

Politically Affiliated Analysts

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Abstract. Government ownership of financial intermediaries is pervasive around the world. In this study, we examine the impact of common government ownership between the brokerage and listed firms on the information production role of brokerage firms. We show that affiliated analysts tend to issue more optimistic recommendations for stocks of firms controlled by the same government entity that controls their brokerage firms. This optimistic bias is particularly pronounced during periods of economic shocks. Our study demonstrates this by utilizing additional tariff impositions and tariff exemptions during the U.S.–China trade war as exogenous negative and positive shocks, respectively. Additionally, our study indicates that stocks recommended by politically affiliated analysts tend to underperform those recommended by independent analysts, implying that the optimism stems from conflicts of interest rather than superior information. Furthermore, our research highlights that sophisticated investors perceive the potential bias and incorporate it into their trading. Consistent with an exchange of favors story, politically affiliated brokerage firms receive a larger allocation during the issuance of local government debt, whereas governments subscribe for more shares during seasoned equity offerings by these affiliated brokerage firms.

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1. Introduction

Government ownership of financial intermediaries is widespread globally (La Porta et al. 2002, Sapienza 2004). According to an analysis by La Porta et al. (2002), among the 10 largest banks in 92 countries, the state owns approximately 42% of the equity. By 2020, state-owned investors managed assets totaling \$27 trillion in U.S. dollars (USD), representing the third largest group of asset owners worldwide (Malik et al. 2021). Many of these state-owned investors are dominant shareholders in a spectrum of financial institutions, such as banks, securities companies, and brokerage firms. The literature, especially studies by Shleifer and Vishny (1994) and Shleifer (1998), highlights that politicians, driven by the allure of retaining power and its associated privileges, often use their control of state-owned enterprises (SOEs) to bolster political allegiance. Given the extensive presence of government-owned financial institutions and the pivotal roles of financial intermediaries

in resource allocation, information production, and corporate governance—coupled with the significant contribution of financial development to economic growth—it is important to examine how government ownership affects the functioning of financial intermediaries. Most research, including works by La Porta et al. (2002), Sapienza (2004), Dinç (2005), Khwaja and Mian (2005), Ru (2018), and Morck et al. (2019), focuses on the role of government ownership in credit allocation within the banking industry. However, the effect of government ownership on the operations of other types of financial intermediaries is relatively underexplored.

In this paper, we examine the impact of the government ownership on the information production role of brokerage firms by leveraging a comprehensive, matched sample of brokerage firms and financial analysts in China. Specifically, our study explores the potential effects of common state ownership ties between brokerage firms and publicly listed firms on the behavior

of the financial analysts, who play a very important role in information production within the capital markets. China offers a unique platform to conduct the study for the following reasons. First is the political rewards system; politicians in China receive recognition based on their economic performance (Blanchard and Shleifer 2001, Li and Zhou 2005). Li and Zhou (2005) elucidate that a politician's economic performance is a significant predictor of career progression or termination. Given that the performance of listed firms is publicly visible, is readily measurable, and offers easy comparison metrics with firms from other regions, politicians possess substantial incentives to enhance the stock market performance of firms within their purview. Therefore, there is potential for politicians to influence brokerage firms under their control to act as advocates for the listed firms in their jurisdictions. This may place analysts within these government-owned brokerage firms under political pressure, possibly leading them to issue optimistically biased ratings for the firms controlled by the same government entity.¹ Second is state ownership prevalence; during our sample period spanning from 2005 to 2019, state ownership remained dominant in China's financial landscape. More than 70% of the brokerage firms and 38% of the listed firms² are ultimately controlled by either central or various regional government bodies.³ This prevalence provides ample instances where the same government entity ultimately controls a brokerage firm and a listed firm. Such instances offer us a unique opportunity to ascertain if affiliated analysts behave differently toward the firms controlled by the same government owner. Third is the size and liquidity of the stock market; China boasts the world's second largest and highly liquid stock market. This allows us to evaluate both the short-term and long-term market reactions to analyst recommendations and discern varied responses from different types of investors, such as institutional versus individual investors.⁴ Accordingly, related findings help us understand the capital market implications of the potential distortion in information production stemming from common state ownership. If analysts distort their recommendations because of political pressure, naïve adherence to analyst recommendations will be costly.

To measure potential political pressure, we manually identify whether an analyst's brokerage firm and a covered firm are ultimately controlled by the central government or the same local government entity (e.g., the State Assets Management Bureau or Finance Bureau). We categorize analysts as being under political pressure (or "politically affiliated") when the firms they cover are controlled by the same government entity that supervises their brokerage firms. Our findings suggest that politically affiliated analysts tend to issue more favorable ratings to listed firms under the same political control as their respective brokerages in comparison with other analysts covering the same firm. Importantly, our

analysis incorporates firm-year and brokerage-year fixed effects to make sure the empirical findings are not driven by temporal variations in firm or brokerage attributes.

If the aforementioned results are indeed driven by a political support story, we should be able to observe a more pronounced pattern during periods of economic shocks. To test this nuanced hypothesis, we delve into specific heterogeneity examinations centered around periods of economic shocks. For our analysis, we first use the China–U.S. trade war as an external economic shock. On March 22, 2018, the Trump administration initiated a 25% tariff on Chinese imports to the United States, valued at up to U.S. \$60 billion, marking a significant downturn in Sino–American trade relations. Using the unexpected tariff imposition announcement as a negative shock, we scrutinize how recommendations for politically related stocks respond to varying firm exposure to this shock. We operationalize this exposure by measuring the volume of a firm's products listed under the tariff impositions that was exported to the U.S. market preshock. We find that politically affiliated analysts are more reluctant to downgrade than independent counterparts for firms with a heightened vulnerability to the China–U.S. trade disputes. Conversely, when examining the tariff exemption announcement as a positive shock, we explore the propensity of analysts to issue positive recommendations for politically related stocks that have greater exposure to this positive shock. Our results suggest that politically affiliated analysts are prompter than independent analysts in advancing upgrade recommendations and reiterating strong buys for stocks that have greater exposure to the tariff exemptions.

Furthermore, we explore the behavior of politically affiliated analysts in the face of general adverse news events pertaining to the covered stocks. Drawing from a sample of negative news events characterized by negative media coverage and significant declines in stock prices (as delineated by Firth et al. 2013), we scrutinize the reactions of these analysts. Our findings reveal that analysts under political pressure exhibit a reduced propensity to downgrade their ratings of related stocks in comparison with their independent counterparts, especially after the occurrence of such negative news events.

Second, we examine the possibility that incentives linked with forthcoming political turnovers might exacerbate the political pressure on analysts, thereby escalating the optimism evident in their recommendations of affiliated firms. Existing literature underscores the propensity of politicians to manipulate capital market activities as a means to showcase their governance prowess and boost their advancement prospects as they approach promotions (Piotroski and Zhang 2014). Disclosing bad news can impose significant costs on local politicians, propelling them to transiently curtail negative information about affiliated firms, such as reducing media coverage ahead of anticipated political promotions (Piotroski

et al. 2015). Given that this tournament mechanism predominantly affects local governmental incentives, our investigation in this segment focuses on analysts' political ties with local governments rather than the central government. Our findings delineate an amplified positive relationship between local political pressure and analyst recommendations when impending political promotions are in the horizon. To reinforce these findings, we further examine how the personal characteristics of politicians affect the observed pattern. Our analysis shows that this effect is more pronounced among younger politicians who ostensibly harbor greater potential for advancement.

Next, we probe deeper into the underlying motivations behind the observed optimism of affiliated analysts. Specifically, we seek to discern whether this optimism can be attributed to an inherent informational edge concerning the recommended stock or if it arises from conflicts of interest borne out of political pressure. Analysts, by virtue of their governmental affiliations, may be privy to insider details on government policies and intrinsic stock values. This could naturally culminate in a positive relationship between analyst optimism and political pressure exerted upon them. If this hypothesis holds, we expect to observe stronger market reactions to recommendations from analysts under political pressure than from independent analysts. Conversely, should conflicts of interest, symptomatic of an agency problem, eclipse the informational benefits garnered from governmental connections, we may observe a diametrically opposite effect.

To answer this question, we emphasize the informativeness of stock recommendations from politically affiliated analysts in two ways. We first examine the difference in stock performance following stock recommendations between analysts subjected to political pressure and their independent counterparts. The empirical evidence reveals that market reactions are significantly lower in response to recommendations issued by analysts under political pressure. Next, we investigate whether sophisticated investors are aware of the inherent political bias in analysts' recommendations as evidenced by their trading behavior. Based on a unique database that contains accurate investor classifications and all transaction records, we identify institutional investors' trading for firms listed on the Shanghai Stock Exchange (SSE) between 2005 and 2008. Using the buy-sell imbalance (BSI) as our metric for investor trading, we find that institutional investors reduce their net buying activities when analysts issue "strong buy" or "buy" recommendations for stocks of firms controlled by the same government entity as their respective brokerage firms. The tempered response from sophisticated investors underscores their cognizance of the optimistic bias in politically pressured analysts' recommendations, factoring it into their trading decisions. Overall, our

evidence supports the argument that the observed analyst optimism in the face of political pressure is predominantly because of conflicts of interest rather than information advantages.

Finally, we investigate the potential benefits that brokerages might receive from the government as a reward for favoring stocks controlled by the same government. To this end, we collect data on underwriting allocations during bond issuances by the government or government-controlled firms and seasoned equity offering (SEO) subscription data when the brokerage firms issue shares. We find that government entities tend to allocate more underwriting assignments to politically affiliated brokerages, particularly if their analysts release more favorable recommendations toward related stocks. Likewise, as the favorableness of affiliated analysts' recommendations increases, the associated government entities tend to subscribe for more shares during SEOs by the brokerage firms. Parallely, we evaluate whether delivering bad news can be significantly detrimental to local politicians, thus incentivizing them to temporize or avoid negative information about associated firms. Prior literature illustrates that politicians often intervene in capital market activities to display their governance competence and by extension, boost their career advancement opportunities before promotions (Piotroski and Zhang 2014). Corroborating this, our findings suggest that the unveiling of unfavorable information about SOEs, as evidenced by significant negative returns, tends to adversely impact the promotional likelihood of local politicians.

We contribute to the literature in several ways. First, we provide a comprehensive explanation into the economic consequences of government ownership and political pressure in an important financial intermediary: the brokerage firms. In particular, we document the real effect of political pressure on information distortion in the financial market. Although prior literature has prominently shed light on the repercussions of government ownership in the banking industry (e.g., La Porta et al. 2002, Sapienza 2004, Dinç 2005, Ru 2018, Morck et al. 2019, Li et al. 2020a), our analysis bridges a gap by elucidating the real effect of government ownership in brokerage firms. Moreover, we also add to the growing literature on how political connections shape market participants' behavior starting from Fisman (2001) and Faccio (2006).⁵ Given that political connections are a form of social networks, our study also aligns with and contributes to the literature on the capital market implications of such networks. In this context, our study examines analysts' political connections and analysts' decision-making process (Cohen et al. 2010, Han and Yang 2013, Gu et al. 2019, Li et al. 2020b, Han et al. 2022).

Second, our study reveals a new source of conflicts of interest in analysts' recommendations, thereby broadening the scope of the existing literature that investigates the determinants of analyst biases. Although the

significance of political connections in China's capital markets has been amply discussed, the literature mainly focuses on how these connections affect firms' performance and financing (Fan et al. 2007, Li et al. 2008, Piotroski and Zhang 2014). Our findings highlight that political pressure distinctly amplifies analyst optimism. This is manifested in the propensity of politically affiliated analysts to release more favorable recommendations for stocks of firms with the same governmental controller as their respective brokerages. We shed new light on the growing literature on how various factors hamper analysts' ability to work as an objective financial intermediary (Lin and McNichols 1998; Michaely and Womack 1999, 2005; Mehran and Stulz 2007; Mola and Guidolin 2009; Cohen et al. 2010, 2012; Firth et al. 2013; Dong et al. 2021).

The rest of this paper is organized as follows. Section 2 presents our data, variables, and methodology. Section 3 presents our empirical results. Section 4 concludes the paper.

2. Data, Variables, and Descriptive Statistics

2.1. Data and Sample Selection

Our sample is compiled from several sources. We obtain data on analysts' stock recommendations from the China Stock Market and Accounting Research (CSMAR) database, a leading financial data provider in China. This data set provides relevant stock codes, reporting dates, analyst names, broker names, broker codes, standardized recommendations, recommendation changes, and recommendation benchmarks. We categorize all standardized recommendations as "strong buy," "buy," "hold," "sell," and "strong sell." The CSMAR data set also provides analysts' earnings forecasts⁶ and data on stock returns and market capitalization.

To ascertain the extent of political pressure exerted on an analyst, we focus on the ownership structures of the analyst's brokerage and the target firm. Comprehensive annual reports of all brokerages in our sample are sourced from the archives of the Securities Association of China.⁷ From each annual report, we collect the brokerage's ownership structure information and identify its ultimate controller. Detailed data on the ownership structure and ultimate controller of the target firms are obtained from the CSMAR database.

To assess firms' exposure to the China–U.S. trade war in 2018, we utilize data from the Chinese Customs Trade Statistics (CCTS) compiled by the General Administration of Customs of China. The data set contains China's monthly international trade operations categorized using the harmonized system-8 (HS-8) digit level. This includes details pertaining to the trading firms and the commodities they trade, including metrics like unit price, quantity, and partner nations. By matching the

trading entity data from the CCTS with our database of publicly listed firms, we can identify the export sales of each listed firm to the U.S. market, achieved by aggregating the CCTS data on an annualized basis.

To capture the underlying political incentives potentially influencing analyst recommendations, we construct a measure termed *Promotion*. Drawing upon the methodology outlined by Piotroski and Zhang (2014), we manually compile a data set capturing political promotion events in local governments. This data accumulation process extensively leverages resources, such as the "Chinese Personnel Database" and "China VIPs" available in the China Information Bank. To enhance the comprehensiveness of our data set, we also conduct supplementary searches on Google. Specifically, we identify all local government turnover events involving the transfer, reassignment, or promotion of either the party secretary or the governor to a position of more political power.

To describe buy-side business pressure, we use the comprehensive data sets available on Wind Information. This platform provides insights into the total commission payments made by each mutual fund and the distribution of these payments among brokerage firms—a distinctive characteristic inherent to Chinese mutual fund data. By combining these data with information on the top 10 stock holdings of Chinese mutual funds, we can discern the buy-side business pressure faced by brokerage firms.

To measure daily investor trading behavior, we use the unique account-level data set of institutions and individuals from the SSE as our data source. This data set contains the complete transaction and order records of various types of investors with accounts in the SSE for the 2005–2008 period. Each record in the data set includes the investor identity code for both sides of the trade along with the date, trade sequence, exchange seat code, trade size, stock code, order time, trade time, trade price, trade amount, order sequence number, and other relevant information. Leveraging the investor identity code, we can categorize each side of a transaction, classifying them as originating from either an individual account or an institutional account. The order sequence number allows us to determine which party initiated a transaction.

Our sample period expands from January 2005 to April 2020. A detailed selection process for analyzing analyst recommendation optimism is delineated in Table B.1 in Online Appendix B. To ensure that our results are not merely reflective of the state ownership feature of the covered firms but rather, indicative of political pressure, we center our analysis on analysts' recommendations of listed state-owned firms.⁸ To evaluate analyst optimism relative to market consensus, we require at least three analysts without political pressure to follow a particular stock over the preceding 12 months. We ultimately

obtain 155,876 stock recommendations for 878 firms in our sample. All continuous variables in the analysis are winsorized at both the 1% and 99% levels.

2.2. Variable Measurement

2.2.1. Political Pressure. To delineate potential political pressure, we formulate a binary variable termed *GovTie*. Specifically, for a given analyst recommendation, *GovTie* is set to one if the ultimate controlling shareholder of both the analyst’s brokerage and the recommended firm aligns with either the central government or an identical local government (e.g., the State Assets Management Bureau or Finance Bureau) and zero otherwise.

2.2.2. Different Levels of Incentives for Political Inter-vention. To articulate the degree of local political interference in brokerage firm operations, we also scrutinize the influence of political promotion incentives on such inter-ventions, drawing inspiration from Piotroski and Zhang (2014). The variable *Promotion* is an indicator equal to one if analysts issue recommendations for a listed firm in either the year preceding or the year concurrent with promotion events in the city where the listed firm’s headquarters are located and zero otherwise.

2.2.3. Analyst Optimism. We record analysts’ recommendations in our data set in real-time sequence with standardized ratings: “strong buy,” “buy,” “hold,” “sell,” and “strong sell.” We construct the variable *Rank* to mirror these ratings, assigning values of five, four, three, two, and one for each respective rating. We gauge analyst recommendation optimism by subtracting the market consensus from an analyst’s rating for a particular stock. Here, the market consensus is measured by the average investment rating given by independent analysts for the same stock over the preceding 12 months. Our results are also consistent when we use the median investment rating as a proxy for market consensus.

To ensure the robustness of our results, we delve into an analysis of analyst forecast optimism, denoted as *FOPT*. Specifically, for a given analyst forecast pertaining to a designated company, *FOPT* is estimated as the difference between the analyst’s expected EPS and the actual EPS scaled by the stock price two trading days prior to the issuance of the analyst report. In addition, we also calculate the relative optimism of analyst forecasts, labeled *RFOPT*, which compares the optimism of a given analyst’s forecast with the average optimism of all independent analysts who make forecasts for the same company and period over the preceding 12 months.

2.2.4. Investor Trading. To measure the trading behavior of sophisticated investors, we follow the literature (Kaniel et al. 2008) and construct an order imbalance measure (i.e., *BSI*) to capture net investor trading. We add the purchases and sales of each stock by institutional

investors on day t . We then subtract the total selling volume from the buying volume and adjust the net buy based on the average daily trading volume in the previous year. Our *BSI* measure only takes into account executed trades. Each day’s *BSI* is calculated as follows:

$$BSI_{kj,t} = \frac{\sum_k Buys_{k,j,t} - \sum_k Sells_{k,j,t}}{Avg\ Daily\ Trading\ Volume_{j,[t-252, t-1]}}, \quad (1)$$

where $BSI_{kj,t}$ is the order imbalance of type k investors for firm j on day t . $Buys_{k,j,t}$ is the buying volume of type k investors for firm j on day t . $Sells_{k,j,t}$ is the selling volume of type k investors for firm j on day t . The denominator is the average daily trading volume in the previous year from day $t - 252$ to day $t - 1$. In this study, we focus on the trading of institutional investors.

We then calculate *ABSI* as a proxy for investors’ trading patterns based on analysts’ recommendations. Following Malmendier and Shanthikumar (2007), we normalize *BSI* by subtracting the firm-year mean and dividing the result by the firm-year standard deviation separately:

$$ABSI_{k,j,t} = \frac{BSI_{k,j,t} - \overline{BSI_{k,j,year(t)}}}{SD(BSI_{k,j,year(t)})}. \quad (2)$$

The cumulative *ABSI* (*CABSI*) over the window $[-1, +1]$ can be computed as follows:

$$CABSI_{k,j}^{[-1,+1]} = \sum_{t=-1}^{+1} ABSI_{k,j,t}. \quad (3)$$

2.3. Summary Statistics

Panel A of Table 1 presents the distribution of brokerage-stock pairs according to the ownership structure in our sample. Within our data set, 34.2% and 39.3% of the stock recommendations are issued by brokerages controlled by the central government and local governments, respectively. Regarding firm ownership characteristics, recommendations for firms under the central government’s domain constitute 40% of the total. Those for firms controlled by local governments comprise 60%. Taken together, 15.8% of the stock recommendations are issued by brokerages controlled by the same government as the recommended firm.

Panel B of Table 1 reports the proportion of recommendation types during our sample period. A significant majority of recommendations are classified as “strong buy” and “buy” categories, dominating at 43.7% and 47.9%, respectively. “Hold” recommendations account for 8.1%. The reluctance to provide negative recommendation is evident with a mere 0.4% of recommendations falling into the “sell” or “strong sell” categories, which has also been observed in previous studies. Conflicts of interest and concerns regarding professional

Table 1. Descriptive Statistics

Panel A: Distribution of brokerage-stock pairs according to the ownership structure					
Year	BCSOE	BCSOE	BLSOE	BLSOE	BOTHER
	with GovTie	without GovTie	with GovTie	without GovTie	without GovTie
2005	73	173	19	322	343
2006	219	466	48	940	218
2007	197	453	28	574	324
2008	540	988	100	1,638	997
2009	795	1,389	142	2,480	1,293
2010	807	1,439	166	2,902	1,348
2011	757	1,268	140	2,530	1,497
2012	709	1,261	105	2,336	1,516
2013	681	1,052	73	1,793	1,170
2014	548	886	77	1,486	739
2015	381	542	60	966	1,016
2016	424	599	74	1,276	1,334
2017	485	627	93	1,901	1,536
2018	553	677	71	1,871	1,400
2019	587	708	82	1,800	1,604
2020	352	411	48	1,109	1,021

Panel B: Proportions of recommendation categories		
Variable	Observations	Mean
<i>Strong Buy</i>	155,876	0.437
<i>Buy</i>	155,876	0.479
<i>Hold</i>	155,876	0.081
<i>Sell, Strong Sell</i>	155,876	0.004

Panel C: Proportions of recommendation categories from different types of analysts		
Types	Independent analysts	Politically related analysts
	Percentage	Percentage
Below market consensus	0.457	0.438
Equal to market consensus	0.031	0.027
Above market consensus	0.512	0.534
Below market consensus (median)	0.211	0.246
Equal to market consensus (median)	0.586	0.492
Above market consensus (median)	0.203	0.262
Strong buy	0.434	0.451
Buy	0.486	0.442
Hold	0.077	0.101
Sell, strong sell	0.003	0.006

Panel D: Variable summary statistics						
Variable	Observations	Mean	SD	P10	Median	P90
<i>GovTie</i>	155,876	0.158	0.365	0	0	1
<i>ROPT</i>	155,876	0.023	0.598	-0.694	0.077	0.724
<i>BuySide</i>	155,876	0.695	0.460	0.000	1.000	1.000
<i>SellSide</i>	155,876	0.070	0.255	0.000	0.000	0.000
<i>FEXP</i>	155,876	1.310	0.858	0.000	1.386	2.398
<i>Frequency</i>	155,876	0.886	0.775	0.000	0.693	1.946
<i>Return</i>	155,876	0.015	0.103	-0.107	0.013	0.142

Notes. This table reports the summary statistics of the variables. Panel A presents the distribution of brokerage-stock pairs according to the ownership structure. Panel B presents the proportions of the recommendation categories. Panel C presents the proportions of the recommendation categories by independent analysts and politically related analysts. Panel D presents the summary statistics for the main variables used in this study. We report the number of observations, mean value (Mean), standard deviation (SD), 10th percentile (P10), median, and 90th percentile (P90). All variables are defined in Online Appendix A.

progression may incentivize analysts to favorably cater to corporate management and investment clients, as shown by previous research (Womack 1996, Mayew 2008, Firth et al. 2013, Brown et al. 2015). Brown et al.

(2015) further posits that determinants like analysts' compensation structures, job security, and opportunities for career mobility may also influence the nature of analysts' stock recommendations.

Panel C of Table 1 presents the proportion of recommendation categories, contrasting those made by politically related analysts against those by independent counterparts. Among politically related analysts, 53.4% of recommendations are above the market consensus. This figure, although only marginally, surpasses the 51.2% of stock recommendations above the market consensus made by independent analysts. When using the median investment rating as a proxy for the market consensus, the divergence widens. Here, politically related analysts have 26.2% of stock recommendations above this benchmark, a significant leap compared with the 20.3% from independent analysts.

Panel D of Table 1 presents the summary statistics for our additional variables. The diverse characteristics of the firms, captured in this data set, further enrich our analysis and add layers of complexity to the recommendations.

3. Empirical Analyses

3.1. Political Pressure and Analyst Optimism

This subsection investigates the effect of political pressure from governments on analyst recommendation optimism. This issue is particularly interesting in China because in many cases, a single government controls both the brokerage and listed firms. As illuminated by Piotroski and Zhang (2014), politicians often reap political dividends from the capital market performance of local listed firms. Therefore, politicians have an incentive to harness the brokerage firms under their jurisdiction to act as vocal advocates for the listed firms. Consequently, we predict that analysts in brokerage firms controlled by the government experience political pressure, nudging them toward issuing optimistically biased ratings for stocks overseen by the same government.

3.1.1. Baseline Results. We use the following regression model to conduct our empirical analyses:

$$\begin{aligned} ROPT_{i,j,T_0} = & \alpha + \beta_1 GovTie_{i,j,T_0} + \gamma_1 BuySide_{i,j,T_0} \\ & + \gamma_2 SellSide_{i,j,T_0} + \delta Controls_{i,j,T_0} \\ & + Fixed\ Effects + \epsilon_{i,j,T_0}, \end{aligned} \quad (4)$$

where the dependent variable ($ROPT$) is the deviation of analyst i 's recommendation level from the prevailing market consensus concerning company j at the time T_0 . $GovTie$ is an indicator of potential political pressure. When $GovTie$ equals one, both the recommended firm and the affiliated analyst are controlled by the same government, implying that the affiliated analyst is more likely to be under intense political pressure.

We include the following control variables. The variable of $BuySide$ is incorporated in the model to control for business pressure on analyst recommendations, particularly those emanating from mutual fund clientele. We

also integrate $SellSide$ into the regression to control for potential conflicts of interest arising from underwriting activities between the analyst's brokerage and the target firm. Additional control variables include a range of analyst and firm characteristics: an analyst's firm-specific experience ($FEXP$), the number of recommendations issued by a specific analyst for the target firm ($Frequency$), and stock performance over a one-month window prior to the issuance of analyst recommendation ($Return$).⁹ Moreover, we also control for firm-year and brokerage-year fixed effects to absorb any difference in performance because of latent unobservable characteristics of firms and brokerages. The standard errors are clustered at brokerage level.

The variable of interest is the coefficient of $GovTie$. The results are presented in Table 2. In column (A) in Table 2, we include all recommendations into our analysis. The coefficient of $GovTie$ is positive and statistically significant at the 5% confidence level, suggesting that analysts are inclined to issue more optimistic recommendations on stocks held by the same government as their brokerage firms relative to market consensus.¹⁰ Quantitatively, when under political pressure, these analysts issue ratings that, on average, exceed ratings for nonpolitically influenced stocks by a magnitude of 0.377, benchmarked against the median value of $ROPT$. Concurrently, the proxy for buy-side pressure is also significant and positive, consistent with the finding of Firth et al. (2013) that analysts make more optimistic recommendations for stocks held by important clients of their brokerage firms compared with independent analysts.

In columns (B) and (C) in Table 2, we ensure that our findings are not tainted by the immediate aftermath of earnings announcements. We delve into subsamples that eliminate recommendations made within a three-day span of the annual and quarterly earnings announcements, respectively. These results are also significant in both subsamples. In panel B of Table 2, we use the raw recommendation level as the dependent variable and obtain relatively consistent results.

Overall, across our analysis, we consistently find that political pressures wielded by governments amplify the optimism embedded within the stock recommendations of affiliated analysts. This trend aligns with prior literature, which posits that firms influence the information conveyed to investors through their relationship with sell-side analysts (Cohen et al. 2020).

3.1.2. Robustness Checks

3.1.2.1. Alternative Measures of Analyst Recommendations. To assess the robustness of our results from Equation (4), we test alternative specifications and report the outcomes in Table 3, panel A. In column (A) in Table 3, panel A, we use the order value of analyst optimism ($Order$) as the dependent variable. Specifically, when a stock recommendation is above market consensus, $Order$

Table 2. Effect of Political Pressure on Analyst Recommendation Optimism

Panel A: Recommendation optimism			
Variable	ROPT		
	All	Excluding days of annual earnings announcements	Excluding days of quarterly earnings announcements
	A	B	C
<i>GovTie</i>	0.029** (2.546)	0.029** (2.580)	0.035*** (2.761)
<i>BuySide</i>	0.024*** (4.697)	0.020*** (4.044)	0.014** (2.070)
<i>SellSide</i>	0.018 (1.601)	0.018* (1.821)	0.015 (1.467)
<i>FEXP</i>	−0.010 (−1.376)	−0.010 (−1.313)	−0.012 (−1.406)
<i>Frequency</i>	0.057*** (7.336)	0.056*** (7.103)	0.056*** (6.755)
<i>Return</i>	0.077*** (3.680)	0.087*** (4.176)	0.087*** (2.984)
Constant	Yes	Yes	Yes
Brokerage × year	Yes	Yes	Yes
Firm × year	Yes	Yes	Yes
Observations	155,876	133,000	83,196
Adjusted R ²	0.313	0.319	0.330
Panel B: Raw recommendations			
Variable	Rank		
	All	Excluding days of annual earnings announcements	Excluding days of quarterly earnings announcements
	A	B	C
<i>GovTie</i>	0.027** (2.419)	0.029** (2.602)	0.034*** (2.849)
<i>BuySide</i>	0.030*** (5.681)	0.027*** (5.127)	0.024*** (3.727)
<i>SellSide</i>	0.018* (1.717)	0.018* (1.873)	0.015* (1.720)
<i>FEXP</i>	−0.009 (−1.307)	−0.009 (−1.234)	−0.011 (−1.286)
<i>Frequency</i>	0.054*** (6.920)	0.053*** (6.720)	0.053*** (6.327)
<i>Return</i>	0.053** (2.614)	0.067*** (3.245)	0.062** (2.148)
Constant	Yes	Yes	Yes
Brokerage × year	Yes	Yes	Yes
Firm × year	Yes	Yes	Yes
Observations	155,876	133,000	83,196
Adjusted R ²	0.455	0.457	0.453

Notes. This table reports the effects of political pressure on analyst recommendation optimism. In panel A, the dependent variable is the deviation of an analyst's recommendation level from the market consensus on company j at time T_0 . Market consensus is measured by the average investment rating of independent analysts covering the same stock over the previous 12 months. In panel B, the dependent variable is the analyst's raw recommendation level on company j at time T_0 . In each panel, column (A) reports the results of the full sample. Column (B) (column (C)) reports the results excluding recommendations within three days of the annual (quarterly) earnings announcements for various stocks. We control for the following analyst and firm characteristics in the regression: buy-side pressure faced by analysts from mutual fund clients (*BuySide*), sell-side pressure because of underwriting business (*SellSide*), an analyst's firm-specific experience (*FEXP*), the number of recommendations issued by an analyst (*Frequency*), and stock performance over one month prior to analyst recommendation (*Return*). We also control for firm-year and brokerage-year fixed effects. All variables are defined in Online Appendix A. Robust t -statistics clustered by brokerage firm are reported in parentheses.

*Significance at the 10% level; **significance at the 5% level; ***significance at the 1% level.

Table 3. Robustness Tests

Panel A						
Variables	<i>Order</i>	<i>Optimism1</i>	<i>Revision</i>	<i>ROPT</i>	<i>ROPT</i>	<i>ROPT</i>
	A	B	C	D	E	F
<i>GovTie</i>	0.046*** (2.691)	0.024** (2.040)	0.031*** (3.066)			
<i>GovTie_{SameInst}</i>				0.034*** (2.752)		
<i>CentralGT</i>					0.031** (2.089)	
<i>LocalGT</i>					0.022 (1.028)	
<i>CentralGT_{SameInst}</i>						0.033** (2.008)
<i>LocalGT_{SameInst}</i>						0.038* (1.826)
<i>BuySide</i>	0.037*** (4.371)	0.042*** (6.649)	0.026*** (4.889)	0.024*** (4.696)	0.024*** (4.697)	0.024*** (4.696)
<i>SellSide</i>	0.017 (1.046)	0.014 (1.088)	0.009 (1.115)	0.018 (1.598)	0.018 (1.632)	0.018 (1.601)
<i>FEXP</i>	-0.008 (-0.723)	-0.004 (-0.530)	-0.011* (-1.776)	-0.010 (-1.384)	-0.010 (-1.348)	-0.010 (-1.376)
<i>Frequency</i>	0.104*** (7.294)	0.058*** (7.646)	0.050*** (5.847)	0.057*** (7.340)	0.057*** (7.335)	0.057*** (7.339)
<i>Return</i>	0.057* (1.662)	0.100*** (4.649)	0.044** (2.014)	0.078*** (3.688)	0.077*** (3.680)	0.078*** (3.688)
Constant	Yes	Yes	Yes	Yes	Yes	Yes
Brokerage × year	Yes	Yes	Yes	Yes	Yes	Yes
Firm × year	Yes	Yes	Yes	Yes	Yes	Yes
Observations	155,876	113,438	138,511	155,876	155,876	155,876
Adjusted R ²	0.381	0.284	0.350	0.313	0.313	0.313

Panel B						
Variable	<i>ROPT</i>	<i>ROPT</i>	<i>ROPT</i>	<i>ROPT</i>	<i>ROPT</i>	<i>ROPT</i>
	A	B	C	D	E	F
<i>GovTie</i>	0.027** (2.348)		0.032*** (2.659)	0.026** (2.236)		0.028** (2.309)
<i>B_{SOE}_F_{SOE}</i>		-0.007 (-0.123)				
<i>GovHold</i>				-0.013 (-1.024)		
<i>LocalPressure</i>					0.012 (0.882)	0.004 (0.264)
<i>BuySide</i>	0.024*** (4.714)	0.042*** (6.355)	0.027*** (4.128)	0.024*** (4.692)	0.024*** (4.713)	0.024*** (4.703)
<i>SellSide</i>	0.018 (1.571)	0.015 (1.213)	0.021 (1.641)	0.018 (1.652)	0.020* (1.738)	0.017 (1.592)
<i>FEXP</i>	-0.010 (-1.417)	-0.008 (-0.965)	-0.011 (-1.488)	-0.010 (-1.362)	-0.010 (-1.339)	-0.010 (-1.368)
<i>Frequency</i>	0.058*** (7.346)	0.056*** (6.583)	0.051*** (6.404)	0.057*** (7.338)	0.058*** (7.347)	0.057*** (7.338)
<i>Return</i>	0.077*** (3.684)	0.076*** (3.465)	0.059*** (2.630)	0.077*** (3.678)	0.077*** (3.663)	0.077*** (3.679)
Constant	Yes	Yes	Yes	Yes	Yes	Yes

Table 3. (Continued)

Panel B						
Variable	ROPT	ROPT	ROPT	ROPT	ROPT	ROPT
	A	B	C	D	E	F
Brokerage		Yes				
Brokerage × year	Yes		Yes	Yes	Yes	Yes
Firm × year	Yes	Yes	Yes	Yes	Yes	Yes
Observations	155,543	155,876	123,201	155,876	155,876	155,876
Adjusted R ²	0.313	0.248	0.326	0.313	0.313	0.313
Panel C						
Events of stock/brokerage ownership property change						
Variable	ROPT	ROPT	ROPT	ROPT	ROPT	ROPT
	One year around A	Two years around B	Three years around C	One year around D	Two years around E	Three years around F
GovTie	0.124** (2.472)	0.126*** (3.722)	0.097*** (2.860)			
GovTie _{Conglom}				0.232* (1.755)	0.351*** (3.472)	0.116 (0.924)
GovTie _{NoConglom}				0.123** (2.441)	0.124*** (3.633)	0.097*** (2.772)
BuySide	0.034** (2.530)	0.049*** (4.454)	0.041*** (3.901)	0.034** (2.527)	0.049*** (4.438)	0.041*** (3.920)
SellSide	0.039 (0.771)	0.051* (1.992)	0.055*** (3.189)	0.039 (0.772)	0.052** (2.008)	0.055*** (3.193)
FEXP	-0.055** (-2.363)	-0.010 (-0.682)	-0.006 (-0.435)	-0.055** (-2.367)	-0.010 (-0.656)	-0.006 (-0.431)
Frequency	0.084*** (5.088)	0.065*** (6.321)	0.062*** (6.009)	0.084*** (5.115)	0.065*** (6.350)	0.062*** (6.007)
Return	0.060 (1.307)	0.097*** (2.885)	0.093*** (3.523)	0.060 (1.311)	0.097*** (2.883)	0.093*** (3.522)
Constant	Yes	Yes	Yes	Yes	Yes	Yes
Brokerage × year	Yes	Yes	Yes	Yes	Yes	Yes
Firm × year	Yes	Yes	Yes	Yes	Yes	Yes
Observations	10,481	17,506	24,361	10,481	17,506	24,361
Adjusted R ²	0.551	0.479	0.451	0.551	0.479	0.451

Notes. Panel A reports the results using alternative measures of key variables. Column (A) uses the order value of analyst optimism as the dependent variable. *Order* is equal to 1, 0, and -1 for recommendations above, equal to, and below the market consensus, respectively. Column (B) uses an alternative proxy for analyst optimism by measuring market consensus over a shorter horizon as the dependent variable (*Optimism1*). The market consensus on each company is measured as the average recommendation of the company's stock over the previous three months prior to the analyst's recommendation. Column (C) uses analyst revision as the dependent variable. Given the censored nature of recommendations and the substantial percentage of strong buy recommendations, we define *Revision* as follows: 1 for analyst upgrade recommendations or strong buy reiterations, -1 for analyst downgrade recommendations, and 0 for all remaining cases. Column (D) uses an alternative proxy of political pressure by requiring that brokerages and listed firms are owned by the same government entities. Column (E) splits government tie into central and local government tie. Column (F) splits government tie into central and local government tie by requiring that brokerages and listed firms are owned by the same government entities. Robust *t*-statistics clustered by brokerage firm are reported in parentheses. Panel B reports the results while accounting for potential alternative explanations linked to government tie. Column (A) controls for the effect of business groups by excluding recommendations made by brokerages and listed firms owned by the same business group. Columns (B) and (C) control for the state ownership effect. *BSOE_FSOE* takes on the value of one when analysts from state-owned brokerages make recommendations for state-owned firms and zero otherwise. Column (C) excludes the time periods in which the government has strong incentives to bolster stock prices as proposed by Cao et al. (2022). Column (D) controls for the government holdings. The variable *GovHold* is assigned a value of one when a listed stock is controlled by a local government, which also holds more than 5% stake in the brokerage but is not the ultimate controller of the brokerage, and zero otherwise. Columns (E) and (F) control for local pressure on local state-owned firms. *LocalPressure* is an indicator that equals one if the brokerage is located in the same province as the listed firm and the listed firm is owned by the local government and equals zero otherwise. Robust *t*-statistics clustered by brokerage firm are reported in parentheses. Panel C reports the results by using events of stock/brokerage ownership change to alleviate the endogenous concern of government tie. *GovTie_{Conglom}* (*GovTie_{NoConglom}*) is an indicator if analysts have government tie and belong to (but do not belong to) the same business group with the covered firms and zero otherwise. Robust *t*-statistics clustered by brokerage firm are reported in parentheses.

*Significance at the 10% level; **significance at the 5% level; ***significance at the 1% level.

is assigned a value of one. When equal to consensus, it is given a value of 0 and -1 otherwise. The results show that the coefficient of *GovTie* continues to be significant and positive.

In column (B) in Table 3, panel A, we refine our method for gauging market consensus. Instead of a longer time frame, we now capture market consensus by averaging recommendations for each company in the three months leading up to an analyst's specific recommendation. We recalculate the relative recommendations of analysts based on this more immediate consensus and use them as the new dependent variable to re-estimate the model in Equation (4). We continue to find a significant and positive coefficient for *GovTie*. This suggests that our choice of time horizon in determining market consensus does not considerably alter the primary conclusions of this study.

In column (C) in Table 3, panel A, we examine the impact of political pressure on the dynamics of analyst recommendation changes by focusing on revisions. Recognizing the inherent limitations in recommendation data, especially considering that analysts cannot upgrade an already maximum rating like "strong buy"—a category that constitutes 43.7% of our recommendations—we categorize "revision" in the following manner; a value of 1 is given for analyst upgrades or strong buy reiterations, a value of -1 is given for analyst downgrades, and a value of 0 is given for all other cases. The results of column (C) in Table 3, panel A show that the coefficient of *GovTie* is significant at the 1% level. This strengthens our initial findings that politically affiliated analysts are predisposed toward favoring target stocks.

3.1.2.2. Alternative Measures of Political Pressure. In understanding the intricate landscape of brokerages and their affiliations with target stocks, it is pivotal to discern the underlying structures of control. A minority of brokerage and target stocks are owned by different entities of the same government. It is noteworthy, for instance, that although some entities, like Great Wall Securities and Daqin Railway, may be governed by different entities, their overarching control still lies with the State Council.¹¹ Addressing these nuanced dynamics, we construct a new variable, *GovTie_{SameInst}*, to delve into whether both the listed firm and the brokerage are ultimately overseen by the same entity within a government. It takes the value of one if both the listed firm and the brokerage firm are ultimately controlled by the same entity of the same government and zero otherwise. When applied to our regression analysis, this distinction aligns harmoniously with our foundational results, lending further credence to our initial findings as seen in column (D) of in Table 3, panel A.

Venturing further, we recognize that political incentives may manifest differently between central and local governments in certain circumstances. To address this

distinction, we introduce two new variables *CentralGT* and *LocalGT*, each mapping to the nuances of central and local government affiliations. The variable *CentralGT* equals one if both the recommended firm and the analyst's brokerage firm are under the ultimate control of the central government and zero otherwise. The variable *LocalGT* equals one if both the recommended firm and the analyst's brokerage firm are under the ultimate control of the same local government and zero otherwise. Through these distinct variables, we aim to provide a more granular understanding of how political ties, whether centralized or localized, might influence analyst recommendations.

The results are shown in column (E) in Table 3, panel A. The coefficient of *CentralGT* is significantly positive, and the coefficient of *LocalGT* is positive, although not significant. Diving deeper into the potential nuances that might arise from specific institutional affiliations within the broader governmental frameworks, we formulate two additional variables—*CentralGT_{SameInst}* and *LocalGT_{SameInst}*. These variables are designed to pinpoint instances where both the recommended firm and the analyst's brokerage firm are controlled by the exact same institution, whether within the central or local government. The results, mapped in column (F) in Table 3, panel A, corroborate our primary assertions; governmental ties at both the local and central levels exert a noticeable impact on analyst recommendations.

In summary, irrespective of the specific metrics applied to assess political pressure, our findings consistently underscore the same conclusion. This unyielding consistency across diverse metrics highlights the significant role of political influences in shaping financial analysts.

3.1.2.3. Excluding Alternative Explanations. There is a possibility for analysts to exhibit a favorable bias toward connected firms that are part of the same business group. To address this issue, we try to ascertain the affiliation between the brokerages and listed firms to discern whether they fall under the umbrella of the same business conglomerate. We manually collected control chain information for both the brokerage firms and the listed firms through an extensive review of annual reports and the use of Tianyancha as a supplementary resource.¹²

Our findings reveal that only a minor proportion of brokerages and listed firms belong to the same business group. For example, both China Merchants Securities and China Merchants Property Development (000024.SZ) are under the control of China Merchants Group Limited. Nonetheless, these connections represent a mere 330 instances of business group affiliations, which constitute a negligible fraction of our overall sample. In order to enhance the validity of our analysis, we eliminate the instances where brokerages and listed firms belong to the

same business group and reassess our baseline results. As demonstrated in column (A) in Table 3, panel B, our conclusions remain congruous with our preliminary findings, thereby reinforcing the validity of our initial outcomes. Hence, we posit that this particular aspect is unlikely to impose a substantive effect on our study's conclusions.

Another possibility is that brokerages controlled by the government are likely to issue positive reports on average. In particular, analysts from state-owned brokerages may choose to issue more optimistic reports on state-owned enterprises no matter whether they are connected or not. To address the potential concern that our study's findings are primarily driven by the state ownership narrative, we implement additional empirical analyses. First, we incorporate brokerage \times year fixed effects into our model to account for the average influence of brokerages' state ownership, thus removing any potential bias in this respect. Second, to assess whether analysts affiliated with government-owned brokerages issue preferential recommendations toward state-owned firms, regardless of their connectivity status, we introduce a binary indicator variable, *BSOE_FSOE*. This variable takes on the value of one when analysts from state-owned brokerages make recommendations for state-owned firms and zero otherwise. To prevent complete collinearity, we incorporate stock \times year fixed effects and brokerage fixed effects instead of brokerage \times year fixed effects. The results of these analyses, as presented in column (B) in Table 3, panel B, reveal a nonsignificant coefficient for *BSOE_FSOE*. This suggests that, on average, analysts from state-owned brokerages do not exhibit a propensity to issue favorable recommendations to state-owned firms.

Third, we investigate whether our primary argument remains valid after accounting for the findings of Cao et al. (2022). Specifically, we exclude the periods where the government has a substantial motive to bolster stock prices. Echoing the terminology used by Cao et al. (2022), we denote these periods as "rescue periods." These are defined by four instances of market-rescue attempts, specifically during periods of IPO (i.e., Initial Public Offering) suspensions, and the 17th, 18th, and 19th National Congress Meetings of the Communist Party of China (CPC). We present the results in column (C) in Table 3, panel B, where the coefficient of *GovTie* is significantly positive. This suggests that our primary conclusions remain valid and are not influenced by the implications of the analysis undertaken by Cao et al. (2022).

Next, we examine whether our results are affected by ownership holding pressure. We consider a scenario in which a given government owns more than 5% of the brokerage but is not its ultimate controller. Would analysts still behave optimistically toward listed firms controlled by the same government to satisfy their employer's large shareholder? To answer this question,

we construct a new variable, *GovHold*, that is equal to one if the target stock is controlled by a local government, which is also a large shareholder but not the ultimate controller of the analyst's employer, and zero otherwise. Intuitively, the government has limited intervention in the activities of a brokerage without ultimate control. As a result, political pressure is much lower in this scenario. We, therefore, expect to observe a smaller coefficient of *GovHold*. To test this prediction, we add *GovHold* to the regression model in Equation (4) and report the results in column (D) in Table 3, panel B. We find a significant and positive coefficient for *GovTie* but a nonsignificant coefficient for *GovHold*. It also suggests that affiliated analysts' optimistic bias comes from the political pressure rather than the state ownership and governance characteristics of political nature.

Columns (E) and (F) in Table 3, panel B investigate the influences stemming from the geographic proximity of the analysts. Indeed, Malloy (2005) argues that geographic proximity offers an information advantage to local analysts, who are able to provide more accurate forecasts than their peers. To examine whether the government ties we capture are different depending on the geographic proximity of the analysts, we construct a new indicator, *LocalPressure*, that is equal to one if the headquarters of an analyst's brokerage is in the same province as the headquarters of the target firm and the target firm is ultimately controlled by the local government and equal to zero otherwise. We re-estimate Equation (4) by replacing *GovTie* with *LocalPressure* and report the results in column (E) in Table 3, panel B. We find that *LocalPressure* is positive but not significant. When *GovTie* and *LocalPressure* are included in the model simultaneously in column (F) in Table 3, panel B, the coefficient of *GovTie* is positive and significant, and the coefficient of *LocalPressure* remains not significant. These results indicate that political pressure suppresses local pressure in our sample, thus rejecting the geographic proximity hypothesis.

We conclude that analysts under political pressure make more optimistic recommendations of stocks controlled by the same government than independent analysts.

3.1.2.4. Identification Issues. To address the identification issue of government ties, we examine the effect of changes in government ties on analyst coverage by investigating instances in which the ownership of listed firms and brokerage firms has changed. This allows us to observe differences in analyst behavior before and after the year of ownership change. First, we pinpoint a subset of listed firms whose ownership transitioned from private to government. We then retain all analyst recommendations for these firms before and after the year of ownership transition. Given that private firms are excluded from our sample because of the absence of cross-sectional variations in analysts' government ties,

firms transitioning from government to private ownership are not part of our sample. Furthermore, we identify a group of brokerages undergoing ownership changes either from private to government or vice versa. We retain all analyst recommendations from these brokerages before and after the year of brokerages' ownership changes. However, we find that only a very small fraction of brokerages transitioned from private to state ownership, resulting in collinearity that impedes the regression estimation of *GovTie*. Thus, we conduct the analysis by integrating these scenarios. Our analysis spans subsamples over one, two, and three years, respectively, before and after the transition year. The results, presented in columns (A)–(C) in Table 3, panel C, exhibit positive and marginally significant coefficients of *GovTie*. The findings are consistent, reinforcing our initial conclusions.

To further reinforce our results, we divide government ties into two categories depending on whether analysts' affiliated brokerages and covered firms belong to the same conglomerate group. Specifically, *GovTie_{Conglom}* (*GovTie_{NoConglom}*) is an indicator variable that takes the value of one if analysts possess government ties and are (or are not) part of the same business group as the covered firms; it assumes a value of zero otherwise. The results of this analysis are displayed in columns (D)–(F) in Table 3, panel C. We observe that the coefficients of *GovTie_{NoConglom}* are significantly positive across all columns. In some columns, however, the coefficients of *GovTie_{Conglom}* are either omitted or not significant, which may be attributable to the limited number of business group observations within our sample.

In summary, we argue that endogeneity concerns regarding government ties are not severe. Analysts with government ties demonstrate a stronger propensity to issue optimistic recommendations compared with their independent counterparts.

3.2. Evidence Based on Unique Settings

Our main results suggest a positive relationship between analysts' political pressure and optimism regarding stock recommendations. We conjecture that analysts' optimistic bias arises from the government's incentive to intervene in capital market development. In this section, we introduce two settings for a more direct exploration of a situation when the government has more incentives to interfere with analyst recommendations. In the first setting, we conduct our analysis using the China–U.S. trade war that started in 2018. By deploying the announcement of the U.S.–China trade war as an exogenous negative shock to stock performance and the tariff exemptions during the U.S.–China trade war as an exogenous positive shock, we deliver a more comprehensive exploration of whether politically affiliated analysts demonstrate enhanced support to connected firms within the context of the U.S.–China trade war. In the second setting, we examine analysts' reactions to bad news

events in firms. Analysts are more likely to be affected by political pressure when the potential benefits of government intervention are greater. If this is the case, we expect to find a stronger effect of political pressure on analyst recommendations after the trade shock and when firms have bad news events. We test this hypothesis as follows.

3.2.1. Analyst Reactions to Additional Tariff Impositions in the U.S.–China Trade War.

On March 22, 2018, the Trump administration set in motion a 25% tariff on Chinese imports to the United States of up to U.S. \$60 billion, leading to serious concerns about the “trade war” between the United States and China. The U.S. Government stated that China has been stealing U.S. intellectual property for a long time, causing an unfair trade relationship between the two parties. As a response, the Chinese Government imposed tariffs on 128 U.S. products exported to China in April 2018. Since then, the trade relationship between the United States and China has become strained. Based on the unexpected tariff announcement on March 22, 2018, Huang et al. (2023) document a larger drop in stock prices and a larger increase in default risk among firms that are more dependent on exports to and imports from China after the announcement. The existing literature suggests that politicians have a tendency to mitigate poor firm performance to boost their chances of career progression. Therefore, the Chinese Government has an impetus to bolster the capital market to assuage investors' concerns regarding the U.S.–China trade disputes. Given this incentive, analysts with government ties are expected to align with government objectives by issuing more optimistic recommendations.

We utilize tariff announcements as a negative shock to scrutinize whether politically linked analysts exhibit a greater hesitancy in downgrading ratings following “bad news” during the trade war. Specifically, we collect information on tariff impositions from the *Federal Register* website,¹³ as shown in Table B.2 in Online Appendix B, which highlights the sequence of events surrounding the imposition of tariffs on Chinese products in the U.S.–China trade war within our study window. Throughout this period, the U.S. Government implemented additional tariffs in four phases. Tranche 1 covered 818 tariff subheadings with an estimated annual trade value of \$34 billion. Tranche 2 covered 279 tariff subheadings with an estimated annual trade value of \$16 billion. Tranche 3 covered 5,733 tariff subheadings with an estimated annual trade value of \$200 billion. Finally, Tranche 4 affected 3,805 tariff subheadings with an estimated annual trade value of \$300 billion. Typically, the U.S. Trade Representative (USTR) published a proposed list of tariff subheadings followed by seeking public comment on changes to the list. The USTR then published a final list of tariff subheadings on which

additional duties would be imposed on Chinese products. Given that the proposed list reflects the U.S. Government's intended action, we also include it in our analysis, assuming that a proposed list expires when the final list is published.

Our data collection procedures involve several steps. First, we compile a list of the Harmonized Tariff Schedule of the United States (HTSUS) subheadings specified in each USTR Section 301 investigation notice, as outlined in Table B.2 in Online Appendix B. Subsequently, we translate these HTSUS to the corresponding HS code used in China's international trade for each notice k . Based on the Chinese Customs Trade Statistics data set, we identify and extract transactions of products corresponding to the same subheadings of each HS list, thereby generating a product list for each notice k . For each firm j , we compute the total sales of products exported to the U.S. market over the past five years, denoted as $TariffValue_{j,k}$, using the product list from notice k . To control for size effects, we normalize $TariffValue_{j,k}$ against the total exports of firm j over the past five years, yielding $TariffPC_{j,k}$. We introduce an indicator, $Tariff_{j,k}$, to measure the susceptibility of each firm to the additional tariffs ensuing from the U.S.–China trade war. This indicator equals one 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 zero.

To analyze analyst reactions to the imposition of additional tariffs in the U.S.–China trade war, we include analyst revision observations categorizing *Downgrade* as the dependent variable in our regression. We regress *Downgrade* on *GovTie*, *Tariff*, and the interaction of *GovTie* and *Tariff*. The result is presented in column (A) in Table 4, panel A and indicates that politically affiliated analysts are less likely to downgrade firms that are exposed to significant additional tariffs in the U.S.–China trade war. To ensure robustness, we retain analyst recommendation revisions after the announcement of the U.S.–China trade war and replicate our analysis, resulting in column (B) in Table 4, panel A, which yields consistent results.

To further explore the behavior of politically affiliated analysts, we analyze whether they delay their downgrade ratings after the trade war. If the analysts downgrade their ratings within 60 days of the announcements, we measure the delay using *HorizonDown*, which is the number of days in between. Otherwise, if the downgrade ratings are published after 60 days, we set the value of *HorizonDown* equal to 60. Our results, tabulated in column (C) in Table 4, panel A, show that politically affiliated analysts indeed postpone their downgrade ratings for firms affected by the tariffs imposed by the U.S. Government.

We also examine analyst reactions to the Section 301 investigation using *ROPT* and *Rank* as dependent variables and find that politically affiliated analysts released

Table 4. Analyst Reactions to Additional Duties Imposition in the U.S.–China Trade War

Panel A: Analyst downgrades			
Variable	Full period	Postwar period	Postwar period
	<i>Downgrade</i>	<i>Downgrade</i>	<i>HorizonDown</i>
	A	B	C
<i>GovTie</i>	−0.001 (−0.262)	−0.003 (−0.600)	−0.114 (−0.504)
<i>GovTie</i> × <i>Tariff</i>	−0.016*** (−2.709)	−0.014** (−2.579)	0.998** (1.995)
<i>Tariff</i>	0.018*** (2.655)	0.021*** (2.936)	−1.758** (−2.260)
<i>BuySide</i>	−0.012*** (−5.035)	0.001 (0.187)	0.443* (1.865)
<i>SellSide</i>	0.000 (0.088)	−0.004 (−1.089)	−0.118 (−0.694)
<i>FEXP</i>	0.016*** (8.645)	0.008*** (3.398)	−0.266** (−2.464)
<i>Frequency</i>	−0.015*** (−7.669)	−0.019*** (−6.182)	0.123 (0.941)
<i>Return</i>	−0.022** (−2.462)	−0.003 (−0.234)	0.728 (1.087)
Constant	Yes	Yes	Yes
Brokerage × year	Yes	Yes	Yes
Firm × year	Yes	Yes	Yes
Observations	138,511	29,093	12,619
Adjusted R ²	0.079	0.0757	0.0783
Panel B: ROPT as dependent			
Variable	Full period	Postwar period	
	<i>ROPT</i>	<i>ROPT</i>	
	A	B	
<i>GovTie</i>	0.025** (2.232)	0.025 (1.473)	
<i>GovTie</i> × <i>Tariff</i>	0.126*** (3.923)	0.126*** (4.190)	
<i>Tariff</i>	−0.066** (−2.572)	−0.062** (−2.312)	
<i>BuySide</i>	0.024*** (4.689)	0.017 (1.130)	
<i>SellSide</i>	0.018 (1.655)	0.026 (1.242)	
<i>FEXP</i>	−0.010 (−1.342)	−0.005 (−0.655)	
<i>Frequency</i>	0.057*** (7.348)	0.046*** (4.645)	
<i>Return</i>	0.076*** (3.662)	0.020 (0.388)	
Constant	Yes	Yes	
Brokerage × year	Yes	Yes	
Firm × year	Yes	Yes	
Observations	155,876	30,667	
Adjusted R ²	0.313	0.408	

Table 4. (Continued)

Panel C: Rank as dependent		
Variable	Full period	Postwar period
	Rank	Rank
	A	B
<i>GovTie</i>	0.023** (2.095)	0.025 (1.462)
<i>GovTie</i> × <i>Tarrif</i>	0.128*** (4.072)	0.127*** (4.336)
<i>Tarrif</i>	−0.029 (−1.167)	−0.021 (−0.829)
<i>BuySide</i>	0.030*** (5.664)	0.020 (1.494)
<i>SellSide</i>	0.018* (1.775)	0.026 (1.276)
<i>FEXP</i>	−0.009 (−1.273)	−0.005 (−0.682)
<i>Frequency</i>	0.054*** (6.933)	0.046*** (4.692)
<i>Return</i>	0.053*** (2.629)	0.033 (0.662)
Constant	Yes	Yes
Brokerage × year	Yes	Yes
Firm × year	Yes	Yes
Observations	155,876	30,667
Adjusted R^2	0.455	0.470

Notes. This table reports analyst reactions to additional duties imposition in the U.S.–China trade war. $Tariff_{j,k}$ equals one 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 zero. $Downgrade$ is set to one if an analyst downgrades his or her recommendation relative to his or her previous recommendation and zero otherwise. $HorizonDown$ measures the delay of analyst downgrades relative to the tariff imposition announcements. If the analysts downgrade their ratings within 60 days of the announcements, $HorizonDown$ is the number of days in between. Otherwise, if the downgrade ratings are published after 60 days, we set the value of $HorizonDown$ equal to 60. All variables are defined in Online Appendix A. Robust t -statistics clustered by brokerage firm are reported in parentheses.

*Significance at the 10% level; **significance at the 5% level; ***significance at the 1% level.

more optimistic recommendations for stocks under investigation. The related results are presented in panels B and C of Table 4.

Taken together, these results suggest that the political pressure on analysts is amplified during the trade war period. This supports the conjecture that economic conflict increases the government's incentives to intervene in analysts' information production to support stocks affected by conflicts of interest.

3.2.2. Analyst Reactions to Tariff Exemptions in the U.S.–China Trade War. To further investigate the role of politically affiliated analysts during the U.S.–China trade war, we examine tariff exemption announcements as a

positive shock and assess whether these analysts are more prompt in upgrading their ratings following such “good news” during the trade war. We obtain relevant information on product exclusions from the *Federal Register* website and collect 21 notices of product exclusions published by the U.S. Trade Representative since December 1, 2018. This date is significant as it marks the commencement of the 90-day trade truce between the United States and China, during which both nations engaged in discussions on structural alterations pertinent to the ongoing trade war.

Each of these notices pertains to the U.S.–China trade war and provides insights into the specifics of product exclusions. As an example, the first notice of product exclusions was issued on December 28, 2018. This exclusion was applicable to the tariff measure of \$34 billion effective from July 6, 2018, and it was extended for a duration of one year following the publication of the notice. For a comprehensive overview of the Chinese product exclusions under Section 301 investigations during our sample period, refer to Table B.3 in Online Appendix B.

In order to identify the listed firms impacted by the tariff exclusion events during the U.S.–China trade war, we undertake a comparable approach. For each listed firm j , we delve into the product list corresponding to each exclusion notice w , from which we extract the total sales of the products that were exported to the U.S. market over the past five years and define this value as $ExemptionValue_{j,w}$. To eliminate the size effect, we normalize $ExemptionValue_{j,w}$ by the total exports of listed firms over the past five years yielding a new value, which we denote as $ExemptionPC_{j,w}$. To quantify each firm's exposure to tariff exemptions during the U.S.–China trade war, we introduce a binary indicator variable named *Exemption*. This variable takes a value of one 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 *Exemption* variable is assigned a value of zero.

To investigate how politically affiliated analysts respond to product exclusion events, we examine analyst upgrades. Given that strong buy recommendations account for 43.7%, we categorize strong buy reiterations as positive opinions. Specifically, we label upgrades and strong buy reiterations as positive opinions denoted by $UpgradeSB = 1$ and $UpgradeSB = 0$ otherwise. The results in column (A) in Table 5, panel A show a positive and significant interaction, indicating that affiliated analysts are more inclined to issue positive opinions for companies that were granted product exclusions in the U.S.–China trade war. We also observe consistent results when considering only observations after the announcement of the U.S.–China trade war, as shown in column (B) in Table 5, panel A.

Table 5. Analyst Reactions to Tariff Exemptions in the U.S.–China Trade War

Panel A: <i>UpgradeSB</i> as dependent variable			
Variable	Full period	Postwar period	Postwar period
	<i>UpgradeSB</i>	<i>UpgradeSB</i>	<i>HorizonUp</i>
	A	B	C
<i>GovTie</i>	0.028*** (3.132)	0.036* (1.964)	−1.629* (−1.789)
<i>GovTie</i> × <i>Exemption</i>	0.127*** (3.273)	0.121*** (3.095)	−5.262*** (−2.726)
<i>Exemption</i>	0.046 (1.072)	0.047 (1.152)	−7.441*** (−3.800)
<i>BuySide</i>	0.014*** (3.252)	0.011 (0.821)	−3.381*** (−3.590)
<i>SellSide</i>	0.010 (1.263)	0.007 (0.376)	−1.112 (−1.153)
<i>FEXP</i>	0.005 (0.890)	−0.002 (−0.229)	−1.960*** (−4.435)
<i>Frequency</i>	0.035*** (4.832)	0.035*** (3.663)	−3.195*** (−5.804)
<i>Return</i>	0.023 (1.312)	0.036 (0.599)	22.338*** (6.754)
Constant	Yes	Yes	Yes
Brokerage × year	Yes	Yes	Yes
Firm × year	Yes	Yes	Yes
Observations	138,511	29,093	16,963
Adjusted R ²	0.448	0.456	0.382

Panel B: <i>ROPT</i> as dependent variable		
Variable	Full period	Postwar period
	<i>ROPT</i>	<i>ROPT</i>
	A	B
<i>GovTie</i>	0.027** (2.445)	0.038** (2.110)
<i>GovTie</i> × <i>Exemption</i>	0.133*** (2.956)	0.128*** (2.779)
<i>Exemption</i>	0.046 (1.036)	0.043 (0.988)
<i>BuySide</i>	0.024*** (4.676)	0.017 (1.105)
<i>SellSide</i>	0.018 (1.628)	0.024 (1.145)
<i>FEXP</i>	−0.010 (−1.371)	−0.006 (−0.754)
<i>Frequency</i>	0.057*** (7.347)	0.047*** (4.720)
<i>Return</i>	0.078*** (3.754)	0.029 (0.573)
Constant	Yes	Yes
Brokerage × year	Yes	Yes
Firm × year	Yes	Yes
Observations	155,876	30,667
Adjusted R ²	0.313	0.408

Table 5. (Continued)

Panel C: <i>Rank</i> as dependent variable		
Variable	Full period	Postwar period
	<i>Rank</i>	<i>Rank</i>
	A	B
<i>GovTie</i>	0.025** (2.315)	0.038** (2.113)
<i>GovTie</i> × <i>Exemption</i>	0.134*** (3.143)	0.127*** (2.912)
<i>Exemption</i>	0.043 (1.024)	0.043 (1.036)
<i>BuySide</i>	0.030*** (5.657)	0.020 (1.475)
<i>SellSide</i>	0.018* (1.748)	0.024 (1.182)
<i>FEXP</i>	−0.009 (−1.302)	−0.006 (−0.776)
<i>Frequency</i>	0.054*** (6.930)	0.047*** (4.751)
<i>Return</i>	0.054*** (2.675)	0.037 (0.743)
Constant	Yes	Yes
Brokerage × year	Yes	Yes
Firm × year	Yes	Yes
Observations	155,876	30,667
Adjusted R ²	0.455	0.469

Notes. This table reports analyst reactions to product exemptions in the U.S.–China trade war. *Exemption* takes a value of one 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 *Exemption* variable is assigned a value of zero. *UpgradeSB* equals one for upgrades and strong buy reiterations and zero otherwise. *HorizonUp* is the number of days between the time of the analyst’s upgrades/strong buy reiterations and exemption announcements, limited to within 60 days. All variables are defined in Online Appendix A. Robust t -statistics clustered by brokerage firm are reported in parentheses.

*Significance at the 10% level; **significance at the 5% level; ***significance at the 1% level.

To further explore if politically affiliated analysts are faster to release positive ratings, we construct a new variable called *HorizonUp*, which reflects the number of days between the time of the analyst’s positive opinion and the announcement of each exemption list, limited to within 60 days. The results in column (C) in Table 5, panel A show a negative and significant interaction, indicating that politically affiliated analysts are quicker to react positively to companies that received duty exemptions.

We also observe consistent results when using *ROPT* and *Rank* as the dependent variables, as shown in panels B and C of Table 5.

Taken together, we suggest that politically connected analysts are quicker to issue positive ratings for firms with a positive shock to firm performance.

3.2.3. Analysts' Reactions to General Bad News Events in Firms.

Next, we examine analysts' reactions to general bad news from the covered firms. To maintain good relationships with institutional clients and underwriting business clients, analysts are reluctant to issue unfavorable recommendations of the relevant stocks. Firth et al. (2013) show that analysts under buy-side pressure are less likely to issue downgrades following bad news from the covered firms. Likewise, politically affiliated analysts may be prevented from issuing bad recommendations that can hurt the stock performance of firms that are ultimately controlled by the same government when they experience bad news events.

To investigate this issue, we identify a sample of bad news events from the covered firms by large drops in stock prices (Firth et al. 2013). In specific, the day of a bad news event for a covered company is defined as the trading day on which the split-adjusted stock price falls by the maximum allowed limit imposed by the Chinese stock market or the first day of a three-day period when the cumulative stock return losses over the period are three times the firm stock's standard deviation of the

three-day returns in the previous year (in absolute value). Then, we restrict the sample to all analysts who issue recommendations on the related stock within 60 days of the occurrence of a bad news event. We report our analyses of analyst reactions to bad news events using *Downgrade* as the dependent variable. The results are presented in column (A) in Table 6. The result for this subsample shows that the coefficient of *GovTie* is negative and marginally significant. This implies that analysts under political pressure are less likely than independent analysts to downgrade their rating of the same stock after the occurrence of a bad news event.

To ensure that the cumulative stock return losses are not caused by previous analyst downgrades, we further use media articles to verify the occurrence of bad news events. We procure media coverage data from the Chinese Research Data Services Platform database and determine whether there was adverse news prior to significant declines in stock prices. When large price drops are paired with prior negative news, we suggest that a bad news event is transpiring. Subsequently, we select observations wherein the analyst responds within

Table 6. Analyst Reactions to Bad News Events Identified by Media Articles and Extreme Return

Variable	Extreme return day	Extreme return day with original negative news the day before	Extreme return day with original negative news 3 days before	Extreme return day with original negative news the week before
	<i>Downgrade</i>	<i>Downgrade</i>	<i>Downgrade</i>	<i>Downgrade</i>
	A	B	C	D
<i>GovTie</i>	-0.011** (-2.065)	-0.062*** (-3.055)	-0.034** (-2.178)	-0.020** (-1.997)
<i>BuySide</i>	-0.005 (-0.955)	-0.006 (-0.254)	-0.005 (-0.321)	-0.001 (-0.100)
<i>SellSide</i>	-0.007 (-0.907)	0.005 (0.185)	0.011 (0.625)	-0.002 (-0.142)
<i>FEXP</i>	0.017*** (5.018)	0.005 (0.502)	0.014** (2.247)	0.016** (2.227)
<i>Frequency</i>	-0.016*** (-5.464)	-0.007 (-0.745)	-0.012 (-1.633)	-0.013*** (-2.658)
<i>Return</i>	-0.016 (-1.274)	-0.051 (-0.933)	0.018 (0.449)	0.005 (0.234)
Constant	Yes	Yes	Yes	Yes
Brokerage × year	Yes	Yes	Yes	Yes
Firm × year	Yes	Yes	Yes	Yes
Observations	24,646	2,630	5,222	8,441
Adjusted R ²	0.112	0.209	0.158	0.140

Notes. This table reports the results of analyst reactions to firms' bad news events. The dependent variable is *Downgrade*, which is equal to one if an analyst downgrades his or her recommendation relative to his or her previous recommendation and equal to zero otherwise. We keep all observations in which the analyst reacts within 60 days of the occurrence of a bad news event. In column (A), we use extreme stock return to identify bad news events. Specifically, a bad news event day for a covered company is defined as the trading day on which the split-adjusted stock price falls by the maximum allowed limit imposed by the Chinese stock market or the first day of a three-day period when the cumulative stock return losses over the three-day period are three times the firm stock's standard deviation of the three-day returns in the previous year (in absolute value). In columns (B)–(D), we use both extreme stock return and media articles to identify bad news events. In column (B) (columns (C)/(D)), a bad news event day for a covered company is defined as the trading day with extreme stock return as well as original negative media news over the day (three days/seven days) before. All variables are defined in Online Appendix A. Robust *t*-statistics clustered by brokerage firm are reported in parentheses.

Significance at the 5% level; *significance at the 1% level.

60 days following the occurrence of a bad news event. In column (B) in Table 6, we define a bad news event day for a covered company as a trading day marked by substantial stock price drops and original negative media news from the previous day. Our findings reveal that the coefficient of *GovTie* maintains its significance and negative value. Furthermore, both the magnitude and statistical significance of the coefficient increase when we refine the definition of bad news events, as shown in column (B) in Table 6. We also offer several robustness checks wherein we modify the measurement window of negative news prior to large price drops. In columns (C) and (D) in Table 6, we require that original negative news occurs within three days and one week prior to significant stock price drops, respectively. Across all specifications, we discern that politically affiliated analysts are less inclined to downgrade when adverse news surfaces.

Taken together, our results are consistent with the prediction that analysts under political pressure are less inclined to react negatively when the covered firms have bad news.

3.3. Political Pressure and Analyst Forecast Optimism

In this subsection, we investigate how political pressure shapes the optimism manifest in analysts' earnings forecasts. Adhering to the framework provided by Equation (4), we make a pivot in our dependent variable, redirecting our focus toward analyst forecast optimism denoted as *FOPT*. *FOPT* is defined as the difference between analysts' expected EPS and actual EPS for the impending fiscal year. To ensure a standardized comparison, this difference is scaled by the stock price two trading days before the release of the analyst report. To bolster the robustness of our insights, we also introduce an alternative measure of analyst forecast optimism (*RFOPT*). Specifically, *RFOPT* delineates the optimism in earnings forecasts relative to the average optimism of earnings forecasts released by independent analysts in the 12 months preceding a given forecast. Crucially, this adjustment mandates that a minimum of three independent analysts should follow the stock in the 12 months prior to a given forecast. For ease of interpretation, we amplify both *FOPT* and *RFOPT* by a factor of 100. To control for the unobservable effects of firm and brokerage characteristics, we include firm-year and brokerage-year fixed effects.

The results are presented in Table 7. The coefficient of *GovTie* is positive and statistically significant, reinforcing the notion that analysts exhibit an upward bias in their earnings forecasts for stocks controlled by the same government as their employing brokerage. In terms of economic magnitude, the results in column (A) in Table 7 indicate that in the face of political pressure, analysts' forecast bias increases by 4.2% relative to the average performance.¹⁴ This pattern is even stronger economically after

Table 7. Political Pressure and Analyst Optimism Regarding Earnings Forecasts

Variable	<i>FOPT</i>	<i>RFOPT</i>
	A	B
<i>GovTie</i>	0.028** (2.508)	0.027** (2.198)
<i>BuySide</i>	0.058*** (4.814)	0.083*** (6.291)
<i>SellSide</i>	0.021 (1.317)	0.015 (0.788)
<i>FEXP</i>	0.006 (0.963)	0.006 (0.856)
<i>Frequency</i>	0.009 (1.246)	0.013* (1.775)
Constant	Yes	Yes
Brokerage × year	Yes	Yes
Firm × year	Yes	Yes
Observations	142,781	142,781
Adjusted R ²	0.622	0.432

Notes. This table reports the effects of political pressure on analysts' earnings forecasts. *FOPT* is the difference between the analysts' expected EPS and actual EPS scaled by the stock price at the end of the second trading day prior to the analyst report. *RFOPT* is a demeaned measure of analyst forecast optimism adjusted by the average optimism of earnings forecasts from independent analysts issued over the previous 12 months prior to a given forecast. We require that at least three independent analysts follow the stock over the previous 12 months prior to a given forecast. All variables are defined in Online Appendix A. Robust *t*-statistics clustered by brokerage firm are reported in parentheses.

*Significance at the 10% level; **significance at the 5% level; ***significance at the 1% level.

controlling for all analyst information on a particular stock. As shown in column (B) in Table 7, political pressure leads to a 19.6% increase in analysts' relative forecast bias compared with the average relative performance.¹⁵

Conclusively, these findings underscore the influence of political pressure on analysts' optimism in earnings forecasts. Amidst government intervention, analysts tend to issue more optimistic forecasts for firms owned by the same government as their employing brokerages.

3.4. Information Advantage or Conflicts of Interest?

Thus far, our findings align with the notion that analysts make optimistic recommendations for politically related stocks in their portfolios. An intriguing dimension to probe is whether this optimism stems from an information edge that analysts gain because of political affiliations or if it rises from potential conflicts of interest between analysts and government officials. Should analysts benefit from an information advantage attributed to their government ties, their optimism would likely mirror genuine anticipation of positive future firm performance, leading to a positive relationship between

analyst optimism and political pressure. Conversely, if the root cause is conflicts of interest, analysts' optimistic views may not genuinely reflect their belief in a firm's prospects but rather, may be an effort to appease or align with governmental preferences.

To address this issue, we investigate the informativeness of stock recommendations issued by politically related analysts in this section. Our exploration unfolds along two key dimensions. First, we investigate the potential variance in stock performance driven by recommendations from analysts, distinguishing between those under political influence and those free from such constraints. Second, we delve into investor trading behavior and examine whether sophisticated investors can discern the imprint of political pressure on analyst's recommendations during the learning process.

3.4.1. Political Pressure, Analyst Optimism, and Stock Returns. Analysts with government ties may have access to privileged information because of several reasons. First, firms tend to disseminate soft information about relationship-based transactions through connected analysts to reduce the cost of disclosing proprietary information. As a result, these connected analysts are more likely to have a richer information set compared with their nonconnected counterparts (Li et al. 2020b). Given the nature of such relationships, government ties may potentially offer analysts unique insights into proprietary and hard-to-value information of recommended firms. Second, their government ties may place analysts in a vantage position to be more attuned to government policy shifts, thereby reducing the policy-induced uncertainty faced by recommended firms. Accordingly, analysts' recommendations would contain information about future stock returns. However, should conflicts of interest outweigh the information advantages derived from government ties, analysts' recommendations would be a negative predictor of future stock performance.

To test which aforementioned effect is dominant, we compare the performance of stock returns around the stock recommendations of analysts with and without political pressure. Following the recent literature (e.g., Hameed et al. 2015), we use the cumulative abnormal return (CAR) in the windows $[-1, +1]$, $[-1, +20]$, and $[-1, +60]$ around a particular stock recommendation as a proxy for the stock return performance. Specifically, at the start of each month, we independently sort and divide all stocks in the A-share market into three groups based on the firms' market capitalization (*Size*), book-to-market value (*BM*), and stock return over the last 12 months (*MOM*), respectively. For each stock, we calculate its expected return as the average performance of stocks in the same portfolio sorted by *Size/BM/MOM*. The daily abnormal return is estimated as the difference

between the realized return and the expected return of the target stock.

The regression model is shown as follows:

$$\begin{aligned}
 CAR_j = & \alpha + \beta_1 Strong\ Buy_{i,j,T_0} + \beta_2 Buy_{i,j,T_0} \\
 & + \beta_3 GovTie_{i,j,T_0} + \beta_4 GovTie_{i,j,T_0} \times Strong\ Buy_{i,j,T_0} \\
 & + \beta_5 GovTie_{i,j,T_0} \times Buy_{i,j,T_0} + \gamma_1 BuySide_{i,j,T_0} \\
 & + \gamma_2 SellSide_{i,j,T_0} + \delta Controls_{i,j,T_0} + Fixed\ Effects \\
 & + \epsilon_{i,j},
 \end{aligned} \tag{5}$$

where the dependent variable (*CAR*) is the cumulative abnormal return of stock *j* around analyst *i*'s recommendation on company *j* at time T_0 . For the sake of enhanced interpretability, we rescale the dependent variable by multiplying it by a factor of 100. *GovTie* is an indicator of potential political pressure. All variables are defined in Online Appendix A. To avoid multicollinearity, we omit "hold," "sell," and "strong sell" recommendations in the model.

Table 8 presents the results. In panel A of Table 8, we retain all stocks covered by both independent and politically related analysts. In column (A) in Table 8, panel A, the coefficient of the interaction of *GovTie* and *Strong Buy* is both negative and significant. It indicates that the stock performance during the window $[-1, +1]$ is better after a "strong buy" recommendation from an independent analyst than after a similar recommendation from a politically related analyst. We observe consistent patterns of stock performance over longer periods—specifically, one month and three months (i.e., $[-1, +20]$ and $[-1, +60]$) after the issuance of analysts' strong buy recommendations. Furthermore, as the window horizon lengthens, the absolute magnitude of the interaction term between *GovTie* and *Strong Buy* also intensifies. Specifically, firms experienced an average decline of 14 basis points in stock returns over the three-day event window $[-1, +1]$ surrounding the release of reports by politically affiliated analysts relative to their independent counterparts. Moreover, this decline deepened to 81 basis points within a 60-day span $[-1, +60]$ following the release of reports by politically affiliated analysts in comparison with independent counterparts. It is worth noting that, in our sample, the average market capitalization of firms stood at CNY (i.e., Chinese Yuan) 39.2 billion at the end of the two days preceding the release of analyst reports. Consequently, these declines translated to an average loss of CNY 316 million within 60 trading days after acting upon the strong buy recommendations of politically affiliated analysts as opposed to those of independent analysts. Remarkably, the aggregate market capitalization losses across all firms in the sample amounted to a staggering CNY 49 trillion within 60 trading days after adhering to the strong buy recommendations of politically affiliated analysts in contrast to those of independent analysts.

Table 8. Political Tie, Analyst Optimism, and Stock Returns

Panel A: Same stock, different analysts			
Variable	CAR _[-1,+1]	CAR _[-1,+20]	CAR _[-1,+60]
	A	B	C
<i>GovTie</i>	0.090 (1.271)	0.196 (1.249)	0.574 (1.649)
<i>Strong Buy</i>	0.996*** (13.167)	0.966*** (9.023)	-0.027 (-0.133)
<i>Strong Buy</i> × <i>GovTie</i>	-0.141* (-1.670)	-0.345** (-1.987)	-0.806** (-2.197)
<i>Buy</i>	0.525*** (8.833)	0.415*** (3.893)	-0.018 (-0.116)
<i>Buy</i> × <i>GovTie</i>	-0.116* (-1.661)	-0.326* (-1.768)	-0.574 (-1.330)
<i>BuySide</i>	0.169*** (5.239)	0.404*** (4.203)	0.451*** (3.564)
<i>SellSide</i>	-0.009 (-0.238)	-0.075 (-0.859)	0.095 (0.545)
<i>FEXP</i>	0.007 (0.311)	0.042 (1.020)	0.065 (1.136)
<i>Frequency</i>	-0.026 (-1.417)	0.019 (0.489)	0.228*** (4.453)
<i>Return</i>	-1.772*** (-11.763)	-7.542*** (-22.700)	-14.037*** (-28.213)
Constant	Yes	Yes	Yes
Brokerage × year	Yes	Yes	Yes
Firm × year	Yes	Yes	Yes
Observations	136,615	136,615	136,615
Adjusted R ²	0.151	0.208	0.351

Panel B: Requiring same analysts covering different stocks, including state-owned firms and private firms

Variable	CAR _[-1,+1]	CAR _[-1,+20]	CAR _[-1,+60]
	A	B	C
<i>GovTie</i>	0.154** (2.465)	0.450*** (2.951)	0.607* (1.825)
<i>Strong Buy</i>	1.082*** (15.167)	1.115*** (9.632)	0.066 (0.285)
<i>Strong Buy</i> × <i>GovTie</i>	-0.209** (-2.393)	-0.528*** (-3.141)	-0.837** (-2.258)
<i>Buy</i>	0.674*** (11.307)	0.761*** (7.208)	0.265 (1.354)
<i>Buy</i> × <i>GovTie</i>	-0.233*** (-3.622)	-0.617*** (-3.576)	-0.744* (-1.899)
<i>BuySide</i>	0.255*** (8.001)	0.823*** (12.510)	0.930*** (9.299)
<i>SellSide</i>	-0.010 (-0.311)	-0.006 (-0.089)	0.054 (0.547)
<i>FEXP</i>	0.028* (1.835)	0.016 (0.561)	0.051 (1.317)
<i>Frequency</i>	-0.006 (-0.496)	0.146*** (7.312)	0.447*** (13.100)
<i>Return</i>	-2.503*** (-11.763)	-7.457*** (-22.700)	-14.634*** (-28.213)

Table 8. (Continued)

Panel B: Requiring same analysts covering different stocks, including state-owned firms and private firms			
Variable	CAR _[-1,+1]	CAR _[-1,+20]	CAR _[-1,+60]
	A	B	C
Constant	(-18.739)	(-39.062)	(-46.417)
Brokerage × year	Yes	Yes	Yes
Firm × year	Yes	Yes	Yes
Observations	342,410	342,410	342,410
Adjusted R ²	0.147	0.209	0.367

Notes. This table compares the performance of stock returns around stock recommendations from analysts with and without political pressure. We introduce three measures as a proxy for stock return performance: (1) cumulative abnormal return in the window [-1, +1]; (2) cumulative abnormal return in the window [-1, +20]; and (3) cumulative abnormal return in the window [-1, +60]. The daily abnormal return is estimated as the difference between the return of a stock and the average return of stocks in the same portfolio by *Size*/*BM*/*MOM*. At the start of each month, we independently sort and divide all stocks in the A-share market into three groups based on the firms' market capitalization (*Size*), book-to-market value (*BM*), and stock return over the past 12 months (*MOM*), respectively. In panel A, we retain all stocks covered by both independent and politically related analysts. In panel B, we retain all analysts who make recommendations of both independent and politically related stocks; here, the independent stocks can also be private firm stocks.

*Significance at the 10% level; **significance at the 5% level; ***significance at the 1% level.

In panel B of Table 8, we retain all analysts who make recommendations for both independent and politically related stocks. As private stocks are independent but excluded throughout this study, we include them in this analysis. Specifically, the independent stocks included in this analysis contain private stocks and state-owned stocks controlled by different governments. As shown in panel B of Table 8, the results are largely augmented compared with panel A of Table 8, indicating that analysts' recommendations of independent stocks perform much better than recommendations of stocks controlled by the same government as brokerage firms over three months.

In summary, our findings offer compelling evidence that stock performance tends to decline following recommendations made by analysts subjected to political pressure. This bolsters the notion that the optimism exhibited by these analysts stems more from underlying conflicts of interest rather than a genuine informational edge.

3.4.2. Political Pressure, Analyst Optimism, and Investor Trading. When a government controls both brokerage firms and listed firms and when sophisticated investors condition their trading based on potential conflicts of interest inherent in analysts' recommendations, we expect investors to reduce their reactions to optimistic recommendations from analysts under political pressure.

To test this prediction, we examine how political pressure affects investors' trading reactions to analyst

recommendations. The model specification is expressed as follows:

$$\begin{aligned}
 CABS I_j^{[T_0-1, T_0+1]} = & \alpha + \beta_1 Strong\ Buy_{i,j,T_0} + \beta_2 Buy_{i,j,T_0} \\
 & + \beta_3 GovTie_{i,j,T_0} + \beta_4 GovTie_{i,j,T_0} \\
 & \times Strong\ Buy_{i,j,T_0} + \beta_5 GovTie_{i,j,T_0} \\
 & \times Buy_{i,j,T_0} + \gamma_1 BuySide_{i,j,T_0} \\
 & + \gamma_2 SellSide_{i,j,T_0} + \delta Controls_{i,j,T_0} \\
 & + Fixed\ Effects + \epsilon_{i,j}, \quad (6)
 \end{aligned}$$

where $CABS I_j^{[-1,+1]}$ is the three-day cumulative abnormal buy-sell imbalance of institutional investors for stock j in the window $[-1, +1]$. All variables are defined in Online Appendix A. To avoid multicollinearity, we omit “hold,” “sell,” and “strong sell” recommendations

in the model. Because of data limitations, we estimate the regression model using a subsample of stocks listed on the SSE from 2005 to 2008 in our sample.

Table 9 presents the regression results. Column (A) in Table 9 shows that the interaction between *Strong Buy* and *GovTie* is negative and significant, indicating that institutional investors reduce their net buying behavior when analysts release “strong buy” recommendations of stocks controlled by the same government as their brokerage firms. In addition, the coefficient of $Buy \times GovTie$ is negative, which suggests that political pressure reduces institutional investors’ trading in response to analysts’ “buy” recommendations. To bolster the robustness of our findings, we exclude recommendations made within a three-day window leading up to the annual earnings announcements in column (B) in Table 9

Table 9. Effect of Political Ties on Investors’ Trading Reactions to Analyst Recommendations

Variable	$CABS I_{[-1,+1]}$		
	Institutions	Institutions	Institutions
	All	Excluding days of annual earnings announcements	Excluding days of quarterly earnings announcements
	A	B	C
<i>Strong Buy</i>	0.324*** (3.809)	0.348*** (3.942)	0.434*** (4.059)
<i>Buy</i>	0.086 (1.330)	0.089 (1.333)	0.114 (1.117)
<i>GovTie</i>	0.046 (0.658)	0.031 (0.470)	0.057 (0.497)
<i>Strong Buy</i> × <i>GovTie</i>	-0.185* (-1.903)	-0.219** (-2.034)	-0.351*** (-2.834)
<i>Buy</i> × <i>GovTie</i>	-0.139* (-1.823)	-0.161** (-2.142)	-0.233* (-1.780)
<i>BuySide</i>	0.126** (2.297)	0.110* (1.773)	0.135 (1.420)
<i>SellSide</i>	-0.041 (-0.473)	-0.040 (-0.481)	-0.082 (-0.654)
<i>FEXP</i>	0.067* (1.909)	0.084** (2.022)	0.139** (2.240)
<i>Frequency</i>	-0.020 (-0.543)	-0.015 (-0.362)	-0.017 (-0.280)
<i>Return</i>	0.299** (2.250)	0.310** (2.349)	0.151 (0.865)
Constant	Yes	Yes	Yes
Brokerage × year	Yes	Yes	Yes
Firm × year	Yes	Yes	Yes
Observations	10,733	9,610	6,405
Adjusted R ²	0.186	0.170	0.173

Notes. This table reports the effect of political pressure on investors’ trading reactions to analyst recommendations. The dependent variable is the cumulative abnormal buy-sell imbalance of institutional investors at $[-1, +1]$. Column (A) reports the results for the full sample. Column (B) (column (C)) reports the results excluding recommendations within three days of the stock’s annual (quarterly) earnings announcements. Because of the limited availability of investor trading data, this table is estimated using a subsample of stocks listed in the SSE from 2005 to 2008. All variables are defined in Online Appendix A. Robust t -statistics clustered by brokerage firm are reported in parentheses.

*Significance at the 10% level; **significance at the 5% level; ***significance at the 1% level.

and similarly, recommendations within three days prior to the quarterly earnings announcements in column (C) in Table 9. As expected, we obtain consistent results.

Overall, we show that political pressure significantly mitigates institutional investors' net buy responses to analysts' "strong buy" and "buy" recommendations, which provides compelling evidence that institutional investors take political pressure into account when responding to analysts' recommendations.

3.5. Gift to Reward the Optimism of Politically Affiliated Analysts

In this section, we explore the potential benefits politically affiliated brokerages might reap as a quid pro quo for championing companies overseen by the same government. We capture the potential benefits from two dimensions. First, we examine how the government allocates underwriting business among politically affiliated brokerages during debt issuance. Second, we examine the government subscription of shares when politically affiliated brokerages have SEOs. The underlying hypothesis is grounded in the possibility that governments might place a premium on analysts who cast a favorable light on strategically significant stocks. Consequently, analysts may behave optimistically to help their employers compete for more business; as a reward, the government may provide preferential offers to the affiliated brokerages, granting them a more substantial portion of underwriting business or simplifying the process of share sales to the government principal.

3.5.1. Underwriting Business Allocations of Government Debt Financing. When issuing government debt, the government has discretion to select underwriters. If the government selects underwriters based on the favorableness of the analysts employed by the brokerages, then the chosen underwriters can obtain more underwriting commitments if their analysts have a more favorable view of the prospects of companies controlled by the same government.

To test this conjecture, we construct a new sample of brokerage-government-year units as follows. First, for each brokerage, we construct a balanced brokerage-government pair, comprising 32 governments (a central government and 31 provincial governments in mainland China). Second, we extend the balanced pairs over the 2005–2019 period. Third, we keep all observations starting in the first year and ending in the last year of the records of analysts' recommendations or the underwriting business for a given brokerage in government debt issuance. Based on this sample, we can easily identify the relationship between each brokerage and each government.

We acquire data on the underwriting activity of each brokerage in the bond market from the Wind database. This includes the issuance date, underwriter name, underwriting amount, issuer name, issuer ownership,

and issuer location. According to the characteristics of the issuers, we retain all bonds issued by governments or by firms ultimately controlled by the government. Then, we can identify the allocations received by each brokerage in underwriting bonds that are issued by different governments.

Specifically, we use the following model specification to test our hypothesis:

$$\begin{aligned} Allocation_{i,k,t+1} = & \alpha + \beta_1 GovTie_{i,k,t} + \beta_2 Strong\ Buy_{Ni,k,t} \\ & + \beta_3 GovTie_{i,k,t} \times Strong\ Buy_{Ni,k,t} \\ & + \beta_4 Buy_{Ni,k,t} + \beta_5 GovTie_{i,k,t} \times Buy_{Ni,k,t} \\ & + \delta Controls_{i,j,t} + Fixed\ Effects + \epsilon_{i,j}, \end{aligned} \quad (7)$$

where the dependent variable is the natural logarithm of one plus the specific underwriting amount of government debt issuance allocated to a given brokerage in year $t + 1$. *GovTie* is an indicator equal to one if brokerage i is ultimately controlled by government k and zero otherwise. *Strong Buy_N* (*Buy_N*) is the natural logarithm of one plus the number of "strong buy" ("buy") recommendations issued by a given brokerage for stocks that are ultimately controlled by government k in year t . The coefficient of interest is β_3 , which measures the return on the optimism of politically affiliated analysts. A positive β_3 supports our conjecture that brokerages that employ optimistic analysts also obtain more underwriting allocations of government debt issuance. To absorb the effect of the characteristics of brokerages and government institutions, we include brokerage-year and government-year fixed effects. We cluster the standard error at the government level in this section, accounting for the possible interdependencies in resource allocations within the government group.

Column (A) in Table 10 presents the results of Equation (7). The coefficient of *GovTie* is significant and positive, suggesting that the government is more likely to allocate commitments to the brokerages that it ultimately controls. As expected, the interaction of *GovTie* and *Strong Buy_N* is positive and significant, whereas the interaction of *GovTie* and *Buy_N* is positive and not significant. This indicates that the government offers more underwriting deals to brokerages under political pressure if their analysts make more "strong buy" recommendations of stocks controlled by the same government.

For robustness, we also use an alternative measure of analyst favorableness. *Abnormal Strong Buy_{N1}* (*Abnormal Buy_{N1}*) is the abnormal frequency of "strong buy" ("buy") recommendations adjusted by the average level of "strong buy" ("buy") recommendations from all brokerages of stocks that are ultimately controlled by government k in year t . Column (B) in Table 11 reports the estimation results by replacing *Strong Buy_N* with

Table 10. Optimism of Politically Affiliated Analysts and Underwriting Business Allocations of Government Debt Issuance

Variable	Underwriting allocations of government bonds in the following year		
	A	B	C
<i>GovTie</i>	1.070*** (6.895)	1.339*** (12.696)	1.330*** (13.026)
<i>Strong Buy_N</i>	0.146*** (5.663)		
<i>GovTie</i> × <i>Strong Buy_N</i>	0.172*** (3.591)		
<i>Buy_N</i>	0.132*** (6.578)		
<i>GovTie</i> × <i>Buy_N</i>	0.061 (0.815)		
<i>Abnormal Strong Buy_{N1}</i>		0.160*** (5.530)	
<i>GovTie</i> × <i>Abnormal Strong Buy_{N1}</i>		0.107*** (3.671)	
<i>Abnormal Buy_{N1}</i>		0.136*** (6.887)	
<i>GovTie</i> × <i>Abnormal Buy_{N1}</i>		0.100 (1.507)	
<i>Abnormal Strong Buy_{N2}</i>			0.159*** (5.514)
<i>GovTie</i> × <i>Abnormal Strong Buy_{N2}</i>			0.114*** (3.953)
<i>Abnormal Buy_{N2}</i>			0.136*** (6.865)
<i>GovTie</i> × <i>Abnormal Buy_{N2}</i>			0.099 (1.440)
Constant	Yes	Yes	Yes
Brokerage × year	Yes	Yes	Yes
Government type × year	Yes	Yes	Yes
Observations	37,984	37,984	37,984
Adjusted R ²	0.482	0.485	0.484

Notes. The sample uses brokerage-government-year units, which are constructed as follows. First, for each brokerage, we construct a balanced brokerage-government pair comprising 32 governments (a central government and 31 provincial governments in mainland China). Second, we extend the balanced pairs to the period from 2005 to 2019. Third, we keep all observations starting in the first year and ending in the last year of the records of analysts' recommendations or underwriting business for a given brokerage in government bond issuance. The dependent variable is the natural logarithm of one plus the specific underwriting amount of government debt issuance allocated to a given brokerage in year $t + 1$. *GovTie* is an indicator that equals one if the brokerage is ultimately controlled by the specific government and zero otherwise. *Strong Buy_N* (*Buy_N*) is the natural logarithm of one plus the number of "strong buy" ("buy") recommendations made by a given brokerage for stocks that are ultimately controlled by the government in year t . *Abnormal Strong Buy_{N1}* (*Abnormal Buy_{N1}*) is measured using a benchmark of the average level of "strong buy" ("buy") recommendations from all brokerages for stocks that are ultimately controlled by the government in year t . *Abnormal Strong Buy_{N2}* (*Abnormal Buy_{N2}*) is measured using a benchmark of the average level of "strong buy" ("buy") recommendations from independent brokerages for stocks that are ultimately controlled by the government in year t .

***Significance at the 1% level.

Abnormal Strong Buy_{N1} in Equation (7). In addition, we measure analyst favorableness using recommendations from independent analysts as a benchmark. Specifically, *Abnormal Strong Buy_{N2}* (*Abnormal Buy_{N2}*) is the abnormal frequency of "strong buy" ("buy") recommendations adjusted by the average level of "strong buy" ("buy") recommendations from all independent

brokerages for stocks that are ultimately controlled by government k in year t . We obtain consistent results for the two alternative measures of analyst favorableness.

In summary, our evidence suggests that brokerages that are more obedient to their government controller can obtain more underwriting business allocations from the government in return.

Table 11. Optimism of Politically Affiliated Analysts and Government Subscription of Shares

Variable	Government subscription of shares in the following year		
	A	B	C
<i>GovTie</i>	−1.741*** (−3.083)	−1.604*** (−5.643)	−1.637*** (−5.815)
<i>Strong Buy_N</i>	0.021 (0.103)		
<i>GovTie</i> × <i>Strong Buy_N</i>	0.622* (1.998)		
<i>Buy_N</i>	0.360 (1.217)		
<i>GovTie</i> × <i>Buy_N</i>	−0.480 (−1.279)		
<i>Abnormal Strong Buy_{N1}</i>		0.078 (0.449)	
<i>GovTie</i> × <i>Abnormal Strong Buy_{N1}</i>		0.592*** (3.202)	
<i>Abnormal Buy_{N1}</i>		0.311 (1.283)	
<i>GovTie</i> × <i>Abnormal Buy_{N1}</i>		−0.271 (−0.789)	
<i>Abnormal Strong Buy_{N2}</i>			0.069 (0.383)
<i>GovTie</i> × <i>Abnormal Strong Buy_{N2}</i>			0.613*** (3.181)
<i>Abnormal Buy_{N2}</i>			0.311 (1.260)
<i>GovTie</i> × <i>Abnormal Buy_{N2}</i>			−0.288 (−0.824)
Constant	Yes	Yes	Yes
Brokerage × year	Yes	Yes	Yes
Government type × year	Yes	Yes	Yes
Observations	1,858	1,858	1,858
Adjusted R^2	−0.127	−0.125	−0.125
Within R^2	0.028	0.029	0.029

Notes. The dependent variable is the subscription of shares by a given government in a brokerage in the following year measured by the change in government ownership in a brokerage firm from year t to year $t + 1$. The construction of the sample is the same as in Table 10, and we confine our analysis to the subset of the sample where the specific government had positive ownership in the brokerage firms at the commencement of the year.

*Significance at the 10% level; ***significance at the 1% level.

3.5.2. Government Subscription of Shares. Next, we examine whether the government more actively subscribes shares during brokerages' SEOs if the brokerages are more obedient to their government controller.

To test this prediction, we use the model specification in Equation (7) by replacing the dependent variable with the subscription of shares by a given government in the following year (*GovSubscription*). Specifically, *GovSubscription* is measured as the change in government ownership in a brokerage firm from year t to year $t + 1$. Given that *GovSubscription* records a value of zero in approximately 97% of observations and that positive ownership at the beginning of the year is observed in only 6% of observations within the sample utilized in the preceding section, it suggests that the majority of governments do

not maintain any interests or ownership in the majority of brokerage firms over the historical period. As a result, we confine our analysis to the subset of the sample where the specific government exhibited positive ownership in the brokerage firms at the commencement of the year. Table 11 present the results using alternative measures of analyst favorableness. For the sake of enhanced interpretability, we rescale the dependent variable by multiplying it by a factor of 100. The coefficient of *GovTie* is significant and negative, indicating that on average, there is no need for the government controller to increase its stake in subordinate brokerages. In addition, the interaction of *GovTie* and *Strong Buy_N* is positive and significant as expected. This indicates that the government controller is more likely to increase shares to support the

development of its subordinate brokerages in the future if the analysts employed by these brokerages make more favorable recommendations of stocks controlled by the same government.

As shown in Table 11, in all specifications, the coefficients of the interaction terms are positive and statistically significant. With an increase in analyst favorableness regarding the covered stocks controlled by the same government as the analysts' employers, the government is willing to increase the ownership in the brokerages. The results are consistent with our argument that brokerages can obtain substantial benefits from the government in return for supporting stocks that are important to the government.

Overall, our findings support a favor exchange story for political pressures and affiliated analysts' optimism.

3.6. Costs of Revealing Bad News for Local Politicians

To delve deeper into the effect of disclosing unfavorable information, we investigate the potential costs to local politicians. In particular, we examine if the odds of promotion for politicians diminish when affiliated state-owned enterprises experience significant negative returns. We hypothesize that significant negative returns of the capital market are detrimental for local politicians, diminishing the likelihood of their career progression.

In line with this, we construct a city-year specific data set where the dependent variable, *Promotion*, signifies whether the local government secretary receives a promotion in year t or $t + 1$. To gauge significant negative returns, we focus on the extent of stock price decline from its peak to its nadir. We operationalize this by defining *LargePrcDrop1* (*LargePrcDrop2*) as the difference between the maximum and minimum prices of a given stock j in year t scaled by the stock's mean (median) price in that year. It is important to note that we are considering the lowest price of the stock j only after it has reached its highest price point within year t . Consequently, a higher value of *LargePrcDrop* indicates a greater degree of negative returns. We then compute the median drop in stock prices for state-owned enterprises situated within each city for every city-year.

To ensure the validity of our analysis, we incorporate a set of control variables based on Li and Zhou (2005). *Age* represents the age of the secretary of local government i in year t , whereas *Tenure* indicates the number of years the secretary has held the position. We also include *Old*, a dummy variable that takes a value of one if the local government secretary is over 55 years old in the year t and a value of zero otherwise. *Education* measures the secretary's education level, with a value of three for a doctoral degree, two for a master's degree, and one for a bachelor's degree. Additionally, we account for the per capita GDP (*GDPPC*) and *GDP growth rate* (here, GDP stands for Gross Domestic Product) for city i in year t .

We also include provincial and year fixed effects to control for unobserved heterogeneity and time-variation effects.

The results are presented in Table 12. In columns (A) and (B) in Table 12, we focus on SOEs located in each city. In columns (C) and (D) in Table 12, we focus on SOEs owned by local government. These results show a negative correlation between political promotion probability and the decline in stock returns of local SOEs.

Overall, revealing bad news about SOEs, proxied by significant negative returns, reduces the probability of career advancement for local politicians.

4. Conclusion

In this study, we explore how analyst recommendations are biased by political pressure in a politicized environment. Based on the ownership structures of the brokerage firms and recommended firms, we construct a unique measure of political pressure, leading to the subsequent empirical findings.

First, analysts tend to make more optimistic recommendations for stocks held by the same government as their brokerage firms, especially when compared with market consensus. Second, the documented relationship between analyst optimism and political pressure is more pronounced for stocks that are most exposed to the China–U.S. trade war. This finding utilizes the imposition of tariffs as an exogenous negative shock and the exemptions from tariffs as an exogenous positive shock to the performance of stocks. We also find that analysts under political pressure are less likely to react negatively to covered stocks associated with general bad news events. Third, stock returns following recommendations from analysts under political pressure are worse than those following recommendations from independent analysts, supporting the argument that politically related analysts' optimism is driven by conflicts of interest rather than an information advantage. Fourth, based on a unique proprietary database that contains accurate investor classifications and all transaction and order records, we find that sophisticated investors effectively learn and react to the recommendation bias of analysts under political pressure. Fifth, as a gift to reward analyst favorableness to the covered stocks, subordinate brokerages can obtain more underwriting business from the government controller during the issuance of government debt, and the government controller is more likely to subscribe more shares during SEOs by brokerages. Lastly, we evaluate whether delivering bad news can be significantly detrimental to local politicians, thus incentivizing them to temporize or avoid negative information about associated firms. Our findings suggest that the disclosure of unfavorable information about SOEs, represented by significant negative returns, can indeed decrease the likelihood of career promotions for local politicians.

Table 12. Firm Performance and Political Promotions

Variable	Performance of SOEs		Performance of SOEs owned by local government	
	Promotion	Promotion	Promotion	Promotion
	A	B	C	D
<i>LargePrCDrop1</i>	−0.104** (−2.275)		−0.118* (−2.027)	
<i>LargePrCDrop2</i>		−0.100*** (−2.836)		−0.105** (−2.297)
<i>Age</i>	0.007 (1.613)	0.007 (1.578)	0.009* (1.857)	0.009* (1.834)
<i>Old</i>	−0.051* (−1.732)	−0.051* (−1.735)	−0.053 (−1.478)	−0.054 (−1.507)
<i>Tenure</i>	0.044*** (3.900)	0.044*** (3.898)	0.037*** (2.842)	0.036*** (2.839)
<i>Education</i>	0.007 (0.395)	0.006 (0.373)	−0.003 (−0.148)	−0.003 (−0.171)
<i>GDPPC</i>	0.016 (0.819)	0.016 (0.826)	0.010 (0.366)	0.010 (0.379)
<i>GDP</i>	−0.003 (−0.406)	−0.003 (−0.407)	−0.007 (−0.775)	−0.007 (−0.771)
Constant	Yes	Yes	Yes	Yes
Province	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Observations	1,261	1,261	1,088	1,088
Adjusted R^2	0.135	0.136	0.126	0.126

Notes. The dependent variable is *Promotion*, an indicator that equals one if the secretary of a local government had a political promotion event in year t or year $t + 1$ and equal zero otherwise. In columns (A) and (B), we calculate the median of price drops among state-owned enterprises located in each city for each city-year. In columns (C) and (D), we calculate the median price drops among state-owned enterprises owned by the local province in each city for each city-year. For each stock, *LargePrCDrop1* (*LargePrCDrop2*) is the difference between the maximum and minimum prices of a given stock j in year t scaled by the stock's mean (median) price in that year. It is important to note that we consider the lowest price of the stock j only after it has reached its highest price point within year t .

*Significance at the 10% level; **significance at the 5% level; ***significance at the 1% level.

Overall, our study offers a comprehensive look at the relationship between political pressure and analyst recommendations by shedding light on how political pressure shapes analyst decisions. Our findings also reinforce regulators' concerns about suboptimal investment decisions made by naïve investors who are unaware of the conflicts of interest that analysts face. It underscores the need for vigilant regulatory measures to bolster the credibility of financial intermediaries in the information dissemination process, thereby safeguarding shareholder interests.

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Endnotes

¹ One example of political pressure on brokerage firms occurred during the Chinese stock market turmoil of 2015. Under political

pressure, 21 large brokerage firms in China allegedly agreed to set up a fund worth at least 120 billion CNY to buy blue-chip Exchange-Traded Fund shares and not sell them when the stock market tumbled in an effort to help stabilize the market (see <http://www.nytimes.com/2015/07/05/business/fund-in-china-aims-to-stabilize-stock-markets.html>).

² The financial market in China has experienced rapid development. In 2005, the A-share market's total capitalization stood at approximately CNY 3.18 trillion, equivalent to approximately USD 0.4 trillion. This valuation comprised CNY 1 trillion in tradable capitalization and CNY 2.18 trillion in nontradable capitalization. However, by 2021, the A-share market had undergone a remarkable transformation, witnessing a substantial increase in its total market value to CNY 91.5 trillion. Shifting focus to the distribution of government ownership, a significant transition also occurred. In 2005, state-owned enterprises dominated the landscape, commanding over 78% of market capitalization, 83% of total assets, 88% of sales, and nearly all the net income generated by listed firms in China. By 2021, state-owned enterprises accounted for approximately 40% of market capitalization, 45% of assets, 62% of sales, and 54% of the net income of listed firms in China. These statistics highlight the profound changes within China's financial sector, underscoring both the dramatic expansion of the A-share market and the shifting dominance of state-owned enterprises.

³ As crucial financial intermediaries, brokerage firms have witnessed substantial growth in tandem with the rapid development of the A-share market. In 2005, the collective total revenue generated by brokerage firms in China amounted to approximately CNY

24 billion. However, by 2021, this figure had experienced an impressive surge, reaching CNY 500 billion, thus reflecting the remarkable expansion of the industry. When specifically examining the top 20 brokerages, their combined revenue in 2005 stood at approximately CNY 91 billion. In contrast, by 2021, this group of leading brokerages had significantly increased their total revenue to an impressive CNY 340 billion. For state-owned brokerages, it is noteworthy that the average ownership stake held by the largest shareholder was 48% in 2005, which increased to 58% in 2019. These figures underscore the substantial financial growth experienced by brokerage firms, mirroring the dynamic evolution of the A-share market in China over the years.

⁴ According to the 2021 Statistical Yearbook of China Securities Depository and Clearing Corporation, there are 196 million individual investors with A-share accounts compared with 469,000 institutional investors with A-share accounts. Furthermore, individual investors accounted for 72.6% of the trading volume in the A-share market in 2021. With such a large proportion of retail investors in China, analyst recommendations possess significant influence over their trading decisions. This could be of particular concern in the context of retail investor protection and market integrity, reinforcing the importance of understanding the potential biases and impacts of analyst recommendations in shaping market dynamics.

⁵ We highlight certain distinctions between our study and that of Cao et al. (2022). Primarily, our focus rests on the heterogeneity in political connections across brokerage firms and listed firms. We meticulously examine whether the relationship between brokerage firms and listed firms, established through shared state ownership, exerts influence on the conduct of financial analysts. Contrastingly, Cao et al. (2022) put emphasis on the temporal shifts in government incentives without pinpointing the ties between the analysts' brokerages and target stock firms. To signify government incentives, they resort to the four market-rescue attempts (specifically, periods of IPO suspensions) and the National Congress Meetings of the CPC as proxies. Second, our research aims to underline the influence of political pressure on analysts' decision-making processes and the ensuing conflict of interest that arises. We also investigate how brokerages can accrue benefits from the government by favoring stocks under government control. Our findings support an exchange of favor story. Conversely, Cao et al. (2022) aim to analyze how analysts strike a balance between preserving their market credibility and adhering to government incentives.

⁶ Unlike the U.S. and European markets, analysts in China do not provide quarterly earnings forecasts. They typically report their earnings per share (EPS) forecasts for the current or next fiscal year. For all firms, the fiscal year and the calendar year are strictly the same as stipulated by the *Company Law of the People's Republic of China*.

⁷ Visit the following page: <https://jg.sac.net.cn/financePublicityPub>.

⁸ On one hand, it guarantees that all the sample stocks have state ownership characteristics. On the other hand, we can compare analysts' recommendations for the same state-owned firms between analysts with and without political pressure. For private stocks, there is no crossanalyst difference in political pressure because all the analysts have no direct political tie with the governments according to our proxy of political pressure.

⁹ Our results are also consistent when measuring stock performance over two or three months prior to analyst reports.

¹⁰ Because we have already controlled for firm-year fixed effects, it is impossible that our results are driven by the different ownership structure of different SOEs.

¹¹ Great Wall Securities is controlled by the State Asset Management Bureau of State Council, whereas Daqin Railway is controlled by China State Railway Group, which is operated by the Finance Bureau on behalf of the State Council.

¹² See <https://www.tianyancha.com/>.

¹³ *Federal Register* is the daily journal of the U.S. Government that contains government agency rules, proposed rules, and public notices. The web link is <https://www.federalregister.gov/>.

¹⁴ The mean of $FOPT (\times 100)$ is 0.666 in the sample. The economic magnitude can be calculated as $0.028/0.666$.

¹⁵ The mean of $RFOPT (\times 100)$ is 0.138 in the sample. The economic magnitude can be calculated as $0.027/0.138$.

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