

Measuring Anti-Corruption Propaganda in China's Official Media: A Text-Based Analysis of News Broadcasts

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Abstract

This study examines how anti-corruption propaganda is conveyed in China's official media and how such messaging has evolved over time. In the context of advancing Chinese-style modernization and strengthening governance capacity, anti-corruption discourse constitutes an important component of contemporary political communication practice. Drawing on news transcripts from 2007 to 2025 from the national television news program, *Xinwen Lianbo*, this study develops a systematic measure of anti-corruption propaganda using text analysis. A sample of 2,500 news articles was independently coded by three human coders to construct a reference dataset and ensure consistency in identifying anti-corruption content. Building on this benchmark, the study applies a word embedding approach that captures semantic patterns in language, allowing for the identification of anti-corruption themes based on contextual meaning rather than relying solely on predefined keywords. The results show that the proposed measure effectively captures substantive anti-corruption propaganda in official media. The analysis further indicates that such messaging becomes more prominent during key periods of anti-corruption efforts, while temporarily declining during the COVID-19 pandemic as media attention shifted toward public health and social stability. Overall, this study provides a transparent and replicable approach to measuring political propaganda in official media. It contributes to a better understanding of how anti-corruption propaganda is systematically presented and evolves over time, and offers methodological insights for future research on political communication and media analysis in the context of governance modernization.

Keywords: anti-corruption propaganda, state media, China, text-as-data, measurement validation

1. Introduction

Anti-corruption campaigns are a central feature of contemporary governance across diverse political settings. Beyond their administrative and disciplinary functions, such campaigns serve as important mechanisms for communicating governance commitments to the public, signaling institutional responsiveness, and building trust in governing institutions (Carothers 2020; Gillespie and Okruhlik 1991; Manion 2004). In systems where state media play a prominent coordinating role, anti-corruption propaganda in official news outlets takes on special significance: it transforms enforcement activity into visible narratives of accountability, amplifying the political and social meaning of investigations, disciplinary actions, and case disclosures (Zhu and Zhang 2017). In this respect, anti-corruption reporting in official media reflects not only enforcement realities but also

deliberate communication strategies oriented toward governance legitimation and public mobilization.

China's experience over the past decade represents one of the most consequential and closely scrutinized anti-corruption efforts in global politics. Since the 18th National Congress of the Chinese Communist Party (CCP) in November 2012, China has sustained a large-scale anticorruption campaign under the leadership of General Secretary Xi Jinping. By 2022, the campaign had resulted in more than 4.7 million investigations and 456,000 disciplinary and administrative sanctions (Wedeman 2017; Huhe et al. 2022). High-ranking officials—referred to colloquially as ‘tigers’—have been investigated at an unprecedented rate, while grassroots-level misconduct, the so-called ‘flies,’ has also been targeted systematically. Domestic and international observers have noted the campaign's scale, longevity, and integration into broader narratives of governance modernization and Party self-improvement (Wedeman 2016). Official media, and *Xinwen Lianbo* in particular, has served as the primary vehicle through which anti-corruption progress is reported to the public, shaping how citizens perceive the scope and sincerity of governance reform.

Despite the salience of anti-corruption propaganda in China's political communication landscape, systematic empirical research on this phenomenon remains limited. A primary obstacle lies in measurement. Anti-corruption content in official news broadcasts is heterogeneous: some reports are dedicated entirely to case disclosures or disciplinary proceedings, while others embed anti-corruption signals within broader economic, social, or political governance narratives. This variability makes it difficult to assess with precision when, how intensively, and in what forms anti-corruption messaging is communicated over time. Existing approaches—including simple keyword counts, case-based indicators, and perceptual survey measures—each capture certain dimensions of this phenomenon but suffer from notable limitations in coverage, conceptual clarity, or empirical granularity (Sun et al. 2022; Engler 2020).

This article addresses this gap by developing and validating a systematic measure of anticorruption propaganda in China's official news media. The empirical focus is on *Xinwen Lianbo*, China's flagship national television news program broadcast daily on China Central Television (CCTV). I analyze program transcripts spanning 2007 to 2025—a period that encompasses both the pre-Xi era and the sustained anti-corruption campaign initiated under his leadership. The dataset, comprising tens of thousands of individual news items, provides a longitudinally rich and institutionally consistent source for examining variation in anti-corruption messaging over time.

The measurement strategy proceeds in two stages. First, a stratified sample of 2,500 news items was independently coded by three human coders using a structured coding protocol. The protocol defines anti-corruption news according to criteria of topic centrality, functional orientation, substantive content, and genre, and distinguishes substantive anti-corruption reports from peripheral mentions of corruption-related terms. Intercoder reliability exceeded 0.8 across the sample, providing a validated reference dataset. Second, this annotated dataset is used to train a word embedding model that captures semantic patterns in anti-corruption language, allowing for the classification of the full corpus of news items based on contextual meaning rather than fixed vocabulary. Anti-corruption scores are then constructed by standardizing the frequency of anticorruption-related content at the monthly level.

To assess the quality of this measure, I conduct two validation exercises. Content validation examines whether high-scoring news items substantively align with the conceptual definition of anti-corruption propaganda, including attention to the institutional actors, narrative frames, and factual-versus-mobilizational content characteristics of identified reports. Nomological validation tests whether the measure behaves in accordance with theoretical expectations derived from the literature on agenda competition and political communication, specifically whether anti-corruption scores increase during periods of intensified campaign activity and decline during periods of agenda displacement, such as the COVID-19 pandemic.

The results confirm the validity and descriptive utility of the proposed measure. Anticorruption messaging scores increase markedly following the 18th National Congress, peak systematically during politically significant moments such as the annual Two Sessions meetings and year-end governance reviews, and decline during the pandemic period when state media attention shifted decisively toward public health and crisis management. These patterns are consistent with both theoretical expectations and historical knowledge about China's media environment, lending confidence to the measure's construct validity.

This study makes several contributions to the literature on political communication and text-based measurement. Methodologically, it demonstrates that word embedding approaches trained on human-coded benchmarks can effectively classify politically sensitive content in Chinese-language official media—a context where vocabulary is highly stylized and meaning is often conveyed through discursive framing rather than isolated keywords. Substantively, it provides new longitudinal evidence on the dynamics of anti-corruption propaganda in China's official news broadcasts, illuminating how governance communication evolves in response to political cycles, leadership priorities, and exogenous shocks. More broadly, the study offers a replicable and transparent approach that can be adapted for the study of political propaganda in other official media contexts.

2. Anti-Corruption propaganda in Official Media: Existing Approaches

Research on anti-corruption communication has grown substantially alongside renewed scholarly and policy interest in anti-corruption campaigns worldwide (Carothers 2020; MungiuPippidi 2015). However, the study of anti-corruption propaganda as a distinct communicative phenomenon—as opposed to an enforcement phenomenon—remains relatively underdeveloped. Existing work tends to approach anti-corruption propaganda either as a dependent variable, examining what drives its variation, or as an independent variable, examining its effects on public opinion and political behavior. In both cases, measurement has been a significant lackingconsensus constraint.

One strand of the literature examines the relationship between anti-corruption propaganda and public perceptions of corruption. Sun, Zhu, and Ni (2022) find that exposure to anti-corruption information in Chinese state media has a dual effect: it may reduce citizens' subjective sense of corruption by signaling that the government is responsive, but it may also increase perceived corruption by making the problem more salient. This ambiguity in effects reflects a broader challenge in the literature—understanding when anti-corruption propaganda functions as reassurance and when it functions as amplification of negative governance signals. Pan, Xu, and

Xia (2023) use experimental methods to show that anti-corruption reporting can enhance trust in central authorities while simultaneously depressing local government evaluations. These studies rely primarily on survey experiments or cross-sectional designs, with anti-corruption propaganda operationalized through stylized stimuli rather than observed media content. While internally valid, such approaches do not map directly onto the supply of actual anti-corruption propaganda in official broadcasts.

A second strand of the literature uses event-based or campaign-based proxies to measure anti-corruption propaganda. This approach treats major anti-corruption campaigns, high-profile case disclosures, or elite-level speeches as indicators of heightened anti-corruption communication activity (Carothers 2020). Huhe, Chen, and Chen (2022) use campaign intensity as a measure of anti-corruption effort, examining its effects on political support in China. Wedeman (2017) traces the trajectory of Xi Jinping's anti-corruption campaign by cataloguing major enforcement events and the official discourse surrounding them. While these event-based approaches are valuable for understanding campaign dynamics, they conflate enforcement activity with communication output and focus on episodic rather than sustained patterns of messaging. They are also difficult to extend systematically across long time series or to fine-grained variation within campaign periods.

A third approach uses content analysis of official media to proxy for anti-corruption propaganda intensity. This typically involves counting the frequency of anti-corruption keywords in news outlets or official documents (Lorentzen 2014; Brady 2008). While straightforward in execution, pure keyword-based measures face several well-documented limitations. They are sensitive to vocabulary selection, may over-count peripheral mentions of corruption-related terms, and do not capture the semantic context in which these terms appear. A single keyword may appear in a story primarily about economic development or public health, and its presence does not necessarily indicate that anti-corruption messaging is the dominant communicative frame. Moreover, Chinese political language is highly stylized and subject to change over time, making static keyword dictionaries potentially prone to coverage gaps.

The limitations of existing approaches point to a broader measurement gap in the study of anti-corruption propaganda. Existing measures tend to conflate enforcement with communication, focus on episodic events rather than sustained narrative patterns, and are limited in their capacity to capture variation over time or across contexts (Engler 2020; Afolabi 2019). There is, in particular, little consensus on what constitutes a valid operationalization of anti-corruption propaganda as it appears in routine official news coverage—as distinguished from both enforcement activity and general references to anti-corruption vocabulary. This gap constrains research on authoritarian information strategies and limits our ability to assess how and to what extent regimes deploy anti-corruption narratives in their communication with citizens.

The present study addresses this gap by developing a measure that is grounded in an explicit conceptual definition of anti-corruption propaganda, validated through human coding, and estimated using methods that capture semantic context rather than isolated keyword frequency. By combining the conceptual rigor of human annotation with the scalability of computational text analysis, the proposed approach offers an improvement over existing alternatives in terms of both validity and coverage.

3. Anti-Corruption Propaganda and Agenda Competition

Understanding variation in anti-corruption propaganda requires attention not only to the content of official news but also to the structural constraints and strategic logics that govern media agenda-setting in state-coordinated broadcast systems. Official media outlets do not operate in a vacuum: they must allocate finite broadcast time and editorial resources across a wide range of governance-relevant topics, including economic performance, social stability, international affairs, and crisis management. The theory of agenda competition provides a useful framework for understanding how and when anti-corruption propaganda claims space within this constrained informational environment (McCombs and Shaw 1972; Iyengar and Kinder 1987; Wlezien 2005).

Anti-corruption propaganda serves several communicative functions in official media. It signals that governing institutions are engaged in active self-regulation, constructs narratives of accountability that differentiate disciplined governance from individual misconduct, and mobilizes public expectations around governance norms and standards. From a legitimation perspective, the sustained presence of anti-corruption content in official news can be understood as a form of performance signaling—demonstrating to citizens that the political system is responsive to governance failures and committed to institutional renewal (Wedeman 2004; Zhu and Zhang 2017). In this sense, anti-corruption propaganda is not merely a byproduct of enforcement activity but a deliberate communication strategy that may be calibrated to governance cycles, leadership priorities, and public opinion considerations.

However, the production and placement of anti-corruption content in official broadcasts is subject to competition from other governance narratives. When alternative priorities dominate the political agenda—whether because of economic crises, public health emergencies, or major policy milestones—anti-corruption propaganda may be displaced or reduced. This is not necessarily because anti-corruption enforcement has diminished, but because media attention is a finite resource that must be allocated strategically. The theory of agenda competition thus suggests that anti-corruption propaganda is not monotonically related to enforcement intensity; it also reflects deliberate allocation decisions within the official media system.

Several observable implications follow from this theoretical framework. First, anticorruption propaganda in official news should intensify during periods of major campaign activity, particularly in the wake of significant political events that elevate anti-corruption as a central governance priority. The 18th National Congress of the CCP in November 2012 provides a paradigmatic example: it marked the beginning of Xi Jinping's sustained and explicitly formulated anti-corruption drive, which was immediately accompanied by heightened coverage of disciplinary proceedings, case disclosures, and institutional reforms in official media.

Second, anti-corruption propaganda should exhibit systematic seasonal patterns tied to China's governance calendar. The annual Two Sessions (两会) meetings of the National People's Congress and the Chinese People's Political Consultative Conference, held each March, are occasions for extensive review of governance performance and policy direction, including anticorruption work. Similarly, year-end periods (December and January) are associated with annual governance assessments and the publicizing of enforcement statistics. These institutional rhythms are likely to generate recurring peaks in anti-corruption propaganda that are independent of underlying enforcement trends.

Third, anti-corruption propaganda should decline during periods of major exogenous shocks that impose alternative agenda demands on official media. The COVID-19 pandemic, which began in late 2019 and dominated China's official media landscape through 2022, provides an important natural test of this hypothesis. During the pandemic period, state media resources were extensively redirected toward public health communication, crisis management, and social stability propaganda. Under conditions of intense agenda competition, anti-corruption content was likely to be crowded out, even if enforcement activity continued. This expectation is consistent with the logic of bounded media attention and the strategic nature of official information allocation in political communication.

These theoretical expectations provide the basis for the nomological validation of the proposed measure. If the anti-corruption score effectively captures the concept it is designed to measure, it should behave in accordance with these predictions: increasing during post-18th Congress and Two Sessions periods, exhibiting year-end peaks, and declining during the COVID19 period. Departures from these expectations would suggest either measurement error or theoretically interesting anomalies warranting further investigation.

4. Data and Methods

4.1 Data Source

The empirical basis for this study is the transcript archive of *Xinwen Lianbo*, China's flagship national evening news program broadcast daily on CCTV-1. *Xinwen Lianbo* has been the most watched and institutionally authoritative television news program in China since its founding in 1978. Broadcast every evening at 7:00 PM, it reaches hundreds of millions of viewers and is understood by both domestic and international observers as a reliable indicator of official political priorities and media agenda (Brady 2008; Huang 2015). Because all content is centrally produced and editorially aligned with official guidance, *Xinwen Lianbo* provides a uniquely consistent and institutionally anchored source for studying variation in official communication over time.

The dataset used in this study consists of full transcripts of *Xinwen Lianbo* broadcasts spanning January 2007 to December 2025, comprising 110,165 individual news items. Each broadcast is segmented into discrete news items, which serve as the unit of analysis for coding and classification. News items vary in length and format, ranging from brief factual announcements to extended investigative or documentary-style reports. The period from 2007 to 2025 encompasses the late Hu Jintao era, the full duration of Xi Jinping's anti-corruption campaign, the COVID-19 pandemic, and the subsequent governance consolidation period—providing a longitudinally rich basis for examining variation in anti-corruption propaganda across diverse political contexts.

4.2 Human Coding and Reference Dataset

To develop a validated reference dataset for training and benchmarking the automated measure, a stratified random sample of 2,500 news items was drawn from the full transcript archive. The sampling strategy was designed to ensure adequate representation across the full time period, including both periods expected to be relatively rich in anti-corruption content (post-2012) and periods expected to be lower in such content (pre-2012 and the COVID-19 period). This

stratification ensures that the reference dataset reflects the full range of variation in anti-corruption messaging rather than being concentrated in high-salience periods.

Three trained human coders independently coded each sampled news item according to a structured coding protocol developed specifically for this study. The protocol defines anticorruption news as reporting in which anti-corruption, clean governance, or Party discipline and integrity (廉政建设, 党风廉政, 反腐败斗争) constitutes the primary information frame of the report—as distinguished from peripheral or decorative mentions of corruption-related vocabulary. The protocol elaborates four defining criteria: (1) topic centrality, meaning anti-corruption or clean governance is the dominant subject of the report rather than background context; (2) functional orientation, meaning the report serves the purposes of anti-corruption mobilization, information dissemination, or institutional accountability; (3) substantive content, meaning the report makes substantive statements about corruption cases, enforcement actions, or governance standards rather than merely invoking related vocabulary; and (4) genre diversity, meaning the category encompasses formal case disclosures, campaign progress reports, inspection work summaries, and disciplinary education pieces, among others.

The coding protocol further specifies decision rules for boundary cases. News items issued by discipline inspection or supervisory institutions are not automatically classified as anticorruption news; coding depends on whether the substantive content of the report concerns anticorruption or clean governance, rather than on the institutional source. Conversely, news items from non-disciplinary institutions may be classified as anti-corruption if their primary subject matter concerns corruption cases or governance discipline. This content-over-source principle prevents over-counting of formally associated but substantively unrelated content.

Intercoder reliability was assessed using Cohen’s Kappa across all pairwise combinations of coders. The overall Kappa coefficient exceeded 0.8 across the sample, indicating substantial agreement and meeting accepted thresholds for reliable content coding in social science research (Krippendorff 2004; Neuendorf 2017). Disagreements between coders were resolved through discussion and adjudication by the research team. The final coded dataset provides 2,500 items with verified binary labels indicating whether each news item constitutes substantive anticorruption propaganda, serving as the reference standard for subsequent automated classification.

4.3 Word Embedding Approach

Building on the human-coded reference dataset, the study employs a word embedding approach to classify anti-corruption content in the full transcript corpus. Word embedding models represent words and phrases as dense numeric vectors in a high-dimensional semantic space, positioning semantically similar items close together (Mikolov et al. 2013; Pennington et al. 2014). This geometric representation captures contextual meaning and co-occurrence patterns in a way that static keyword lists cannot: it enables the identification of anti-corruption relevant language even when specific predefined terms are absent, provided that the semantic context is consistent with anti-corruption discourse.

The word embedding model is trained on the full *Xinwen Lianbo* corpus to develop representations that are calibrated to the specific vocabulary and discursive patterns of China’s

official news language. Chinese-language text is segmented into words using a standard word segmentation tool prior to model training. The human-coded dataset is then partitioned into a training set (80% of coded items) and a test set (20% of coded items). Using the embedding representations learned from the full corpus, a classifier is trained on the labeled training set to distinguish anti-corruption news items from non-anti-corruption items. The classifier's performance is evaluated on the held-out test set using standard metrics including accuracy, precision, recall, and F1 score.

Anti-corruption scores are constructed by applying the trained classifier to the full transcript corpus and aggregating the results at the monthly level. For each month, the anti-corruption score reflects the standardized frequency of news items classified as anti-corruption content. Standardization ensures that variation in the total volume of broadcasts across months does not confound estimates of anti-corruption messaging intensity. The resulting monthly series, spanning January 2007 to December 2025, provides the basis for descriptive analysis and validation testing.

This approach offers several advantages over existing alternatives. Compared to pure keyword counting, it captures semantic context and is less sensitive to the specific vocabulary used in any given news item, allowing for identification of implicit anti-corruption framing alongside explicit references. Compared to purely unsupervised topic models, it is anchored to a humanvalidated conceptual definition, reducing the risk of capturing statistically coherent but substantively misspecified latent categories. The combination of human coding for conceptual grounding and word embeddings for scalable classification thus represents a methodologically balanced approach to the measurement of politically sensitive content in official media.

5. Results: Patterns in Anti-Corruption Propaganda

5.1 Content Validation

Content validation assesses whether the proposed measure accurately identifies news items that substantively constitute anti-corruption propaganda, in accordance with the conceptual definition articulated in the coding protocol. To evaluate this, I examine a sample of high-scoring news items drawn from across the full time series, analyzing their institutional actors, narrative frames, and content characteristics.

The institutional landscape of identified anti-corruption news items is consistent with theoretical expectations. The predominant actors in identified items are institutions of the Party disciplinary and supervisory system, particularly the Central Commission for Discipline Inspection (CCDI, 中央纪律检查委员会) and the National Supervisory Commission (NSC, 国家监察委员会) and their provincial and local counterparts. This is analytically expected: these bodies are the institutional engines of China's anti-corruption enforcement, and their activities— investigations, case disclosures, inspection tours, and work summaries—constitute the core of official anti-corruption communication. That these actors dominate the institutional landscape of identified items provides initial evidence that the measure is identifying the intended content.

The narrative content of identified items reflects the range of anti-corruption discourse as described in the coding protocol and the broader literature. Identified items include both factualinformational reports, which convey specific enforcement statistics, case details, and

institutional proceedings, and normative-mobilizational content, which frames anti-corruption as a moral and political imperative and addresses governance audiences in exhortatory terms. This duality—what might be called the evidentiary and hortatory dimensions of anti-corruption reporting—is consistent with the multi-functional nature of official media communication, which serves simultaneously to inform, legitimize, and mobilize.

An illustrative example from August 2017 demonstrates the evidentiary register of anticorruption reporting in *Xinwen Lianbo*. The item reported on disciplinary inspection work in poverty alleviation areas in Guangxi and Hunan, describing specific cases of financial misconduct by local officials who had exploited housing renovation subsidies for personal gain. The report documented the investigation and return of misappropriated funds to affected households, while also noting the broader inspection campaign targeting poverty alleviation governance across multiple counties and townships. This type of report combines factual case disclosure with institutional mobilization framing, presenting the enforcement action both as a concrete accountability outcome and as evidence of ongoing campaign momentum:

Disciplinary inspection and supervision organs at all levels in Guangxi Province are focusing on key aspects of the use and management of poverty alleviation funds, and are closely monitoring issues such as embezzlement, misappropriation, fraudulent claims, interception and private distribution, misappropriation, favoritism, and waste, conducting precise supervision and discipline enforcement. Recently, personnel from disciplinary inspection and supervision organs at all levels in Hunan Province have stepped out of their offices and into the fields, taking action to bridge the last mile of supervision and discipline enforcement in the poverty alleviation field. In early August, the Hunan Provincial Commission for Discipline Inspection dispatched 12 research teams to 49 impoverished counties across the province. The focus was on supervising the progress of supervision, discipline enforcement, and accountability in the poverty alleviation field, as well as the performance of duties by township-level discipline inspection commissions. Simultaneously, an “Internet + Supervision” platform was established, and inspection teams were dispatched to conduct inspections of impoverished counties and provincial-level units, and key leads were designated for special supervision, constructing a comprehensive supervision system to prevent and control misconduct and corruption in the poverty alleviation field. (August 26, 2017, in *Xinwen Lianbo*)

Another example from September 2007 demonstrates the normative-mobilizational register of anti-corruption reporting in *Xinwen Lianbo*. The item covered a symposium on institutional capacity-building within discipline inspection and supervisory organs, at which Politburo Standing Committee member and CCDI Secretary He Guoqiang delivered substantive remarks reviewing recent progress in Party conduct and clean governance work across all levels of the disciplinary system. He affirmed that discipline inspection bodies had made meaningful advances in institutional self-improvement, and called for continued deepening of anti-corruption efforts in service of the Party's broader governance mission. This type of report exemplifies the hortatory dimension of anti-corruption propaganda: rather than disclosing a specific case or enforcement outcome, it frames anti-corruption as an ongoing institutional priority, signals leadership commitment to disciplinary rigor, and addresses governance audiences in explicitly mobilizational terms. Such normative framing—emphasizing the sustained momentum and organizational integrity of the anti-corruption effort—constitutes a distinct but equally important mode of official anti-corruption communication:

He Guoqiang, member of the Standing Committee of the Political Bureau of the CPC Central Committee and Secretary of the Central Commission for Discipline Inspection, attended and addressed a symposium on the self-construction of discipline inspection and supervision organs held in Beijing on September 18. After carefully listening to the remarks of the participants, He Guoqiang pointed out that in recent years, under the correct leadership of the Central Committee, discipline inspection and supervision organs at all levels have consistently regarded strengthening their own construction as a fundamental project, achieving positive progress and significant results. This has effectively promoted the indepth development of Party conduct and integrity building and the fight against corruption, making positive contributions to the smooth development of the Party and the country... (September 19, 2012, in *Xinwen Lianbo*)

Across the range of identified items, anti-corruption content is consistently characterized by reference to institutional accountability processes (investigations, inspections, case disclosures), enumeration of enforcement outcomes (officials investigated, funds recovered, disciplinary actions taken), or framing of anti-corruption as a governance priority with direct implications for citizen welfare and social trust. These content features align with the defining criteria of the coding protocol and confirm that the measure is capturing the intended conceptual domain.

5.2 Longitudinal Trends

Figure 1 presents the monthly anti-corruption messaging scores derived from the full *Xinwen Lianbo* corpus, spanning January 2007 to December 2025. The time series reveals several clear patterns that are consistent with both the theoretical framework developed above and existing knowledge about China's anti-corruption campaign history. The most visible structural break in the series occurs around the time of the 18th National Congress in November 2012, which marked the beginning of Xi Jinping's leadership and the formal initiation of the sustained anti-corruption drive. Following this event, monthly anti-corruption scores increase noticeably and remain elevated relative to the pre-2012 baseline, reflecting the intensification and institutionalization of anti-corruption propaganda as a persistent feature of official communication. This upward shift is consistent with the theoretical expectation that major campaign periods should be accompanied by increased anti-corruption propaganda intensity.

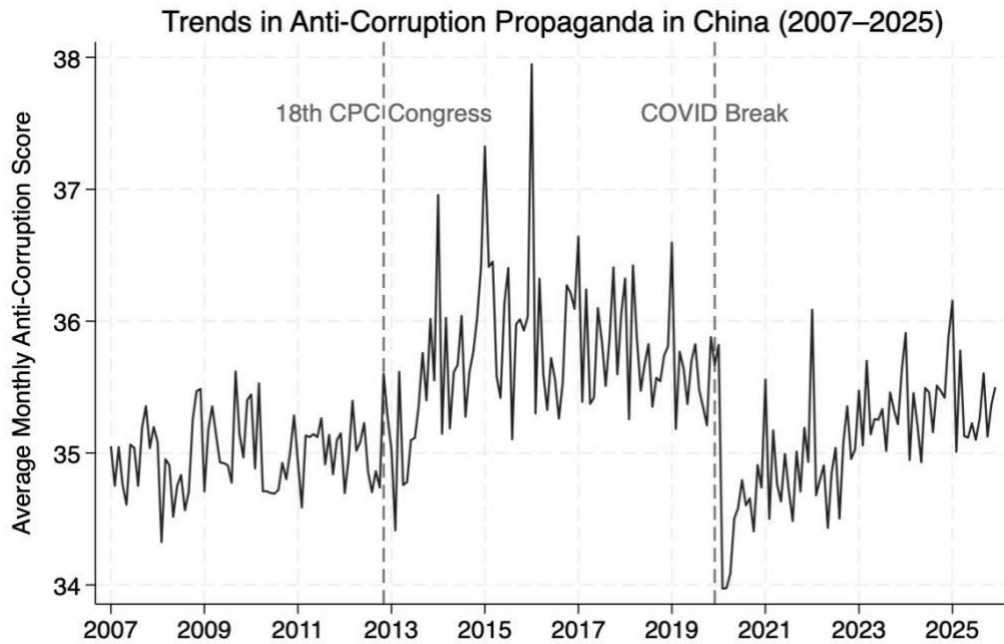


Figure 1. Trends in Anti-Corruption Propaganda in China (2007–2025). The solid line shows the monthly average anti-corruption scores derived from *Xinwen Lianbo*. Anti-corruption scores are constructed by standardizing the frequency of anti-corruption–related phrases appearing in the news text. The dashed vertical lines indicate two key events: the first marks the 18th CPC National Congress in November 2012, when Xi Jinping assumed leadership; the second marks December 2019, corresponding to the outbreak of the COVID-19 pandemic in China.

Within the post-2012 elevated period, the series exhibits recurring seasonal variation, with notable peaks in March (the Two Sessions period) and in December and January (the year-end governance review period). These peaks are consistent with the governance calendar hypotheses: that recurring political moments associated with governance review and accountability reporting should generate systematic increases in anti-corruption messaging, independent of underlying variation in enforcement activity. The regularity of these seasonal peaks across years lends further support to the measure’s capacity to capture agenda-setting dynamics in official media.

A second major structural shift occurs around the onset of the COVID-19 pandemic in late 2019 and early 2020. Following this date, anti-corruption scores decline markedly, reflecting the reallocation of official media attention toward pandemic management and public health communication. This decline is consistent with the agenda competition hypothesis: that major exogenous shocks impose alternative media demands that crowd out anti-corruption messaging, even when enforcement activity continues. The subsequent partial recovery in anti-corruption scores in the post-pandemic period, as COVID-related media demands eased, is also visible in the series and provides additional support for the agenda competition interpretation.

5.3 Nomological Validation

To assess the nomological validity of the proposed measure, I estimate a series of Seasonal Autoregressive Moving Average (SARMA) models that relate monthly anti-corruption scores to theoretically motivated predictors while accounting for the temporal autocorrelation and seasonality evident in the raw series.

Given the strong autocorrelation structure and seasonal periodicity visible in the ACF and PACF plots of the anti-corruption score series, standard OLS regression would produce invalid inference (see Figure 2). SARMA models accommodate both the short-run persistence of the series (captured by ARMA components) and its recurring annual seasonality (captured by seasonal AR components at lag 12). Model selection based on information criteria (AIC and BIC) and loglikelihood comparison across a range of specifications identifies the $\text{ARMA}(3,0) \times \text{SARMA}(2,0,12)$ model as providing the best fit to the data. Ljung-Box Q tests confirm that residuals from this model are consistent with white noise, indicating adequate model specification.

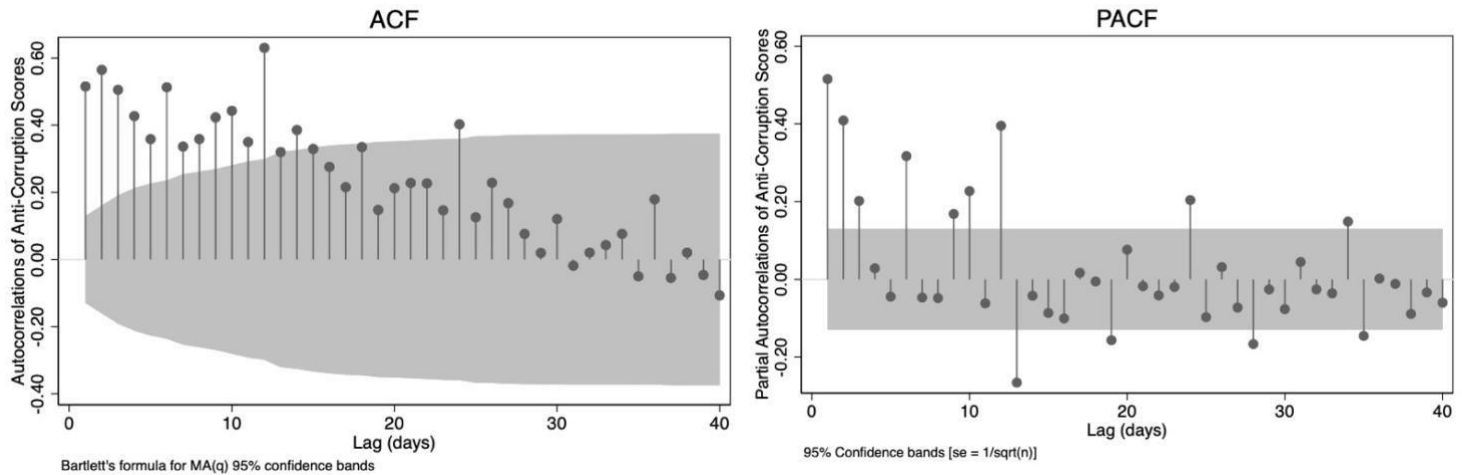


Figure 2. Autocorrelation and Partial Autocorrelation Functions of Monthly Anti-Corruption Scores. The upper panel presents an ACF plot showing the raw autocorrelations, while the lower panels present a PACF plot showing partial autocorrelations. Spikes show the estimated coefficients for each lag. The gray shaded area presents 95% confidence band. Bars extending outside the shaded area indicate $p < 0.05$. Source: China Central Television’s news program *Xinwen Lianbo*.

The main predictors in the nomological validation models are: (1) a December/January indicator capturing year-end governance review periods; (2) a March indicator capturing Two Sessions periods; (3) a Post-18th CPC Congress indicator (equal to 1 from November 2012 onward) capturing the structural elevation of anti-corruption messaging under Xi Jinping’s leadership; and (4) a Post-COVID indicator (equal to 1 from December 2019 onward) capturing the agenda displacement effect of the pandemic period.

The results of the nomological validation models are presented in Figure 3 and Table B (Appendix). Across all model specifications, the December/January coefficient is positive, large, and statistically significant, confirming that year-end periods are systematically associated with

elevated anti-corruption messaging ($\beta \approx 0.48$, $p < 0.001$ in the preferred specification). The March coefficient is likewise positive and significant, confirming the Two Sessions effect ($\beta \approx 0.41$, $p < 0.05$). The Post-18th CPC Congress coefficient is positive and significant, consistent with the theoretical expectation that the initiation of Xi's anti-corruption campaign produced a sustained structural increase in messaging intensity ($\beta \approx 0.37$, $p < 0.01$). The Post-COVID coefficient is negative, large, and highly significant, confirming the agenda displacement hypothesis ($\beta \approx -0.71$, $p < 0.001$).

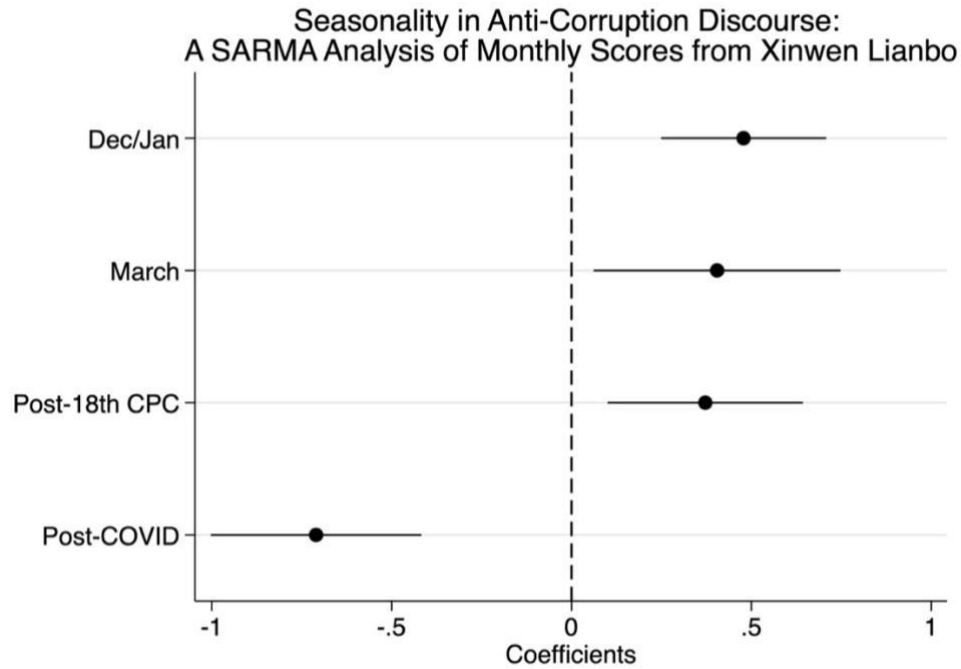


Figure 3. Seasonality in Anti-Corruption Discourse: A SARMA Analysis of Monthly Scores from Xinwen Lianbo. Dots represent coefficient estimates, and spikes indicate 95% confidence intervals. Model: ARMA(3,0) $\times$ SARMA(2,0,12). Source: China Central Television's news program *Xinwen Lianbo*.

Together, these results confirm that the proposed anti-corruption messaging measure behaves in accordance with the theoretical expectations derived from the literature on agenda competition and political communication. The measure responds to known campaign periods, institutional governance rhythms, and major exogenous shocks in the theoretically predicted directions, providing strong evidence of nomological validity.

6. Discussion and Conclusion

This study develops and validates a systematic measure of anti-corruption propaganda in China's official television news broadcasts. By combining structured human coding with a word embedding approach, the proposed measure captures the semantic dimensions of anti-corruption content in *Xinwen Lianbo* transcripts spanning nearly two decades. The validation exercises—content validation and nomological validation—provide converging evidence that the measure identifies substantively meaningful anti-corruption news, responds appropriately to theoretically

motivated predictors, and tracks the known dynamics of China's anti-corruption communication environment.

From a methodological standpoint, the study demonstrates the value of a hybrid strategy that anchors computational text analysis in explicit conceptual definitions and human-validated reference standards. The word embedding approach overcomes the limitations of pure keyword counting by capturing semantic context and allowing for the identification of anti-corruption framing even in the absence of specific predefined terms. At the same time, the human-coded benchmark ensures that the automated classifier is oriented toward a conceptually coherent and substantively grounded definition of the target phenomenon, rather than merely optimizing for statistical coherence. This combination of conceptual rigor and computational scalability offers a model for the measurement of politically sensitive content in other official media contexts.

Substantively, the study provides new longitudinal evidence on the dynamics of anticorruption propaganda in China. The time series reveals a structural elevation of anti-corruption scores following the 18th National Congress, systematic seasonal patterns tied to China's governance calendar, and a marked decline during the COVID-19 pandemic. These findings are consistent with the theoretical framework of agenda competition and illuminate how official media allocates attention to anti-corruption narratives in response to political cycles, leadership priorities, and exogenous shocks. The recovery of anti-corruption messaging intensity in the post-pandemic period, as COVID-related agenda demands eased, further supports the interpretation of media attention as a finite and strategically allocated resource.

The findings also contribute to the broader study of political communication and governance propaganda. Anti-corruption reporting in official media serves multiple functions simultaneously: it informs citizens about enforcement activity, legitimizes governing institutions by demonstrating accountability, and mobilizes normative commitments around governance standards. The capacity to measure this multi-functional communication practice systematically over long time periods enables more precise inquiry into its effects on public attitudes, political trust, and perceptions of governance quality. By providing a validated and replicable measure, this study lays the groundwork for future research that examines the downstream effects of anticorruption propaganda on citizen perceptions and political behavior.

Several directions for future research follow from this study. First, the distinction between factual-informational and normative-mobilizational anti-corruption content—identified in the content validation analysis—warrants further systematic investigation. Future work could develop measures that differentiate these two modes of anti-corruption communication and examine whether they have distinct effects on public perceptions of corruption and governance quality. Second, the present study focuses on *Xinwen Lianbo* as the primary official news source. Future research could extend the approach to other official media outlets—including print, online, and social media channels—and examine how anti-corruption propaganda is coordinated and amplified across the broader official media ecosystem. Third, the measure developed here could be adapted for comparative analysis of anti-corruption communication across different governance contexts, enabling cross-national studies of how propaganda strategies vary with campaign type, media system structure, and political context.

In conclusion, effective governance communication—including anti-corruption propaganda—is an important and underexplored dimension of how governments connect with citizens and build institutional trust. This study advances the measurement of this phenomenon in the context of China's official media system, offering a transparent and replicable tool for subsequent empirical inquiry. The findings illuminate how anti-corruption discourse is constructed, sustained, and modulated in official broadcasts over time, contributing to a richer understanding of governance communication in the context of modernization and institutional reform.

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Appendix

Table A1. Ljung–Box Q Test for Daily Anti-Corruption Scores from China’s *Xinwen Lianbo* Broadcasts

Portmanteau test for white noise
H0: The variable is a white noise.
Portmanteau (Q) statistic = 887.0572
Prob > chi2(40) = 0.0000

Note: The Ljung–Box Q test strongly rejects the null hypothesis of white noise for the anticorruption series ($Q = 887.0572$, $df = 40$, $p < 0.001$), indicating substantial serial correlation up to lag 40.

Table A2. Augmented Dickey–Fuller Test for Daily Anti-Corruption Scores from China’s *Xinwen Lianbo* Broadcasts

Augmented Dickey–Fuller test for unit root
H0: Random walk with or without drift.
Test statistic = -8.482
p-value > $z(t) = 0.0000$

Note: The augmented Dickey–Fuller test rejects the null of a unit root for the anti-corruption scores ($Z(t) = -8.482$, $p < 0.001$), indicating that the series is stationary. No differencing or additional transformation is required before modeling.

Table B. Comparing SARMA Models for Monthly Anti-Corruption Scores from China’s *Xinwen Lianbo* Broadcasts

	(1) ARMA (3,0)	(2) ARMA (3,0) SARMA (1,0,12)	(3) ARMA (3,0) SARMA (1,0,12)	(4) ARMA (3,0) SARMA (2,0,12)	(5) ARMA (3,0) SARMA (2,0,12)
Dec/Jan	0.488*** (0.064)	0.488*** (0.105)	0.478*** (0.102)	0.486*** (0.123)	0.478*** (0.117)
March	0.378*** (0.105)	0.409** (0.141)	0.401** (0.151)	0.412* (0.164)	0.405* (0.175)
Post-18th CPC			0.450*** (0.129)		0.372** (0.139)
Post-COVID			-0.687*** (0.141)		-0.710*** (0.149)
constant	35.175*** (0.146)	35.170*** (0.154)	35.104*** (0.148)	35.161*** (0.187)	35.167*** (0.173)

ARMA					
L1.ar	0.272*** (0.056)	0.338*** (0.051)	0.253*** (0.054)	0.368*** (0.054)	0.289*** (0.058)
L2.ar	0.353*** (0.080)	0.253** (0.087)	0.204* (0.079)	0.241** (0.089)	0.204* (0.079)
L3.ar	0.179* (0.070)	0.129 (0.081)	0.114 (0.081)	0.126 (0.080)	0.116 (0.081)
SARMA					
L1.ar.S7		0.431*** (0.049)	0.446*** (0.044)	0.358*** (0.059)	0.387*** (0.054)
L2.ar.S7				0.167** (0.060)	0.152* (0.059)
sigma	0.380*** (0.014)	0.344*** (0.014)	0.332*** (0.014)	0.339*** (0.014)	0.328*** (0.013)
N	228	228	228	228	228
log likelihood	-103.196	-81.787	-73.775	-78.657	-71.365
AIC	220.391	179.575	167.550	175.314	164.730
BIC	244.396	207.010	201.843	206.178	202.453

Note: Standard errors in parentheses. *p<.05; **p<.01; ***p<.001. The table presents five SARIMA specifications for modeling monthly anti-corruption scores in China's Xinwen Lianbo broadcasts. All models use ARMA(3,0) non-seasonal components while varying the seasonal structure: Model 1 has no seasonal terms; Model 2 uses SARMA(1,0,12); Models 3-4 combine these specifications; Model 5 employs SARMA(2,0,12). Model 5 (ARMA(3,0) × SARMA(2,0,12)) is identified as optimal based on information criteria (lowest AIC, BIC, and highest log-likelihood). December/January and March show consistently higher scores.