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Buy or Build Abroad? Host-Country News Tone and Chinese Firms' OFDI Entry Mode --Manuscript Draft--

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Buy or Build Abroad? Host-Country News Tone and Chinese Firms' OFDI Entry Mode*

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Abstract

This paper examines how host-country news-based event tone toward China is associated with Chinese firms' choice between cross-border mergers and acquisitions (M&A) and greenfield investment, conditional on outward foreign direct investment occurring. We develop a real-options framework in which a more favorable host-country environment reduces uncertainty and entry frictions, increasing the relative attractiveness of M&A. Combining OFDI transaction data for Chinese A-share listed firms over 2003–2023 with GDELT event-tone measures, we find that more favorable tone is associated with a higher probability of M&A entry. A one-unit increase in the baseline measure raises this probability by 1.6 percentage points. The result is robust to instrumental-variable estimation, alternative models, sentiment measures, outcome definitions, and two-way clustering. Favorable sentiment is also associated with stronger cooperation with China and closer bilateral political relations. The effect is strongest for market-seeking, capital-intensive, state-owned, and heavy-polluting firms, identifying sentiment as an important non-institutional correlate of entry strategy.

Keywords: host-country sentiment; news-based event tone; outward foreign direct investment (OFDI); foreign entry mode; cross-border mergers and acquisitions (M&A); greenfield investment

JEL Classification: D81; F21; F23; G34

*The authors contributed equally to this article. All errors are our own.

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1 Introduction

The expansion of Chinese outward foreign direct investment (OFDI) has made the foreign-market entry decisions of Chinese firms increasingly important for global capital allocation. Once a firm has selected a host country, it must decide whether to acquire an existing local business or establish a new operation. Cross-border mergers and acquisitions (M&A) provide rapid access to local assets, brands, customers, and distribution networks, but require substantial upfront commitments and expose the acquirer to integration and legitimacy risks. Greenfield investment offers slower market entry but greater organizational control and flexibility. The choice between these modes therefore determines not only the speed and scale of internationalization, but also the firm's exposure to host-country uncertainty.

Existing explanations of OFDI entry mode emphasize firm productivity, ownership advantages, institutional conditions, and economic or policy uncertainty (Buckley et al., 2007; Nocke and Yeaple, 2007; Spearot, 2012; Canh et al., 2020). A growing literature further shows that sentiment can influence international investment. Li et al. (2019), for example, demonstrate that national sentiment provides explanatory power for FDI decisions. This evidence establishes the relevance of affective and behavioral factors, but it does not examine how attitudes in the host country toward the investor's home country alter the relative attractiveness of alternative entry modes. Such attitudes can influence consumer acceptance, regulatory scrutiny, political resistance, and the legitimacy of local operations. These considerations should matter especially for M&A, which immediately places a foreign firm inside an established local organization. This observation motivates our research question: does host-country sentiment toward China affect whether Chinese firms enter through cross-border M&A rather than greenfield investment?

We examine this question conditional on Chinese firms undertaking OFDI. The theoretical construct of interest is the host-country evaluative environment toward China, which we proxy empirically using the tone of reported host-country actions toward China in international news coverage. This news-based measure captures the valence and salience of reported interactions, but it is not interpreted as a direct measure of public opinion, elite beliefs, or country image. We incorporate the construct into a real-options framework and test its predictions using 4,839 observed OFDI transactions undertaken by Chinese A-share listed firms between 2003 and 2023. More favorable news-based sentiment significantly increases the conditional probability that an observed investment takes the form of M&A rather than greenfield investment. The evidence further associates the measure with host-country cooperation and bilateral political relations, while showing that its

effect varies with investment motives, firm characteristics, and uncertainty. The analysis therefore concerns how firms enter a foreign market once they invest, rather than whether they undertake OFDI in the first place.

The theoretical framework clarifies why sentiment should affect the relative attractiveness of the two entry modes. M&A delivers immediate access to local productive assets, but its larger sunk costs and integration exposure make its value particularly sensitive to uncertainty and local acceptance. Greenfield investment can begin at a smaller scale and preserves an option to expand after uncertainty is resolved. We represent both modes as claims on a common host-market opportunity and parameterize their exposure to sentiment-related frictions. When acquisitions have greater proportional friction exposure—reflecting their higher regulatory visibility, stakeholder disruption, and integration requirements—a more favorable host-country environment lowers the acquisition threshold relative to the greenfield threshold and raises the relative payoff from M&A. The model therefore predicts a positive relationship between favorable sentiment and the probability of acquisition entry.

The empirical analysis combines greenfield investment records from fDi Markets, cross-border M&A records from BvD Zephyr, firm characteristics from CSMAR, country risk measures from ICRG, and host-country information from international databases. We construct the sentiment proxy from GDELT events in which an actor from the host country initiates an action and China is the target actor. The baseline measure is the annual average *AvgTone* weighted by the number of event mentions; an article-weighted measure reduces sensitivity to repeated mentions of the same event. The host country is identified from the event actor rather than the location of the news publisher, and the measure therefore represents international news tone surrounding host-country actions rather than local-media opinion. We estimate Probit models with lagged firm and host-country controls and year, industry, and home-province fixed effects. To address omitted variables and measurement error, we instrument the news-based sentiment measure with corresponding sentiment in non-neighboring and genetically distant third countries.

The baseline estimates indicate that favorable news-based sentiment has an economically meaningful association with entry mode. On average, a one-unit increase in *sentiment* raises the probability of M&A entry by approximately 1.6 percentage points. The result remains positive under IV-Probit estimation, Logit and linear probability models, an article-weighted GDELT measure, and a survey-based measure from the Pew Research Center. The Pew estimate is positive but imprecisely estimated because the survey covers fewer countries and years; we therefore treat it as suggestive external validation rather than evidence that GDELT tone and public opinion are equivalent constructs. The result

is also robust when entry mode is measured by the share of M&A value in a firm's total OFDI within a host country-year. Taken together, these findings indicate that the news-based measure contains information not fully captured by conventional institutional and economic variables.

The additional results help explain when and why this relationship arises. More favorable news-based sentiment is associated with a more cooperative host-country stance toward China and a smaller bilateral political distance in United Nations voting. The entry-mode effect is concentrated among market-seeking projects and is stronger for capital-intensive, state-owned, and heavy-polluting firms, whose investments involve greater local visibility or policy exposure. Firm-level perceived uncertainty weakens the positive effect of the news-based measure, whereas host-country uncertainty strengthens it, suggesting that favorable event tone becomes more informative when the external environment is risky but less influential when managers remain internally cautious. Finally, tone surrounding events targeting Chinese societal actors, rather than the Chinese government, is more closely associated with the main result.

This paper makes three contributions. First, it contributes to the literature on foreign entry modes and Chinese OFDI. Theoretical and empirical studies explain the choice between acquisitions and greenfield investment through firm heterogeneity, productivity, asset complementarities, and the value of waiting under uncertainty (Gilroy and Lukas, 2006; Nocke and Yeaple, 2007; Spearot, 2012). Research on Chinese OFDI further emphasizes host-country institutions, corruption, and firm-specific ownership advantages (Cuervo-Cazurra, 2006; Buckley et al., 2007). We extend these studies by identifying news-based host-country sentiment toward China as a proxy for an external environment of market acceptance, legitimacy, and policy exposure. We thereby establish an additional correlate of entry mode conditional on the realization of an OFDI transaction.

Second, the paper contributes to research on national and host-country sentiment in international economic exchange. National sentiment has been shown to affect FDI decisions (Che et al., 2015; Li et al., 2019), while country image influences trade flows and welfare (Chang et al., 2022). More directly, Yiu et al. (2024) develop a theory of host-country sentiments and examine their implications for the completion of cross-border acquisitions. We extend this literature by constructing a common transaction-level sample of acquisitions and greenfield projects and examining how host-country sentiment reallocates observed OFDI between the two entry modes. The outcome is therefore not aggregate FDI or acquisition completion, but the organizational form selected conditional on foreign investment occurring.

Third, the paper links the host-country-sentiment literature to real-options reasoning.

Uncertainty raises the value of delaying irreversible investment (Bloom et al., 2007), while entry modes differ in their sunk costs, flexibility, and exposure to post-entry integration. By allowing sentiment to affect both volatility and investment costs, our framework provides a mechanism through which host-country perceptions alter mode-specific investment thresholds. The empirical interaction tests further distinguish firm-level perceived uncertainty from host-country uncertainty, showing that the two forms of uncertainty condition the role of sentiment in different directions.

The rest of the paper is organized as follows. Section 2 develops the theoretical framework and hypotheses. Section 3 describes the data, variables, and empirical design. Section 4 reports the empirical results. Section 5 concludes.

2 Theoretical background and hypothesis development

2.1 Host-country sentiment and OFDI entry mode

Firms typically enter foreign markets through either greenfield investment or cross-border M&A. Greenfield investment establishes new operations in the host country, generally begins at a smaller scale, and permits later expansion. Cross-border M&A transfers ownership or control of an existing local firm and provides faster access to local assets and networks, but requires a larger immediate commitment and exposes the acquirer to integration and legitimacy risks.

Following the real-options approach to entry-mode choice (Gilroy and Lukas, 2006), we use a two-stage structure while distinguishing explicitly between the payoffs from acquisition and greenfield entry. The firm is risk neutral, capital markets satisfy the standard no-arbitrage condition, and the required rate of return is r . Let A denote the latent host-country evaluative environment toward China.

A common host-market opportunity. Both entry modes are claims on the same host-market fundamental X_t , which evolves before entry according to

$$dX_t = \alpha_1 X_t dt + \sigma_1(A) X_t dz_t, \quad 0 \leq \alpha_1 < r. \quad (1)$$

The gross operating value delivered by mode $m \in \{M, G\}$ is $s_m X_t$, where $s_M \geq s_G > 0$. The parameter s_m maps the common market opportunity into mode-specific operating value: acquisition provides immediate access to an established operation, whereas greenfield entry generally begins at a smaller scale. Thus, the mode-specific values are defined

consistently as $V_{m,t} = s_m X_t$ rather than as independent state variables.

Greenfield expansion option. Only greenfield investment creates a second-stage option to expand from its initial scale to the scale available through acquisition. Let $V_{2,t}$ be the value of the incremental cash flows generated by expansion and let $C_2(A)$ be the expansion cost, with $C_2'(A) < 0$:

$$dV_{2,t} = \alpha_2 V_{2,t} dt + \sigma_2(A) V_{2,t} dz_{2,t}, \quad 0 \leq \alpha_2 < r. \quad (2)$$

The value $F_2(V_2; A)$ of waiting to expand satisfies

$$\frac{1}{2} \sigma_2(A)^2 V_2^2 F_{2,VV} + \alpha_2 V_2 F_{2,V} - r F_2 = 0. \quad (3)$$

The positive characteristic root is

$$\beta(A) = \frac{1}{2} - \frac{\alpha_2}{\sigma_2(A)^2} + \sqrt{\left(\frac{\alpha_2}{\sigma_2(A)^2} - \frac{1}{2} \right)^2 + \frac{2r}{\sigma_2(A)^2}} > 1. \quad (4)$$

Indeed, the characteristic polynomial $p_2(k) = \frac{1}{2} \sigma_2(A)^2 k(k-1) + \alpha_2 k - r$ satisfies $p_2(1) = \alpha_2 - r < 0$ and tends to infinity as k tends to infinity. Because its two roots have opposite signs, its unique positive root must satisfy $\beta(A) > 1$. The zero-value, value-matching, and smooth-pasting conditions are

$$F_2(0; A) = 0, \quad (5)$$

$$F_2(V_2^*; A) = V_2^* - C_2(A), \quad (6)$$

$$F_{2,V}(V_2^*; A) = 1. \quad (7)$$

They yield

$$F_2(V_2; A) = \begin{cases} B(A) V_2^{\beta(A)}, & V_2 < V_2^*(A), \\ V_2 - C_2(A), & V_2 \geq V_2^*(A), \end{cases} \quad (8)$$

where

$$V_2^*(A) = \frac{\beta(A)}{\beta(A) - 1} C_2(A), \quad B(A) = \frac{1}{\beta(A)} \left[\frac{\beta(A)}{\beta(A) - 1} C_2(A) \right]^{1-\beta(A)}. \quad (9)$$

Let v_0 denote the project-specific value of incremental capacity available when the initial greenfield investment is undertaken. Conditional on the engineering design and intended

scale of the project, v_0 is predetermined relative to the first-stage timing decision. The term $F_2(v_0; A)$ therefore belongs only to the greenfield payoff.

Define the effective irreversible commitments associated with the two modes as

$$K_M(A) \equiv C_M(A), \quad (10)$$

$$K_G(A) \equiv C_G(A) - F_2(v_0; A) > 0. \quad (11)$$

The greenfield commitment is net of the expansion option. Changes in the expansion cost and second-stage volatility therefore enter the first-stage decision through their combined effect on $K_G(A)$.

To express the cost responses in primitive, scale-free parameters, let $h(A) > 0$ denote sentiment-related host-country frictions, with $h'(A) < 0$, and parameterize

$$\sigma_1(A) = \bar{\sigma}_1 \exp\{\gamma_\sigma h(A)\}, \quad \gamma_\sigma > 0, \quad (12)$$

$$K_m(A) = \bar{K}_m \exp\{\gamma_m h(A)\}, \quad \gamma_m \geq 0. \quad (13)$$

The semi-elasticity γ_m measures the proportional exposure of a mode's effective commitment to regulatory scrutiny, stakeholder resistance, legitimacy costs, and integration frictions. Acquisition is expected to have a larger exposure because it immediately changes control of an established local organization, whereas greenfield entry can begin at a smaller scale and retains the expansion option. We formalize this mechanism through the parameter restrictions

$$K_M(A) > K_G(A) > 0, \quad \gamma_M > \gamma_G \geq 0. \quad (14)$$

Thus, acquisition involves both a larger effective commitment and greater proportional exposure to the host-country frictions represented by $h(A)$.

Mode-specific entry thresholds. Before entry, the option value $F_m(X; A)$ satisfies

$$\frac{1}{2}\sigma_1(A)^2 X^2 F_{m,XX} + \alpha_1 X F_{m,X} - r F_m = 0, \quad (15)$$

with positive-root solution $F_m(X; A) = D_m(A) X^{\eta(A)}$, where

$$\eta(A) = \frac{1}{2} - \frac{\alpha_1}{\sigma_1(A)^2} + \sqrt{\left(\frac{\alpha_1}{\sigma_1(A)^2} - \frac{1}{2}\right)^2 + \frac{2r}{\sigma_1(A)^2}} > 1. \quad (16)$$

The inequality follows from the same argument as for $\beta(A)$ because $r > \alpha_1$. The exercise payoffs are

$$\Pi_M(X; A) = s_M X - K_M(A), \quad (17)$$

$$\Pi_G(X; A) = s_G X - K_G(A). \quad (18)$$

Consequently, the value-matching and smooth-pasting conditions are

$$F_m(X_m^*; A) = s_m X_m^* - K_m(A), \quad (19)$$

$$F_{m,X}(X_m^*; A) = s_m, \quad m \in \{M, G\}. \quad (20)$$

Solving these conditions gives

$$X_m^*(A) = q(A) \frac{K_m(A)}{s_m}, \quad m \in \{M, G\}, \quad (21)$$

$$q(A) = \frac{\eta(A)}{\eta(A) - 1}, \quad (22)$$

and

$$D_m(A) = \frac{s_m}{\eta(A)} [X_m^*(A)]^{1-\eta(A)}, \quad m \in \{M, G\}. \quad (23)$$

Equation (21) assigns the expansion option only to greenfield investment through $K_G(A)$. Because the two entry modes are mutually exclusive, the firm's overall pre-entry option value is

$$F^{\text{entry}}(X; A) = \max \{F_M(X; A), F_G(X; A)\}. \quad (24)$$

This expression assumes that target search and due diligence for acquisition and site selection and construction planning for greenfield entry are mode-specific preparations. The firm therefore selects a mode-specific entry program before waiting for its associated trigger. Under this precommitment assumption, the firm selects M&A whenever the acquisition option provides the larger value. If mode choice could instead be deferred costlessly until the exercise date, the relevant stopping payoff would be $\max\{\Pi_M(X; A), \Pi_G(X; A)\}$ and a separate free-boundary problem would be required.

Proposition 1. *Suppose that $r > \alpha_1$, $h'(A) < 0$, and the friction parameterization and exposure restrictions in equations (13) and (14) hold. Then $\eta(A) > 1$, each mode-specific entry threshold decreases with A , and*

$$\frac{d}{dA} \ln \left[\frac{X_M^*(A)}{X_G^*(A)} \right] < 0. \quad (25)$$

Thus, the acquisition threshold falls relative to the greenfield threshold. Moreover, for a given host-market opportunity X , a more favorable environment raises the exercise payoff from acquisition relative to greenfield entry.

Proof. The characteristic root solves

$$\frac{1}{2}\sigma_1(A)^2\eta(\eta-1) + \alpha_1\eta - r = 0. \quad (26)$$

The quadratic has one positive and one negative root, and its value at $\eta = 1$ is $\alpha_1 - r < 0$; hence the positive root satisfies $\eta(A) > 1$. Implicit differentiation gives

$$\frac{\partial\eta}{\partial\sigma_1} = -\frac{\sigma_1\eta(\eta-1)}{\frac{1}{2}\sigma_1^2(2\eta-1) + \alpha_1} < 0. \quad (27)$$

Because $\partial q/\partial\eta = -1/(\eta-1)^2 < 0$, it follows that $\partial q/\partial\sigma_1 > 0$ and hence $q'(A) < 0$ when $\sigma'_1(A) = \gamma_\sigma\sigma_1(A)h'(A) < 0$. Because $K'_m(A) = \gamma_m K_m(A)h'(A) \leq 0$, logarithmic differentiation of the thresholds gives

$$\frac{d \ln X_m^*}{dA} = \frac{q'(A)}{q(A)} + \gamma_m h'(A) < 0, \quad m \in \{M, G\}. \quad (28)$$

Because the common option multiplier $q(A)$ cancels from the threshold ratio,

$$\frac{d}{dA} \ln \left(\frac{X_M^*}{X_G^*} \right) = (\gamma_M - \gamma_G) h'(A) < 0. \quad (29)$$

Finally,

$$\frac{\partial[\Pi_M(X; A) - \Pi_G(X; A)]}{\partial A} = [\gamma_G K_G(A) - \gamma_M K_M(A)] h'(A) > 0. \quad (30)$$

The last inequality follows from $K_M(A) > K_G(A) > 0$, $\gamma_M > \gamma_G \geq 0$, and $h'(A) < 0$. $\square$

For completeness, the planning-date mode choice depends on the relative option values rather than on the thresholds alone. Define

$$R(A) \equiv \frac{X_M^*(A)}{X_G^*(A)} = \frac{K_M(A)/s_M}{K_G(A)/s_G}. \quad (31)$$

At a pre-entry state $X < \min\{X_M^*, X_G^*\}$, both options remain in their continuation regions and

$$\ln \left(\frac{F_M(X; A)}{F_G(X; A)} \right) = \ln \left(\frac{s_M}{s_G} \right) + [1 - \eta(A)] \ln R(A). \quad (32)$$

Because $\eta'(A) > 0$, differentiation gives

$$\frac{d}{dA} \ln \left(\frac{F_M}{F_G} \right) = -\eta'(A) \ln R(A) + [1 - \eta(A)](\gamma_M - \gamma_G)h'(A). \quad (33)$$

The relative acquisition option value therefore increases automatically when $R(A) \leq 1$. When $R(A) > 1$, it increases under the explicit option-ranking condition

$$[\eta(A) - 1](\gamma_M - \gamma_G)[-h'(A)] > \eta'(A) \ln R(A). \quad (34)$$

This condition requires the differential reduction in mode-specific frictions to dominate the common effect of lower uncertainty on a relatively high-threshold acquisition option.

The model therefore separates three results. A favorable environment lowers both entry thresholds; greater proportional friction exposure lowers the acquisition threshold relative to the greenfield threshold and raises the relative exercise payoff; and equation (34) states when these forces also increase the acquisition option value at the planning date. If the exposure ordering or the option-ranking condition fails, the mode-choice effect is theoretically ambiguous and must be determined empirically. Under the stated parameter region, we propose:

Hypothesis 1. *As host-country sentiment toward China becomes more favorable, Chinese firms are more likely to choose M&A rather than greenfield investment as their OFDI entry mode.*

2.2 Transmission mechanisms

The latent host-country evaluative environment toward China may reflect the attitudes and actions of political actors, organizations, and society. The empirical GDELT measure is an observable news-based proxy for this broader environment rather than a direct measure of any single group's beliefs. The environment can affect economic decisions through at least two channels.

First, favorable sentiment may increase unilateral cooperation with China. If the host country views China as a reliable and trustworthy partner, it is more likely to facilitate economic, technological, cultural, and investment cooperation (Goldsmith and Horiuchi, 2012). Such cooperation can reduce market-entry frictions, policy uncertainty, and regulatory obstacles. Trust and cooperative attitudes are known to influence cross-border economic exchange (Guiso et al., 2009). For Chinese firms, a cooperative environment makes the higher sunk costs and integration risks of M&A more manageable.

Second, favorable sentiment may improve bilateral political relations. Public and elite

attitudes shape the domestic political cost of foreign policy choices (Guisinger and Saunders, 2017). More favorable sentiment toward China may make host-country governments more willing to adopt cooperative positions in bilateral and multilateral settings. Stable political relations reduce policy uncertainty and strengthen firms' confidence in long-term market commitment (Desbordes and Vicard, 2009). Under these conditions, firms have less need to preserve the waiting option embedded in greenfield investment and may prefer the faster and deeper market entry offered by M&A.

Hypothesis 2. *Host-country sentiment toward China promotes M&A entry by strengthening the host country's unilateral cooperation with China and by improving bilateral political relations.*

2.3 Uncertainty as a boundary condition

The uncertainty faced by Chinese firms abroad depends on host-country sentiment, objective host-country risks, and firms' own perception of uncertainty. More generally, we write this relationship as $\sigma_1 = \sigma_1(A, P, H)$, where P denotes firm-level perceived uncertainty and H denotes host-country uncertainty. The baseline derivation in Section 2.1 holds P and H fixed and therefore writes volatility as $\sigma_1(A)$ for notational simplicity.

Firm-level perceived uncertainty captures how managers interpret economic policy uncertainty and market volatility. As perceived uncertainty increases, firms become more sensitive to changes in international relations, local policy instability, and transaction risk (Schweizer, 2015). Even if host-country sentiment sends a favorable signal, highly uncertainty-sensitive firms may rely more on internal risk assessment and become less willing to make the large sunk-cost commitment required by M&A.

Hypothesis 3. *As firm-level perceived uncertainty increases, the positive relationship between host-country sentiment toward China and M&A entry becomes weaker.*

Host-country uncertainty has a different implication. Objective economic, financial, and political risks increase demand uncertainty, cash-flow volatility, and financing costs (Bloom et al., 2007). When the host country is highly uncertain, favorable sentiment toward China becomes a more valuable signal of local acceptance and organizational resilience. In such markets, positive sentiment may help Chinese firms reduce institutional and social frictions, making M&A more attractive despite heightened uncertainty.

Hypothesis 4. *As host-country uncertainty increases, the positive relationship between host-country sentiment toward China and M&A entry becomes stronger.*

3 Sample and method

3.1 Sample construction

We construct a transaction-level sample of OFDI undertaken by Chinese A-share listed firms from 2003 to 2023, combining greenfield investment records from fDi Markets with cross-border M&A records from BvD Zephyr. We identify listed firms by matching their English names in the investment databases to stock codes and assign industries using investment descriptions. The matched records are then cleaned and merged to form the sample.

We use GDELT data to construct measures of host-country news-based sentiment toward China and unilateral cooperation with China. Host-country uncertainty is measured using International Country Risk Guide (ICRG) ratings, while firm-level perceived uncertainty is derived from textual analysis of listed firms' annual reports. Bilateral political relations are measured by the ideal point distance between China and each host country in United Nations voting. Firm-level controls are obtained from CSMAR, and host-country controls are drawn from the World Bank and CEPII.

3.2 Key variable construction

The dependent variable is OFDI entry mode. We define $MA_{ikt} = 1$ if firm i enters host country k in year t through cross-border M&A, and $MA_{ikt} = 0$ if it enters through greenfield investment (Nocke and Yeaple, 2007).

The main explanatory variable is a news-based proxy for host-country sentiment toward China, denoted by $\text{sentiment}_{k,t-1}$ and reported as *sentiment* in the tables. It is the empirical counterpart of the latent environment A in the theoretical model. We use GDELT 1.0 event data, which identify an event initiator (Actor1), an event target (Actor2), and the country affiliation of each actor (Leetaru and Schrodtt, 2013). We retain observations for which Actor1 is associated with host country k and China is Actor2. Thus, the host-country classification is based on the initiating actor's country code, not the country in which the news publisher is located.

For each event, the GDELT *AvgTone* field measures the average tone of source documents containing one or more mentions of the event and ranges from -100 to 100 , with higher values indicating more positive coverage. For weight w , the country-year measure is

$$\text{sentiment}_{kt}^{(w)} = \frac{\sum_{e \in \mathcal{E}_{kt}} w_e \text{AvgTone}_e}{\sum_{e \in \mathcal{E}_{kt}} w_e}, \quad (35)$$

Table 1: Definition of variables

Variable	Definition
MA	Dummy variable equal to one for cross-border M&A and zero for greenfield investment.
sentiment	News-based annual weighted average of GDELT <i>AvgTone</i> for events initiated by host-country actors and targeting China, using <i>NumMentions</i> as weights.
sentiment_article	News-based annual weighted average of GDELT <i>AvgTone</i> for events initiated by host-country actors and targeting China, using <i>NumArticles</i> as weights.
sentiment_mean	Multi-year host-country mean, $\bar{S}_k = T_k^{-1} \sum_{t=1}^{T_k} S_{kt}$, where $S_{kt} \equiv sentiment_{kt}$.
sentiment_dev	Annual within-country deviation, $\tilde{S}_{kt} = S_{kt} - \bar{S}_k$.
sentiment_contig	Annual average sentiment toward China among countries that do not share a border with the host country.
sentiment_gdw	Annual average sentiment toward China among countries with above-median genetic distance from the host country.
sentiment_gov	Annual average host-country tone toward the Chinese government.
sentiment_soc	Annual average host-country tone toward Chinese society.
pew_good	Proportion of respondents reporting a favorable view of China in the Pew Global Attitudes Survey, expressed on a zero-to-one scale.
MA_share	Share of M&A in total OFDI value at the firm–host-country–year level, $V_{ikt}^{MA} / (V_{ikt}^{MA} + V_{ikt}^{GF})$.
tfp	Firm-level total factor productivity estimated using the LPACF method of Akerberg et al. (2015) .
size	Natural logarithm of total assets.
lnage	Natural logarithm of firm age.
capital	Net fixed assets divided by employment.
fix	Fixed asset turnover ratio.
roe	Return on equity.
lev	Degree of total leverage.
sus	Sustainable growth rate.
cash	Cash ratio.
debt	Long-term debt divided by total assets.
DD	Institutional distance between China and the host country based on the World-wide Governance Indicators.
ppgdp	Natural logarithm of host-country GDP per capita.
hostgrow	Host-country GDP growth rate.
urban	Annual growth rate of the host-country urban population.
Indistwces	Natural logarithm of geographic distance between China and the host country.
perceive	Firm-level perceived uncertainty constructed from textual analysis of annual reports.
icrg	Host-country uncertainty, $icrg_{kt} = \max(ICRG) - ICRG_{kt}$, so that larger values indicate greater uncertainty.
goldstein_m	Annual average Goldstein score for host-country actions toward China, weighted by <i>NumMentions</i> .
goldstein_a	Annual average Goldstein score for host-country actions toward China, weighted by <i>NumArticles</i> .
ipdist	Ideal point distance between China and the host country in United Nations voting; smaller values indicate closer political positions.

where $\mathcal{E}_{kt}$ contains eligible events initiated by actors from country k and targeting China in year t . The baseline measure, *sentiment*, sets w_e equal to *NumMentions*; the alternative measure, *sentiment_article*, uses *NumArticles*. At least one eligible event with nonmissing tone and weight is required to construct a country-year measure. Country-years without an eligible event are treated as missing rather than assigned a neutral value of zero.

Several features determine how this proxy should be interpreted. First, the baseline pools eligible CAMEO event types and does not restrict source documents to publishers located in the host country. Second, no additional language restriction is imposed by our construction; the measure inherits the source and language coverage of GDELT 1.0, which varies over time and does not correspond to a balanced local-media panel. Third, we rely on GDELT’s event-level aggregation and do not independently identify syndicated or duplicated news stories. Weighting by *NumMentions* captures the salience of an event but may give greater influence to repeatedly reported events. The article-weighted measure reduces sensitivity to repeated mentions, although it does not eliminate all source-composition concerns. Accordingly, throughout the empirical analysis, “host-country sentiment” refers to this news-based event-tone proxy and not to a direct measure of public or elite opinion.

We assess convergent validity using the Pew Research Center’s survey-based proportion of respondents reporting a favorable view of China, reported as *pew_good*. Unlike GDELT tone, the Pew measure directly records public attitudes, but it is available for substantially fewer host-country-years. Its coefficient is positive but statistically imprecise in the entry-mode regression. We therefore interpret the Pew result as suggestive external evidence while acknowledging that it does not establish equivalence between survey attitudes and event-reporting tone.

Firm-level perceived uncertainty is denoted by $perceive_{i,t-1}$ and corresponds to P in the theoretical model. We apply a dictionary-based text analysis to listed firms’ annual reports and calculate the proportion of uncertainty-related words in economic-policy-uncertainty sentences within the management discussion and analysis section. Host-country uncertainty is denoted by $icrg_{k,t-1}$ and corresponds to H . ICRG provides economic, financial, and political risk ratings, with higher original scores indicating lower risk. We construct $icrg_{kt} = \max(ICRG) - ICRG_{kt}$ so that larger values indicate greater host-country uncertainty.

For mechanism tests, unilateral cooperation with China is measured using GDELT Goldstein scores (Goldstein, 1992). Each event receives a score from -10 to 10 , where negative values indicate conflict and positive values indicate cooperation. We compute weighted annual averages using mentions and articles, denoted by *goldstein_m* and *gold-*

stein. Bilateral political relations are measured using *ipdist* from United Nations voting data (Bailey et al., 2017; Fjelstul et al., 2026); smaller distances indicate closer political positions.

We control for firm-level characteristics and host-country characteristics. Firm-level total factor productivity (*tfp*) is estimated using the LPACF production-function estimator following Akerberg et al. (2015). The remaining firm controls are the logarithm of total assets (*size*), the logarithm of firm age (*lnage*), net fixed assets divided by employment (*capital*), fixed asset turnover (*fix*), return on equity (*roe*), the degree of total leverage (*lev*), sustainable growth (*sus*), the cash ratio (*cash*), and long-term debt divided by total assets (*debt*). Host-country controls are institutional distance (*DD*), the logarithm of GDP per capita (*ppgdp*), GDP growth (*hostgrow*), urban population growth (*urban*), and the logarithm of geographic distance (*Indistwces*). Institutional distance is constructed from the World Bank’s Worldwide Governance Indicators. We exclude observations with missing values for key variables. Table 1 summarizes the definitions and construction of all variables.

3.3 Summary statistics

Table 2 presents descriptive statistics for the variables used in the empirical analysis. The sample mean of *MA* is 0.256, indicating that cross-border M&A transactions account for 25.6% of the sample, with greenfield investments comprising the remaining 74.4%. Observation counts vary across variables because data availability differs across the firm-level, host-country, survey, and mechanism measures.

3.4 Empirical specification

We estimate the effect of host-country sentiment on OFDI entry mode using a Probit model:

$$\Pr(MA_{ikt} = 1) = \Phi\left(\rho_0 + \rho_1 sentiment_{k,t-1} + \rho'_2 \mathcal{X}_{i,t-1} + \rho'_3 \mathcal{Y}_{k,t-1} + \lambda_t + \mu_{j(i)} + \theta_{p(i)}\right), \quad (36)$$

where i , k , and t index firm, host country, and year. $\mathcal{X}_{i,t-1}$ is the vector of lagged firm controls, and $\mathcal{Y}_{k,t-1}$ is the vector of lagged host-country controls. The calligraphic notation distinguishes these empirical control vectors from the theoretical host-market state X_t . Year, industry, and province fixed effects are denoted by λ_t , $\mu_{j(i)}$, and $\theta_{p(i)}$, where $j(i)$ and $p(i)$ identify firm i ’s industry and home province. Standard errors are clustered at the firm level. To facilitate interpretation, all Probit estimates report average marginal

Table 2: Summary statistics

Variable	N	Mean	p25	p50	p75	SD
MA	3272	0.256	0	0	1	0.436
sentiment	3272	1.651	-1.185	0.653	5.312	3.297
sentiment_article	3272	1.629	-1.206	0.592	5.298	3.285
sentiment_mean	3272	1.994	1.104	1.963	2.498	1.075
sentiment_dev	3272	-0.343	-2.786	-1.455	2.557	3.097
sentiment_contig	3272	2.349	0.269	0.32	6.148	2.905
sentiment_gdw	3272	2.368	0.265	0.353	6.079	2.898
sentiment_gov	3200	2.025	-0.85	1.709	5.376	3.537
sentiment_soc	3272	1.613	-1.203	0.593	5.298	3.284
pew_good	1337	0.542	0.28	0.4	0.5	0.193
MA_share	3170	0.222	0	0	0	0.414
tfp	3272	8.383	7.551	8.392	9.154	1.166
size	3272	23.786	22.465	23.55	24.98	1.83
lnage	3272	2.801	2.565	2.89	3.091	0.428
capital	3272	1.887	1.032	1.444	2.127	1.762
fix	3272	10.155	2.357	4.164	8.879	52.561
roe	3272	0.129	0.066	0.115	0.171	0.092
lev	3272	2.9	1.246	1.519	2.085	14.104
sus	3272	0.097	0.042	0.083	0.127	0.087
cash	3272	0.665	0.196	0.325	0.582	2.03
debt	3272	0.062	0.002	0.033	0.09	0.081
DD	3272	1.239	0.612	1.275	1.812	0.62
ppgdp	3272	9.694	8.726	10.42	10.714	1.336
hostgrow	3272	3.265	1.819	2.896	5.092	3.433
urban	3272	1.418	0.642	1.076	2.086	1.325
Indistwces	3272	8.733	8.305	8.988	9.315	0.757
perceive	3272	0.111	0	0.072	0.166	0.132
icrg	3140	22.985	16.96	21.63	27.72	8.656
goldstein_mention	4025	2.354	1.749	2.555	3.183	1.525
goldstein_article	4025	2.339	1.742	2.54	3.176	1.553
idealpointdistance	3930	0.71	0.184	0.442	1.181	0.672

Notes: This table presents summary statistics for the variables used in the empirical analysis.

effects.

For mechanism tests, we estimate country-level regressions:

$$Z_{kt} = \omega_0 + \omega_1 \text{sentiment}_{k,t-1} + \omega_2' \mathcal{Y}_{k,t-1} + \lambda_t + \phi_k + \varepsilon_{kt}, \quad (37)$$

where Z_{kt} denotes unilateral cooperation with China (*goldstein_mention* or *goldstein_article*) or bilateral political distance (*idealdistance*). The specification includes year and country fixed effects. Accordingly, $\mathcal{Y}_{k,t-1}$ contains the time-varying host-country controls; the time-invariant geographic-distance measure is absorbed by country fixed effects. The coefficients ω_0 , ω_1 , and ω_2 are distinct from the theoretical friction semi-elasticities γ_m .

For uncertainty analyses, we estimate interaction specifications of the form

$$\begin{aligned} \Pr(MA_{ikt} = 1) = \Phi[& \delta_0 + \delta_1 \text{sentiment}_{k,t-1} + \delta_2 U_{ikt-1} \\ & + \delta_3 \text{sentiment}_{k,t-1} \times U_{ikt-1} + \delta_4' \mathcal{X}_{i,t-1} + \delta_5' \mathcal{Y}_{k,t-1} \\ & + \lambda_t + \mu_{j(i)} + \theta_{p(i)}]. \end{aligned} \quad (38)$$

Here, $U_{ikt-1} = \text{perceive}_{i,t-1}$ in the firm-level analysis and $U_{ikt-1} = \text{icrg}_{k,t-1}$ in the host-country analysis. Unless otherwise stated, the explanatory variables and controls enter the regressions with a one-year lag.

4 Empirical results

4.1 Baseline results

Table 3 reports the baseline estimates. Columns (1)–(3) sequentially add year, industry, and home-province fixed effects. The average marginal effect of *sentiment* is positive and statistically significant across all three specifications. In the preferred specification in column (3), the estimated marginal effect is 0.016 and significant at the 5% level. Thus, a one-unit increase in *sentiment* is associated with an average increase of approximately 1.6 percentage points in the probability of M&A entry. This evidence supports Hypothesis 1.

We do not include host-country fixed effects in the baseline Probit specification because many host countries exhibit limited within-country variation in entry mode. Their inclusion results in substantial sample loss through perfect prediction, leaving only about one thousand transactions and substantially reducing estimation precision. As an alternative way to distinguish cross-country from within-country variation, column (4) decomposes *sentiment* into its host-country mean (*sentiment_mean*) and its annual deviation from that mean (*sentiment_dev*). The coefficient on *sentiment_mean* is positive, economi-

cally larger, and statistically significant, whereas the coefficient on *sentiment_dev* is positive but statistically insignificant. The baseline association therefore appears to be driven primarily by persistent differences in the news environment across host countries rather than by short-run changes within a country. Chinese firms are more likely to use M&A when entering countries characterized by a more favorable long-run news environment, while the evidence does not establish that temporary improvements in news tone alter entry-mode choices.

4.2 Endogeneity analysis

Although all explanatory variables and controls are lagged by one period, omitted variables and measurement error may still bias the estimates. Following the logic of [Chang et al. \(2022\)](#), we construct two instrumental variables based on third-country sentiment toward China. In a globalized information environment, attitudes toward China are not formed independently across countries; international narratives and media frames can spill over across borders. However, firms may also consider attitudes in neighboring or culturally similar countries when investing in a host market. To strengthen the exclusion restriction, we compute third-country averages after excluding countries that are likely to be directly relevant to the host-country investment decision.

The first instrument, *sentiment_contig*, is the annual average sentiment toward China among countries that do not share a border with host country k . The second instrument, *sentiment_gdw*, is the annual average sentiment toward China among countries whose genetic distance from host country k is above the median distance ([Spolaore and Wacziarg, 2018](#)). Table 4 reports IV-Probit results and corresponding first-stage diagnostics from linear IV regressions. The instruments are strongly correlated with *sentiment*, and the first-stage F-statistics exceed conventional weak-instrument thresholds. The second-stage coefficients on *sentiment* remain positive and statistically significant, confirming that the baseline conclusion is robust to this endogeneity correction.

4.3 Robustness checks

Table 5 presents robustness checks. Columns (1) and (2) replace the Probit model with a Logit model and a linear probability model. Column (3) uses GDELT tone weighted by the number of articles, reducing sensitivity to repeated mentions of the same event. Column (4) uses the Pew Research Center’s survey-based favorable view of China as an external benchmark that is conceptually closer to public opinion. Its coefficient is positive but imprecisely estimated, reflecting the substantially smaller and discontinuous

Table 3: Baseline regression results

	(1)	(2)	(3)	(4)
	Margin	Margin	Margin	Margin
sentiment	0.017*	0.015**	0.016**	
	(0.009)	(0.007)	(0.007)	
sentiment_mean				0.033***
				(0.011)
sentiment_dev				0.009
				(0.007)
tfp	0.027	0.018	0.026	0.023
	(0.019)	(0.019)	(0.019)	(0.019)
size	-0.061***	-0.057***	-0.058***	-0.057***
	(0.015)	(0.013)	(0.012)	(0.012)
lnage	-0.014	-0.018	-0.003	-0.004
	(0.033)	(0.029)	(0.030)	(0.030)
capital	0.011*	0.006	0.009	0.008
	(0.007)	(0.006)	(0.006)	(0.006)
fix	-0.000	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)
roe	-0.152	-0.097	-0.070	-0.060
	(0.222)	(0.208)	(0.211)	(0.207)
lev	-0.002	-0.001	-0.001	-0.001
	(0.002)	(0.002)	(0.002)	(0.002)
sus	0.098	0.075	0.053	0.056
	(0.217)	(0.191)	(0.212)	(0.205)
cash	0.003	0.005	0.004	0.004
	(0.003)	(0.003)	(0.003)	(0.003)
debt	-0.190	-0.140	-0.177	-0.160
	(0.163)	(0.143)	(0.144)	(0.138)
DD	0.003	-0.011	-0.006	-0.011
	(0.025)	(0.023)	(0.022)	(0.022)
ppgdp	0.102***	0.090***	0.089***	0.095***
	(0.014)	(0.014)	(0.013)	(0.013)
hostgrow	-0.001	-0.001	-0.001	-0.001
	(0.004)	(0.004)	(0.004)	(0.004)
urban	0.009	0.004	0.003	0.005
	(0.008)	(0.008)	(0.007)	(0.007)
Indistwces	-0.080***	-0.063***	-0.063***	-0.057***
	(0.009)	(0.010)	(0.010)	(0.010)
Year FE	Yes	Yes	Yes	Yes
Industry FE	No	Yes	Yes	Yes
Province FE	No	No	Yes	Yes
Observations	3,287	3,281	3,272	3,272
Pseudo R-squared	0.244	0.301	0.318	0.321

Notes: This table reports average marginal effects from Probit regressions of OFDI entry mode (MA) on the news-based event-tone measure (*sentiment*). Column (4) replaces *sentiment* with its host-country mean (*sentiment_mean*) and annual deviation from that mean (*sentiment_dev*). Robust standard errors clustered at the firm level are reported in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Table 4: Instrumental-variable estimation results

	Non-neighbor countries		Distant genetic distance		Combined instruments	
	(1)	(2)	(3)	(4)	(5)	(6)
	First stage	IV-Probit	First stage	IV-Probit	First stage	IV-Probit
sentiment		0.074*		0.130*		0.089**
		(0.044)		(0.068)		(0.035)
sentiment_contig	-10.263***				-10.697***	
	(1.248)				(1.232)	
sentiment_gdw			2.069***		2.337***	
			(0.485)		(0.475)	
tfp	0.027	0.024	0.035	0.021	0.018	0.023
	(0.035)	(0.019)	(0.035)	(0.020)	(0.034)	(0.019)
size	-0.019	-0.057***	-0.021	-0.055***	-0.016	-0.056***
	(0.022)	(0.012)	(0.022)	(0.012)	(0.021)	(0.012)
lnage	-0.095*	0.002	-0.081	0.007	-0.082	0.003
	(0.058)	(0.030)	(0.058)	(0.031)	(0.058)	(0.030)
capital	-0.007	0.009	-0.000	0.009	-0.005	0.009
	(0.013)	(0.006)	(0.013)	(0.006)	(0.013)	(0.006)
fix	-0.001**	-0.000	-0.001*	-0.000	-0.001**	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
roe	-0.056	-0.068	-0.099	-0.057	-0.060	-0.066
	(0.578)	(0.207)	(0.587)	(0.209)	(0.559)	(0.207)
lev	-0.000	-0.001	0.000	-0.001	0.000	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
sus	-0.053	0.058	-0.001	0.057	0.003	0.059
	(0.550)	(0.212)	(0.550)	(0.216)	(0.525)	(0.213)
cash	-0.009	0.004	-0.009	0.005	-0.010	0.005
	(0.009)	(0.003)	(0.008)	(0.003)	(0.008)	(0.003)
debt	0.727***	-0.218	0.682**	-0.261*	0.674**	-0.228
	(0.274)	(0.144)	(0.278)	(0.156)	(0.276)	(0.145)
DD	0.114*	-0.009	0.066	-0.014	0.137**	-0.012
	(0.065)	(0.023)	(0.065)	(0.024)	(0.066)	(0.023)
ppgdp	-0.175***	0.098***	-0.165***	0.108***	-0.184***	0.101***
	(0.032)	(0.016)	(0.034)	(0.019)	(0.034)	(0.016)
hostgrow	0.004	-0.001	-0.002	-0.000	0.006	-0.001
	(0.012)	(0.004)	(0.012)	(0.004)	(0.012)	(0.004)
urban	0.058***	-0.001	0.076***	-0.005	0.069***	-0.002
	(0.021)	(0.008)	(0.021)	(0.010)	(0.021)	(0.008)
Indistwces	0.043	-0.065***	0.120***	-0.067***	0.136***	-0.065***
	(0.033)	(0.009)	(0.034)	(0.010)	(0.034)	(0.009)
Hansen J statistic						0.086
χ^2 p-value						0.770
First-stage F-statistic	65.91		17.78		46.53	
Anderson-Rubin F-statistic	6.43		3.90		5.69	
p-value	[0.011]		[0.049]		[0.004]	
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,272	3,272	3,272	3,272	3,272	3,272

Notes: Columns (1), (3), and (5) report first-stage estimates; columns (2), (4), and (6) report IV-Probit estimates. Because IV-Probit is a nonlinear maximum-likelihood estimator, the first-stage F-statistics and overidentification diagnostics are obtained from the corresponding linear IV regressions. The Anderson–Rubin statistics and associated *p*-values are obtained from the corresponding linear IV regressions with firm-clustered standard errors and test the null hypothesis that the coefficient on *sentiment* is zero. Robust standard errors clustered at the firm level are reported in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

country-year coverage; this result is therefore suggestive rather than definitive evidence of convergent validity. Column (5) replaces the binary dependent variable with the share of M&A investment in the firm’s total OFDI value in a host country-year. Column (6) allows for correlated disturbances within both firms and host countries by using two-way clustered standard errors. The estimated average marginal effect of news-based host-country sentiment remains 0.016 and is statistically significant at the 5% level, matching the magnitude of the preferred baseline estimate. Overall, the results are robust across model specifications and measurement choices, while the weaker Pew result underscores that news tone should not be interpreted as identical to survey sentiment.

4.4 Heterogeneity analysis

We next examine whether the baseline effect differs across investment motives and firm characteristics. Table 6 splits OFDI projects by investment motive. Following the standard classification of resource-seeking, market-seeking, efficiency-seeking, and strategic-asset-seeking OFDI (Dunning, 1988), and using investment descriptions and industry information, we classify transactions into resource-seeking, market-seeking, and efficiency-seeking categories. The effect of host-country sentiment is statistically significant only for market-seeking OFDI. A one-unit increase in *sentiment* raises the probability that a market-seeking project uses M&A by approximately 3.3 percentage points. This is consistent with the idea that favorable sentiment affects local demand, brand acceptance, and consumer responses, making acquisitions of local assets and brands especially valuable.

Table 7 further examines firm heterogeneity. Columns (1) and (2) split firms into capital-intensive and labor-intensive firms using capital intensity, measured as net fixed assets divided by employment. Columns (3) and (4) split firms by ownership. Columns (5) and (6) split firms by whether they operate in heavy-polluting industries. The effect of sentiment is stronger for capital-intensive firms, state-owned enterprises, and heavy-polluting firms. These firms face higher fixed investment, stronger policy visibility, or greater environmental scrutiny, and therefore benefit more from favorable host-country sentiment when choosing a high-commitment M&A entry mode.

4.5 Mechanism tests

Table 8 examines unilateral cooperation and bilateral political relations as potential channels linking host-country sentiment to OFDI entry mode. Following Di Giuli and Laux (2022), we adopt a two-stage approach. First, we estimate the relationship between host-country sentiment and each mechanism variable. We then use the fitted values from

Table 5: Robustness results

	Logit	LPM	Alternative sentiment measures		Alternative outcome	Two-way clustering
	(1) Margin	(2) MA	(3) Margin	(4) Margin	(5) MA_share	(6) Margin
sentiment	0.013** (0.007)	0.019*** (0.006)			0.018*** (0.006)	0.016** (0.007)
sentiment_article			0.016** (0.007)			
pew_good				0.003 (0.006)		
tfp	0.028 (0.020)	0.033 (0.022)	0.026 (0.019)	0.045 (0.027)	0.042* (0.022)	0.026* (0.016)
size	-0.060*** (0.012)	-0.062*** (0.014)	-0.058*** (0.012)	-0.081*** (0.016)	-0.067*** (0.013)	-0.058*** (0.010)
lnage	-0.007 (0.030)	-0.009 (0.034)	-0.003 (0.030)	-0.016 (0.039)	-0.004 (0.031)	-0.003 (0.023)
capital	0.010 (0.008)	0.011 (0.007)	0.009 (0.006)	0.015* (0.009)	0.010 (0.007)	0.009 (0.006)
fix	-0.000 (0.000)	-0.000*** (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000** (0.000)	-0.000 (0.000)
roe	-0.049 (0.206)	-0.089 (0.229)	-0.070 (0.211)	-0.030 (0.247)	-0.186 (0.230)	-0.070 (0.167)
lev	-0.001 (0.002)	-0.000 (0.000)	-0.001 (0.002)	-0.004* (0.002)	-0.000 (0.000)	-0.001 (0.001)
sus	0.051 (0.204)	0.034 (0.225)	0.053 (0.212)	0.172 (0.233)	0.145 (0.219)	0.053 (0.175)
cash	0.003 (0.003)	0.008** (0.003)	0.004 (0.003)	0.004 (0.003)	0.009** (0.004)	0.004 (0.003)
debt	-0.162 (0.149)	-0.211 (0.145)	-0.177 (0.143)	-0.014 (0.167)	-0.153 (0.126)	-0.177 (0.119)
DD	-0.014 (0.022)	0.038* (0.021)	-0.006 (0.022)	0.041 (0.043)	0.014 (0.020)	-0.006 (0.023)
ppgdp	0.095*** (0.014)	0.070*** (0.012)	0.089*** (0.013)	0.038* (0.023)	0.075*** (0.012)	0.089*** (0.013)
hostgrow	-0.002 (0.005)	-0.003 (0.004)	-0.001 (0.004)	-0.004 (0.006)	-0.005** (0.003)	-0.001 (0.004)
urban	0.004 (0.007)	0.009 (0.007)	0.003 (0.007)	-0.012 (0.018)	0.017** (0.007)	0.003 (0.007)
Indistwces	-0.064*** (0.009)	-0.075*** (0.013)	-0.063*** (0.010)	-0.017 (0.019)	-0.085*** (0.013)	-0.063*** (0.009)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,272	3,285	3,272	1,337	3,170	3,272
(Pseudo) R-squared	0.321	0.330	0.318	0.289	0.359	0.318

Notes: Columns (1) and (2) replace the Probit model with a Logit model and a linear probability model. Columns (3) and (4) replace *sentiment* with *sentiment_article* and *pew_good*, respectively. Column (5) replaces the binary dependent variable *MA* with *MA_share*. Column (6) reports average marginal effects from the baseline Probit model using two-way clustering at the firm and host-country levels. Robust standard errors clustered at the firm level are reported in parentheses in columns (1)–(5). *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Table 6: Heterogeneity analysis: investment motives

	(1) Resource-seeking	(2) Market-seeking	(3) Efficiency-seeking
sentiment	-0.004 (0.012)	0.033** (0.013)	0.009 (0.009)
tfp	0.012 (0.027)	0.017 (0.033)	0.027 (0.026)
size	-0.042** (0.017)	-0.031 (0.021)	-0.063*** (0.017)
lnage	0.016 (0.046)	0.088* (0.049)	-0.015 (0.040)
capital	0.015 (0.011)	0.002 (0.006)	0.017* (0.009)
fix	-0.001 (0.001)	-0.001*** (0.000)	0.001 (0.001)
roe	-0.225 (0.342)	-0.145 (0.304)	-0.177 (0.310)
lev	-0.003 (0.003)	-0.001 (0.002)	-0.001 (0.002)
sus	0.226 (0.317)	0.031 (0.348)	0.117 (0.318)
cash	0.010 (0.014)	0.020 (0.016)	0.002 (0.003)
debt	-0.293 (0.191)	-0.268 (0.237)	-0.209 (0.185)
DD	-0.070** (0.035)	-0.007 (0.042)	0.003 (0.033)
ppgdp	0.093*** (0.019)	0.088*** (0.024)	0.082*** (0.020)
hostgrow	0.005 (0.005)	-0.007 (0.006)	0.006 (0.005)
urban	-0.012 (0.013)	0.018 (0.012)	-0.005 (0.008)
Indistwces	-0.036* (0.021)	-0.083*** (0.016)	-0.043*** (0.012)
Joint test p-value		0.000	
Between-group p-value	(2 vs. 1) 0.000		(2 vs. 3) 0.002
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Province FE	Yes	Yes	Yes
Observations	614	754	1,826
Pseudo R-squared	0.373	0.503	0.248

Notes: Following [Dunning \(1988\)](#), OFDI projects are classified as resource-seeking, market-seeking, efficiency-seeking, or strategic-asset-seeking. Strategic-asset-seeking projects are excluded because they cannot be identified reliably from the investment descriptions. The reported p -values for the joint and pairwise tests are obtained from a pooled Probit model that includes interactions between *sentiment* and investment-motive indicators. Robust standard errors clustered at the firm level are reported in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Table 7: Heterogeneity analysis: firm characteristics

	Factor intensity		Ownership		Pollution status	
	Capital intensive (1)	Labor intensive (2)	State-owned (3)	Private (4)	Heavily polluting (5)	Non-heavily polluting (6)
sentiment	0.023*** (0.008)	0.001 (0.010)	0.017* (0.009)	0.009 (0.009)	0.035*** (0.013)	0.005 (0.007)
tfp	0.033 (0.026)	0.035 (0.033)	0.059*** (0.022)	0.017 (0.029)	0.053 (0.038)	0.015 (0.019)
size	-0.053*** (0.016)	-0.063*** (0.019)	-0.053*** (0.016)	-0.064*** (0.017)	-0.050** (0.023)	-0.065*** (0.012)
lnage	0.002 (0.042)	-0.040 (0.037)	0.019 (0.036)	0.018 (0.045)	0.027 (0.054)	-0.002 (0.032)
capital	0.006 (0.009)	0.012 (0.009)	0.015** (0.007)	0.007 (0.009)	0.019 (0.012)	0.006 (0.007)
fix	-0.005 (0.003)	-0.000 (0.000)	-0.002** (0.001)	-0.000 (0.000)	-0.012** (0.006)	-0.000 (0.000)
roe	0.393 (0.282)	-0.626** (0.312)	-0.320 (0.313)	-0.065 (0.258)	1.027*** (0.380)	-0.398* (0.217)
lev	-0.001 (0.001)	-0.002 (0.005)	-0.000 (0.001)	-0.002 (0.003)	-0.009*** (0.003)	-0.000 (0.001)
sus	-0.294 (0.290)	0.496* (0.271)	0.041 (0.293)	0.214 (0.244)	-0.904** (0.352)	0.363* (0.205)
cash	0.017 (0.012)	-0.002 (0.004)	0.026* (0.015)	0.002 (0.004)	0.009 (0.008)	0.002 (0.004)
debt	-0.129 (0.154)	-0.388 (0.238)	-0.226 (0.168)	-0.195 (0.206)	-0.372* (0.225)	-0.061 (0.148)
DD	-0.023 (0.025)	0.010 (0.033)	-0.021 (0.026)	-0.002 (0.034)	-0.032 (0.035)	0.004 (0.026)
ppgdp	0.088*** (0.016)	0.087*** (0.019)	0.078*** (0.016)	0.089*** (0.018)	0.094*** (0.022)	0.081*** (0.015)
hostgrow	0.006 (0.005)	-0.008* (0.005)	0.004 (0.004)	-0.009* (0.005)	0.005 (0.006)	-0.000 (0.005)
urban	-0.006 (0.009)	0.014* (0.008)	-0.007 (0.008)	0.012 (0.011)	-0.029* (0.016)	0.005 (0.007)
Indistwces	-0.042*** (0.013)	-0.084*** (0.013)	-0.050*** (0.013)	-0.077*** (0.013)	-0.011 (0.019)	-0.069*** (0.010)
Fisher test p-value	0.028		0.112		0.000	
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Province FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,571	1,550	1,408	1,668	761	2,497
Pseudo R-squared	0.343	0.394	0.367	0.355	0.410	0.362

Notes: This table reports heterogeneity analyses by factor intensity, ownership, and pollution status. Because the number of estimable regressors differs across subsamples, we conduct Fisher tests of between-group differences using specifications that include year fixed effects only. Robust standard errors clustered at the firm level are reported in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

these regressions as explanatory variables in the entry-mode regressions. Columns (1) and (3) measure unilateral cooperation using GDELT Goldstein scores weighted by mentions and articles, respectively. The coefficients on *sentiment* are positive and significant at the 1% level, indicating that more favorable sentiment is associated with greater cooperation with China. In columns (2) and (4), the coefficients on the corresponding fitted cooperation measures are positive and significant at the 5% level. These results are consistent with cooperation facilitating M&A entry relative to greenfield investment. Column (5) measures bilateral political relations using ideal point distance in United Nations voting. The coefficient on *sentiment* is negative and significant at the 1% level, indicating that more favorable sentiment is associated with closer political positions between China and the host country. In column (6), the coefficient on fitted political distance is negative and significant at the 5% level, suggesting that closer political relations are associated with a higher probability of M&A entry. Together, these findings provide suggestive evidence consistent with the channels proposed in Hypothesis 2.

Table 8: Mechanism analysis

	(1) goldstein_m	(2) MA	(3) goldstein_a	(4) MA	(5) ipdist	(6) MA
sentiment	0.307*** (0.028)		0.308*** (0.029)		-0.009*** (0.003)	
$\widehat{\text{goldstein_m}}$		0.203** (0.101)				
$\widehat{\text{goldstein_a}}$				0.200** (0.100)		
$\widehat{\text{ipdist}}$						-4.715** (2.303)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,025	3,259	4,025	3,259	3,930	3,259
(Pseudo) R-squared	0.268	0.317	0.266	0.317	0.901	0.317

Notes: This table reports results from the two-stage mechanism analysis. Columns (1), (3), and (5) relate the mechanism variables to host-country sentiment using the full available country-year sample, including countries without observed Chinese OFDI. Columns (2), (4), and (6) report entry-mode regressions using the corresponding fitted mechanism variables. Robust standard errors, clustered at the country level in columns (1), (3), and (5) and at the firm level in columns (2), (4), and (6), are reported in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

4.6 Extended analyses

Table 9 examines whether the relationship between host-country sentiment and OFDI entry mode varies with uncertainty. Column (1) includes an interaction between sen-

timent and firm-level perceived uncertainty. The reported interaction term is negative and significant at the 10% level. Figure 1a shows that the marginal effect of sentiment on the probability of M&A entry declines as perceived uncertainty increases. Together, these results are consistent with Hypothesis 3, suggesting that favorable news tone is less strongly associated with acquisition entry when firms perceive greater uncertainty. Column (2) includes an interaction between sentiment and host-country uncertainty. The reported interaction term is positive and significant at the 10% level. Figure 1b shows that the marginal effect of sentiment increases with host-country uncertainty. This pattern is consistent with Hypothesis 4, suggesting that favorable news tone is more strongly associated with acquisition entry in more uncertain host-country environments.

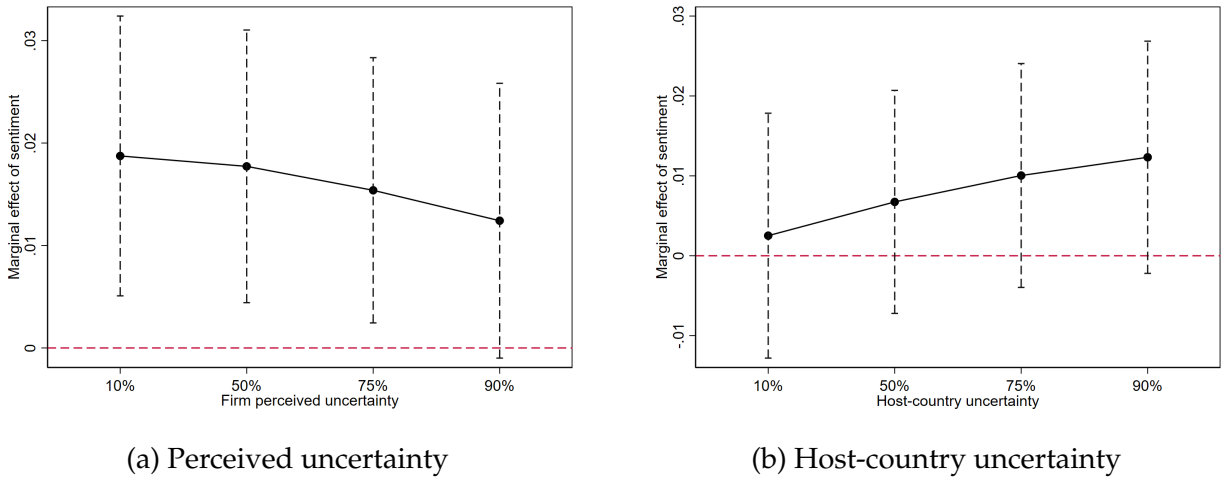


Figure 1: Marginal effects of sentiment under different levels of uncertainty

Finally, Table 10 distinguishes news-based tone by the Chinese actors targeted in the reported events. Using GDELT's CAMEO actor codes, we construct separate measures for events targeting the Chinese government and Chinese societal actors. The estimate for government-directed events in column (1) is statistically insignificant, whereas the estimate for events targeting societal actors in column (2) is positive and significant at the 5% level. The positive association between news tone and M&A entry is therefore also evident in reported interactions involving Chinese societal actors. This finding concerns the tone of event coverage and should not be interpreted as direct evidence of cultural acceptance or people-to-people attitudes.

Table 9: Extended analysis: uncertainty

	Firm perceived uncertainty (1)	Host-country uncertainty (2)
sentiment	0.017** (0.007)	0.007 (0.007)
perceive	0.073 (0.062)	
sentiment $\times$ perceive	-0.027* (0.016)	
icrg		-0.002 (0.002)
sentiment $\times$ icrg		0.001* (0.000)
tfp	0.026 (0.019)	0.021 (0.018)
size	-0.058*** (0.012)	-0.059*** (0.011)
lnage	-0.002 (0.030)	-0.012 (0.028)
capital	0.009 (0.006)	0.008 (0.006)
fix	-0.000 (0.000)	-0.000 (0.000)
roe	-0.088 (0.210)	-0.102 (0.195)
lev	-0.001 (0.002)	-0.001 (0.002)
sus	0.067 (0.210)	0.090 (0.191)
cash	0.004 (0.003)	0.004 (0.003)
debt	-0.165 (0.144)	-0.100 (0.132)
DD	-0.007 (0.022)	0.045** (0.023)
ppgdp	0.090*** (0.013)	0.032** (0.014)
hostgrow	-0.001 (0.004)	-0.002 (0.004)
urban	0.003 (0.007)	-0.008 (0.007)
Indistwces	-0.063*** (0.009)	-0.071*** (0.010)
Year FE	Yes	Yes
Industry FE	Yes	Yes
Province FE	Yes	Yes
Observations	3,272	3,140
Pseudo R-squared	0.320	0.326

Notes: Column (1) examines firm-level perceived uncertainty, and column (2) examines host-country uncertainty. Robust standard errors clustered at the firm level are reported in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Table 10: News-based tone toward the Chinese government and society

	Sentiment toward Chinese government (1)	Sentiment toward Chinese society (2)
sentiment_gov	-0.00032 (0.005)	
sentiment_soc		0.016** (0.007)
tfp	0.022 (0.019)	0.026 (0.019)
size	-0.056*** (0.012)	-0.058*** (0.012)
lnage	-0.005 (0.030)	-0.004 (0.030)
capital	0.009 (0.006)	0.009 (0.006)
fix	-0.000 (0.000)	-0.000 (0.000)
roe	-0.025 (0.207)	-0.072 (0.211)
lev	-0.001 (0.002)	-0.001 (0.002)
sus	0.017 (0.203)	0.055 (0.211)
cash	0.004 (0.003)	0.004 (0.003)
debt	-0.171 (0.142)	-0.177 (0.143)
DD	0.008 (0.022)	-0.006 (0.022)
ppgdp	0.075*** (0.013)	0.088*** (0.013)
hostgrow	-0.001 (0.004)	-0.001 (0.004)
urban	0.002 (0.007)	0.003 (0.007)
Indistwces	-0.067*** (0.010)	-0.063*** (0.010)
Year FE	Yes	Yes
Industry FE	Yes	Yes
Province FE	Yes	Yes
Observations	3,200	3,272
Pseudo R-squared	0.317	0.318

Notes: Column (1) uses news-based tone surrounding events targeting the Chinese government, and column (2) uses tone surrounding events targeting Chinese societal actors. Robust standard errors clustered at the firm level are reported in parentheses. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

5 Conclusion

This paper investigates whether a news-based measure of host-country sentiment toward China influences the entry mode choices of Chinese firms undertaking OFDI. Using transaction-level investments by Chinese A-share listed firms from 2003 to 2023 and event-tone measures constructed from GDELT, we show that more favorable tone surrounding host-country actions toward China is associated with a higher likelihood of cross-border M&A relative to greenfield investment. This finding is robust to instrumental-variable estimation, alternative econometric specifications, alternative sentiment measures, a value-based measure of entry mode, and two-way clustering.

The results indicate that news-based host-country sentiment is an economically relevant, non-institutional correlate of international investment strategy. The mechanism analysis shows that favorable event tone is associated with stronger unilateral cooperation with China and closer bilateral political relations. The effect is concentrated among market-seeking projects and among capital-intensive, state-owned, and heavy-polluting firms, for which local acceptance and policy exposure are particularly important. Moreover, firm-level perceived uncertainty weakens the relationship between the news-based measure and M&A entry, whereas host-country uncertainty strengthens firms' reliance on this measure as a signal of the external environment. The decomposition analysis further shows that tone surrounding events targeting Chinese societal actors, rather than the Chinese government, is most closely associated with entry mode choice.

These findings have practical implications for firms and policymakers. Chinese firms can incorporate news-based indicators of the host-country environment into market-entry assessments alongside conventional measures of institutional and political risk, particularly when considering high-commitment acquisitions. At the same time, favorable news tone should not substitute for transaction-specific due diligence, direct stakeholder research, or careful evaluation of post-acquisition integration risks. Policymakers seeking to facilitate sustainable international investment can improve information transparency, strengthen bilateral communication, and encourage firms to establish responsible local reputations.

The measurement also imposes an important limitation. GDELT *AvgTone* captures the tone of international news documents reporting coded events; it does not directly observe public opinion, elite beliefs, or local-media attitudes. Changes in source coverage, language coverage, event composition, and repeated reporting may therefore introduce measurement error. The article-weighted specification and the comparison with Pew survey data address some of these concerns, but they cannot fully establish construct equiv-

alence. Future research could validate the measure using hand-coded events, a balanced sample of host-country local media, or more extensive country-year survey data.

Disclosure of interest

There are no relevant financial or non-financial competing interests to report.

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Data availability statement

The data that support the findings of this study are available from the sources described in the paper. Restrictions may apply to commercially licensed databases.

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