

Internet Appendix for

## **Politically Affiliated Analysts**

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## Appendix A: Variable Definitions

Variables	Definition
<b>Panel A: Recommendation categories and forecast bias</b>	
<i>Strong Buy</i>	An indicator that equals 1 if the recommendation is “strong buy,” and 0 otherwise.
<i>Buy</i>	An indicator that equals 1 if the recommendation is “buy,” and 0 otherwise.
<i>Hold</i>	An indicator that equals 1 if the recommendation is “hold,” and 0 otherwise.
<i>Sell</i>	An indicator that equals 1 if the recommendation is “sell,” and 0 otherwise.
<i>Strong Sell</i>	An indicator that equals 1 if the recommendation is “strong sell,” and 0 otherwise.
<i>Rank</i>	The recommendation level of an analyst on company $j$ , equal to 5, 4, 3, 2, and 1 for “strong buy,” “buy,” “hold,” “sell,” and “strong sell” recommendations, respectively.
<i>ROPT</i>	The recommendation level of an analyst minus the market consensus on company $j$ . Market consensus on each company is measured as the average recommendation for the company’s stock over the last 12 months prior to the analyst’s recommendation. When estimating market consensus, we require that at least three independent brokerages cover the stock in the last 12 months prior to the analyst’s recommendation.
<i>FOPT</i>	The difference between analysts’ expected EPS and actual EPS, scaled by the stock price at the end of the second trading day prior to the analyst report.
<i>RFOPT</i>	Demeaned analyst forecast optimism, adjusted by the average optimism of earnings forecasts from independent analysts issued in the last 12 months prior to a given forecast. We require that at least three independent brokerages follow the stock in the last 12 months prior to a given forecast.
<b>Panel B: Political pressure and ownership structure</b>	
<i>GovTie</i>	An indicator that equals 1 if the recommended firm and the analyst brokerage firm are both ultimately controlled by the central government or the same local government, and 0 otherwise.
<i>LocalGT</i>	An indicator that equals 1 if the ultimate controlling shareholder of the analyst brokerage firm and the recommended firm is the same local government (e.g., State Assets Management Bureau or Finance Bureau), and 0 otherwise.
<i>CentralGT</i>	An indicator that equals 1 if the recommended firm and the analyst brokerage firm are both ultimately controlled by the central government, and 0 otherwise.
<i>BLSOE</i>	An indicator that equals 1 if the analyst brokerage firm is ultimately controlled by a local government (e.g., State Assets Management Bureau or Finance Bureau), and 0 otherwise.
<i>BCSOE</i>	An indicator that equals 1 if the analyst brokerage firm is ultimately controlled by the central government (e.g., State Assets Management Bureau or Finance Bureau), and 0 otherwise.
<i>FLSOE</i>	An indicator that equals 1 if the recommended firm is ultimately controlled by a local government (e.g., State Assets Management Bureau or Finance Bureau), and 0 otherwise.
<i>FCSOE</i>	An indicator that equals 1 if the recommended firm is ultimately controlled by the central government (e.g., State Assets Management Bureau or Finance Bureau), and 0 otherwise.
<b>Panel C: Investor trading</b>	
<i>CABSI</i>	Cumulative abnormal buy–sell imbalance of institutional investors. It is defined as the sum of <i>ABSI</i> at $[T_0-1, T_0+1]$ , where $T_0$ is the date of the analyst recommendation report. Following Malmendier and Shanthikumar (2007), <i>ABSI</i> is defined as the normalized <i>BSI</i> by subtracting the firm-year mean and dividing the result by the firm-year standard deviation. <i>BSI</i> is defined as the total buying volume minus the total selling volume, adjusted by the average daily trading volume in the previous year, following Kaniel et al. (2008).
<b>Panel D: Other variables</b>	
<i>Tariff</i>	An indicator, equal to 1 if firm $j$ ’s $TariffPC_{j,k}$ exceeds the median among positive $TariffPC_{j,k}$ firms and analyst recommendations pertain to the period following the issuance of notice $k$ . Otherwise, the indicator is set to 0. $TariffPC_{j,k}$ represents the normalized value of products exported to the U.S. market over the preceding five years, that specifically fall under the tariff imposition notices during

	the U.S.-China trade war.
<i>Exemption</i>	An indicator, equal to 1 if the $ExemptionPC_{j,w}$ of the firm $j$ is above the median of firms possessing a positive $ExemptionPC_{j,w}$ and if the analyst recommendations are published during the time period between the issuance and expiration of notice $w$ . If these conditions are not met, the <i>Exemption</i> variable is assigned a value of 0. $ExemptionPC_{j,w}$ represents the normalized value of products exported to the U.S. market over the preceding five years, that specifically fall under the tariff exemption notices during the U.S.-China trade war.
<i>BuySide</i>	Buy-side pressure from mutual funds faced by analysts, following Firth, Lin, Liu, and Xuan (2013). It is an indicator that equals 1 if the covered stock was held in the top 10 stocks of the portfolio by at least one of the mutual fund clients of the analyst's brokerage firm in the previous quarter, and 0 otherwise. A mutual fund is considered a client of a brokerage firm if that firm received commission payments from the mutual fund in the previous quarter.
<i>SellSide</i>	An indicator that equals 1 if analyst $j$ 's brokerage firm is under pressure for their underwriting business with company $i$ , and 0 otherwise. The brokerage firm is identified as facing sell-side pressure for the company if one of the following two conditions is met: (i) the brokerage firm is the major underwriter of the company's IPO; (ii) the brokerage firm was a major underwriter of the company's SEOs, allotments, or debt financing in the past.
<i>FEXP</i>	Natural logarithm of the analyst's firm-specific experience, measured by the number of years covered by the analyst in a given firm.
<i>Frequency</i>	Natural logarithm of the number of recommendations issued by an analyst for a firm in the year preceding the focal recommendation.
<i>Return</i>	Stock performance prior to analyst recommendation, measured by the cumulative stock return over the window of $[-20, -6]$ before analyst recommendation.

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## **Appendix B: Supplementary analysis**

### *Political promotions, political pressure, and analyst optimism*

In this section, we examine whether the incentives created by the impending turnover of politicians can exacerbate analysts' political pressure and thus lead to more optimistic recommendations.

In China, politicians are rewarded for their activities in the capital market. To signal their governance quality and enhance their career prospects, politicians are inclined to accelerate initial public offering (IPO) activities and suppress negative information prior to political promotion events (Piotroski and Zhang, 2014; Piotroski, Wong, and Zhang, 2015). Similarly, the career concerns of politicians in affected regions may also prompt them to intervene in the decisions of politically connected analysts to improve stock performance before promotion events. Therefore, we predict that the documented relationship between political pressure and analyst recommendations will be stronger in the year before or the year of political promotions. We collect data of either the party secretaries or governors of the cities where the listed firms in our sample are headquartered during all political turnover cycles, and we identify all promotion events in which such individuals are promoted to a position of more political power. Because the data on local politicians' promotion events end in 2016, we conduct our analysis over the period from 2005 to 2015.

As the tournament mechanism mainly affects the incentives of local governments rather than the central government, we focus on analysts' political ties to local governments. Before examining the marginal effect of political promotions, we construct two new variables, *LocalGT* and *CentralGT*, to represent political pressure from the local government and the central government, respectively. *LocalGT* (*CentralGT*) equals 1 if the ultimate controlling shareholder of the brokerage firm and the recommended firm is the same local (central) government, and 0 otherwise. We then split *GovTie* into *LocalGT* and *CentralGT* in the regression models.

Next, we examine how political promotion incentives affect the documented relationship between local government ties and analyst recommendation optimism. More specifically, we estimate the following regression model:

$$\begin{aligned}
ROPT_{i,j,T_0} = & \alpha + \beta_1 LocalGT_{i,j,T_0} + \beta_2 Promotion_{j,T_0} + \beta_3 LocalGT_{i,j,T_0} \times Promotion_{j,T_0} \\
& + \beta_4 CentralGT_{i,j,T_0} + \beta_5 CentralGT_{i,j,T_0} \times Promotion_{j,T_0} + \gamma_1 BuySide_{i,j,T_0} \\
& + \gamma_2 SellSide_{i,j,T_0} + \delta Controls_{i,j,T_0} + Fixed\ Effects \\
& + \epsilon_{i,j}, \tag{B1}
\end{aligned}$$

Following Piotroski and Zhang (2014), *Promotion* is an indicator equal to 1 if analysts make recommendations in the year before or the year of political promotion events in the city where the listed firm is headquartered, and 0 otherwise. Our variable of interest is the coefficient of the interaction of *LocalGT* and *Promotion*. We expect to observe a positive  $\beta_3$ .

Column A of Table B4 presents the regression results. Following Piotroski, Wong, and Zhang (2015), we cluster standard errors by province. We find that the coefficient of the interaction of *LocalGT* and *Promotion* is significant and positive. This suggests that the positive relationship between local political pressure and analyst recommendation optimism in the affected stocks is more pronounced in the presence of impending political promotions. In addition, the coefficient of the interaction of *CentralGT* and *Promotion* is insignificant, indicating the affiliation with the central government does not affect the coverage of analysts from brokerages owned by the central government before local politicians' promotions.

To further augment this result, we examine how the personal attributes of politicians affect the documented pattern among political promotions, analysts' government ties, and analyst optimism. In 1980, the Chinese Communist Party implemented a mandatory retirement system in which provincial officers are required to retire at the age of 65 years if they fail to be promoted to a higher position in the central government. In general, young politicians are more likely to be promoted (Li and Zhou, 2005). Accordingly, we investigate whether the political promotion effect documented in this study is stronger for young politicians.

The regression model is shown in Equation (B2):

$$\begin{aligned}
ROPT_{i,j,T_0} = & \alpha + \beta_1 LocalGT_{i,j,T_0} + \beta_2 Promotion_{j,T_0} + \beta_3 Young_{j,T_0} \\
& + \beta_4 LocalGT_{i,j,T_0} \times Promotion_{j,T_0} + \beta_5 LocalGT_{i,j,T_0} \times Young_{j,T_0} \\
& + \beta_6 Promotion_{j,T_0} \times Young_{j,T_0} \\
& + \beta_7 LocalGT_{i,j,T_0} \times Promotion_{j,T_0} \times Young_{j,T_0} + \beta_8 CentralGT_{i,j,T_0} \\
& + \beta_9 CentralGT_{i,j,T_0} \times Promotion_{j,T_0} + \beta_{10} CentralGT_{i,j,T_0} \times Young_{j,T_0} \\
& + \beta_{11} CentralGT_{i,j,T_0} \times Promotion_{j,T_0} \times Young_{j,T_0} + \gamma_1 BuySide_{i,j,T_0} \\
& + \gamma_2 SellSide_{i,j,T_0} + \delta Controls_{i,j,T_0} + Fixed\ Effects + \epsilon_{i,j}, \quad (B2)
\end{aligned}$$

*Young* is an indicator equal to 1 if the government incumbent is not older than 55 (the sample median), and 0 otherwise.

Column B of Table B4 presents the results. It shows that the coefficient of *LocalGT*  $\times$  *Promotion*  $\times$  *Young* is significant and positive, suggesting that political intervention in analyst recommendations is relatively higher when local government officials are younger before their promotion events. This indicates that young politicians tend to pressure politically related analysts to make optimistic recommendations of affiliated stocks ahead of impending promotions. To some extent, our results shed light on the channel through which the personal attributes of officials affect their chances of promotion.

For robustness, we also use the raw level of stock recommendations without adjustment for market consensus as the dependent variable in the rest columns of Table B4 and obtain consistent results.

Overall, our evidence demonstrates that local politicians' turnover incentives strengthen the positive relationship between political pressure and analysts' optimistic bias, especially when the politicians are younger.

/\*Insert Table B4 Here\*/

**Table B1 Sample Selection**

This table reports the sample selection process.

Sample selection	Retained observations	Retained unique stocks
Total recommendations between January 2005 and April 2020	482,384	3,806
Minus:		
Recommendations for stocks in the financial industry	456,417	3,761
Minus:		
Recommendations for private stocks	178,332	1,220
Minus:		
Recommendations for stocks covered by less than three independent analysts	163,447	953
Minus:		
Recommendations with missing control variables	155,876	891
Final sample	155,876	891

**Table B2 Events of the Impositions of Additional Duties on Products of China**

Proposed List Announcement	Estimated Value of Products on the Proposed List (Billion)	Final List Announcement	Estimated Value of Products on the Final List (Billion)	Notes
6-Apr-2018	\$50	20-Jun-2018	\$34	/
20-Jun-2018	\$16	16-Aug-2018	\$16	/
17-Jul-2018	\$200	21-Sep-2018	\$200	/
		19-Dec-2018	\$200	Postponing the date on which the rate of the additional duties will increase to 25 percent for the products of China covered by the September 2018 action. The rate of additional duty for the products covered by the September 2018 action will increase to 25 percent on March 2, 2019.
		9-May-2019	\$200	Increasing the rate of additional duty from 10 percent to 25 percent for the products of China covered by the September 2018 action
17-May-2019	\$300	20-Aug-19	\$300	/
		30-Aug-19	\$300	Increasing the rate of additional duty from 10 to 15 percent for the products of China covered by the \$300 billion tariff action published on August 20, 2019.



**Table B3 Events of the Tariff Exclusions of Products from China**

Publication Date	Expiration Date	Product Exclusions that apply as of the action (billion)
2018.12.28	2019.12.28	\$34
2019.03.25	2020.03.25	\$34
2019.04.18	2020.04.18	\$34
2019.05.14	2020.05.14	\$34
2019.06.04	2020.06.04	\$34
2019.07.09	2020.07.09	\$34
2019.07.31	2020.07.31	\$16
2019.08.07	2020.08.07	\$200
2019.09.20	2020.09.20	\$34
2019.10.02	2020.10.02	\$16
2019.10.28	2020.10.28	\$200
2019.11.13	2020.11.13	\$200
2019.11.29	2020.11.29	\$200
2019.12.17	2020.12.17	\$200
2020.01.06	2021.01.06	\$200
2020.02.11	2020.10.01	\$34
2020.02.11	2020.08.07	\$200
2020.03.17	2020.09.01	\$300
2020.03.26	2020.08.07	\$200
2020.03.31	2020.09.01	\$300
2020.04.24	2020.08.07	\$200

**Table B4 Local Political Pressure, Government Promotions, and Analyst Recommendation Optimism**

This table reports the results of the effect of political pressure on analyst optimism, using the setting of local politician promotion events. We estimate the model specifications for a subsample from 2005 to 2015 because the data on local politicians' promotion events end in 2016. Following Piotroski and Zhang (2014), *Promotion* is an indicator that equals 1 if analysts make recommendations in the year before or the year of political promotion events in the city where the listed firms are headquarters, and 0 otherwise. *Young* is an indicator that equals 1 if the government incumbent is not older than 55 years (the sample median), and 0 otherwise. Please note that the coefficients of *Promotion* and *Promotion*×*Young* are absorbed by the fixed effects we control for. All variables are defined in Appendix A. Robust *t*-statistics clustered by province are reported in brackets, following Piotroski, Wong, and Zhang (2015). \*, \*\*, and \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

Variable	<i>ROPT</i>	<i>ROPT</i>	<i>Rank</i>	<i>Rank</i>
	A	B	C	D
<i>LocalGT</i>	0.007 (0.318)	0.023* (1.966)	0.005 (0.260)	0.020 (1.588)
<i>CentralGT</i>	0.029 (1.672)	0.024 (1.055)	0.028 (1.657)	0.024 (1.087)
<i>LocalGT</i> × <i>Promotion</i>	0.060** (2.233)	-0.067 (-1.553)	0.065** (2.485)	-0.052 (-1.139)
<i>CentralGT</i> × <i>Promotion</i>	0.014 (0.536)	0.042 (0.851)	0.010 (0.393)	0.040 (0.811)
<i>LocalGT</i> × <i>Young</i>		-0.040 (-1.005)		-0.035 (-0.897)
<i>LocalGT</i> × <i>Promotion</i> × <i>Young</i>		0.198*** (3.442)		0.182*** (2.929)
<i>CentralGT</i> × <i>Young</i>		0.011 (0.514)		0.009 (0.441)
<i>CentralGT</i> × <i>Promotion</i> × <i>Young</i>		-0.059 (-1.138)		-0.063 (-1.187)
<i>BuySide</i>	0.026*** (5.578)	0.026*** (5.584)	0.032*** (6.229)	0.032*** (6.242)
<i>SellSide</i>	0.025* (1.733)	0.024 (1.663)	0.024 (1.693)	0.023 (1.620)
<i>FEXP</i>	-0.012 (-1.450)	-0.012 (-1.454)	-0.011 (-1.371)	-0.011 (-1.375)
<i>Frequency</i>	0.056*** (8.146)	0.056*** (8.209)	0.052*** (7.667)	0.052*** (7.721)
<i>Return</i>	0.097*** (4.634)	0.097*** (4.659)	0.063*** (3.088)	0.063*** (3.101)
Constant	Yes	Yes	Yes	Yes
Brokerage×Year	Yes	Yes	Yes	Yes
Firm×Year	Yes	Yes	Yes	Yes
Obs.	89,619	89,619	89,619	89,619
Adj. R-squared	0.279	0.279	0.407	0.408