		(3)		(4)		(5)	
Recommend	0.030	***	0.030	***	0.030	***	0.030	***	0.030	***
	(5.59)		(5.52)		(5.50)		(5.47)		(5.51)	
Top Surname	-0.004		-0.015	***	-0.004	**	-0.003		-0.002	
	(-1.29)		(-3.75)		(-2.02)		(-1.63)		(-0.88)	
Recommend×Top Surname	0.002	*	0.005	***	0.002	**	0.001	*	0.001	
	(1.83)		(3.26)		(2.21)		(1.90)		(1.00)	
Recommend×Firm Size	-0.001	***	-0.001	***	-0.001	***	-0.001	***	-0.001	***
	(-3.26)		(-3.24)		(-3.31)		(-3.29)		(-3.32)	
Recommend×Firm Coverage	0.000		0.000		0.000		0.000		0.000	
	(-0.36)		(-0.07)		(-0.40)		(-0.32)		(-0.26)	
Recommend×Industry Coverage	0.000		0.000		0.000		0.000		0.000	
	(-0.42)		(-0.72)		(-0.37)		(-0.40)		(-0.41)	
Recommend×Broker Size	0.000		0.000		0.000		0.000		0.000	
	(1.15)		(1.25)		(1.25)		(1.24)		(1.11)	
Recommend×Analyst Following	0.000	*	0.000		0.000	*	0.000	*	0.000	
	(-1.68)		(-1.63)		(-1.66)		(-1.67)		(-1.64)	
Recommend×Career Exp.	0.000		0.000		0.000		0.000		0.000	
	(0.70)		(0.70)		(0.69)		(0.71)		(0.73)	
Recommend×Firm-specific Exp.	0.000		0.000		0.000		0.000		0.000	
	(-0.81)		(-0.83)		(-0.81)		(-0.82)		(-0.84)	
Recommend×Accuracy	0.033	***	0.033	***	0.033	***	0.033	***	0.033	***
	(2.85)		(2.84)		(2.84)		(2.83)		(2.84)	
Firm Size	0.004	***	0.004	***	0.004	***	0.004	***	0.004	***
	(3.86)		(3.79)		(3.90)		(3.88)		(3.90)	
Firm Coverage	0.000		0.000		0.000		0.000		0.000	
	(-0.49)		(-0.82)		(-0.44)		(-0.52)		(-0.57)	
Industry Coverage	0.001		0.001		0.001		0.001		0.001	
	(0.71)		(1.07)		(0.66)		(0.69)		(0.70)	
Brokerage Size	0.000		0.000		0.000		0.000		0.000	
	(0.39)		(0.25)		(0.28)		(0.31)		(0.43)	
Analyst Following	0.000		0.000		0.000		0.000		0.000	
	(-0.15)		(-0.19)		(-0.17)		(-0.16)		(-0.18)	
Career Exp.	-0.001		-0.001		-0.001		-0.001		-0.001	
	(-0.59)		(-0.58)		(-0.58)		(-0.59)		(-0.61)	
Firm-specific Exp.	0.000		0.000		0.000		0.000		0.000	
	(0.24)		(0.25)		(0.24)		(0.25)		(0.27)	
Accuracy	-0.060	**	-0.060	**	-0.060	**	-0.060	**	-0.060	**
	(-2.17)		(-2.16)		(-2.16)		(-2.16)		(-2.17)	
Firm & Year FE	Yes		Yes		Yes		Yes		Yes	
# of observations	474,112		474,112		474,112		474,112		474,112	
Adjusted R^2	0.793		0.793		0.793		0.793		0.793	

Note. This table presents the results of examining the effect of analyst surnames on investors' market reaction to stock recommendations. The dependent variable (*BHSAR3*) is the size-adjusted buy-and-hold return measured during the 3 days surrounding the analyst's stock recommendation date. The test variable (*Top Surname*) is defined as *Kim* in column (1), *Lee* in column (2), *Top-3 Surname* in column (3), *Top-5 Surname* in column (4), and *Top-10 Surname* in column (5). The numbers in parentheses are the *t*-statistics based on standard errors adjusted for firm-level clustering. *$p < 0.10$, **$p < 0.05$, ***$p < 0.01$. The definitions of the variables are presented in the Appendix.

5. Conclusion

This study documents investors' biased favorability towards recommendations provided by analysts with familyship. It also finds that such biased reactions are observed only in response to good news. It contributes greatly to the field of behavioral finance by enhancing our understanding of investors' unreasonable decision-making that occurs primarily in favorable and optimistic situations.

CRediT authorship contribution statement

Kyoungwon Mo: Conceptualization, Formal analysis, Data curation, Investigation, Resources. **Wonsuk Ha:** Writing – original draft, Writing – review & editing, Project administration. **Kyung-Jin Park:** Writing – original draft, Methodology, Supervision.

Declaration of Competing Interest

The authors declare no conflicts of interest.

Table 4
Upgrade versus downgrade recommendations.

Dep. Variable =	*BHSAR3*				
Sample =	Upgrade		No change		Downgrade
	(1)		(2)		(3)
Recommend	0.054		0.026	***	-0.008
	(1.32)		(4.77)		(-0.24)
Top-3 Surname	-0.038	*	-0.004	*	0.010
	(-1.96)		(-1.92)		(0.95)
Recommend×*Top-3 Surname*	0.012	*	0.002	**	-0.006
	(1.82)		(2.15)		(-1.13)
Recommend×Control variables	Yes		Yes		Yes
Control variables	Yes		Yes		Yes
Firm & Year FE	Yes		Yes		Yes
# of observations	9506		453,844		10,762
Adjusted R^2	0.771		0.794		0.755

Note. This table presents the results for the subsamples of upgrade (Column 1), hold (Column 2), and downgrade recommendations (Column 3). The numbers in parentheses are the *t*-statistics based on standard errors adjusted for firm-level clustering. *$p < 0.10$, **$p < 0.05$, ***$p < 0.01$. The definitions of the variables are presented in the Appendix.

Table 5
Differential effects depending on the type of stock recommendation.

Dep. Variable =	*BHSAR3*											
	(1)		(2)		(3)		(4)		(5)		(6)	
Strong Buy	0.049	**	0.069	***	0.024	***	1.054	***	0.174	***	1.107	***
	(2.19)		(5.11)		(2.62)		(28.93)		(2.80)		(23.80)	
Buy	0.071	***	0.091	***	0.013		1.043	***	0.110	**	1.044	***
	(3.68)		(22.09)		(1.58)		(27.35)		(2.03)		(26.52)	
Hold	0.013		0.034	***	0.005		1.035	***	0.082		1.016	***
	(0.75)		(9.17)		(0.62)		(27.14)		(1.50)		(25.78)	
Underperform	-0.020		0.000		-0.001		1.029	***	0.081		1.015	***
	(-1.29)		(0.03)		(-0.13)		(26.92)		(1.43)		(23.04)	
Sell			0.020				1.030	***			0.934	***
			(1.12)				(26.31)				(13.98)	
Strong Buy×*Top-3 Surname*	0.075	**	0.075	**	0.004		0.004		0.000		0.000	
	(2.27)		(2.27)		(0.60)		(0.60)		(-0.06)		(-0.06)	
Buy×*Top-3 Surname*	0.035	***	0.035	***	0.001	**	0.001	**	0.001	**	0.001	**
	(7.96)		(7.96)		(2.01)		(2.01)		(2.03)		(2.03)	
Hold×*Top-3 Surname*	0.015	***	0.015	***	-0.001		-0.001		-0.001		-0.001	
	(3.10)		(3.10)		(-1.59)		(-1.59)		(-1.56)		(-1.56)	
Underperform×*Top-3 Surname*	-0.002		-0.002		0.000		0.000		0.002		0.002	
	(-0.32)		(-0.32)		(0.04)		(0.04)		(0.73)		(0.73)	
Sell×*Top-3 Surname*	0.082		0.082		0.010		0.010		0.005		0.005	
	(1.32)		(1.32)		(0.84)		(0.84)		(0.33)		(0.33)	
Recommend×Control variables	No		No		No		No		Yes		Yes	
Control variables	No		No		Yes		Yes		No		No	
Firm & Year FE	No		No		Yes		Yes		Yes		Yes	
# of observations	474,112		474,112		474,112		474,112		474,112		474,112	
Adjusted R^2	0.013		0.103		0.793		0.809		0.793		0.809	

Note. This table presents the results with separate indicators for analysts' stock recommendations: *Strong Buy, Buy, Hold, Underperform,* and *Sell*. The numbers in parentheses are the *t*-statistics based on standard errors adjusted for firm-level clustering. *$p < 0.10$, **$p < 0.05$, ***$p < 0.01$. The definitions of the variables are presented in the Appendix.

Data availability

Data will be made available on request.

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Appendix. Definitions of variables

Variable		Definition
BHSAR3	=	Size-adjusted buy-and-hold return measured during the three days surrounding the analyst's stock recommendation date, calculated as an individual firm's buy-and-hold return minus the equal-weighted average of the buy-and-hold returns for all firms in the same size decile.
Recommend	=	Analyst's stock recommendation, coded as 4 for "Strong Buy", 3 for "Buy", 2 for "Hold", 1 for "Underperform", and 0 for "Sell".
Top Surname	=	Dummy variable that equals 1 for the three most populous surnames ("Kim", "Lee", "Park") and 0 otherwise.
Strong Buy	=	Dummy variable that equals 1 if an analyst recommends "Strong Buy" and 0 otherwise.
Buy	=	Dummy variable that equals 1 if an analyst recommends "Buy" and 0 otherwise.
Hold	=	Dummy variable that equals 1 if an analyst recommends "Hold" and 0 otherwise.
Underperform	=	Dummy variable that equals 1 if an analyst recommends "Underperform" and 0 otherwise.
Sell	=	Dummy variable that equals 1 if an analyst recommends "Sell" and 0 otherwise.
Career Exp.	=	Number of years that elapsed since an analyst began their career
Firm-specific Exp.	=	Number of years for which an analyst has provided forecasts for a given firm during his/her entire career.
Firm Coverage	=	Number of unique firms followed by an analyst in a given year.
Industry Coverage	=	Number of industries followed by an analyst in a given year.
Brokerage Size	=	Number of analysts belonging to a brokerage firm in a given year
Analyst Following	=	Number of analysts providing stock recommendations for a firm in a given year
Accuracy	=	Absolute difference between an analyst's earnings estimate and reported earnings scaled by stock price, multiplied by -1.

References

Cao, Y., Guan, F., Li, Z., Yang, Y.G., 2020. Analysts' beauty and performance. Manag. Sci. 66 (9), 4315–4335.
Conrad, J., Cornell, B., Landsman, W.R., 2002. When is bad news really bad news? J. Financ. 57 (6), 2507–2532.
Even-Tov, O., Huang, K.K., Trueman, B., Bogard, J., 2022. Call me by your name: the effect of analyst-CEO first name commonality on analyst forecast accuracy. Available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3569247.
Firth, M., Lin, C., Liu, P., Xuan, Y., 2013. The client is king: do mutual fund relationships bias analyst recommendations? J. Accounting Res. 51 (1), 165–200.
Gu, P., 2020. The effects of social bias against female analysts on markets. J. Corporate Financ. 64, 101681.
Hodge, F., Pronk, M., 2006. The impact of expertise and investment familiarity on investors' use of online financial report information. J. Accounting, Auditing & Financ. 21 (3), 267–292.
Jung, J.H., Kumar, A., Lim, S.S., Yoo, C.Y., 2019. An analyst by any other surname: surname favorability and market reaction to analyst forecasts. J. Accounting and Econ. 67 (2–3), 306–335.
Klauer, K.C., Stern, E., 1992. How attitudes guide memory-based judgments: a two-process model. J. Exp. Soc. Psychol. 28 (2), 186–206.
Li, C., Lin, A.P., Lu, H., Veenstra, K., 2020. Gender and beauty in the financial analyst profession: evidence from the United States and China. Rev. Accounting Stud. 25, 1230–1262.
Lim, Y., Jung, K., 2012. Conflict of interest or information sharing? Evidence from affiliated analyst performance in Korea. Contemporary Accounting Res. 29 (2), 505–537.
Song, K., Mantecon, T., Altintig, Z.A., 2012. Chaebol-affiliated analysts: conflicts of interest and market responses. J. Bank. Financ. 36 (2), 584–596.
Statistics Korea, 2015. 2015 population and housing census report. Available at: https://kosis.kr/common/meta_onedepth.jsp?vwcd=MT_ZTITLE&listid=A_4 (accessed April 10, 2023).
Williams, C.D., 2015. Asymmetric responses to earnings news: a case for ambiguity. The Accounting Rev. 90 (2), 785–817.
Zhang, L., Zhang, Z., Jia, M., Ren, Y., 2020. A tiger with wings: cEO–board surname ties and agency costs. J. Bus. Res. 118, 271–285.