CENTRE FOR RESPONSIBLE BANKING & FINANCE
CRBF

University of St Andrews | Business School

WORKING PAPERS IN RESPONSIBLE BANKING & FINANCE

Anchoring Bias and Cross-Border Acquisition Premia

By *Leonidas G. Barbopoulos and Jo Danbolt*

Abstract: How do prior stock price peaks, as reference points, influence bid premia in cross-border M&A (CBA) compared to domestic deals? First, in CBA, relative to domestic M&A, offer prices are more likely to exceed past peaks, reducing deal withdrawal and speeding up completion. Second, peaks have stronger effect on bid premia in CBA, adding at least 1% on average. This effect is more pronounced when the bidder or target is from a developed market (outside the US), the bidder is listed, experienced, or the exchange rate is more volatile. However, this anchoring often leads to bidder overpayment and value destruction, despite simplifying valuation and negotiation.

WP Nº 26-028

4th Quarter 2026

University of St Andrews
Scotland's first university
600 YEARS
1413 – 2013

Anchoring Bias and Cross-Border Acquisition Premia *

Leonidas G. Barbopoulos†

Jo Danbolt‡

This version
June 18, 2026

*We are grateful to Malcolm Baker, David Comerford, Isil Erel, Swarnodeep Homroy, Sascha Kolaric, William Megginson, David Michayluk, Isaac Tabner, Patrick Verwijmeren, Vadym Volosovch, Jeffrey Wurgler, seminar participants at Erasmus, Groningen and Stirling Universities, and participants at the European Financial Management Association, the Financial Management Association and the World Finance Conferences for helpful comments and suggestions on previous versions of this paper. Jo Danbolt holds the Baillie Gifford Chair in Financial Markets, and his research is partially funded by a Baillie Gifford endowment held by the University of Edinburgh Business School. Baillie Gifford has no role in or influence over the research conducted. We are responsible for our errors.

†University of Edinburgh Business School, The University of Edinburgh, 29 Buccleuch Place, Edinburgh, EH8 9JS, UK, and CUNEF Universidad, Department of Finance, Calle Leonardo Prieto Castro, número 2, Madrid, Spain. Email: leonidas.barbopoulos@ed.ac.uk. Tel: +44 131 650 8344. Corresponding author.

‡University of Edinburgh Business School, The University of Edinburgh, 29 Buccleuch Place, Edinburgh, EH8 9JS, UK. Email: jo.danbolt@ed.ac.uk

Anchoring Bias and Cross-Border Acquisition Premia

Abstract

How do prior stock price peaks, as reference points, influence bid premia in cross-border M&A (CBA) compared to domestic deals? First, in CBA, relative to domestic M&A, offer prices are more likely to exceed past peaks, reducing deal withdrawal and speeding up completion. Second, peaks have stronger effect on bid premia in CBA, adding at least 1% on average. This effect is more pronounced when the bidder or target is from a developed market (outside the US), the bidder is listed, experienced, or the exchange rate is more volatile. However, this anchoring often leads to bidder overpayment and value destruction, despite simplifying valuation and negotiation.

Keywords: Cross-Border Acquisitions; Anchoring bias; Reference points; Offer price; Bidder gains.

JEL Classification Codes: G10; G12; G14.

1. Introduction

Firms engaged in cross-border mergers and acquisitions (CBA) can generally benefit from expanding their multinational networks, accessing new markets and industries (increasing diversification), and improved financial and tax efficiencies. However, CBA introduce a level of complexity that is beyond what is common in domestic M&A, primarily due to national borders adding several frictions that can impede or facilitate mergers (Baker et al., 2008; Chari et al., 2010; Erel et al., 2012).[1] As a result, this level of complexity further imposes, and at the same time is fueled by, additional assumptions in the valuation process of foreign targets and merger synergies.[2] While the underlying motivations for CBA mirror those of domestic M&A, namely, value creation through synergies, a voluminous literature over the course of several decades examines the factors that lead to lower bidder gains in CBA compared to domestic deals by explicitly focusing on the determinants of the higher price (premia) usually offered in CBA (Harris and Ravenscraft, 1991; Barbopoulos et al., 2018). Perhaps more importantly, CBA requires more intense negotiations and thorough consideration of more factors during the valuation, negotiation, and execution phases compared to domestic deals, and hence there is potentially more space for psychological factors to play a more crucial role in the higher price offered to foreign target shareholders.

In this paper, we investigate the differential effect of recent target stock price peaks (*reference points*) on the price offered (*premia*) to targets in CBA vs. domestic M&A.[3] Reference points serve as anchors for decision making and can influence behavior, valuations, or outcomes in various economic settings (Kahneman and Tversky, 1979; Shefrin and Statman, 1985; Ljungqvist and Wilhelm, 2005; Hart and Moore, 2008), as well as in M&A (Baker et al., 2012). Typically, the uncertainty over the target's standalone valuation and merger synergies creates an opportunity for the offer price

[1] Despite these frictions, CBA have grown increasingly popular and remain crucial to the evolution of most modern multinational corporations (MNC). In particular, the global CBA market for corporate control has increased in recent years to exceed $1.95tn in 2021 from $93.7bn in 1987 (Refinitiv). Similarly, global foreign direct investment (FDI) flows rebounded sharply in 2021, increasing by 77% to an estimated $1.65tn, compared to $929bn in 2020, exceeding pre-COVID-19 levels, according to UNCTAD's Investment Trends Monitor.

[2] These may include exchange rate volatility, foreign country risk, inflation and interest rate risk, corporate tax in the target nation, as well as political and market segmentation risk, which must be justified in the negotiation phase, or before the deal's completion, and directly impact the price offered to the target shareholders.

[3] The price a bidding firm offers for a target typically reflects the target's perceived strategic value, expected synergies, and control benefits, in addition to the competition among bidders, intense negotiations between the boards and advisors of both firms, their relative bargaining power, and a wide range of valuation assumptions that shape the final offer price.

(and its likelihood of acceptance) to be influenced by psychological factors affecting the target company's board, as well as the bidder and target shareholders, who must approve the bid price. In a study of domestic US acquisitions, Baker et al. (2012) demonstrate that offer prices tend to be biased towards recent target stock price peaks, which simplifies the valuation process while also increasing the likelihood of the bid price being accepted by the target's shareholders.[4] However, the substantial differences in the valuation, execution, and negotiation phases of domestic and foreign target M&A are likely to render the differential effect of prior target stock price peaks on offer prices highly consequential. One possibility is that this effect could be more pronounced in CBA, given the additional uncertainty and the increased need to streamline the process. Previous evidence in the literature indicates that CBA are likely to be riskier and therefore psychological influences on offer prices are possibly even more severe than previously documented in domestic deals (Erel et al., 2012; Barbopoulos et al., 2018). In contrast, reference points might be less effective in CBA, as bidders are often more attuned to the expectations of foreign managers and the valuation of target shares. Yet, another possibility is that, given the limited reliable information possibly available for foreign targets, bidders may be more reliant on simplifying heuristics in determining the appropriate offer price. Which of these opposing effects dominates remains an empirical question with major implications for the CBA market for corporate control.

To examine these effects, we rely on all (worldwide) M&A transactions meeting standard criteria in the literature (detailed later) from 1990 to 2022 (inclusive), covering targets (bidders) from 48 (82) countries. This leaves us with a comprehensive global dataset of 15,591 deals, of which 3,217 (21%) are CBA. Detailed information on bidder and target countries can be found in the Appendix Table (A). We begin by investigating the differential effect of prior target stock price peaks on (a) the decision to pursue CBA vs. domestic M&A, (b) their likelihood of deal withdrawal, and (c) the speed of deal completion (for the non-withdrawn ones). We then examine whether these stock price peaks disproportionately influence the acquisition premia in CBA vs. domestic deals, and whether this influence is reflected in bidders' gains. Across all tests, we examine the effect of various fac-

[4] Büsing et al. (2024) show that the peak share prices of targets over the past year similarly influence bid premia in an international context. However, the magnitude of this effect varies across regions and is generally smaller outside the US.

tors that are likely to contribute to (or invalidate) the differential effect of prior target stock price peaks on these outcomes, given anecdotal evidence suggesting that the bidder and target negotiating power, along with other characteristics of the firm or the deal, are related to these outcomes. We follow Baker et al. (2012) and measure *premia* as the log-percentage difference between the offer price (obtained from Refinitiv) and the stock price 30 calendar days before the announcement of the deal. Reference point stock prices, in turn, are defined as the highest stock price within the 335 calendar days ending 31 days before the announcement (i.e., over 52 weeks, starting at 365 calendar days prior to the announcement), expressed as a log-percentage difference from the stock price 30 days prior to the announcement. Hereafter, we define reference point stock prices as the 52-week high (or peak).[5] Unlike previous studies, which broadly examine factors affecting CBA premia, our analysis focuses explicitly on the differential effect of target (share price) 52-week highs on the premia offered in CBA vs. domestic deals within a global context. Although the existing literature has consistently found higher premia in CBA (Harris and Ravenscraft, 1991), our research seeks to determine whether the target 52-week peaks contribute to this difference. To our knowledge, no previous study has investigated this effect at this level of granularity.

Our paper is fundamentally different from others that have generally explored how the target 52-week highs affect premia in M&A in a diverse array of settings. For example, Baker et al. (2012) analyze how 52-week highs affect several aspects of M&A activity, including the offer prices, an offer's probability of completion, and how bidder shareholders react to the offer price being influenced by the target 52-week peak. Ma et al. (2019) examine whether acquirer 52-week highs affect their announcement period returns and find that acquirers earn higher (lower) announcement period returns when their pre-announcement stock prices are below (near) their 52-week highs. Nevertheless, despite prior evidence that primarily focus on domestic M&A decisions, the *precise* direction of this relationship, as well as the extent to which bidders rely on the target's 52-week high in CBA vs. domestic M&A, has been insufficiently explored. Smith et al. (2019), the only study

[5] Baker et al. (2012) analyzed various windows (13, 26, 39, 52, 65, and 104-week) over which the effect of reference points on offer prices is measured and focus on the 52-week high for simplicity. On page 50 of their study they write: "The reference point stock prices that we focus on are the peak prices that the target has achieved over various horizons, such as the 13-week high, 26-week high, and so on. The 52-week high price, for example, is routinely reported and discussed in the financial press and is salient to executives, boards, and investors." For robustness, we also measure reference points over various horizons, such as 13-week (3 months), 26-week (6 months) and 104-week (2 years).

that has attempted to examine the role of target reference points in CBA vs. domestic M&A, has provided limited evidence. Using a sample of 1,597 completed mergers from 1990 to 2009 (of which 391 are CBA), they document an inverse relationship, suggesting that foreign bidders are less influenced by 52-week highs than domestic bidders.[6] Our robustness tests yield results consistent with Smith et al. (2019) when we replicate their sample selection criteria and control variables. However, using a larger and more comprehensive dataset, covering 82 bidder and 48 target countries, and applying standard selection criteria along with an expanded set of controls, we obtain results that differ from theirs. The divergence likely stems from their exclusion of major markets such as the US and Canada. By including these and other regions, our analysis captures a broader cross-section of global M&A behavior, helping to explain the observed differences. Overall, our findings indicate that reference prices exert a more pronounced influence in cross-border than in domestic M&A. Hence, our study fills an important gap by investigating how various merger outcomes in CBA and domestic deals are shaped by the target's 52-week peaks.

First, we find that in CBA, the probability that the offer price exceeds the target's 52-week peak is approximately 12% higher than in domestic M&A. Figure 1 demonstrates this trend, showing that spikes at the 52-week high are more pronounced, albeit modestly so, in the CBA than in domestic deals (we later explore the influence of this anchoring on various merger outcomes). This initial evidence suggests that foreign bidders are more likely to anchor on target 52-week highs than domestic bidders, potentially as a way to navigate the complex and valuation-intensive nature of CBA. This finding is consistent with the framework proposed by Baker et al. (2012), who originally documented the role of prior stock price peaks as reference points in domestic US M&A. Moreover, we find that when offer prices surpass the target 52-week high, CBA deals are less likely to be withdrawn and tend to close more quickly, highlighting the practical relevance of 52-week highs as reference points in shaping CBA (relative to domestic deals) outcomes.

To formally assess the differential impact of 52-week highs on offer premia in CBA relative

[6]The sample selection criteria employed by Smith et al. (2019) differ substantially from those used by Baker et al. (2012) and related studies, which we closely follow. Specifically, Smith et al. (2019) focus exclusively on completed transactions, hence limiting the examination of deal success probability, and include only deals in which bidders acquire full ownership of the target's outstanding shares. Moreover, they exclude US and Canadian target firms, despite these representing a significant portion of global M&A activity.

to domestic deals, we employ both univariate and multivariate (regression) tests. Our findings provide strong evidence that the greater reliance of foreign bidders on target 52-week highs is associated with significantly higher premia in CBA compared to domestic M&A. Specifically, our initial univariate tests reveal that the high-minus-low differential effect of these peaks on the premia is approximately 3% larger in CBA than in domestic deals (differentials of 22.94% and 19.90%, respectively), suggesting that such reference points can help simplify the inherently more complex negotiation processes characteristic of CBA. Moreover, our regression analysis indicates that this effect persists both in direction and magnitude, even after controlling for a wide range of bidder, target, and deal characteristics, as well as fixed effects for time, bidder country, and target country. In particular, a simple linear specification suggests that in CBA, offer prices increase by up to 43 basis points for every 10% increase in the target's 52-week high relative to domestic deals.

While this differential effect is statistically significant, its magnitude is modest (yet, it remains important to explain our univariate "CBA effect" of 3.18%). However, the true size of the effect can be 'obscured' by extreme outliers in the independent variable (as illustrated in Figure 1) or by the generally higher premia offered in CBA than in domestic deals. To address these potential issues, we implement piecewise-linear specifications as outlined by Baker et al. (2012). We find that, for the overall sample, a 10% increase in the 52-week high corresponds to an approximately 4.56% higher offer price across the typical range of 52-week peaks. Notably, once the 52-week high reference price is more than 25% above the stock price 30 days prior to the announcement, the differential impact on CBA vs. domestic M&A becomes larger: in this range (between 25% and 50%), each additional 10% increase in the 52-week high leads to an approximate 1% further rise in the offer price, highlighting the disproportionate anchoring effect at higher peak levels in CBA.[7] We further find that moving from the first to the second piecewise segment, the effect of 52-week highs on offer prices declines by 66% (coefficient drop from 0.391 in piecewise segment 1 to 0.134 in piecewise segment 2) in domestic deals but only by 31% (coefficient drop from 0.356 in piecewise segment 1 to 0.244 in piecewise segment 2) in CBA. One possible explanation for this more persistent effect in CBA is the generally higher premia offered in CBA, which may already exceed the levels implied

[7] Figure 2 highlights the heightened relevance of 52-week highs in the 25% to 50% range for CBA, compared to domestic deals.

by the reference points. Yet, it may also be that these higher premia in CBA are not solely driven by 52-week highs but rather reflect additional factors, such as complexity and valuation uncertainty, that amplify the role of 52-week peaks even when offer prices are well above these anchors.

We further examine the effect of 52-week highs on offer premia across various sub-samples and consider potential non-psychological alternative explanations. Most importantly, the positive relationship between the 52-week high and the offer price is more pronounced in deals involving listed bidders, transactions where both bidders and targets are based outside the US, and deals between parties located in developed markets. Additionally, we find that the anchor effect is much stronger in deals announced by frequent bidders, suggesting that bidder experience may amplify the reliance on 52-week high as reference points in setting offer prices faster. We also find that the effect of 52-week highs on premia is more pronounced in larger deals, and similarly for larger target size, as well as for more profitable targets, whereas this anchor effect is significantly less pronounced for targets exhibiting larger share price volatility. Lastly, we find that CBA premia rise with increased exchange rate volatility and, when considering the interaction between exchange rate volatility and reference points, the highest influence of reference points on premia occurs during periods of high exchange rate volatility.

To what extent does the influence of reference prices on premia affect how bidders' shareholders respond to the announcement of CBA vs. domestic M&A?[8] All else being equal, bidders who rely more on reference points are more likely to overpay for a deal, leading to lower (or larger) short-term bidder gains (losses). Our findings confirm that bidders' reliance on 52-week high is associated with lower short-run bidder gains. This effect is even more pronounced in CBA, where foreign bidders exhibit a stronger reliance on 52-week highs. Specifically, for every 10% increase in the portion of the offer premia explained (or instrumented) by the 52-week high, the bidder gains decrease substantially by 0.66%. Given the strong link between 52-week highs and premia, a possible interpretation is that bidder shareholders perceive a greater risk of overpayment when the target's stock price at the time of the offer remains substantially below the 52-week high. These

[8] As Baker et al. (2012) highlight, the premia offered in M&A is not a perfect measure of overpayment, as stronger synergies may justify higher bid premia. However, the 52-week high serves as a strong instrument for isolating the effects of overpayment in M&A, independent of synergies or bidder misvaluation.

effects are especially pronounced when both bidders and targets are based in the US, when they are located in developed countries, when the bidder is frequently engaged in CBA, and when the deal is settled in cash.

Our paper significantly contributes to the M&A literature in several ways. While prior studies on reference points in M&A decisions have focused primarily on domestic transactions (Baker et al., 2012), except for Smith et al. (2019) that analyzes a limited sample of 1,597 completed mergers with 391 classified as CBA and 1,206 as domestic, research on CBA remains limited. We fill this gap by investigating how different merger outcomes, such as the likelihood of deal withdrawal, speed of deal completion, premia, and target and bidder returns, vary between CBA and domestic M&A concerning target 52-week peaks. Additionally, our research broadens this literature by assessing how bidder managers with varied M&A experience (frequent bidders) are influenced by recent target share price peaks in their decisions regarding domestic or foreign target bids, a topic previously overlooked. We also advance related studies by revealing that exchange rate volatility plays a crucial role in the impact of reference points on the premia offered by foreign bidders. Furthermore, we explore how various deal and firm-level characteristics, including the geographical location of bidders and targets, the economic development of their countries, the bidder listing status, and the deal's payment method, influence reliance on the 52-week high. These characteristics significantly affect how bidders anchor to recent price peaks, causing variations in the reference points' effects on premia in CBA compared to domestic M&A and ultimately affecting bidder gains.

2. Theoretical Framework

Several branches of the literature help us understand how the 52-week highs of target share price influence premia, and how this effect varies between CBA and domestic M&A, as well as across bidder and target geographical locations, levels of economic development, bidder listing status, method of payment, and the bidder's experience in bidding for domestic and/or foreign targets. The related theory includes prospect theory and anchoring bias and how recent peaks of targets affect M&A negotiations and premia via psychological distortions, as well as studies that analyze the effect of 52-week highs on the same. Relevant studies also refer to the complexity of CBA and

how that affects M&A activities and outcomes, and how that may affect managers' reliance on reference points.

2.1. **Factors affecting the distribution of M&A premia**

The large size of the CBA market (and the complexities associated with it) has led to the emergence of a voluminous literature in finance and international business that investigates the factors influencing the price offered in CBA, how this compares to the price offered in domestic M&A, and how CBA affects the value of the bidding firm (Doukas and Travlos, 1988; Moeller and Schlingemann, 2005; Chari et al., 2010; Danbolt and Maciver, 2012; Erel et al., 2012). The majority of studies show that foreign targets receive higher premia compared to their domestic counterparts (Harris and Ravenscraft, 1991; Danbolt, 2004), which is often considered as one of the reasons for the decline in bidders' value commonly observed around CBA announcements (Moeller and Schlingemann, 2005).

A bidder often decides on how much to pay for a target firm by determining how much added value (synergy) the combined entity can bring compared to the target as a standalone company. Positive synergies can come from increased market power, economies of scale, scope and learning, or new growth opportunities (Dutz, 1989; Heflebower, 1963; Karim and Mitchell, 2000). In contrast, negative synergies may be the result of inefficient post-merger integration or the difficulty of coordinating a diversified firm (Sudarsanam, 2010). Therefore, the ambiguity in setting a price tag for the target opens the opportunity for external factors to affect the valuation process and in effect lead to mispricing. Rhodes-Kropf and Viswanathan (2004) attribute takeover misevaluation to periods of over- and undervaluation in the market as a whole. The pioneering agency theory developed by Jensen and Meckling (1976) suggests that conflict of interest between agents and principals can negatively affect the outcome of M&A. Shareholders prioritize maximizing their own wealth, while managers' objectives can be job security, larger compensation, or power status. Thus, managers may take on an acquisition that has little or no actual synergies but may increase managers' utility at the expense of shareholders' utility.[9]

[9] Kesner et al. (1994) finds that the principal-agent problem not only exists between shareholders (principals) and managers (agents), but also in the case of deal representatives. They find a misalignment in the objectives of the bidders

In contrast, Shleifer and Vishny (2003) introduce the market timing theory, which predicts that misevaluation drives M&A activities. Overvalued firms are likely to become bidders while undervalued (or less overvalued than bidders) firms are likely to become targets. This theory holds that agents are rational while principals are not. Dong et al. (2006) find that overvalued bidders tend to overpay, and firms' managers tend to time the market. Roll (1986) proposes a theory of managerial hubris that assumes the opposite of Shleifer and Vishny (2003), which is that principals are rational while agents are not. As the opportunity to undertake M&A is limited for the average manager, managerial hubris may lead them to arbitrarily believe their presumptions of takeover value to be true. Therefore, offer prices may exceed the true economic value of M&A. Similar to Dong et al. (2006), Roll (1986) also finds that, on average, bidders tend to overpay for their targets. Malmendier and Tate (2008) expand on the proposition of hubris by specifically pointing to overconfidence as the driving force associated with overpayment and find that bidders' managers often overestimate their ability to yield returns and therefore are prone to make low quality M&A, especially when they have abundant access to internal financing. For a comprehensive review of this literature, see Eckbo (2009) and Eckbo et al. (2025).

2.2. **The effect of reference points on M&A premia**

2.2.1. **Prospect theory and anchoring bias**

The prospect theory developed by Tversky and Kahneman (1974) argues that decision makers have the tendency to violate the axioms of expected utility theory.[10] They perceive the value of investment choices as changes in wealth relative to a reference point, which is derived from arbitrary expectations rather than a relevant frame of reference. Comparison of choices will therefore be viewed through the lenses of gains/losses from the reference point; and loss aversion, rather than risk aversion, will drive the comparative process. In particular, losses (values to the left of the reference point) have more emotional weights than gains (values to the right). This leads to a kink

and the investment banks that represent them, as compensation for the representative, is positively related to deal premia.

[10] First established by Bernouli (1738) and further developed by Von-Neumann and Morgenstern (1944) and Savage (1954), the expected utility theory is based on three pillars: (a) choices are made by comparing their utility, which is the sum of possible outcomes multiplied by their probabilities, (b) the utility function reflects the decision maker's risk-aversion attitudes, i.e., it is concave, and (c) an alternative is selected based on the change in utility resulting from adding the alternative to one's assets, rather than based on gains or losses. The theory implies that decision makers can correctly weigh the probability of outcomes and the objectively best alternative will always be chosen.

in the utility function, as it is concave in the domain of gains and convex in the domain of losses. People tend to be more risk averse in dealing with winning prospects and risk-seeking in dealing with losing prospects.

In the framework of prospect theory, individuals often use cognitive shortcuts by selecting an apparently significant yet potentially questionable value as a starting point. They then make minor adjustments from this anchor until arriving at what they perceive to be an optimal value. This process is referred to as "anchoring bias", as adjustments are often not sufficiently distant from the anchor value. The end result may be emotionally satisfactory, but not necessarily a utility-maximizing one. Studies have found abundant applications of reference points in negotiation settings. Kahneman (1992) states that anchors can induce a sense of fairness that is self-serving. An offer perceived as unfair may present unnecessary or costly delays in the bargaining process. Evidence can be found in the consumer and labor markets, as a small number of rules of fairness govern the asymmetric attitude towards upward and downward changes in price and wage (Kahneman et al., 1986). In the field of real estate, studies have shown that anchoring bias affect real estate agents and sellers alike.[11]

2.2.2. **Recent peak prices as the reference points in M&A negotiations**

Roll (1986) points out that the target firm's current market price can represent a reference point in M&A negotiations. Recent peaks of prices can also represent a likely candidate of reference points. The challenge in determining reference points is that prices of assets across time have the potential to anchor investments. However, research on human learning and memory in contexts other than financial activities suggests that reference points may be set based on average and/or extreme values. Anderson (1974, 1995) find that people pay attention to general information sets rather than specific details, and Fredrickson and Kahneman (1993) find that details are only remembered if they are novel or unusual.

[11] Northcraft and Neale (1987) find a dependence on asking price in estimating the fair market value of real estates. More importantly, their results also indicate that experts, rather than amateurs, are more prone to bias and less likely to admit their bias. Genesove and Mayer (2001) find that sellers tie their determination of the asking price to the original purchase price. Their study goes further by showing that anchors can be employed to frame the negotiation and induce the end result. In bust markets, houses may sell at lower than sellers' asking price, indicating that in negative framing, negotiators are less likely to concede.

In M&A research, the target's objective is to seek the highest possible price, and the highest point of reference available at hand is the recent peak price. Similar to the case of the real estate market, the target's management team can employ framing to justify the selling price to their shareholders. If an offer price is perceived as a gain relative to the recent peak price, the target's management can induce their shareholders to accept the deal. As for the bidder, they may point to the recent peak price to reason with their own investors that if it was possible for the target to reach that level in the past, then they can repeat that in the future. As reflected in Kahneman (1992), the target may have a biased judgment of fairness, and the bidder, in appreciation of this, may use recent peak prices to estimate the minimum offer that the target may consider as fair. The bidder lacking information needed for target valuation may also refer to recent peak prices to obtain an estimation of the target.

2.2.3. **Empirical studies on the effect of 52-week high prices on M&A premia**

Baker et al. (2012) is the first to propose the possible impact of reference points on M&A price settings. They suggest that the 52-week high price can be the recent peak price used as a reference point. It is commonly reported in publications and in communications between management and shareholders.[12] Not only do they find a positive relationship between the level of the 52-week high and the level of offers, but they also find that this is a diminishing marginal effect. The latter provides support for the kink in the utility function of prospect theory, as further current prices relative to the targets' 52-week high have weaker impacts on the determination of offer price.

It is worth mentioning that, other than the 52-week high price, Baker et al. (2012) also examine peak prices at different points in time. The more recent peak prices are positively correlated with offer price at varying levels of impact, whereas peak prices further in the past than a year are weakly correlated or not correlated at all. This finding is consistent with Neale and Bazerman (1992), who suggest that almost all negotiations take multiple reference points into consideration. Baker et al. (2012) do not state that the 52-week high price is the most salient reference point, but focus on it

[12] In a recent article in the Financial Times (on February 9, 2023) regarding Rothchild's proposed bid to take the firm private, it is stated that "People close to Concordia [the bidder] point out that the €48 per share offer price is a premium of 15 per cent compared with Rothschild & Co shares' all-time high in January 2022." The recent stock price peak of the target is an important reference point when target shareholders assess the attractiveness of an offer.

for simplicity. There have been a few studies subsequent to Baker et al. (2012), and virtually all exclusively use the 52-week high price. Besides the deal premia question, Baker et al. (2012) also show the salience of 52-week high price by finding that it has a significant effect on varying aspects of M&A activities, namely deal success, bidder's post-announcement returns, and merger waves.

Along similar lines, Ang and Ismail (2015) show that not only the parties involved in deal negotiation manifest anchoring bias, but also the market in anticipation of the deal. In particular, they examine the effect of nearness to the 52-week high price on target's announcement returns over a 3-day event window. The 52-week high price in this case is considered in proximity to the initial offer price, as opposed to the target's current share price as in Baker et al. (2012). The results show that the market's response to an M&A announcement is positive when the initial offer is in excess of the 52-week high. Furthermore, the study also finds that the market's expectation of the offer is driven by both rational and irrational channels. It also varies according to economic conditions and merger waves. Ma et al. (2019) studies the impact of bidders' reference points on bidders' announcement returns. As mentioned earlier, the position of a firm's share price relative to its 52-week high price may be indicative of its valuation level. Ma et al. (2019) find that bidders gain lower abnormal returns when their share prices are overvalued, or in other words, closer to their 52-week highs. This effect is reported to be stronger for private target deals, due to the added uncertainty and volatility.

2.3. **The complexity of CBA and the premia puzzle**

Reflecting the importance of CBA in shaping the typical multinational corporation (MNC), a voluminous literature has emerged in the last few decades investigating the factors influencing the premia offered in CBA and how it impacts firm value (Harris and Ravenscraft, 1991; Chari et al., 2010; Danbolt and Maciver, 2012; Erel et al., 2012). The literature suggests that the takeover premia in CBA is influenced by a diverse range of factors, including (a) managerial incentives, such as managers' enhanced job security (Amihud and Lev, 1981), (b) national pride of acquiring targets based in developed countries (Hope et al., 2011), (c) acquiring and target firms' characteristics, such as market access Doukas and Travlos (1988), industry affiliation (Denis et al., 2002), accounting qual-

ity (Bris and Cabolis, 2008), intangibility of assets (Chari et al., 2010), and previous takeover premia decisions (Malhotra and Zhu, 2013), (d) deal-specific features (Eckbo, 2009; Eckbo et al., 2025), (e) international taxation (Huizinga et al., 2012), and finally (f) exchange rate dynamics (Froot and Stein, 1991; Baker et al., 2008; Erel et al., 2012). As predicted by agency theory, by entering foreign markets through M&A, managers can potentially increase their private benefits, including power, prestige, perks, and the value of their compensation package to the detriment of shareholders' wealth. Therefore, if managers are interested in maximizing their own benefits (i.e., the agency motive), they could be prepared to pay high premia, higher than synergy value, to ensure that they can acquire targets.

3. Data and Methodology

Our M&A sample (both CBA and domestic M&A) are retrieved from the Refinitiv (previously SDC Thomson-ONE) database. We keep all M&A announced between January 1st 1991 and December 31st 2022, and apply several sample-selection criteria. First, the target firm is required to be listed (public) in the equity market of the target firms' country (all countries are shown in Appendix Table (A)). In turn, the bidding firm is required to be either a listed firm in the equity market of the bidding firms' country, or a private, or a subsidiary firm, the country of which is also shown in Appendix Table (A). Second, we require the value of the deal, and the market capitalization of the target firm (and also the bidding firm, if listed) at 30 calendar days prior to the M&A announcement, to exceed $1 million. Third, the target firm's share prices must be available from the Datastream database from 365 calendar days prior to the deal's announcement date to 20 days after, to allow us to calculate the 52-week target share price peaks (reference points) and the target firm's Cumulative Abnormal Returns (CAR). Fourth, for deals announced by listed bidders, we also require the prices of the bidder to be available from the Datastream database (over the window from $t-365$ calendar days to $t-31$ and around the deal's announcement date) to allow for the calculation of the bidder CAR. Fifth, we exclude deals classified as: spin off, recapitalization, self tender, exchange offer, repurchase, restructuring, leveraged buyout, liquidation, acquisitions by- or of- firms in the government sector, bankruptcy, going-private, and reverse takeover. We also require the payment method to be avail-

able, i.e., we exclude deals with the payment method being 100% unknown. Sixth, we require the bidder to (a) own less than 20% of the target's shares six months prior to the deal's announcement, and (b) seeks to own at least 50% of the target's shares following the acquisition.[13] After applying these filters to our initial sample, our final sample covers 15,591 M&A, of which 3,217 (21%) are CBA.

3.1. **Measures of premia, reference-points, and announcement-period returns**

We follow standard procedures in the literature to measure the premia and the 52-week highs (reference points). As in Baker et al. (2012), the 52-week high (52wHigh_i) is computed as the high target stock price over the 52 weeks (335 calendar) days ending 31 calendar days prior to the announcement date, expressed as the log percentage difference from the target stock price 30 calendar days prior to the announcement date.[14] Following the same source, we calculate the premia $(Premia_i)$ as the log percentage difference between the Price Per Share (PPS_i) from the Refinitiv database and the target stock price 30 calendar days prior to the announcement date. As our main premia measure exhibits substantial variation, we follow Officer (2003) and exclude deals with premia levels higher than 200% or lower than 0%.

Our measure of target or bidder announcement period Cumulative Abnormal Returns (CAR) is calculated as in Brown and Warner (1980, 1985). We estimate CAR as the sum of the daily differences between the company i's (target or bidder) actual returns (R_i) and their corresponding expected returns $(E(R_i))$ over the event-window $(t-m, t+n)$ around the day of the deal's announcement day $(t=0)$, where m is the number of calendar days prior to the M&A announcement day and n is the number of calendar days after the M&A announcement day. Actual returns are computed using the company i's return-to-index (dividends included) and expected returns are computed based on the market model that is estimated from $t-365$ to $t-31$ calendar days prior to the announcement date $(t=0)$. We compute the target CAR over 11-days $(t-5, t+5)$ and 3-days $(t-1, t+1)$

[13] The sample includes some deals where pre-bid ownership data was missing. However, all bids were for at least a 50% stake and would thus result in a change in control.

[14] For robustness purposes, we also calculate the 13-week or 3-month (26-week or 6-month) [104-week or 24-month] target firm share-price peak as the high target stock price over the 92 (182) [730] calendar days, ending one month or 31 calendar days prior to the announcement date expressed as the log percentage difference from the target stock price 30 calendar days prior to the announcement date.

windows. For the bidder, the CAR is computed over a 5-day $(t-2, t+2)$ window.

3.2. **Descriptive statistics**

The annual distribution of the sample is presented in Table (**1**). The overall M&A activity follows a pro-cyclical pattern, with notable peaks in the late 1990s and in the mid-2000s and significant declines in the aftermath of the dotcom bubble, the 2008 financial crisis, and the year of Covid-19 outbreak (2020). In our sample, about one in five deals (21%) is CBA, which is equivalent to the percentages reported in previous studies (Chari et al., 2010; Barbopoulos and Sudarsanam, 2012; Erel et al., 2012; Barbopoulos et al., 2018). In addition, more than half of the deals in our sample (54%) are industry-focused. A large proportion of the deals in our sample (57%) are settled in cash, with the remaining share roughly equally divided between full-stock payments (24%) and mixed payments (19%). 62% of bidders in our sample are publicly traded firms, and the remaining are roughly equally divided between private (18%) and subsidiary (20%) firms. It should also be noted that the largest deals in our sample are around the late 1990s, just before the 2008 financial crisis, and from 2015 onward (until the end of our sample period in 2022).

Table (**1**) also reports the annual distributions of the premia for all deals, as well as CBA and domestic M&A separately. First, the premia offered to foreign targets is more than 3% higher compared to domestic M&A (37.3% vs. 34.1%). The annual distribution shows that in 28 of 33 years in our sample (85% of all), the yearly average premia offered to foreign targets exceed the corresponding domestic targets. It is worth noting that the highest premia were offered around the late 1990s, before the 2008 financial crisis, and toward the end of our sample period, especially during the Covid-19 outbreak year (2020). Figure (3) further shows that the time series average of the difference between PPS_i (from Refinitiv) and 52wHigh_i is higher in CBA than in domestic M&A in 76% of the years (25 out of 33 years in our sample).

Table (**3**) presents our summary statistics for our main variables. Panel A presents summary statistics for our main dependent and continuous independent variables. We find that the average premia $(Premia_i)$ in our sample of all M&A is 34.74%, which is comparable to Baker et al. (2012). The domestic M&A premia average 34.08%, while the CBA equivalent is 37.26%, with the differ-

ence between the two (-3.18%) statistically significant at the 1% level. The premia offered in CBA exhibit a higher variation, as depicted by the standard deviation of 25.97, compared to the equivalent of 25.52 for the premia offered in domestic M&A. Similarly, the median of the premia offered in CBA is 31.65%, significantly higher than that offered in domestic M&A of 28.77%. The differences observed in the right-most column of Table (3) are predominantly statistically significant at the 1% level. These findings emphasize the notably higher target CAR in CBA compared to domestic M&A, along with larger target and bidder market capitalization, deal size, and relative deal size in CBA vs. domestic M&A. Finally, Panel B reports the distribution of the premia by the bidding firm's industry. We find the highest premia offered in deals announced by bidders in the healthcare sector (41.55%). In contrast, M&A announced by bidders in the real estate sector are associated with the lowest offered premia (23.58%). These results are consistent across both CBA and domestic M&A.

4. Results and Discussion

We first assess whether the target firm's domicile influences the likelihood of the offer price surpassing the 52-week high and, in turn, how this impacts the probability of deal withdrawal and the speed of deal completion. Next, we conduct univariate and multivariate tests to examine the effect of 52-week highs on the premia and target CAR. We later present the results of our piecewise regression analysis to determine the 'true' size of the effect, which may be obscured by significant outliers in the independent variable. We conclude this section by evaluating bidder gains.

4.1. Determinants of higher offer price relative to 52-week high and M&A outcomes

To understand the influence of target share price peaks (reference points) on the premia offered in CBA vs. domestic deals, we examine and contrast their determinants. Before conducting formal regression tests to unpack these relations, we plot the density of offer price vs. 52-week high, as well as the time series difference between the offer price and 52-week high. Figure 1 shows that the spikes at 52-week highs are marginally more pronounced in CBA than in domestic M&A, suggesting a moderately stronger reliance of foreign bidders on 52-week high compared to domestic target bidders. In turn, Figure 3 plots the annual differences between the offer price and the 52-week

highs. The difference originating from CBA appears to be greater than the domestic equivalent.

The formal regression results are reported in Table (4). First, we find that in CBA the likelihood of the offer price exceeding the 52-week high is approximately 12% higher than in domestic M&A (Columns 1 and 2). Second, we find that in CBA, listed bidders are significantly more likely to rely on the target 52-week high (Column 3). This suggests that the factors influencing the premia offered in CBA by listed bidders extend beyond well-known factors such as financial flexibility, competitive pressures, market expectations, and hubris, to also include the psychological impact of reference points. We further show that the offer price exceeding the 52-week high significantly reduces the likelihood of deal withdrawal (Columns 4-6), and this effect is more pronounced when the bidder is a listed firm. Finally, we show that the time required to complete a deal is inversely related to the offer price exceeding the 52-week high. Specifically, in CBA, when the offer price is below the 52-week high ($Offer_i \leq 52wHigh_i$), the time to completion is longer. In contrast, when the offer price exceeds the 52-week high ($Offer_i > 52wHigh_i$), the completion time is significantly reduced. The above results provide strong indication of the likelihood that, and the effect of, the offer price exceeding the 52-week high are different in domestic and CBA, giving an early suggestion that the merger premia and the stock market reaction may similarly be affected differently.

4.2. **How does the target 52-week high affect premia?**

In this section, we formally examine the influence of target 52-week peaks (52wHigh_i) on the distribution of premia offered in CBA vs. domestic M&A, using both univariate and multivariate approaches. First, we conduct a univariate analysis by categorizing deals based on the level of the 52-week high, the bidder's listing status, the method of payment, and the deal's industrial diversification. We then enhance this analysis using a multivariate framework, which enables us to control for potential confounding effects from key variables that are known to affect M&A premia.

4.2.1. **Univariate tests**

Table (5) presents our results from the univariate analysis of Premia_i. Consistent with previous studies (Harris and Ravenscraft, 1991; Moeller and Schlingemann, 2005; Barbopoulos et al., 2012),

our initial tests indicate that the average premia is significantly higher in CBA than in domestic M&A (Panel A), with a mean 'CBA effect' of 3.18% (significant at the 1% level). Is this higher premia for foreign targets driven by a particular type of bidder or deal characteristic? To explore this, we segment our sample based on four firm- and deal-specific characteristics and repeat the univariate tests. In Panel B, we divide the sample into three equal groups based on the target's 52-week high. Across all categories (low, medium, and high), premia in foreign-target deals remain significantly higher than in domestic deals, by 2.15%, 2.36%, and 5.19%, respectively. Notably, the 'CBA effect' is twice as large in the high group compared to the remaining two, highlighting the disproportional influence of reference points in shaping premia in CBA vs. domestic deals in the high group. Additionally, the differential effect between the low and high 52-week high groups is over 3% greater in CBA than in domestic M&A (19.90% vs. 22.94%).

We further demonstrate that foreign targets receive significantly higher premia when acquired by listed rather than private or subsidiary bidders (Panel C). Specifically, listed bidders offer 4.35% higher premia for foreign targets compared to domestic ones, a difference that is significant at the 1% level. This finding aligns with our earlier discussion in Section *4.1*, where we showed that the likelihood of the offer price exceeding the 52-week high is significantly greater in CBA deals announced by listed bidders. In Panel D, we find that bidders in stock-settled deals offer higher premia (in absolute terms) for both domestic and foreign targets compared to deals settled in cash or mixed-payment. Moreover, even within stock-settled M&A, premia remain higher in CBA than in domestic deals. Lastly, both focused and diversifying deals are associated with higher premia in CBA compared to domestic M&A (Panel E). These results align with the broader literature, which consistently reports similar findings for the influence of firm and bid characteristics on bid premia (for a comprehensive review, see (Eckbo, 2009)).

4.2.2. **Evidence from multivariate analysis**

We estimate the following regression:

$$\text{Premia}_i = \alpha + \beta_1 \text{CBA}_i + \beta_2 52\text{wHigh}_i + \beta_3 \Big(\text{CBA}_i \times 52\text{wHigh}_i \Big) + \sum_{j=4}^{k} \beta_j X_{j,i} + \varepsilon_i \qquad (1)$$

where Premia_i is our primary measure of premia, defined in Section (3.1). 52wHigh_i is the target firm's share price 52-week high and CBA_i is a cross-border acquisition indicator, both defined in Appendix Table (B). The control variables, X_i, capture various deal- and firm-specific characteristics, including bidder listing status, method of payment, and whether the deal is diversifying. We also account for whether the bidder operates in the financial sector or whether it is a high technology firm, target firm share price volatility, equity value relative to sales or cash flows, and the number of financial advisors involved on both sides. We control for the level of the World Uncertainty Index and exchange rate volatility. Different fixed effects are also used across different regression specifications to control for distinct sources of unobserved heterogeneity. Time fixed effects are used to capture common temporal shocks, such as macroeconomic or policy changes, that influence all firms simultaneously. In addition, we include bidder and target country fixed effects to account for unobserved heterogeneity across countries. Combining them allows testing the robustness of our findings under varying identification assumptions.

Table (6) presents our results. Consistent with previous literature, we find that target firms in CBA receive significantly higher premia (nearly 4% more) than in domestic M&A, as indicated by the highly significant $\hat{\beta}_1$ coefficient in Column (1). This result remains robust even after controlling for firm and deal characteristics (Column 10). Column (2) provides the first multivariate evidence that the 52-week high is positively associated with higher premia. The coefficient $\hat{\beta}_2$ is 0.204 and significant at the 1% level, suggesting that a 10% increase in the 52-week high corresponds to an approximate 2% rise in premia. While this finding applies to both CBA and domestic M&A, it aligns with prior research on US domestic M&A (Baker et al., 2012).

Column (3) jointly examines the effects of CBA and the 52-week high, while Column (4) introduces their interaction. The results show that in CBA, a 10% increase in the 52-week high contributes approximately 0.27% more to the premia than in domestic deals (and 0.43% in Column 8). This is consistent with our univariate results, which indicate: (a) a stronger differential effect of CBA deals in the high 52-week high segment and (b) higher HML 52-week high premia in CBA than in domestic deals. The significant interaction between CBA and the 52-week high remains robust across various controls and fixed effects (Columns 5-9) and holds under alternative definitions

of reference points and premia.

Lastly, Internet Appendices I and II offer additional support for our main findings by presenting an analysis of target CAR. The results from this analysis are closely aligned with our baseline results, reinforcing the robustness of our conclusions. Likewise, the findings reported in Internet Appendices III, IV, and V provide further validation by examining the impact of reference points over alternative time horizons (3 months, 6 months, and 2 years) demonstrating the consistency of our results across different temporal benchmarks.

4.2.3. **Evidence from piecewise linear regressions**

The simple linear specification (1) is likely to contaminate the 'true' size of the 52-week high effect due to potentially large outliers in the independent variable, even when the 52wHigh_i is winsorized at 1% and 99%. To address this, we partition the 52wHigh_i into three segments and estimate piecewise linear regressions. Specifically, we estimate the following piecewise linear regression:

$$\text{Premia}_i = \alpha + \beta_1 \text{CBA}_i + \sum_{j=2}^{4} \beta_j \text{PW}_{j,i} + \sum_{j=5}^{7} \beta_j \left(\text{CBA}_i \times \text{PW}_{j,i} \right) + \sum_{j=8}^{k} \beta_j X_{j,i} + \varepsilon_i \tag{2}$$

where Premia_i is our primary measure of premia, defined in Section (3.1). Following Baker et al. (2012), the piecewise segment $\text{PW}_{1,i}$ is $\min(52\text{wHigh}_i, 25)$ (capturing deals where the share price is within 25% below the 52wHigh_i), the piecewise segment $\text{PW}_{2,i}$ is $\max(0, \min(52\text{wHigh}_i - 25, 50))$, and the piecewise segment $\text{PW}_{3,i}$ is $\max(52\text{wHigh}_i - 75, 0)$. The control variables, $X_{j,i}$, include several deal and firm characteristics, as in the multivariate analysis in Section 4.2.2. Time fixed effects are also employed to account for common temporal shocks that affect all firms simultaneously.

Table (7) presents our results. Column (1) shows that while the effect of the 52-week high on premia remains highly significant, its magnitude diminishes as we move further from the 52-week high. Specifically, the coefficient decreases from 0.456 for prices within 25% below the 52-week high to 0.215 in the 25%-50% segment and further to 0.114 for prices more than 75% below the 52-week high. This suggests that as the current price moves further from the 52-week high, the perceived marginal loss diminishes, aligning with the S-shaped value function of prospect theory. In Column (2), we introduce the CBA indicator, which confirms that foreign targets receive 3.654%

higher premia. The piecewise coefficients remain similar to those in Column (1), reinforcing the robustness of the findings. Column (3) incorporates interaction terms between PW$j, i$ and the CBA indicator. Notably, our results indicate that the 52-week high has a significantly greater impact on premia in CBA than in domestic acquisitions, particularly in the 25%-50% region. This differs from the findings for the first region (below 25%), as reported in Column (1) and in Baker et al. (2012). For both small and large reference prices (Piecewise$_{1,i}$ and Piecewise$_{3,i}$), the interaction effect between CBA and the 52-week high is insignificant. This suggests that investors and boards rely more on reference points when negotiating CBA premia. Finally, the significant effect of reference prices in the 25%-50% range on CBA premia remains robust to various controls and time fixed effects (Column 4). The results also hold under alternative definitions of reference points and premia, reinforcing their reliability.

To further examine how the 52-week high affects premia across different reference price segments, we run separate regressions for domestic (Columns 5-6) and CBA (Columns 7-8) deals. In Column (5), we show that for domestic M&A, the piecewise coefficients decrease from 0.469 for reference prices below 25% of the 52-week high to 0.193 (a 59% drop) in the 25%-50% segment and further to 0.118 (a 39% drop) for prices above 75%. Column (6) confirms a similar pattern after including additional controls and time fixed effects. Notably, for CBA deals, Column (7) shows that the piecewise coefficients decrease from 0.427 for reference prices below 25% of the 52-week high to 0.301 (only a 30% drop) in the 25%-50% segment, then further to 0.092 (a 69% drop) for prices above 75%. Column (8) confirms this evidence after we include several control factors and time fixed effects. This suggests a key difference in the role of 52-week high on the bid premia in domestic vs. CBA. In domestic M&A, the most significant drop occurs between segments 1 and 2, whereas in CBA, it occurs between segments 2 and 3. Figure (3) visually highlights this pattern, making the differences particularly evident. Again, this suggests that investors and boards rely more on reference points when negotiating CBA premia rather than premia for domestic M&A.

4.2.4. **What is the role of firm and deal characteristics?**

We next examine whether the differential effect of the 52-week high on premia in CBA vs. domestic M&A varies based on the geographical location of the merging firms, the economic development level of the bidder and target countries, the bidder's M&A experience, the method of payment, and the bidder's listing status. Specifically, we estimate equation (1) across 21 different sub-samples, in addition to the full sample (Row 1), with results presented in Table (8). Control variables are included to account for various deal and firm characteristics, consistent with the multivariate analysis presented in Section (4.2.2). Time fixed effects are included to capture common temporal shocks. Row (1) replicates the results from Column (5) of Table (6), confirming the positive differential effect of the 52-week high on premia for foreign vs. domestic targets. The next four rows reveal that this effect is primarily driven by deals where both the bidder and target are located outside the US. Notably, in Rows (2) and (4), where we analyze US bidder and US target deals separately, the coefficient $\hat{\beta}_3$ is statistically insignificant. This may be due to intense competition in the US market, regardless of the bidding firm's domicile, which could diminish the distinguishable (and positive) reference point effect between CBA and domestic M&A. In contrast, Rows (3) and (5) show that the overall effect of the 52-week high on premia is primarily influenced by deals where the bidder and/or the target are located outside the US.[15]

Next, we estimate regressions based on the economic development level of the bidder and target countries. Following Chari et al. (2010), we classify countries as developed (DM) or emerging (EM) using the World Bank Economic Development Indicators. Our results, presented in Rows (6) and (8), indicate that the differential effect of the 52-week high on premia for foreign vs. domestic targets is more pronounced when both bidders and targets are based in developed markets rather than emerging ones. In contrast, Rows (7) and (9) show an insignificant or even the opposite effect (marginally significant) for emerging markets. This suggests that when bidders and targets operate outside the US but within a developed market, investors and boards place greater emphasis on the 52-week high when bidding for foreign vs. domestic targets.

[15]Notably, the coefficients $\hat{\beta}_3$ in Rows (3) and (5) are significantly larger in magnitude, compared to the same coefficient in Row (1) (0.0530 and 0.0431 in Rows (3) and (5) respectively, compared to 0.0314 in Row (1)).

Next we ask the following question: to what extent does a bidder's experience in acquiring targets (domestic or foreign) account for the positive differential effect of reference point on CBA vs. domestic target premia? We expect experienced bidders to be more reliant on simplifying assumptions as a starting point when deciding on the offer price. With less acquisition experience or a first-time acquirer, particularly in CBA where the valuation risks can be severe, may expend more time and effort in considering and negotiating offer terms, consistent with Barbopoulos et al. (2018). In contrast, a frequent acquirer may learn from experience what offer price relative to recent past target company share price may be required to obtain support from the target company board and to persuade target shareholders to accept the offer, and may use the 52-week high as a simplifying heuristic to speed up the negotiations. To test this, we build indicator variables that account for the M&A experience of the bidding firm overall, only in domestic deals and only in CBA in the three-year period prior to the date of the bid announcement.[16]

Results in Row (10) show that the interaction effect between 52wHigh_i and the CBA indicator among frequent bidders, captured by the coefficient $\hat{\beta}_3$, is positive (0.0719) and highly significant. This suggests that the influence of reference points on CBA premia is largely driven by frequent bidders, who are more likely to exhibit the psychological distortions discussed earlier. The remaining results in Rows (11 to 22) of Table (8) indicate that the positive differential effect of reference points on CBA vs. domestic M&A premia is not driven by a particular method of payment but rather by non-mixed payments (Raw 16). In addition, Rows (17) and (21) show that listed bidders or non-private -listed and subsidiary- bidders are more likely to rely on reference points when determining premia in CBA compared to domestic M&A. This finding aligns with our key result, established earlier in the paper: listed bidders are more inclined to structure offers around the 52-week high, leading to a higher likelihood of deal completion at a faster pace. Consequently, these bidders tend to place greater emphasis on the 52-week high when negotiating bid premia. Lastly, results presented in Row (23) are the outcome from replicating the main finding of Smith et al. (2019), adhering to their sample selection criteria as partly discussed in our footnote 6. As in this study, we include the same fixed effects (year and target country) and cluster standard errors in

[16]The analysis in this section is based on deals by listed bidders, for which we can obtain information on prior acquisition experience. Results are consistent using a five-year period for capturing prior acquisition experience.

the same frequency (month). Consistent with Smith et al. (2019), we find an inverse relationship (coefficient of -0.019, yet statistical insignificant), suggesting that foreign bidders are less dependent on 52-week highs compared to domestic bidders.

Additional robustness tests provide further evidence of the differential effect of the 52-week high on the premia offered in CBA vs. domestic M&A. Specifically, we divide the sample into either two equal segments (each comprising 50% of the sample) or three equal segments (each comprising 33.3% of the sample) to construct an indicator variable ($HighIndex$). This variable is defined such that $HighIndex = x > 50\%$ for the two-segment partition, or $HighIndex = x > 66.7\%$ for the three-segment partition. Here, x represents key characteristics of the deal or merging firms, such as deal value, the target or bidder market capitalization (measured 30 calendar days prior to the M&A announcement), deal relative size, target firm volatility, inverse price, target firm sales or cash flows, and the World Uncertainty Index. We estimate the following regression model:

$$\begin{aligned} Premia_i = \alpha \quad &+ \quad \beta_1 CBA_i + \beta_2 52\text{wHigh}_i + \beta_3 \Big(\text{CBA}_i \times 52\text{wHigh}_i \Big) \\ &+ \quad \beta_4 \Big(\text{CBA}_i \times 52\text{wHigh}_i \times \text{HighIndex}_i \Big) + \beta_5 \text{HighIndex}_i + \sum_{j=6}^{k} \beta_j X_{j,i} + \varepsilon_i \end{aligned} \tag{3}$$

where $Premia_i$ is our primary measure of acquisition premia, as defined in Section (3.1). CBA_i is a cross-border acquisition indicator, and $52wHigh_i$ represents the target firm's 52-week high share price, with both variables defined in Appendix Table (B). The indicator variable $HighIndex_i$, defined above, captures firm- or deal-level characteristics used to segment the sample. The control variables $X_{j,i}$ include a range of deal and firm characteristics, consistent with the multivariate analysis in Section 4.2.2. Time fixed effects are also included to capture common temporal shocks, such as macroeconomic or policy changes, that influence all firms in a given period. Our results are reported in Table (**9**), Panels A and B for two and three segment splits, respectively.

We find that the positive differential effect of the 52-week high on premia is more pronounced in larger deals (Column 1), in transactions involving larger target firms (Column 2), and in deals with more profitable targets, based on their cash flow (Column 7). We argue that this pattern may stem from the increased complexity of valuing larger targets, which often leads to greater valuation disagreement between the boards and a stronger need to gain shareholder approval. In such

settings, bidders may lean more heavily on salient reference points, such as the 52-week high, to streamline the valuation process and facilitate deal closure. In contrast, when target shares exhibit higher levels of volatility, bidders appear less inclined to rely more heavily on reference points in CBA (relative to domestic deals). This may reflect a lack of trust in volatile price signals and the expectation that target shareholders are unlikely to demand adherence to reference points such as the 52-week high when forming their price expectations.

Overall, our robustness tests provide strong supporting evidence that several deal- and firm-level characteristics influence the extent to which bidders rely on the 52-week high, leading to variation in the differential effect of reference points on premia offered to CBA vs. domestic M&A. Ultimately, both bidder and target boards, as well as the target shareholders who ultimately approve the deal, appear to adjust their strategies and expectations in response to these underlying deal and firm features.

4.3. **The role of exchange rate volatility**

A substantial body of literature indicates that foreign bidders gain a purchasing advantage when their home currency is stronger compared to that of the host country (Froot and Stein, 1991; Baker et al., 2008; Erel et al., 2012). These studies suggest that heightened exchange rate volatility typically results in fewer CBA, largely due to increased valuation risk. Currency fluctuations introduce an extra layer of valuation uncertainty for bidders, which, alongside the greater valuation uncertainty of foreign assets vs. domestic ones, may elevate the importance of reference points for bidders. Similarly, target firms may leverage reference prices as negotiation anchors. Exchange rate volatility can reduce the bidder's ability to negotiate for a lower price, leading targets to demand higher premia. As a result, we expect that, during periods of high exchange rate volatility, reference points will play a more significant role in determining CBA (compared to domestic deals) premia. Our findings from this analysis are presented in Table **10**. We have used different fixed effects across different regression specifications to control for distinct sources of unobserved heterogeneity. Time fixed effects are included to capture common temporal shocks. In addition, we include bidder and target country fixed effects to account for unobserved heterogeneity across countries.

We find that premia rise with exchange rate volatility (Column 1). Furthermore, when considering the interaction of exchange rate volatility levels with reference points, we observe that the highest CBA premia (relative to domestic ones) occur under conditions of high exchange rate volatility (Columns 5-11). It is noteworthy that the interaction between low or medium exchange rate volatility and reference points remains statistically insignificant (Columns 3 and 4). Additionally, across Columns (5)-(11), the coefficient $\hat{\beta}_4$ is statistically significant, highlighting the relative importance of high exchange rate volatility (ERV).

5. Bidders' announcement returns

So far, our results demonstrate a strong relationship between the 52-week high and the premia, which is more pronounced in CBA than in domestic M&A. This raises an important question: how do bidders' shareholders respond to management's decision to pay higher prices—exceeding the 52-week high—in CBA compared to domestic M&A? Put differently, how do bidder shareholders react to the announcement of premia offered in CBA vs. domestic M&A, particularly the portion of the offer influenced by the target's 52-week high? To address this, we estimate the following regression:

$$\text{BCAR}_i = \alpha + \beta_1 \text{Premia}_i + \beta_2 \text{CBA}_i + \beta_3 \Big(\text{Premia}_i \times \text{CBA}_i \Big) + \sum_{j=4}^{k} \beta_j X_{j,i} + \varepsilon_i \tag{4}$$

where BCAR_i represents the cumulative abnormal returns (CAR) for listed bidders over a five-day window from $t-2$ to $t+2$, with $t=0$ marking the deal announcement day, as defined in Section (3.1). Premia_i is our primary measure of premia, defined in Section (3.1), while CBA_i is an indicator for cross-border acquisitions, defined in Appendix Table (B). The control variables, X_i, account for various deal- and firm-specific characteristics, including the method of payment and whether the deal is diversifying. We also control for whether the bidder operates in the financial sector or whether it is a high technology firm, target firm share price volatility, equity value relative to sales or cash flows, and the number of financial advisors involved on both sides. Additionally, we have used different fixed effects across different regression specifications to control for distinct sources of unobserved heterogeneity. Time fixed effects are employed to account for common temporal shocks that affect all firms simultaneously. In addition, we include bidder country fixed effects to account

for unobserved heterogeneity in bidder country. Our results are reported in Table (11).

Column (1) shows that bidders' shareholders react more negatively as premia increase. Specifically, a 10% rise in premia is associated with a 0.14% decrease in the bidder's announcement returns. While this effect is relatively small and not necessarily indicative of overpayment, the more compelling aspect of our analysis is how shareholders respond to the portion of premia influenced by the 52-week high. To investigate this, we instrument premia using the 52-week high and run instrumental variable (IV) regressions to assess how bidders react to the component of premia driven by this reference point (52-week high). Column (2) reveals that shareholders react five times more negatively compared to the OLS regression in Column (1): a 10% increase in the instrumented premia leads to a 0.71% lower bidder announcement returns. This effect is substantial relative to the unconditional mean announcement effect of -0.53% (with a median of -0.46% and a standard deviation of 7.50%, shown in Table 3). These findings suggest that, from the market's perspective, the 52-week high serves as a signal of potential overpayment rather than synergies, reinforcing concerns that managers may be influenced by psychological huristics when setting bid prices.

In Column (3), we introduce the foreign target acquisition effect and find that bidders experience significant losses from CBA deals compared to domestic M&A. The coefficient (coefficient $\hat{\beta}_2 = -0.50\%$, significant at the 10% level), aligning with findings from prior studies (Harris and Ravenscraft, 1991; Danbolt, 2004; Moeller and Schlingemann, 2005; Barbopoulos et al., 2018). Column (6) extends this analysis by incorporating an interaction term between the CBA dummy and the instrumented premia, allowing us to assess whether the negative market reaction intensifies when higher premia (instrumented by the 52-week high) are paid in CBA deals. The significant (at 5% level) negative coefficient of -0.0451 shows that it does. Notably, this result is consistent with our main findings: from the analysis of determinants of offer price exceeding the 52-week high, where listed bidders emerged as key drivers, to this section, which shows that such bidders suffer significant losses due to potential overpayment.

5.1. **Robustness tests on the role of 52-week high on bidder returns**

Next, we investigate the relationship between the instrument used in the bidder CAR analysis, the 52-week high, and bidder announcement returns. To do so, we estimate the following regression:

$$\text{BCAR}_i = \alpha + \beta_1 \text{CBA}_i + \beta_2 52\text{wHigh}_i + \beta_3 \left(CBA_i \times 52\text{wHigh}_i \right) + \sum_{j=4}^{k} \beta_j X_{j,i} + \varepsilon_i \tag{5}$$

where BCAR_i is the cumulative abnormal returns (CAR) for listed bidders over a five-day window from $t-2$ to $t+2$, with $t=0$ marking the deal announcement day, as defined in Section (*3.1*). CBA_i is an indicator for cross-border acquisitions, while 52wHigh_i denotes the target firm's 52-week high, both defined in Appendix Table (B). The control variables, X_i, account for various deal- and firm-specific characteristics, including the method of payment and whether the deal is diversifying. We also control for whether the bidder operates in the financial sector or whether it is a high technology firm, target firm share price volatility, equity value relative to sales or cash flows, and the number of financial advisors involved on both sides. Additionally, we incorporate time fixed effects to capture common temporal shocks, such as macroeconomic or policy changes, that influence all firms in a given period. Our results are reported in Table (**12**).

We examine this relationship across multiple sub-samples, categorized by the geographical location of the merging firms, the economic development level of the bidder and target countries, the bidder's acquisition experience, and the method of payment. Specifically, we estimate equation (5) across 15 sub-samples, in addition to the full sample (Row 1), with results presented in Table (**12**). Row (1) confirms a negative relationship between the bidder CAR and the interaction between CBA and the instrumented premia (shown in Column (6) of Table **11**). Specifically, the coefficient $\hat{\beta}_3 = -0.0127$ (significant at the 5% level) suggests that foreign bidders experience greater losses when they rely on the 52-week high, compared to their domestic counterparts. Interestingly, we observe a negative differential effect of the 52-week high on bidder CAR in CBA vs. domestic M&A deals involving US bidders or targets (Rows 2 and 4). When we contrast these findings with those reported in Table **8** and discussed in Section (*4.2.4*), a consistent pattern emerges: deals associated with higher premia that is driven by heavy reliance on reference points (our instrument) tend to result in greater value losses for the bidding firm's shareholders. A similar pattern is observed in

deals involving both bidders and targets from developed markets (Rows 6 and 8), as well as in transactions announced by frequent bidders (Row 10). Lastly, our findings indicate that foreign bidders in cash-settled deals (Row 11), as well as those in non-stock-settled deals (Row 14), experience increased losses as the 52-week high (reference point) rises. Overall, bidders that rely heavily on reference points (52-week high) when designing their offer premia tend to experience significant losses, likely driven by overpayment.

6. Conclusion

Using a global dataset of cross-border mergers and acquisitions (CBA) and domestic M&A, we examine whether acquisition premia in CBA are more strongly influenced by recent stock price peaks of target firms (reference points) than in domestic M&A. We argue that the boards of merging firms, particularly in CBA deals, rely more heavily on these recent peaks to simplify the inherently complex process of valuing and negotiating with foreign targets. While cognitively efficient, this reliance often results in overpayment and subsequent value destruction for bidding firms.

Our results demonstrate that the well-established finding that foreign targets receive higher premia (Harris and Ravenscraft, 1991) is driven in part by anchoring to recent share price peaks. This indicates that both the boards of acquiring firms and, importantly, the target shareholders who ultimately approve the deal incorporate recent stock price highs into their decision making. Consistent with the predictions of prospect theory (Tversky and Kahneman, 1974; Kahneman and Tversky, 1979), decision makers tend to evaluate investment outcomes as gains or losses relative to a reference point that is often derived from arbitrary or psychologically salient benchmarks rather than objective valuations. Moreover, we find that shareholders of bidding firms are significantly more disappointed when management relies heavily on historical reference points, such as the 52-week high, in the context of CBA. This reliance results in considerably larger bidder losses at the deal announcement in CBA compared to domestic M&A, highlighting the market's concern over potential overpayment and value destruction.

We also investigate whether the above heuristic is further related to several deal and merging firms' features, such as the geographical location of bidders and targets, the economic development

of the country where bidders and targets are based, the experience of bidders in making deals of foreign or domestic targets, the listing status of the bidder, the deal's method of payment, and the exchange rate volatility. We find strong supporting evidence that several deal- and firm-level characteristics influence the extent to which bidders rely on the 52-week high, leading to variation in the differential effect of reference points on premia offered to CBA vs. domestic M&A, ultimately impacting bidder gains. These findings are robust to the inclusion of various controls and fixed effects, and remains qualitatively similar to alternative ways of defining reference points and premia. Overall, our findings suggest that merging firms' boards, especially those engaged in CBA, rely on reference points or anchors to simplify the complex tasks of valuation of, and negotiation with, foreign targets.

References

Ahir, H., Bloom, N., Furceri, D., 2022. The world uncertainty index. NBER Working Paper Series pp. 1–114.

Amihud, Y., Lev, B., 1981. Risk reduction as a managerial motive for conglomerate mergers. The Bell Journal of Economics 12, 605–617.

Anderson, J. R., 1974. Verbatim and propositional representation of sentences in immediate and long-term memory. Journal of Verbal Learning and Verbal Behavior 13, 149–162.

Anderson, J. R., 1995. Cognitive psychology and its implications (4th ed.). New York: W. H. Freeman.

Ang, J. S., Ismail, A. K., 2015. What premiums do target shareholders expect? explaining negative returns upon offer announcements. Journal of Corporate Finance 30, 245–256.

Baker, M., Foley, C. F., Wurgler, J., 2008. Multinationals as arbitrageurs: The effect of stock market valuations on foreign direct investment. The Review of Financial Studies 22, 337–369.

Baker, M., Pan, X., Wurgler, J., 2012. The effect of reference point prices on mergers and acquisitions. Journal of Financial Economics 106, 49–71.

Barbopoulos, L. G., Danbolt, J., Alexakis, D., 2018. The role of earnout financing on the valuation effects of global diversification. Journal of International Business Studies 49, 523–551.

Barbopoulos, L. G., Paudyal, K., Pescetto, G., 2012. Legal systems and gains from cross-border acquisitions. Journal of Business Research 65, 1301–1312.

Barbopoulos, L. G., Sudarsanam, S., 2012. Determinants of earnout as acquisition payment currency and bidder's value gains. Journal of Banking & Finance 36, 678–694.

Bernouli, D., 1738. Specimen theoriae novae de mensura sortis. Commentarii academiae scientiarum imperialespetropolitanae 5, 175–192.

Bris, A., Cabolis, C., 2008. The value of investor protection: Firm evidence from cross-border mergers. Review of Financial Studies 21, 605–648.

Brown, S. J., Warner, J. B., 1980. Measuring security price performance. Journal of Financial Economics 8, 205–258.

Brown, S. J., Warner, J. B., 1985. Using daily stock returns: The case of event studies. Journal of Financial Economics 14, 3–31.

Büsing, P., Hark, P. F., Lohmeier, N., Mohrschladt, H., 2024. The 52-week high and m&a deals: International evidence. Working Paper, SSRN 5058520 .

Chari, A., Ouimet, P. P., Tesar, L. L., 2010. The Value of Control in Emerging Markets. The Review of Financial Studies 23, 1741–1770.

Danbolt, J., 2004. Target company cross-border effects in acquisitions into the uk. European Financial Management 10, 83–108.

Danbolt, J., Maciver, G., 2012. Cross-border versus domestic acquisitions and the impact on shareholder wealth. Journal of Business Finance & Accounting 39.

Denis, D. J., Denis, D. K., Yost, K., 2002. Global diversification, industrial diversification, and firm value. Journal of Finance 57, 1951–1979.

Dong, M., Hirshleifer, D., Richardson, S., Teoh, S. H., 2006. Does investor misvaluation drive the takeover market? The Journal of Finance 61, 725–762.

Doukas, J. A., Travlos, N. G., 1988. The effect of corporate multinationalism on shareholders' wealth: Evidence from international acquisitions. Journal of Finance 43, 1161 – 1175.

Dutz, M. A., 1989. Horizontal mergers in declining industries: Theory and evidence. International Journal of Industrial Organization 7, 11–33.

Eckbo, B. E., Malenko, A., Thorburn, K. S., 2025. Corporate takeovers: Theory and evidence. Foundations and Trends in Finance Forthcoming, 1–186.

Eckbo, E. B., 2009. Bidding strategies and takeover premiums: A review. Journal of Corporate Finance 15, 149–178.

Erel, I., Liao, R. C., Weisbach, S. M., 2012. Determinants of cross-border mergers and acquisitions. Journal of Finance 67, 1045–1082.

Fredrickson, B. L., Kahneman, D., 1993. Duration neglect in retrospective evaluations of affective episodes. Journal of Personality and Social Psychology 65, 45.

Froot, K. A., Stein, J. C., 1991. Exchange rates and foreign direct investment: An imperfect capital markets approach. The Quarterly Journal of Economics 106, 1191–1217.

Fuller, K., Netter, J., Stegemoller, M., 2002. What do returns to acquiring firms tell us? evidence from firms that make many acquisitions. The Journal of Finance 57, 1,763–1,793.

Genesove, D., Mayer, C., 2001. Loss aversion and seller behavior: Evidence from the housing market. The Quarterly Journal of Economics 116, 1233–1260.

Harris, R. S., Ravenscraft, D., 1991. The role of acquisitions in foreign direct investment: Evidence from the u.s. stock market. Journal of Finance 46, 825 – 844.

Hart, O., Moore, J., 2008. Contracts as reference points. The Quarterly Journal of Economics 123, 1–48.

Heflebower, R. B., 1963. Corporate Mergers: Policy and Economic Analysis. The Quarterly Journal of Economics 77, 537–558.

Hope, O.-K., Thomas, W. B., Vyas, D., 2011. Financial credibility, ownership, and financing constraints in private firms. Journal of International Business Studies 42, 935–957.

Huizinga, H., Voget, J., Wagner, W., 2012. Who bears the burden of international taxation? evidence from cross-border m&as. Journal of International Economics 88, 186–197.

Jensen, M. C., Meckling, W. H., 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics 3, 305–360.

Kahneman, D., 1992. Reference points, anchors, norms, and mixed feelings. Organizational Behavior and Human Decision Processes 51, 296–312.

Kahneman, D., Knetsch, J. L., Thaler, R., 1986. Fairness as a constraint on profit seeking: Entitlements in the market. The American Economic Review 76, 728–741.

Kahneman, D., Tversky, A., 1979. Prospect theory: An analysis of decision under risk. Econometrica 47, 263–291.

Karim, S., Mitchell, W., 2000. Path-dependent and path-breaking change: Reconfiguring business resources following acquisitions in the U.S. medical sector, 1978-1995. Strategic Management Journal 21, 1061–1081.

Kesner, I. F., Shapiro, D. L., Sharma, A., 1994. Brokering mergers: An agency theory perspective on the role of representatives. The Academy of Management Journal 37, 703–721.

Ljungqvist, A., Wilhelm, W. J., 2005. Does prospect theory explain ipo market behavior? The Journal of Finance 60, 1759–1790.

Ma, Q., Whidbee, D. A., Zhang, W., 2019. Acquirer reference prices and acquisition performance. Journal of Financial Economics 132, 175–199.

Malhotra, S., Zhu, P., 2013. Paying for cross-border acquisitions: The impact of prior acquirers' decisions. Journal of World Business 48, 271–281.

Malmendier, U., Tate, G., 2008. Who makes acquisitions? ceo overconfidence and the market's reaction. Journal of Financial Economics 89, 20–43.

Moeller, B. S., Schlingemann, F. P., 2005. Global diversification and bidder gains: A comparison between cross-border and domestic acquisitions. Journal of Banking & Finance 29, 533–564.

Neale, M. A., Bazerman, M. H., 1992. Negotiator cognition and rationality: A behavioral decision theory perspective. Organizational Behavior and Human Decision Processes 51, 157–175.

Northcraft, G. B., Neale, M. A., 1987. Experts, amateurs, and real estate: An anchoring-and-adjustment perspective on property pricing decisions. Organizational Behavior and Human Decision Processes 39, 84–97.

Officer, M. S., 2003. Termination fees in mergers and acquisitions. Journal of Financial Economics 69, 431–467.

Rhodes-Kropf, M., Viswanathan, S., 2004. Market valuation and merger waves. Journal of Finance 59, 2685–2718.

Roll, R., 1986. The hubris hypothesis of corporate takeovers. Journal of Business 59, 197–216.

Savage, L. J., 1954. The foundations of statistics. John Wiley & Sons, Inc.

Shefrin, H., Statman, M., 1985. The disposition to sell winners too early and ride losers too long: Theory and evidence. The Journal of Finance 40, 777–790.

Shleifer, A., Vishny, R. W., 2003. Stock market driven acquisitions. Journal of Financial Economics 70, 295–311.

Smith, G. C., Coy, J. M., Spieler, A. C., 2019. Cross-border transactions, mergers and the inconsistency of international reference points. Journal of Behavioral and Experimental Finance 22, 14–21.

Sudarsanam, S., 2010. Creating Value from Mergers and Acquisitions. Financial Times/ Prentice Hall.

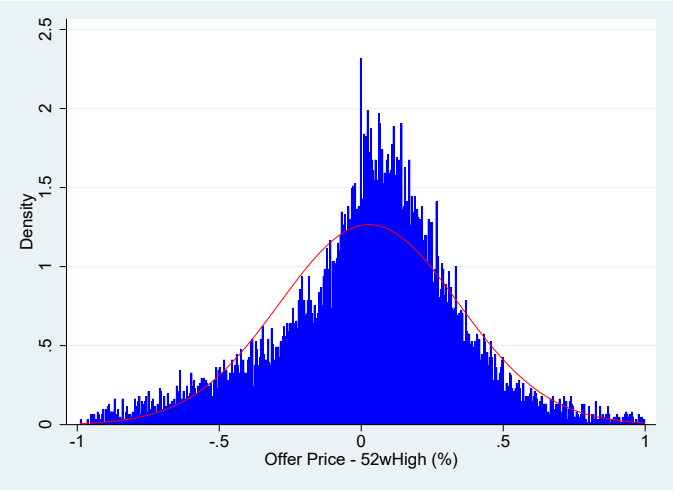
Tversky, A., Kahneman, D., 1974. Judgment under uncertainty: Heuristics and biases. Science 185, 1124–1131.

Von-Neumann, J., Morgenstern, O., 1944. Theory of Games and Economic Behavior. Princeton, NJ, USA: Princeton University Press.

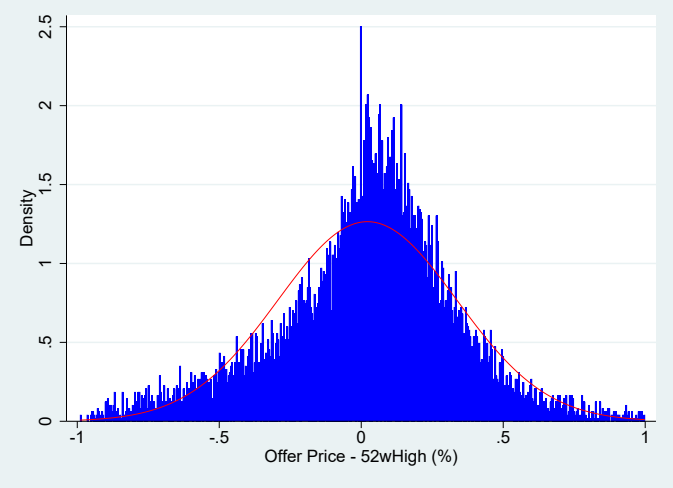
Figure 1: Offer price density

This figure presents histograms of the difference between the offer price (obtained from Refinitiv) and the target's 52-week high price (the high stock price over the 335 calendar days ending 31 days prior to the announcement date), both expressed as a log percentage difference from the target's stock price 30 calendar days prior to the announcement date. Panel (a) represents the histogram of All M&A, (b) Domestic M&A only, and (c) CBA only.

(a) All M&A



(b) Domestic M&A



(c) Foreign M&A (CBA)

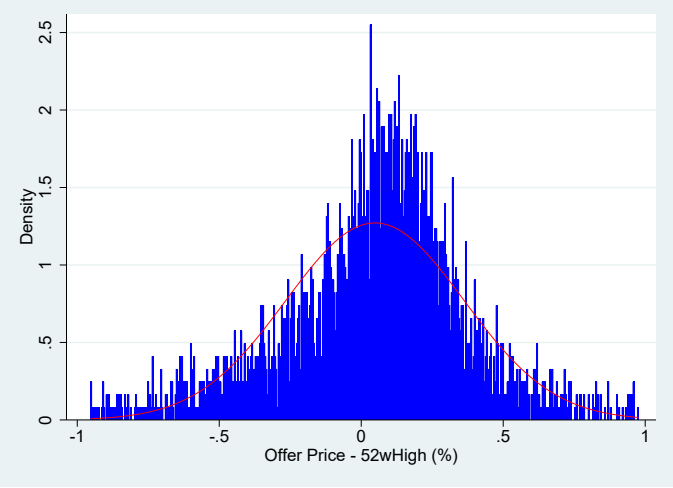


Figure 2: Piecewise-regression coefficients

This figure plots the piecewise-regression coefficients $\hat{\beta}_2$, $\hat{\beta}_3$, and $\hat{\beta}_4$ obtained from estimating the following regression:

$$\text{Premia}_i = \alpha + \beta_1 \text{CBA}_i + \sum_{j=2}^{4} \beta_j \text{PW}_{j,i} + \sum_{j=5}^{7} \beta_j \left(\text{CBA}_i \times \text{PW}_{j,i} \right) + \sum_{j=8}^{k} \beta_j X_{j,i} + \varepsilon_i$$

The orange line corresponds to coefficients obtained from estimating the above regression in a domestic M&A sample (DOM) while the gray line corresponds to to coefficients obtained from estimating the same regression in a foreign M&A sample (CBA). $\beta(2)$ is the coefficient $\hat{\beta}_2$ of $PW_{1,j}$ in the above regression, $\beta(3)$ is the coefficient $\hat{\beta}_3$ of $PW_{2,j}$, and $\beta(4)$ is the coefficient $\hat{\beta}_4$ of $PW_{5,j}$ in the same regression. All coefficient estimates are presented in Table (7), in Columns (6 and 8) for domestic M&A and CBA, respectively.

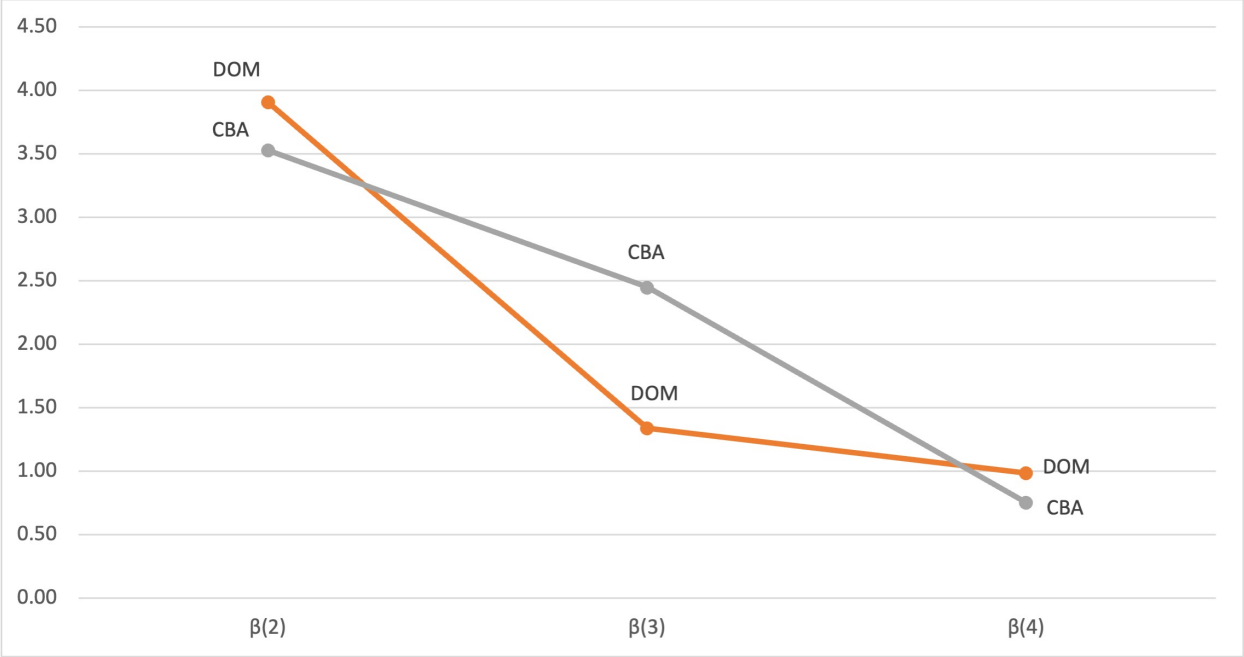


Figure 3: Yearly average differences between the offer prices and the target's 52-week highs

This figure plots yearly average-differences between the offer price (Price Per Share or PPS from Refinitiv) and the 52-week high of target shares ($52wHigh_i$), both expressed as a log percentage difference from the target's stock price 30 calendar days prior to the announcement date.

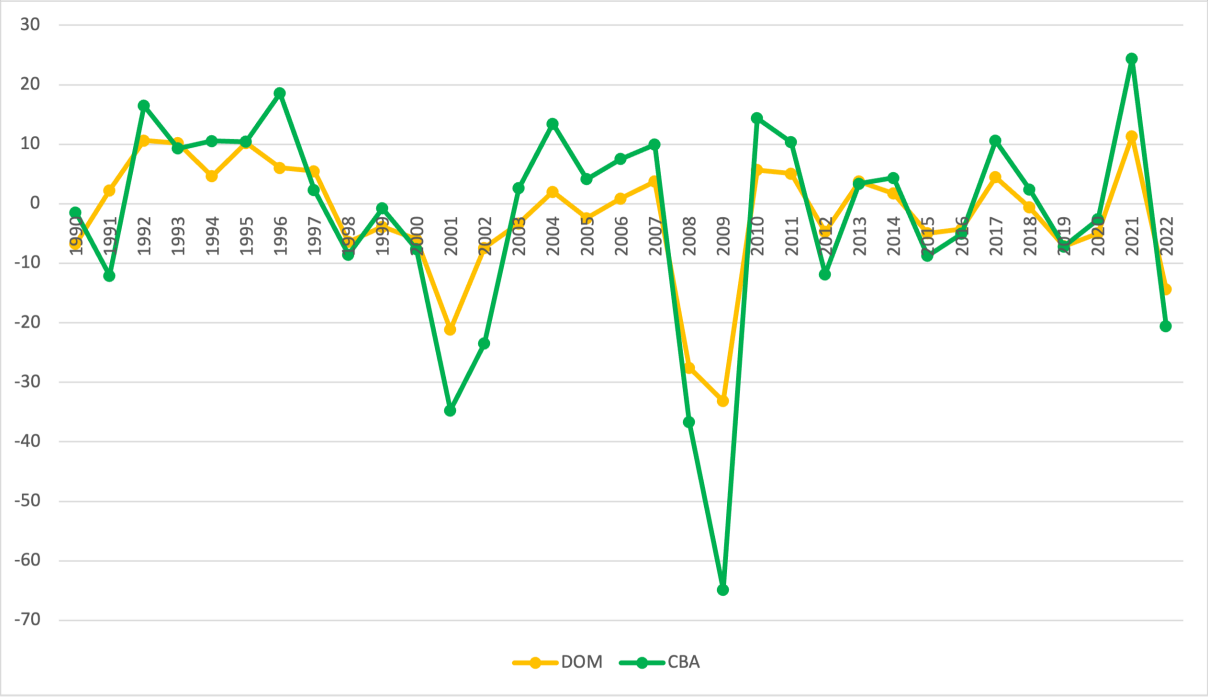


Table 1: Annual distribution of sample

This table presents the annual distribution of our sample. All represents all M&A deals; Dom. represents domestic deals where both the bidder and target firms are based in the same country; CBA represents deals where the bidder and target firms are based in different countries; Focused represents deals in which the bidder and the target are in the same industry, that is, they share the same two-digit SIC code; Cash represents deals settled fully in cash; Stock corresponds to deals settled fully in stock; Private (Listed) represents deals of private (listed) bidders; Deal Value is the deal's transaction value (in $m); Premia All is the offer price from Refinitiv expressed as a log percentage difference from the target stock price 30 trading days prior to the announcement date; similarly Premia Dom. (Premia CBA) refers to premia offered in domestic (CBA) deals. All variables are defined in the Appendix Table (B).

Year	All	Dom.	CBA	Focused	Cash	Stock	Private	Listed	Deal Value	Premia All	Premia Dom.	Premia CBA
1990	58	50	8	30	29	11	12	35	990	39.8	39.0	45.3
1991	153	138	15	80	49	65	16	122	353	43.2	43.0	44.5
1992	126	114	12	59	43	62	16	92	268	39.4	38.8	44.9
1993	159	143	16	78	65	55	21	119	404	40.2	40.6	36.4
1994	265	239	26	102	107	117	33	222	412	34.8	34.6	36.6
1995	390	352	38	164	155	148	39	299	666	34.7	34.7	34.3
1996	411	370	41	176	139	166	47	322	639	34.6	34.1	39.4
1997	567	491	76	254	181	229	60	446	769	32.5	31.8	36.6
1998	704	603	101	324	297	255	100	530	1,358	36.2	36.2	36.2
1999	937	761	176	484	456	276	147	656	1,309	37.7	36.8	41.8
2000	796	639	157	437	392	236	151	551	1,388	37.1	35.8	42.7
2001	550	453	97	272	255	156	79	401	732	41.1	41.5	39.1
2002	400	338	62	211	218	96	80	257	549	36.5	36.9	34.7
2003	462	390	72	259	254	108	117	271	736	34.4	33.8	37.9
2004	408	342	66	200	202	105	59	294	1,563	28.4	28.2	29.5
2005	527	431	96	287	310	106	97	343	1,589	28.2	27.9	29.5
2006	725	562	163	424	470	125	153	411	1,934	26.7	25.5	30.8
2007	771	558	213	434	498	126	150	429	2,307	29.8	29.6	30.4
2008	520	387	133	287	375	77	101	288	1,331	39.2	37.5	44.1
2009	451	357	94	248	253	130	91	274	975	46.5	45.1	51.8
2010	556	420	136	306	374	99	104	322	952	38.4	37.5	41.1
2011	481	372	109	286	319	80	79	234	1,129	33.4	32.8	35.3
2012	488	378	110	274	344	79	110	249	845	35.2	34.2	38.5
2013	403	316	87	210	271	61	86	216	1,080	33.9	33.9	34.1
2014	430	319	111	231	252	91	78	267	2,491	30.7	30.6	30.9
2015	512	371	141	280	302	93	80	318	3,145	31.5	29.6	36.6
2016	501	359	142	301	349	84	97	271	2,164	35.8	35.2	37.4
2017	475	343	132	276	324	83	94	251	2,375	29.2	28.0	32.2
2018	468	359	109	275	292	91	74	262	2,100	29.9	28.3	35.4
2019	475	333	142	281	311	92	77	243	2,450	33.2	31.5	37.1
2020	413	319	94	256	277	87	88	197	1,828	41.0	40.0	44.3
2021	553	417	136	343	370	98	107	267	2,082	32.9	31.8	36.3
2022	456	350	106	313	324	76	101	215	2,009	39.4	38.0	43.9
Total	15,591	12,374	3,217	8,442	8,857	3,763	2,744	9,674	-	-	-	-
%	-	79%	21%	54%	57%	24%	18%	62%	-	-	-	-
Average	-	-	-	-	-	-	-	-	1,361	34.7	34.1	37.3

Table 2: Number of M&A by Country Pair

This table presents the number of M&A by country pair. The columns represent the countries of the target companies while the rows represent the countries of the bidding companies. The diagonal entries of the matrix are the number of domestic deals for a particular country and the off-diagonal entries are the number of deals in a particular country pair. The totals exclude domestic mergers and hence represent the number of cross-border mergers to and from a particular country. Our sample period is from 1990 to 2022.

Bidder Country	Target Country: AU	AT	BE	BM	BR	CA	CL	CN	CO	CY	DK	EG	FI	FR	DE	GR	HK	IN	ID	IE	IM	IL	IT
Argentina (AR)																							
Australia (AU)	613					24																	
Austria (AT)	2	3	1												1								
Bahamas (BS)																							
Bahrain (BH)																							
Belgium (BE)	5		18			2								3				2		1			
Bermuda (BM)	6			13		3							1			1						1	
Botswana (BW)																							
Brazil (BR)					39	3			2														
British Virgin (VG)	1					2										1	6		1	1	2		
Bulgaria (BG)				1																			
Canada (CA)	45			1		949			1					4						2		1	
Cayman Isl. (KY)	4					3		3									2						
Chile (CL)							7																
China (CN)	16					23	1	100			1		1	1			20						
Colombia (CO)						1			5											1			
Croatia (HR)																							
Cyprus (CY)		1		2		2				3	2					4		1					
Czech Repub. (CZ)		1														1							
Dem Rep Con. (CD)						1																	
Denmark (DK)	2		1			1					44												
Egypt (EG)						1						6											
Estonia (EE)													1								1		
Faroe Islands (FO)																							
Finland (FI)						1					2		32	1									
France (FR)	3		7	1		10		2			1		1	198	1							2	4
Germany (DE)	3	3	2			5					1		1	6	51	1		2			1	2	3
Ghana (GH)	2					2																	
Gibraltar (GI)		1																					
Greece (GR)	1															19							
Honduras (HN)																	1						
Hong Kong (HK)	15					10		25									192						
Iceland (IS)						2							1										
India (IN)	1		1	1		2												94				1	
Indonesia (ID)	4													1			1		7				
Ireland-Rep (IE)				2		3		1				1		2						32		1	
Isle of Man (IM)																					5		
Israel (IL)						1								1								24	
Italy (IT)	2			1		1					1			2									89
Japan (JP)	13		1	1		3								1	1		2		1	1			
Jersey (JE)	2																			1			
Kazakhstan (KZ)																							
Lebanon (LB)	1																						
Liechtenstein (LI)																							
Luxembourg (LU)	2	1	1	1	2	3					1		3	5	4	1	2						3
Malaysia (MY)																	2		1				
Malta (MT)																							
Marshall Is (MH)																							
Mauritius (MU)						1												3					
Mexico (MX)	1			1		2	1																
Mongolia (MN)						1																	
Neth Antilles (AN)																							
Netherlands (NL)	2		4		1	9							2	3	3	1	2	2		2		1	1
New Zealand (NZ)	4																						
Nigeria (NG)						1																	

Bidder Country	Target Country: JP	LU	MY	MX	NL	NZ	NO	PL	PT	RU	SG	SI	ZA	KR	ES	LK	SE	CH	TW	TH	TN	TR	UK	US	VN	Total
Argentina (AR)																								3		3
Australia (AU)		1	1			13					1												17	24		694
Austria (AT)					1		1				1												3	3		16
Bahamas (BS)																								3		3
Bahrain (BH)																								3		3
Belgium (BE)					6			1				1			1		1						7	11		59
Bermuda (BM)							1						1										11	38		76
Botswana (BW)													1													1
Brazil (BR)									1						1								2	3		51
British Virgin (VG)	1										3		1										7	2		28
Bulgaria (BG)																							1			2
Canada (CA)				1	1	2	1				1		2				3	1					26	208		1249
Cayman Isl. (KY)	4										9			1					1				11	3		41
Chile (CL)													2													9
China (CN)	2		2		1	1	1				4		1		1			1		1			7	17		202
Colombia (CO)																							1			8
Croatia (HR)												1														1
Cyprus (CY)								3		2													3			23
Czech Repub. (CZ)																										2
Dem Rep Con. (CD)																										1
Denmark (DK)					2		2	2									3	1					3	9		70
Egypt (EG)																										7
Estonia (EE)																										2
Faroe Islands (FO)																							1			1
Finland (FI)					2		2										6						1	9		56
France (FR)	2	1			13		2	1			2	1			3		6	2		1	1		34	72		371
Germany (DE)	1	2	1		3	1	2	2				1	1		3		5	4	1	1			21	63		193
Ghana (GH)																							1			5
Gibraltar (GI)																							3			4
Greece (GR)							1																1	1		23
Honduras (HN)																										1
Hong Kong (HK)	1		11			1					11							2					10	9		287
Iceland (IS)							1										1						3			8
India (IN)													1			1							2	7		111
Indonesia (ID)							1				1															15
Ireland-Rep (IE)							1							2									19	14		78
Isle of Man (IM)					1																		7			13
Israel (IL)																							2	19		47
Italy (IT)					3			1					1		2								5	15		123
Japan (JP)	593		2		2						5		2		1		2	2	1	3			9	43		689
Jersey (JE)																	1						14	2		20
Kazakhstan (KZ)										1																1
Lebanon (LB)																										1
Liechtenstein (LI)																		1								1
Luxembourg (LU)		4			3			1					1		2			3				1	8	11		63
Malaysia (MY)			140				2				3		1										1	1		151
Malta (MT)																	1						1			2
Marshall Is (MH)											1															1
Mauritius (MU)											1									1						6
Mexico (MX)		1		4	1	1									1			1						6		20
Mongolia (MN)																										1
Neth Antilles (AN)					1																			1		2
Netherlands (NL)		2	5	1	78		2	7		1	1				2		6	3					24	64	1	230
New Zealand (NZ)						31												1					1	3		40
Nigeria (NG)																							1			2

Bidder Country	AU	AT	BE	BM	BR	CA	CL	CN	CO	CY	DK	EG	FI	FR	DE	GR	HK	IN	ID	IE	IM	IL	IT
Norway (NO)	1		1			3							2			1							
Pap. N Guin. (PG)	3																						
Poland (PL)						1																	
Portugal (PT)						1																	
Puerto Rico (PR)																							
Qatar (QA)	1													1									
Romania (RO)																							
Russian Fed (RU)	1					3																	
Saudi Arabia (SA)																							
Seychelles (SC)																	1						
Singapore (SG)	14					1		4						1			4	3	3				
Slovenia (SI)																							
South Africa (ZA)	8					7		1															
South Korea (KR)	1					1								1			1		3				
Spain (ES)	3					2	1							3	1								1
Sri Lanka (LK)																							
Sweden (SE)	3					4	1				5		4	1									
Switzerland (CH)	9		2			8		1	1	2	1	1	1	3	1			1					2
Taiwan (TW)						1							1		1		2						
Tanzania (TZ)																							
Thailand (TH)						1											1		1				
Tunisia (TN)																							
Turkey (TR)						1																	
UK (UK)	23	3	3	1		32					7		3	13	4	1	1			16	4	3	2
USA (US)	87	2	4	9		274	2	9			6		9	22	6	3	5	1		15		32	7
UAE (AE)	2			1		2						3								1	1		
Vietnam (VN)						1																	
Total	906	15	46	36	42	1415	13	146	9	5	72	11	63	273	74	34	245	109	17	73	14	68	112

Bidder Country	JP	LU	MY	MX	NL	NZ	NO	PL	PT	RU	SG	SI	ZA	KR	ES	LK	SE	CH	TW	TH	TN	TR	UK	US	VN	Total
Norway (NO)						1	64	1									6						4	5		89
Pap. N Guin. (PG)																							1			4
Poland (PL)								31			1						1									34
Portugal (PT)									11						1											13
Puerto Rico (PR)																								2		2
Qatar (QA)																						1	2			5
Romania (RO)																							1			1
Russian Fed (RU)										11							1						2	5		23
Saudi Arabia (SA)	1		1																							2
Seychelles (SC)			2																					1		4
Singapore (SG)			8								132					2				2			6	11		191
Slovenia (SI)												5														5
South Africa (ZA)		1											110								1		11	5		144
South Korea (KR)			1											82									1	10		101
Spain (ES)	1				3			1	2						65		1						4	10		98
Sri Lanka (LK)																22										22
Sweden (SE)					4		9								1		167	1					9	24		233
Switzerland (CH)					3		1								1		3	18					13	41		113
Taiwan (TW)	1																		114					3	1	124
Tanzania (TZ)																							1			1
Thailand (TH)																				35						38
Tunisia (TN)																					2					2
Turkey (TR)																						12		1		14
UK (UK)	3	1			5	2	4	1			6		4	2	4		13	3					1353	161		1678
USA (US)	8	2	2		14	4	13	1			7		3	3	1		25	7	7	1			176	6734		7501
UAE (AE)											3		2									1	2			18
Vietnam (VN)																									13	14
Total	618	15	176	6	147	57	111	53	14	15	193	9	134	90	90	25	252	51	124	45	4	15	1854	7680	15	15591

Table 3: Summary statistics

This table presents summary statistics of our key variables. Panel A presents summary statistics (Mean, Median, and Standard Deviation) of our main dependent and independent variables: 52wHigh$_i$, Offer Price$_i$ (PPS), Premia$_i$, Target CAR, Bidder CAR, Target or Bidder Market Capitalization, Deal Value, Deal Relative Size by domestic and foreign target deals, and Exchange Rate Volatility (for CBA only). Panel B presents summary statistics of Premia$_i$ by the bidding firm's macro-industry. All variables are defined in Appendix Table (B).

	All M&A				**Dom M&A**				**CBA**				
	N	Mean	Median	S.D.	*N*	Mean	Median	S.D.	*N*	Mean	Median	S.D.	Diff.
	Panel A: Various measures of premia, abnormal returns and deal characteristics												
52wHigh$_i$	15,591	36.84	22.08	42.70	12,374	36.82	22.23	42.57	3,217	36.91	21.76	43.23	-0.09
Offer Price$_i$	15,591	28.08	8.43	170.04	12,374	29.60	9.00	180.70	3,217	22.27	6.50	120.44	7.33***
Premia$_i$	15,591	34.74	29.38	25.65	12,374	34.08	28.77	25.52	3,217	37.26	31.65	25.97	-3.18***
Target CAR$_{i,t-1,t+1}$	15,486	22.22	16.50	24.56	12,297	21.47	15.97	24.05	3,189	25.11	19.07	26.21	-3.63***
Target CAR$_{i,t-2,t+2}$	15,566	23.18	17.63	25.01	12,357	22.45	17.02	24.53	3,209	26.00	20.29	26.59	-3.54***
Target CAR$_{i,t-5,t+5}$	15,580	25.11	19.49	26.53	12,367	24.33	18.68	26.15	3,213	28.12	22.58	27.75	-3.78***
Bidder CAR$_{i,t-2,t+2}$	8,748	-0.53	-0.46	7.50	6,977	-0.62	-0.60	7.62	1,771	-0.20	-0.07	6.97	-0.42**
Target MV$_i$ (log)	15,588	5.06	4.94	1.92	12,371	4.95	4.82	1.91	3,217	5.49	5.45	1.92	-0.54***
Bidder MV$_i$ (log)	9,370	7.29	7.31	2.25	7,483	7.07	7.08	2.22	1,887	8.16	8.36	2.15	-1.09***
Deal Value$_i$ (log)	15,591	5.36	5.25	1.95	12,374	5.24	5.14	1.94	3,217	5.80	5.72	1.92	-0.56***
Deal Relative Size (log)	9,370	-1.72	-1.45	1.73	7,483	-1.64	-1.36	1.70	1,887	-2.04	-1.83	1.83	0.40***
Exchange Rate Volatility	-	-	-	-	-	-	-	-	3,217	1.38	0.025	17.80	-
Exchange Rate Volatility (log)	-	-	-	-	-	-	-	-	3,217	0.140	0.024	0.508	-
	Panel B: Premia$_i$ by Bidder Macro Industry												
Consumer Products and Services	636	36.02	31.37	25.65	491	35.45	30.13	26.40	145	37.94	33.19	22.92	-2.49
Consumer Staples	512	34.72	29.59	24.03	387	33.68	28.18	22.91	125	37.93	31.74	27.07	-4.25
Energy and Power	1,096	32.89	27.94	24.96	874	31.83	27.41	24.26	222	37.05	31.42	27.21	-5.22
Financials	5,793	31.53	26.85	23.52	4,900	31.27	26.51	23.37	893	32.99	28.24	24.33	-1.72
Healthcare	1,176	41.55	37.16	27.20	874	40.22	35.42	27.19	302	45.41	41.79	26.90	-5.19
High Technology	1,762	40.09	34.04	27.78	1,372	39.92	33.68	27.88	390	40.67	34.84	27.46	-0.75
Industrials	1,230	35.05	30.38	25.01	892	34.33	30.24	24.48	338	36.94	30.89	26.29	-2.61
Materials	1,400	39.83	34.14	28.25	958	39.75	34.14	29.03	442	40.00	34.13	26.52	-0.25
Media and Entertainment	585	34.50	30.00	24.54	462	34.51	29.71	25.23	123	34.49	33.29	21.86	0.01
Real Estate	549	23.58	17.24	22.87	481	23.54	17.11	23.52	68	23.81	18.21	17.82	-0.27
Retail	450	35.00	29.74	25.36	375	34.58	29.34	25.64	75	37.13	30.66	23.99	-2.56
Telecommunications	402	37.20	29.88	28.92	308	37.01	29.33	29.05	94	37.83	31.49	28.65	-0.82

Table 4: Determinants and effects of offer price exceeding the target share's 52-week high

This table presents probit regression results on the likelihood of $Offer_i$ exceeding 52wHigh$_i$ and the likelihood of deal withdrawal, and linear regression results on the determinants of the deal's time to completion. Columns (1)-(3) present probit regressions results on the likelihood of the $Offer_i$ price (obtained from Refinitiv) to exceed the target's share price peak (52wHigh$_i$) over the window from $t-365$ to $t-31$ calendar days prior to M&A announcement. The dependent variable is a categorical one that is assigned the value of one if $Offer_i >$ 52wHigh$_i$ and zero otherwise. Columns (4)-(6) present probit regression results on the likelihood of deal withdrawal (obtained from Refinitiv) where the dependent variable is a categorical one that is assigned the value of one if the deal is classified as withdrawn and zero otherwise. Lastly, Columns (7)-(10) present linear regressions results on the factors affecting the deal's 'Time to Completion' (log). The dependent variable is measured as the log of the number of days between the deal's effective date and the announcement date (both obtained from Refinitiv). In Column (9) the sample is limited to only deals where the $Offer_i \leq$ 52wHigh$_i$ whereas in the Column (10) the the sample is limited to only deals where $Offer_i >$ 52wHigh$_i$. The key aggressors include the CBA$_i$ dummy that is assigned the value of one if the bidder and target are based in different countries and zero otherwise (the same country); the $Offer_i >$ 52wHigh$_i$ dummy (in Columns 4-10) variable that is assigned the value of one if the offer price (from Refinitiv) exceeds the target firm's share price peak over the window from $t-365$ to $t-31$ calendar days and zero otherwise; and the Bid. Listed$_i$ dummy that is assigned the value of one if the bidder is a listed firm and zero otherwise (unlisted bidder). Control variables include the target share price volatility in the window from $t-365$ to $t-31$ calendar days, the target inverse price, the method of payment, diversified deal dummy, hostile deal dummy, the tender offer dummy, the log of the number of bidder and target financial advisors, financial buyer, hitech buyer, ratios of equity value to cash-flows and sales, the world uncertainty index, and also the Exchange Rate volatility (ERV) from $t-365$ to $t-31$ calendar days prior to M&A announcement. All variables are defined in Appendix Table (B). Pseudo R^2 is the Pseudo R^2 value in Columns (1 to 6) and Adj. R^2 is the adjusted R^2 value in Columns (7 to 10). We report heteroskedasticity-robust standard errors (in parentheses). Standard errors are clustered at the bidding-firm level only in Columns (4)–(10). ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	$Pr(Offer_i > 52wHigh_i = 1)$			$Pr(Withdrawn_i = 1)$			$log(Time\ to\ Completion_i)$ (Only Completed M&A)			
Sample used:	All M&A			All M&A			All Completed M&A		$Offer_i \leq 52wHigh_i$	$Offer_i > 52wHigh_i$
CBA$_i$	0.118***	0.110***	0.009	0.246***	0.210***	0.247***	0.0545***	0.0450**	0.0343*	0.0342***
	(0.0252)	(0.0277)	(0.0427)	(0.0292)	(0.0386)	(0.0271)	(0.0164)	(0.0200)	(0.0200)	(0.0112)
Offer$_i$>52wHigh$_i$				-0.137***	-0.151***	-0.0933***	0.0321**	0.0333**		
				(0.0216)	(0.0249)	(0.0133)	(0.0156)	(0.0154)		
CBA$_i$ × Bid. Listed$_i$			0.169***						0.0744*	-0.0656**
			(0.0541)						(0.0447)	(0.0293)
CBA$_i$ × Offer$_i$>52wHigh$_i$					0.0617			-0.0568**		
					(0.0500)			(0.0256)		
Offer$_i$>52wHigh$_i$ × Bid. Listed$_i$						-0.0743**				
						(0.0355)				
Controls	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wald χ^2 or F-Stat	21.7***	1261.5***	1274.2***	1483.6***	1484.4***	1704.9	208.0***	165.4***	89.6***	117.3***
Pseudo R^2 or Adj. R^2	0.001	0.077	0.077	0.082	0.082	0.083	0.162	0.138	0.120	0.165
NObs	15,591	15,591	15,591	15,591	15,591	15,591	12,494	12,494	4,861	7,633

Table 5: Univariate tests on the impact of target domicile and reference points on premia

This table reports univariate results on the impact of CBA vs. domestic target M&As on Premia_i for all deals (Panel A), and for deals sorted by the target firm's reference point (Panel B), the bidder listing status (Panel C), the deal's method of payment (Panel D), and the deal's industry diversification (Panel E). The Premia_i is the offer price from Refinitiv expressed as the log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date. All represents all M&A deals; Domestic represents deals where both the acquirer and target firms are based in the same country; CBA represents deals where the acquirer and target firms are based in different countries. Diff. presents the difference between the premia offered in CBA vs. Domestic target M&A. All variables are defined in Appendix Table (B). *t*-statistics are presented in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

		All	Domestic	CBA	Domestic vs CBA
			Panel A: All M&A		
All	Mean	34.73***	34.08***	37.26***	3.18***
	t-stat	(169.13)	(148.55)	(81.39)	(6.27)
	N	15,591	12,374	3,217	
			Panel B: All M&A by Reference Point (Tertiles)		
Low	Mean	25.54***	25.09***	27.25***	2.15***
	t-stat	(103.12)	(91.76)	(47.39)	(3.54)
	N	5,335	4,225	1,110	
Medium	Mean	33.43***	32.95***	35.32***	2.36***
	t-stat	(112.4)	(97.97)	(55.84)	(3.31)
	N	5,318	4,233	1,085	
High	Mean	46.07***	44.99***	50.19***	5.19***
	t-stat	(102.66)	(89.41)	(51.16)	(4.71)
	N	4,938	3,916	1,022	
High vs Low	Mean	20.53***	19.90***	22.94***	
	t-stat	(40.84)	(35.44)	(20.56)	
			Panel C: All M&A by Acquirer Listing Status		
Private	Mean	32.48***	32.24***	33.57***	1.32
	t-stat	(65.97)	(59.38)	(28.72)	(1.04)
	N	2,744	2,244	500	
Listed	Mean	35.50***	34.61***	38.96***	4.35***
	t-stat	(133.51)	(116.01)	(67.11)	(6.67)
	N	9,674	7,681	1,993	
Subsidiary	Mean	34.33***	34.10***	35.12***	1.02
	t-stat	(81.44)	(72.81)	(36.94)	(1.02)
	N	3,173	2,449	724	
			Panel D: All M&A by Method of Payment		
Cash	Mean	34.72***	33.97***	36.84***	2.87***
	t-stat	(132.16)	(112.47)	(69.72)	(4.81)
	N	8,857	6,538	2,319	
Stock	Mean	35.04***	34.45***	40.00***	5.55***
	t-stat	(75.89)	(70.95)	(27.36)	(3.71)
	N	3,763	3,364	399	
Mixed	Mean	34.38***	33.85***	36.99***	3.13***
	t-stat	(75.74)	(68.54)	(32.41)	(2.58)
	N	2,971	2,472	499	
			Panel E: All M&A by Industry Diversification		
Focused	Mean	34.64***	33.98***	37.03***	3.05***
	t-stat	(123.63)	(108.32)	(59.89)	(4.49)
	N	8,442	6,616	1,826	
Diversified	Mean	34.84***	34.19***	37.55***	3.36***
	t-stat	(115.43)	(101.64)	(55.25)	(4.43)
	N	7,149	5,758	1,391	

Table 6: The impact of target domicile and target reference points on premia

This table reports OLS regression estimates of the impact of foreign deals (the CBA indicator), the target reference points, their product, and several other control variables, on premia. We estimate the following regression:

$$\text{Premia}_i = \alpha + \beta_1 \text{CBA}_i + \beta_2 52\text{wHigh}_i + \beta_3 \Big(\text{CBA}_i \times 52\text{wHigh}_i \Big) + \sum_{j=4}^{k} \beta_j X_{j,i} + \varepsilon_i$$

where Premia_i is the offer price from Refinitiv expressed as the log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date, CBA_i is a dummy variable that is assigned the value of one for deals in which the bidder and target are based in different countries and the value of zero otherwise (both the bidder and target are based in the same country), and 52wHigh_i is the high stock price over the window from $t-365$ to $t-31$ calendar days prior to the deal's announcement date expressed as a log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date. The control variables $(X_{j,i})$ across Columns (5)-(10) include: Tar. Volatility$_i$, Inv. Price$_i$, Cash$_i$, Stock$_i$, Listed$_i$, Private$_i$, Diversified$_i$, Hostile$_i$, Tender$_i$, #TrgFA$_i$, #BidFA$_i$, Financial Buyer$_i$, HiTech Buyer$_i$, EV2CF$_i$, EV2Sales$_i$, WUI$_i$, and the Exchange Rate Volatility$_i$ (ERV$_i$). All variables are defined in Appendix Table (B). All continuous variables have been winsorized at the 1st and 99th percentiles. Time FE, Bidder Country FE, and Target Country FE indicate year, bidder country, and target country fixed effects, respectively. NObs indicates the number of observations. Adj. R^2 is the adjusted R^2 value. We report heteroskedasticity-robust standard errors (in parentheses), which are clustered at the bidding-firm level. The asterisks *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
CBA$_i$	3.592***		3.574***	2.582***	0.853	1.607**	2.267***	1.116	2.241***	1.960**
	(0.844)		(0.951)	(0.825)	(0.702)	(0.708)	(0.706)	(0.795)	(0.632)	(0.807)
52wHigh$_i$		0.204***	0.204***	0.198***	0.150***	0.139***	0.134***	0.137***	0.131***	
		(0.00630)	(0.00619)	(0.00734)	(0.0127)	(0.0128)	(0.0139)	(0.0132)	(0.0154)	
CBA$_i$ × 52wHigh$_i$				0.0268**	0.0314**	0.0332**	0.0271**	0.0427***	0.0321**	
				(0.0118)	(0.0143)	(0.0150)	(0.0136)	(0.0146)	(0.0152)	
Tar. Volatility$_i$					4.976***	4.510***	3.950***	3.655***	2.914***	8.577***
					(0.764)	(0.664)	(0.615)	(0.817)	(0.698)	(0.660)
Inv. Price$_i$					1.477***	2.825***	3.529***	3.036***	3.800***	2.276***
					(0.146)	(0.147)	(0.222)	(0.149)	(0.251)	(0.136)
Cash$_i$					-0.316	-0.464	-0.374	-0.147	0.0568	-0.716
					(0.746)	(0.687)	(0.661)	(0.617)	(0.620)	(0.926)
Stock$_i$					-4.477***	-3.624***	-3.575***	-3.948***	-3.800***	-4.000***
					(0.566)	(0.585)	(0.569)	(0.594)	(0.587)	(0.577)
Listed$_i$					0.417	-0.286	-0.320	-0.210	-0.0264	0.836
					(0.504)	(0.436)	(0.403)	(0.469)	(0.490)	(0.566)
Private$_i$					-2.330***	-2.838***	-2.827***	-2.373***	-2.295***	-2.030***
					(0.270)	(0.254)	(0.252)	(0.238)	(0.279)	(0.278)
Diversified$_i$					-0.207	-0.504	-0.665	-0.605	-0.765	-0.683
					(0.421)	(0.473)	(0.465)	(0.511)	(0.504)	(0.416)
Hostile$_i$					-0.489	0.977	1.485	0.451	0.923	-0.123
					(0.997)	(1.020)	(0.986)	(1.163)	(1.173)	(1.020)
Tender$_i$					-0.231	1.387***	1.667***	1.288***	1.645***	-0.408
					(0.372)	(0.520)	(0.646)	(0.443)	(0.502)	(0.386)
#TrgFA$_i$					1.904***	0.953*	1.079**	1.056**	0.999*	2.102***
					(0.484)	(0.495)	(0.494)	(0.537)	(0.529)	(0.504)
#BidFA$_i$					-0.355	0.135	0.548	0.807	1.322*	-0.166
					(0.644)	(0.629)	(0.605)	(0.699)	(0.718)	(0.594)
Financial Buyer$_i$					-2.169***	-1.788***	-1.669***	-2.016***	-1.858***	-2.269***
					(0.416)	(0.379)	(0.367)	(0.432)	(0.407)	(0.427)
HiTech Buyer$_i$					1.763***	0.622	0.760	1.015	1.049	2.710***
					(0.617)	(0.616)	(0.636)	(0.635)	(0.677)	(0.635)
EV2CF$_i$					1.951***	1.896***	1.902***	1.962***	1.993***	1.749***
					(0.237)	(0.215)	(0.215)	(0.232)	(0.224)	(0.231)
EV2Sales$_i$					1.004***	1.187***	1.317***	1.299***	1.390***	0.805***
					(0.262)	(0.211)	(0.224)	(0.222)	(0.267)	(0.278)
WUI$_i$					-1.772***	-1.172**	-1.224**	-1.699**	-1.868***	-0.937
					(0.636)	(0.512)	(0.528)	(0.674)	(0.656)	(0.649)
ERV$_i$					2.390***	3.137***	2.162***	2.900**	2.122***	2.223***
					(0.645)	(1.021)	(0.611)	(1.315)	(0.652)	(0.727)
Time FE	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No
Bidder Country FE	No	No	No	No	No	Yes	No	Yes	No	No
Target Country FE	No	No	No	No	No	No	Yes	No	Yes	No
Adj. R^2	0.034	0.136	0.139	0.140	0.180	0.195	0.196	0.269	0.266	0.133
F-Stat	18.1***	1050.0***	769.9***	512.6***	129.8***	163.9***	162.1***	135.8***	132.3***	82.5***
NObs	15,591	15,591	15,591	15,591	15,591	15,591	15,591	15,591	15,591	15,591

Table 7: The impact of target domicile and target reference points on premia
Piecewise regression tests

This table reports OLS regression estimates of the impact of foreign deals (the CBA indicator), the target reference points, their product, and several other control variables, on premia. We run piecewise (PW) linear regressions:

$$\text{Premia}_i = \alpha + \beta_1 \text{CBA}_i + \sum_{j=2}^{4} \beta_j \text{PW}_{j,i} + \sum_{j=5}^{7} \beta_j \left(\text{CBA}_i \times \text{PW}_{j,i} \right) + \sum_{j=8}^{k} \beta_j X_{j,i} + \varepsilon_i$$

where Premia_i is the offer price from Refinitiv expressed as the log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date, and CBA_i is a dummy variable that is assigned the value of one for deals in which the bidder and target are based in different countries and the value of zero otherwise (both the bidder and target are based in the same country). The first piecewise segment, $PW_{1,i}$, is the $\min(52\text{wHigh}_i, 25)$, the second piecewise segment, $PW_{2,i}$, is the $\max(0, \min(52\text{wHigh}_i - 25, 50))$, and the third piecewise segment, $PW_{3,i}$, is the $\max(52\text{wHigh}_i - 75, 0)$. 52wHigh_i is the high stock price over the window from $t-365$ to $t-31$ calendar days prior to the deal's announcement date expressed as a log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date. The control variables $(X_{j,i})$ across Columns (4), (6) and (8) include: Tar. Volatility_i, Inv. Price_i, Cash_i, Stock_i, Listed_i, Private_i, Diversified_i, Hostile_i, Tender_i, $\#\text{TrgFA}_i$, $\#\text{BidFA}_i$, Financial Buyer_i, HiTech Buyer_i, EV2CF_i, EV2Sales_i, WUI_i, and the Exchange Rate Volatility_i (ERV_i). All variables are defined in Appendix Table (B). All continuous variables have been winsorized at the 1st and 99th percentiles. Time FE indicate year fixed effects. NObs indicates the number of observations. Adj. R^2 is the adjusted R^2 value. We report heteroskedasticity-robust standard errors (in parentheses), which are clustered at the bidding-firm level. The asterisks *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	All M&A				Only Dom. M&A		Only CBA	
CBA_i		3.654***	2.917***	1.140*				
		(0.934)	(0.640)	(0.635)				
$\text{PW}_{1,i}$	0.456***	0.458***	0.464***	0.386***	0.469***	0.391***	0.427***	0.356***
	(0.0189)	(0.0188)	(0.0243)	(0.0306)	(0.0240)	(0.0332)	(0.0419)	(0.0383)
$\text{PW}_{2,i}$	0.215***	0.214***	0.193***	0.134***	0.193***	0.134***	0.301***	0.244***
	(0.0141)	(0.0141)	(0.0161)	(0.0213)	(0.0160)	(0.0236)	(0.0299)	(0.0316)
$\text{PW}_{3,i}$	0.114***	0.114***	0.119***	0.0992***	0.118***	0.0986***	0.0923***	0.0757***
	(0.0121)	(0.0119)	(0.0129)	(0.0127)	(0.0129)	(0.0130)	(0.0247)	(0.0236)
$\text{CBA}_i \times \text{PW}_{1,i}$			-0.0272	-0.0147				
			(0.0582)	(0.0534)				
$\text{CBA}_i \times \text{PW}_{2,i}$			0.106***	0.107***				
			(0.0338)	(0.0361)				
$\text{CBA}_i \times \text{PW}_{3,i}$			-0.0252	-0.0231				
			(0.0256)	(0.0253)				
Tar. Volatility_i				4.573***		4.653***		4.030***
				(0.770)		(1.098)		(1.063)
Inv. Price_i				1.391***		1.349***		1.707***
				(0.148)		(0.184)		(0.234)
Cash_i				-0.381		-0.597		-0.153
				(0.770)		(0.814)		(1.214)
Stock_i				-4.563***		-4.515***		-4.145**
				(0.564)		(0.658)		(1.743)
Listed_i				0.394		-0.746		3.659***
				(0.528)		(0.638)		(0.781)
Private_i				-2.383***		-2.698***		-1.817***
				(0.263)		(0.251)		(0.468)

Table 7 (continued)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	All M&A				Only Dom. M&A		Only CBA	
$Diversified_i$				-0.144		-0.0570		-0.559
				(0.433)		(0.501)		(0.821)
$Hostile_i$				-0.845		-0.627		-1.217
				(0.950)		(1.125)		(1.643)
$Tender_i$				-0.281		-0.440		0.552
				(0.374)		(0.408)		(1.011)
$\#TrgFA_i$				1.976***		2.151***		0.820
				(0.489)		(0.663)		(1.144)
$\#BidFA_i$				-0.350		-0.977*		2.072
				(0.642)		(0.578)		(1.389)
$Financial\ Buyer_i$				-1.942***		-1.776***		-2.909***
				(0.456)		(0.568)		(0.886)
$HiTech\ Buyer_i$				1.676***		2.080***		0.252
				(0.625)		(0.791)		(1.437)
$EV2CF_i$				1.970***		1.904***		1.998***
				(0.232)		(0.258)		(0.491)
$EV2Sales_i$				1.049***		1.197***		0.477
				(0.262)		(0.268)		(0.399)
WUI_i				-1.914***		-2.015***		-1.487
				(0.629)		(0.697)		(1.474)
ERV_i				2.473***				2.201***
				(0.659)				(0.693)
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-Stat	668.7	652.4	374	152.1	378.9	147.6	206.8	43.26
Adj. R^2	0.146	0.149	0.150	0.187	0.142	0.180	0.178	0.218
NObs	15,591	15,591	15,591	15,591	12,374	12,374	3,217	3,217

Table 8: Robustness tests on the impact of target reference points on premia

This table reports OLS regression estimates of the impact of foreign deals (the CBA indicator), the target reference points, their product, and several other control variables, on premia. We estimate the following regression:

$$\text{Premia}_i = \alpha + \beta_1 \text{CBA}_i + \beta_2 52\text{wHigh}_i + \beta_3 \Big(\text{CBA}_i \times 52\text{wHigh}_i \Big) + \sum_{j=4}^{k} \beta_j X_{j,i} + \varepsilon_i$$

where Premia_i is the offer price from Refinitiv expressed as the log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date, CBA_i is a dummy variable that is assigned the value of one for deals in which the bidder and target are based in different countries and the value of zero otherwise (both the bidder and target are based in the same country), and 52wHigh_i is the high stock price over the window from $t-365$ to $t-31$ calendar days prior to the deal's announcement date expressed as a log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date. The control variables across all Columns include: Tar. Volatility_i, Inv. Price_i, Cash_i, Stock_i, Listed_i, Private_i, Diversified_i, Hostile_i, Tender_i, $\#\text{TrgFA}_i$, $\#\text{BidFA}_i$, Financial Buyer_i, HiTech Buyer_i, EV2CF_i, EV2Sales_i, WUI_i, and the Exchange Rate Volatility_i (ERV_i). All variables are defined in Appendix Table (B). All continuous variables have been winsorized at the 1st and 99th percentiles. Time FE in Row (1)-(22) indicate year fixed effects and Time combined with T. Nation FE in Row (23) indicate year-target-nation FE (as in Smith et al., 2019). NObs indicates the number of observations. Adj. R^2 is the adjusted R^2 value. In Rows (1)-(22) we report heteroskedasticity-robust standard errors (in parentheses), which are clustered at the bidding-firm level. In Row (23), standard errors are clustered at the time(month) frequency (as in Smith et al., 2019). The asterisks *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

		$\hat{\beta}_1$	$\hat{\beta}_2$	$\hat{\beta}_3$	Controls	FE	F-stat	Adj. R^2	NObs
(1) All	coef.	0.853	0.150***	0.0314**	Yes	Time	129.8***	0.180	15,591
	s.e.	(0.702)	(0.0127)	(0.0143)					
(2) US Bid.	coef.	-2.943**	0.137***	0.00231	Yes	Time	75.8***	0.240	7,501
	s.e.	(1.334)	(0.0165)	(0.0268)					
(3) Non-US Bid.	coef.	2.291*	0.135***	0.0525***	Yes	Time	55.4***	0.161	8,090
	s.e.	(1.301)	(0.0115)	(0.0152)					
(4) US Trg.	coef.	0.611	0.131***	0.0252	Yes	Time	77.6***	0.251	7,680
	s.e.	(0.930)	(0.0184)	(0.0292)					
(5) Non-US Trg.	coef.	2.153*	0.135***	0.0427***	Yes	Time	63.1***	0.156	7,911
	s.e.	(1.299)	(0.0109)	(0.0145)					
(6) Bid. in DM	coef.	0.362	0.148***	0.0460***	Yes	Time	123.1***	0.189	14,474
	s.e.	(0.851)	(0.0127)	(0.0142)					
(7) Bid. in Non-DM	coef.	7.036***	0.154***	-0.0323	Yes	Time	14.2***	0.147	1,117
	s.e.	(1.668)	(0.0328)	(0.0404)					
(8) Trg. in DM	coef.	0.611	0.148***	0.0400***	Yes	Time	122.9***	0.188	14,706
	s.e.	(0.675)	(0.0125)	(0.0145)					
(9) Trg. in Non-DM	coef.	5.140***	0.145***	-0.0540	Yes	Time	9.7***	0.146	885
	s.e.	(1.755)	(0.0369)	(0.0339)					
(10) Freq. Bid.	coef.	1.474	0.128***	0.0715***	Yes	Time	45.3***	0.193	8,197
	s.e.	(0.985)	(0.0107)	(0.0255)					

Table 8 (continued)

		$\hat{\beta}_1$	$\hat{\beta}_2$	$\hat{\beta}_3$	Controls	FE	F-stat	Adj. R^2	NObs
(11) Cash	coef.	0.465	0.172***	0.0224	Yes	Time	116.4***	0.183	8,857
	s.e.	(0.660)	(0.00910)	(0.0158)					
(12) Stock	coef.	1.806	0.102***	0.0451	Yes	Time	29.2***	0.197	3,770
	s.e.	(1.762)	(0.0145)	(0.0336)					
(13) Mixed	coef.	3.227**	0.158***	0.00283	Yes	Time	26.9***	0.218	2,971
	s.e.	(1.432)	(0.0160)	(0.0417)					
(14) Non-Stock	coef.	1.033	0.171***	0.0162	Yes	Time	128.7***	0.185	11,821
	s.e.	(0.741)	(0.00884)	(0.0134)					
(15) Non-Cash	coef.	2.318**	0.121***	0.0346	Yes	Time	51.4***	0.196	6,734
	s.e.	(1.076)	(0.0112)	(0.0247)					
(16) Non-Mixed	coef.	0.340	0.147***	0.0382**	Yes	Time	108.1***	0.177	12,620
	s.e.	(0.682)	(0.0142)	(0.0173)					
(17) Listed Bid.	coef.	1.689**	0.131***	0.0488**	Yes	Time	61.5***	0.186	9,674
	s.e.	(0.805)	(0.0102)	(0.0197)					
(18) Private Bid.	coef.	0.331	0.166***	-0.0122	Yes	Time	589.7***	0.185	2,744
	s.e.	(0.550)	(0.00686)	(0.0125)					
(19) Sub. Bid.	coef.	-0.431	0.198***	0.00818	Yes	Time	715.8***	0.207	3,173
	s.e.	(0.410)	(0.00277)	(0.0120)					
(20) Non-Listed Bid.	coef.	-0.344	0.180***	0.00161	Yes	Time	865.2***	0.188	5,917
	s.e.	(0.338)	(0.00435)	(0.00940)					
(21) Non-Private Bid.	coef.	0.789	0.147***	0.0419***	Yes	Time	89.7***	0.183	12,847
	s.e.	(0.820)	(0.0122)	(0.0152)					
(22) Non-Sub. Bid.	coef.	1.605**	0.139***	0.0336*	Yes	Time	82.9***	0.181	12,418
	s.e.	(0.649)	(0.00967)	(0.0179)					
(23) Replication of	coef.	6.090*	0.078	-0.019	Yes	Time	6.51***	0.163	1,453
Smith et al. (2019)	s.e.	(3.650)	(0.0567)	(0.0921)		T. Nation			

Table 9: Further robustness tests on the impact of target reference points on premia

This table reports OLS regression estimates of the impact of foreign deals (the CBA indicator), the target 52-week highs, high index dummy, their product, and several other control variables, on premia. We estimate the following regression:

$$Premia_i = \alpha + \beta_1 CBA_i + \beta_2 52\text{wHigh}_i + \beta_3\Big(\text{CBA}_i \times 52\text{wHigh}_i\Big) + \beta_4\Big(\text{CBA}_i \times 52\text{wHigh}_i \times \text{HighIndex}_i\Big) + \beta_5 \text{HighIndex}_i + \sum_{j=6}^{k} \beta_j X_{j,i} + \varepsilon_i$$

where Premia_i is the offer price from Refinitiv expressed as the log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date, CBA_i is a dummy variable that is assigned the value of one for deals in which the bidder and target are based in different countries and the value of zero otherwise (both the bidder and target are based in the same country), and 52wHigh_i is the high stock price over the window from $t-365$ to $t-31$ calendar days prior to the deal's announcement date expressed as a log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date. We partition the sample into two (Panel A) or three (Panel B) segments based on a constructed indicator variable ($HighIndex$), defined as $HighIndex_i = 1$ if $Index_i > 50\%$ for two segments or $HighIndex_i = 1$ if $Index_i > 66.7\%$ for three segments. $Index_i$ is key characteristics of the deal or merging firms: deal value, the target or bidder market capitalization (measured 30 calendar days prior to the M&A announcement), real relative size, target firm volatility, inverse price, target firm sales or cash flows, and the World Uncertainty Index. The control variables across all Columns include: Tar. Volatility_i, Inv. Price_i, Cash_i, Stock_i, Listed_i, Private_i, Diversified_i, Hostile_i, Tender_i, $\#\text{TrgFA}_i$, $\#\text{BidFA}_i$, Financial Buyer_i, HiTech Buyer_i, EV2CF_i, EV2Sales_i, WUI_i, and the Exchange Rate Volatility_i (ERV_i). All variables are defined in Appendix Table (B). All continuous variables have been winsorized at the 1st and 99th percentiles. NObs indicates the number of observations. Adj. R^2 is the adjusted R^2 value. We report heteroskedasticity-robust standard errors (in parentheses), which are clustered at the bidding-firm level. The asterisks *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Panel A: 2 segments ($HighIndex_i = 1$ if $Index_i > 50\%$ in sample)								
$Index_i$:	DV	TMV	BMV	RS	Trg Vol	Inv. Prc	CF	Sales	WUI
CBA_i	0.482	1.098	1.691**	1.712**	0.187	0.902	0.847	0.834	0.862
	(0.751)	(0.801)	(0.829)	(0.826)	(0.696)	(0.727)	(0.707)	(0.680)	(0.719)
52wHigh_i	0.149***	0.150***	0.135***	0.135***	0.148***	0.150***	0.150***	0.150***	0.150***
	(0.0126)	(0.0124)	(0.0103)	(0.0103)	(0.0124)	(0.0126)	(0.0128)	(0.0128)	(0.0125)
$CBA_i \times 52\text{wHigh}_i$	0.0173	0.0220	0.0480*	0.0304	0.0973***	0.0259	0.0165	0.0128	0.0235
	(0.0182)	(0.0178)	(0.0253)	(0.0229)	(0.0232)	(0.0249)	(0.0150)	(0.0156)	(0.0179)
$CBA_i \times 52\text{wHigh}_i \times HighIndex_i$	0.0499**	0.0270	-0.0130	0.0331	-0.0678***	0.00608	0.0319*	0.0407**	0.0133
	(0.0245)	(0.0257)	(0.0296)	(0.0301)	(0.0193)	(0.0224)	(0.0188)	(0.0193)	(0.0258)
$HighIndex_i$	0.746*	-5.067***	2.224***	-1.941***	1.058	-0.233	0.267	-1.532***	0.529
	(0.445)	(0.520)	(0.569)	(0.605)	(0.663)	(1.025)	(0.457)	(0.528)	(0.690)
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.181	0.186	0.191	0.191	0.181	0.180	0.180	0.181	0.180
F-Stat	120.9***	131.8***	49.0***	49.4***	130.4***	119.1***	119.4***	120.2***	118.3***
NObs	15,591	15,591	9,370	9,370	15,591	15,591	15,591	15,591	15,591
	Panel B: 3 segments ($HighIndex_i = 1$ if $Index_i > 66.7\%$ in sample)								
$Index$:	DV	TMV	BMV	RS	Trg Vol	Inv. Prc	CF	Sales	WUI
CBA_i	0.540	1.017	1.550*	1.848**	-0.0205	1.094	0.738	0.750	0.871
	(0.677)	(0.693)	(0.824)	(0.824)	(0.657)	(0.784)	(0.680)	(0.692)	(0.702)
52wHigh_i	0.149***	0.150***	0.134***	0.135***	0.145***	0.151***	0.150***	0.150***	0.150***
	(0.0128)	(0.0126)	(0.0103)	(0.0103)	(0.0123)	(0.0123)	(0.0128)	(0.0128)	(0.0126)
$CBA_i \times 52\text{wHigh}_i$	0.0237	0.0248*	0.0487**	0.0400*	0.0930***	0.0112	0.0199	0.0197	0.0232
	(0.0153)	(0.0151)	(0.0237)	(0.0217)	(0.0211)	(0.0179)	(0.0141)	(0.0156)	(0.0177)
$CBA_i \times 52\text{wHigh}_i \times HighIndex_i$	0.0584***	0.0354*	-0.0155	0.00667	-0.0698***	0.0276	0.0498**	0.0456**	0.0196
	(0.0201)	(0.0214)	(0.0297)	(0.0348)	(0.0177)	(0.0241)	(0.0216)	(0.0189)	(0.0174)
$HighIndex_i$	-0.511	-4.189***	2.571***	-0.834	2.339***	-2.057***	-0.739	-2.440***	0.796
	(0.713)	(0.934)	(0.568)	(0.663)	(0.770)	(0.688)	(0.614)	(0.518)	(0.604)
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.181	0.184	0.191	0.190	0.181	0.181	0.180	0.181	0.180
F-Stat	122.1***	132.0***	48.7***	48.6***	126.0***	118.6***	119.7***	120.3***	119.8***
NObs	15,591	15,591	9,370	9,370	15,591	15,591	15,591	15,591	15,591

Table 10: The impact of exchange rate volatility and target reference points on premia

This table reports OLS regression estimates of the impact of exchange rate volatility dummies (the control group, where $ERV_i = 0$, represent domestic M&A), the target 52-week high, the product of each of the dummies with the 52-week high, and several other control variables, on premia. We estimate the following regression:

$$Premia_i = \alpha + \beta_1 \text{Low}ERV_i + \beta_2 \text{Midium} + \beta_3 \text{High}ERV_i + \beta_4 52\text{wHigh}_i + \beta_5 \Big(\text{Low}ERV_i \times 52\text{wHigh}_i \Big) + \beta_6 \Big(\text{Medium}ERV_i \times 52\text{wHigh}_i \Big) + \beta_7 \Big(\text{High}ERV_i \times 52\text{wHigh}_i \Big) + \sum_{j=8}^{k} \beta_j X_{j,i} + \varepsilon_i$$

where Premia$_i$ is the offer price from Refinitiv expressed as the log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date, LowERV_i (MediumERV_i) [HighERV_i] is a dummy variable that is assigned the value of one for the lower one-third (medium one-third) [high one-third] of the sample ranked by ERV$_i$, and 52wHigh$_i$ is the high stock price over the window from $t-365$ to $t-31$ calendar days prior to the deal's announcement date expressed as a log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date. The control variables across all Columns include: Tar. Volatility$_i$, Inv. Price$_i$, Cash$_i$, Stock$_i$, Listed$_i$, Private$_i$, Diversified$_i$, Hostile$_i$, Tender$_i$, #TrgFA$_i$, #BidFA$_i$, Financial Buyer$_i$, HiTech Buyer$_i$, EV2CF$_i$, EV2Sales$_i$, and the WUI$_i$. All variables are defined in Appendix Table (B). All continuous variables have been winsorized at the 1st and 99th percentiles. Time FE, Bidder Country FE, and Target Country FE indicate year, bidder country, and target country fixed effects, respectively. NObs indicates the number of observations. Adj. R^2 is the adjusted R^2 value. We report heteroskedasticity-robust standard errors (in parentheses), which are clustered at the bidding-firm level. The asterisks *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Low ERV_i	2.777***	2.997**	2.467***			2.857***	1.083	1.576*	3.245***	1.110	3.454***
	(0.966)	(1.196)	(0.868)			(0.916)	(0.793)	(0.831)	(0.875)	(0.920)	(0.870)
Midium ERV_i	3.855***	3.869***		2.637***		2.988***	1.600**	1.588*	2.483***	1.619*	2.357***
	(0.786)	(0.814)		(0.799)		(0.831)	(0.813)	(0.921)	(0.795)	(0.937)	(0.848)
High ERV_i	4.841***	4.319***			2.203*	2.630**	0.744	2.813**	2.167*	1.585	2.305**
	(1.375)	(1.342)			(1.156)	(1.207)	(1.081)	(1.322)	(1.139)	(1.630)	(1.085)
52wHigh$_i$		0.204***	0.205***	0.203***	0.201***	0.199***	0.150***	0.139***	0.133***	0.137***	0.131***
		(0.00584)	(0.00633)	(0.00620)	(0.00640)	(0.00736)	(0.0126)	(0.0126)	(0.0138)	(0.0130)	(0.0158)
Low $ERV_i \times$ 52wHigh$_i$			-0.00226			0.00361	0.00978	0.0169	0.00718	0.0347	0.00175
			(0.0242)			(0.0250)	(0.0271)	(0.0283)	(0.0256)	(0.0260)	(0.0257)
Medium $ERV_i \times$ 52wHigh$_i$				0.0203		0.0248	0.0266	0.0347*	0.0223	0.0315	0.0294
				(0.0215)		(0.0221)	(0.0215)	(0.0208)	(0.0206)	(0.0231)	(0.0217)
High $ERV_i \times$ 52wHigh$_i$					0.0399**	0.0411**	0.0494**	0.0417*	0.0431**	0.0640***	0.0464**
					(0.0202)	(0.0206)	(0.0212)	(0.0224)	(0.0198)	(0.0216)	(0.0217)
Controls	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Time Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Bidder Country FE	No	No	No	No	No	No	No	Yes	No	Yes	No
Target Country FE	No	No	No	No	No	No	No	No	Yes	No	Yes
Adj. R^2	0.034	0.140	0.137	0.138	0.138	0.140	0.181	0.195	0.197	0.267	0.268
F-Stat	8.599	386.6	481.4	456.6	486.2	221.5	111.3	140.4	138.4	117.3	115.1
NObs.	15,371	15,371	15,371	15,371	15,371	15,371	15,371	15,371	15,371	15,371	15,371

Table 11: The impact of premia on bidder gains

This table presents OLS regressions of the bidder cumulative abnormal returns $(BCAR_i)$ on the premia, instrumented premia (based on the reference points) and other controls (X_i). as follows,

$$BCAR_i = \alpha + \beta_1 Premia_i + \beta_2 CBA_i + \beta_3 \Big(Premia_i \times CBA_i \Big) + \sum_{j=4}^{k} \beta_j X_{j,i} + \varepsilon_i$$

where BCAR_i is the bidding firm's cumulative abnormal returns over the window $(t-2, t+2)$ (5 days) (see Section 3.1 for calculation details), $Premia_i$ is the offer price from Refinitiv expressed as a log percentage difference from the target stock price 30 calendar days prior to the announcement date. $Premia_i$ in Columns 2, 4 and 6 is the $\widehat{Premia}_i$, the instrumented premia. CBA_i is a dummy variable indicator that is assigned the value of one for CBA, and zero otherwise (domestic M&A). In the first stage, we use the reference points as an instrument, in addition to all controls that appear in Columns 1-6. Control variables include the deal relative size, the target volatility, the target inverse price, stock dummy, cash dummy, diversified deals dummy, hostile dummy, tender offer dummy, the log of the number of target and bidder financial advisors, financial and hitech buyer dummies, the ratio of the target equity value to cash flow, the level of the World Uncertainty Index (WUI), and the exchange rate volatility. All variables are defined in Appendix Table (B). Bidder Country FE and Time FE indicate bidder country and time fixed effects, respectively. Adj. R^2 is the adjusted R^2 value. We report heteroskedasticity-robust standard errors (in parentheses), which are clustered at the year and bidding-firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	OLS	*IV*	*OLS*	*IV*	*OLS*	*IV*
			$BCAR_i$			
Premia_i	-0.0137***	-0.0711***	-0.0133**	-0.0639***	-0.0143**	-0.0615***
	(0.00502)	(0.0192)	(0.00501)	(0.0235)	(0.00642)	(0.0213)
CBA_i			-0.499*	-0.427*	-0.234	1.383*
			(0.301)	(0.248)	(0.493)	(0.751)
$\text{Premia}_i \times \text{CBA}_i$					0.00197	-0.0451**
					(0.0113)	(0.0208)
Relative Size_i	0.296***	0.301***	0.314***	0.245***	0.251***	0.319***
	(0.0790)	(0.0780)	(0.0896)	(0.0820)	(0.0913)	(0.0838)
Tar. Volatility_i	0.170	0.685**	0.162	0.678*	0.238	0.679**
	(0.255)	(0.320)	(0.103)	(0.389)	(0.314)	(0.328)
Inv. Price_i	0.140	0.233**	0.259**	0.337***	0.251***	0.391***
	(0.103)	(0.105)	(0.122)	(0.104)	(0.0797)	(0.0919)
Stock_i	-0.0775	-0.233	-0.380	-0.552*	-0.487	-0.524
	(0.306)	(0.307)	(0.264)	(0.306)	(0.352)	(0.355)
Cash_i	2.768***	2.691***	2.651***	2.764***	2.849***	2.619***
	(0.257)	(0.258)	(0.249)	(0.303)	(0.299)	(0.238)
Diversified_i	0.150	0.108	0.357	0.360	0.386	0.347
	(0.255)	(0.256)	(0.311)	(0.229)	(0.234)	(0.219)
Hostile_i	-1.147**	-0.961**	-1.048***	-0.988*	-1.188**	-0.844
	(0.468)	(0.467)	(0.232)	(0.513)	(0.558)	(0.515)
Tender_i	0.814***	0.959***	0.798	1.006***	0.842***	0.975***
	(0.262)	(0.268)	(0.500)	(0.353)	(0.265)	(0.293)
$\#\text{TrgFA}_i$	-1.163***	-1.030***	-0.607*	-0.483	-0.557	-0.432
	(0.384)	(0.386)	(0.311)	(0.451)	(0.465)	(0.404)
$\#\text{BidFA}_i$	-1.164***	-1.339***	-1.157***	-1.298***	-1.161***	-1.287***
	(0.310)	(0.317)	(0.323)	(0.303)	(0.371)	(0.356)
Financial Buyer_i	0.590*	0.595*	0.544**	0.442	0.496*	0.536*
	(0.324)	(0.324)	(0.241)	(0.308)	(0.288)	(0.274)
HiTech Buyer_i	-0.644**	-0.442	-0.722**	-0.517	-0.648*	-0.592*
	(0.276)	(0.297)	(0.299)	(0.335)	(0.327)	(0.309)
EV2CF_i	-0.476***	-0.456***	-0.433**	-0.521***	-0.523***	-0.412***
	(0.159)	(0.159)	(0.178)	(0.167)	(0.148)	(0.138)
WUI_i	0.752**	1.091***	0.466**	0.847*	0.494	0.832*
	(0.314)	(0.323)	(0.203)	(0.435)	(0.475)	(0.419)
ERV_i	-0.419	-0.240	0.0510	-0.311	-1.800***	-1.538***
	(0.298)	(0.300)	(0.576)	(0.682)	(0.346)	(0.458)
Constant	-4.368	-3.679	-1.774	-1.698	-1.740	-1.691
	(2.854)	(2.805)	(2.335)	(4.143)	(4.436)	(3.740)
Bidder Country FE	No	No	Yes	Yes	Yes	Yes
Time FE	No	No	No	Yes	Yes	No
Adj. R^2	0.038	0.039	0.057	0.242	0.243	0.059
F-Stat	13.21***	14.85***	45.57***	10.20***	12.20***	22.01***
NObs.	8,748	8,748	8,748	8,748	8,748	8,748

Table 12: Robustness tests on bidder gains

This table presents OLS regressions of the bidder cumulative abnormal returns $(BCAR_i)$ on CBA dummy, reference point, the interaction of CBA dummy and reference point, and other controls (X_i), as follows,

$$\text{BCAR}_i = \alpha + \beta_1 \text{CBA}_i + \beta_2 52\text{wHigh}_i + \beta_3 \Big(CBA_i \times 52\text{wHigh}_i \Big) + \sum_{j=4}^{k} \beta_j X_{j,i} + \varepsilon_i$$

where BCAR_i is the bidding firm's cumulative abnormal returns over the window $(t-2, t+2)$ (5 days) (see Section 3.1 for calculation details), CBA_i is a dummy assigned the value of 1 for a cross-board deal, and 52wHigh_i is the target 52-weeks high (reference point). Control variables include the deal relative size, the target volatility, the target inverse price, stock dummy, mixed financing dummy, diversified deals dummy, hostile dummy, tender offer dummy, the log of the number of target and acquirer financial advisors, financial and hitech buyer dummy, the ratio of the target equity value to cash flow and the level of world uncertainty index (WUI). We group deal according difference deal or firm features and we estimate the above regression in each case. All variables are defined in Appendix Table (B). Time FE indicate year fixed effects. Adj. R^2 is the adjusted R^2 value. We report heteroskedasticity-robust standard errors (in parentheses), which are clustered at the bidding-firm level. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

		$\hat{\beta}_1$	$\hat{\beta}_2$	$\hat{\beta}_3$	Controls	FE	F-stat	Adj. R^2	NObs
(1) All	coef.	0.235	0.00332	-0.0127*	Yes	Time	13.44***	0.033	10,216
	s.e.	(0.305)	(0.00571)	(0.00660)					
(2) US Bid.	coef.	-0.166	0.00240	-0.0327**	Yes	Time	10.12***	0.043	5,229
	s.e.	(0.790)	(0.00778)	(0.0156)					
(3) Non-US Bid.	coef.	-0.466	-0.000436	-0.00245	Yes	Time	6.027***	0.039	4,987
	s.e.	(0.396)	(0.00519)	(0.00651)					
(4) US Trg.	coef.	0.0596	0.000109	-0.0189*	Yes	Time	11.59***	0.042	5,468
	s.e.	(0.535)	(0.00757)	(0.0112)					
(5) Non-US Trg.	coef.	-0.284	5.48e-05	-0.00736	Yes	Time	5.393***	0.042	4,748
	s.e.	(0.442)	(0.00521)	(0.00768)					
(6) Bid. in DM	coef.	0.316	0.00202	-0.0127*	Yes	Time	13.45***	0.032	9,636
	s.e.	(0.313)	(0.00590)	(0.00690)					
(7) Bid. in Non-DM	coef.	0.291	0.0328	-0.0375*	Yes	Time	0.891	0.158	580
	s.e.	(1.420)	(0.0201)	(0.0209)					
(8) Trg. in DM	coef.	0.219	0.00206	-0.0118*	Yes	Time	13.71***	0.033	9,730
	s.e.	(0.313)	(0.00590)	(0.00682)					
(9) Trg. in Non-DM	coef.	1.763	0.0283	-0.0447*	Yes	Time	1.312	0.184	486
	s.e.	(1.419)	(0.0201)	(0.0264)					
(10) Freq. Bid.	coef.	0.133	0.00347	-0.0119*	Yes	Time	11.88***	0.035	8,614
	s.e.	(0.345)	(0.00599)	(0.00703)					

Table 12 (continued)

		$\hat{\beta}_1$	$\hat{\beta}_2$	$\hat{\beta}_3$	Controls	FE	F-stat	Adj. R^2	NObs
(11) Cash	coef.	0.707*	0.0126	-0.0265***	Yes	Time	5.567***	0.087	3,670
	s.e.	(0.378)	(0.00813)	(0.00903)					
(12) Stock	coef.	0.0178	0.00355	-0.0152	Yes	Time	2.868***	0.035	4,112
	s.e.	(0.886)	(0.0104)	(0.0143)					
(13) Mixed	coef.	0.736	0.00103	0.00184	Yes	Time	2.916***	0.044	2,441
	s.e.	(0.558)	(0.00732)	(0.0117)					
(14) Non-Stock	coef.	0.722**	0.00792	-0.0173***	Yes	Time	11.58***	0.072	6,104
	s.e.	(0.306)	(0.00568)	(0.00606)					
(15) Non-Cash	coef.	0.373	0.00189	-0.0105	Yes	Time	4.334***	0.028	6,546
	s.e.	(0.506)	(0.00746)	(0.00989)					
(16) Non-Mixed	coef.	-0.108	0.00371	-0.0146*	Yes	Time	9.301***	0.034	7,775
	s.e.	(0.358)	(0.00693)	(0.00777)					

Appendix (Main)

A. Countries of Bidders and Targets

This table presents the country, and numbers of deals per country, for both bidders and targets in our final sample.

Panel A: Bidder country & # of deals				Panel B: Target country & # of deals			
Argentina	3	Kazakhstan	1	Australia	906	Taiwan	124
Australia	694	Lebanon	1	Austria	15	Thailand	45
Austria	16	Liechtenstein	1	Belgium	46	Tunisia	4
Bahamas	3	Luxembourg	63	Bermuda	36	Turkey	15
Bahrain	3	Malaysia	151	Brazil	42	UK	1,854
Belgium	59	Malta	2	Canada	1,415	USA	7,680
Bermuda	76	Marshall Is	1	Chile	13	Vietnam	15
Botswana	1	Mauritius	6	China	146		
Brazil	51	Mexico	20	Colombia	9		
British Virgin	28	Mongolia	1	Cyprus	5		
Bulgaria	2	Neth Antilles	2	Denmark	72		
Canada	1,249	Netherlands	230	Egypt	11		
Cayman Islands	41	New Zealand	40	Finland	63		
Chile	9	Nigeria	2	France	273		
China	202	Norway	89	Germany	74		
Colombia	8	Papua N Guinea	4	Greece	34		
Croatia	1	Poland	34	Hong Kong	245		
Cyprus	23	Portugal	13	India	109		
Czech Republic	2	Puerto Rico	2	Indonesia	17		
Dem Rep Congo	1	Qatar	5	Ireland-Rep	73		
Denmark	70	Romania	1	Isle of Man	14		
Egypt	7	Russian Fed	23	Israel	68		
Estonia	2	Saudi Arabia	2	Italy	112		
Faroe Islands	1	Seychelles	4	Japan	618		
Finland	56	Singapore	191	Luxembourg	15		
France	371	Slovenia	5	Malaysia	176		
Germany	193	South Africa	144	Mexico	6		
Ghana	5	South Korea	101	Netherlands	147		
Gibraltar	4	Spain	98	New Zealand	57		
Greece	23	Sri Lanka	22	Norway	111		
Honduras	1	Sweden	233	Poland	53		
Hong Kong	287	Switzerland	113	Portugal	14		
Iceland	8	Taiwan	124	Russian Fed	15		
India	111	Tanzania	1	Singapore	193		
Indonesia	15	Thailand	38	Slovenia	9		
Ireland-Rep	78	Tunisia	2	South Africa	134		
Isle of Man	13	Turkey	14	South Korea	90		
Israel	47	UK	1,678	Spain	90		
Italy	123	USA	7,501	Sri Lanka	25		
Japan	689	UAE	18	Sweden	252		
Jersey	20	Vietnam	14	Switzerland	51		
Total:			15,591	Total:			15,591

B. Variable Definitions

The table presents variable definitions, including the source of each variable or the source of information needed to compute each variable.

Variable	Definition	Source
	Panel A: Dependent and key independent variables	
Premia_i	The offer price from Refinitiv (PPS_i) expressed as a log percentage difference from the target stock price 30 calendar days prior to the announcement date.	Refinitiv
PPS_i	The price (offer price) per share.	Refinitiv
52wHigh_i	The high target stock price over the year (365 calendar days) ending 31 calendar days prior to the announcement date expressed as a log percentage difference from the target stock price 30 calendar days prior to the announcement date.	Refinitiv
$\text{BCAR}_i(t-m, t+n)$	The bidding firm's Cumulative Abnormal Returns (CAR) over the windows $t-m, t+n$, where m is the number of trading days prior to the M&A announcement day and n is the number of trading days after the M&A announcement day. See Section (3.1) for calculation details.	Refinitiv
$\text{Piecewise}_{1,i}$ or $\text{PW}_{1,i}$	The $\min(52\text{wHigh}_i, 25)$	Refinitiv
$\text{Piecewise}_{2,i}$ or $\text{PW}_{2,i}$	The $\max(0, \min(52\text{wHigh}_i - 25, 50))$	Refinitiv
$\text{Piecewise}_{3,i}$ or $\text{PW}_{3,i}$	The $\max(52\text{wHigh}_i - 75, 0)$	Refinitiv
$\text{TCAR}_i(t-m, t+n)$	The target firm's Cumulative Abnormal Returns (CAR) over the windows $t-m, t+n$, where m is the number of trading days prior to the M&A announcement day and n is the number of trading days after the M&A announcement day. See Section (3.1) for calculation details.	Refinitiv
	Panel B: Other variables	
All	All M&As (both domestic and foreign target ones).	Refinitiv
DOM_i	Dummy equal to one if both the bidding and the target firms are based in the same country, and zero otherwise.	Refinitiv
CBA_i	Dummy equal to one if the bidding and the target firms are based in different countries, and zero otherwise.	Refinitiv
Hostile_i	Dummy equal to one if the deal's attitude is hostile, and zero otherwise.	Refinitiv
Tender Offer_i	Dummy equal to one if the deal is classified as tender offer, and zero otherwise.	Refinitiv
Diversified_i	Dummy equal to one if the bidder and target are in different industries, i.e., they do not share the same first two-digit SIC code, and zero otherwise (=Focused_i).	Refinitiv
Bid. (or Trg.) in DM_i	Dummy equal to one if the bidding (or the target) firm is based in a developed market, and zero otherwise.	IMF
Bid. (or Trg.) in EM_i	Dummy equal to one if the bidding (or the target) firm is based in an emerging market, and zero otherwise.	IMF
Freq. DOM_i	Dummy equal to one if the bidder of domestic targets is a serial domestic one (has announced more than 3 domestic deals in the past three years, as in Fuller et al. (2002)), and zero otherwise.	Refinitiv
Freq. CBA_i	Dummy equal to one if the bidder of foreign targets is a serial CBA one (has announced more than 3 cross-border deals in the past three years, as in Fuller et al. (2002)), and zero otherwise.	Refinitiv
Freq. $\text{M\&A}_i$	Dummy equal to one if the bidder is a serial one (has announced more than 3 deals in the past three years, as in Fuller et al. (2002)), and zero otherwise.	Refinitiv

Continued

Variable Definitions (*Continued*)

Variable	Definition	Source
	Panel B: Other variables	
Private_i	Dummy variable equal to one if the target firm is a private firm, and zero otherwise.	Refinitiv
Listed_i	Dummy variable equal to one if the target firm is a listed or publicly traded firm, and zero otherwise.	Refinitiv
Subsidiary_i	Dummy variable equal to one if the target firm is a subsidiary firm, and zero otherwise.	Refinitiv
Cash_i	Dummy variable equal to one if the deal is settled fully in cash, and zero otherwise.	Refinitiv
Stock_i	Dummy variable equal to one if the deal is settled fully in stock, and zero otherwise.	Refinitiv
Mixed_i	Dummy variable equal to one if the deal is settled in a combination of cash and stock, and zero otherwise.	Refinitiv
Financial Buyer_i	Dummy variable equal to one if the bidding firm is a financial firm, and zero otherwise.	Refinitiv
Target MV_i	The target firm's market capitalization in million US dollars at 30 calendar days (4 weeks) prior to the M&A announcement day.	Refinitiv
$\text{Target Volatility}_i$	The volatility of target firm's stock return from 365 to 31 calendar days prior to the M&A announcement day.	Refinitiv
$\#\text{TrgFA}_i$	The natural logarithm of the target financial advisors in the deal.	Refinitiv
$\#\text{BidFA}_i$	The natural logarithm of the bidder financial advisors in the deal.	Refinitiv
HiTech Buyer_i	Dummy variable equal to one if the bidding firm is a high technology firm, and zero otherwise	Refinitiv
EV2CF_i	The ratio of the equity value to cash-flows.	Refinitiv
EV2Sales_i	The ratio of the equity value to sales.	Refinitiv
WUI_i	The world uncertainty index.	Ahir et al. (2022)
Inv. Price_i	The measure of a firm's "cheapness" defined as the log of the ratio 1 over the target firm's share price at 30 calendar days prior to the M&A announcement day.	Baker et al. (2012)
ERV_i	The standard deviation of the bilateral exchange rate between the bidder and target firms' currencies over the year (365 calendar days) ending 31 calendar days prior to the announcement date.	WRDS (Compustat Global, Ex. Rates)

Internet Appendix

"Anchoring Bias and Cross-Border Acquisition Premia"

June 18, 2026

I. Multivariate analysis of target CAR (Robustness tests)

This table reports OLS regression estimates of the impact of foreign deals (the CBA indicator), the target reference points, the product of CBA and reference points, and several other control variables (depending on specification), on the target firm's cumulative abnormal returns (TCAR_i). We estimate the following regression:

$$\text{TCAR}_i = \alpha + \beta_1 \text{CBA}_i + \beta_2 52\text{wHigh}_i + \beta_3 \Big(CBA_i \times 52\text{wHigh}_i \Big) + \sum_{j=4}^{k} \beta_j X_{j,i} + \varepsilon_i$$

where TCAR_i is the target firm's cumulative abnormal returns over the window $(t-1, t+1)$ (3 days) (see Section *3.1* for calculation details). CBA_i is a dummy variable indicator that is assigned the value of one for CBA, and zero otherwise (domestic M&A) and 52wHigh_i is the high stock price over the year (365 calendar days) ending 31 calendar days prior to the announcement date expressed as a log percentage difference from the target stock price 30 calendar days prior to the announcement date. The control variables $(X_{j,i})$ across Columns (5)-(10) include: Tar. Volatility_i, Inv. Price_i, Cash_i, Stock_i, Listed_i, Private_i, Diversified_i, Hostile_i, Tender_i, $\#\text{TrgFA}_i$, $\#\text{BidFA}_i$, Financial Buyer_i, HiTech Buyer_i, EV2CF_i, EV2Sales_i, WUI_i, and the ERV_i. All variables are defined in Appendix Table (B). All continuous variables have been winsorized at the 1st and 99th percentiles. Time FE, Bidder Country FE, and Target Country FE indicate year, bidder country, and target country fixed effects, respectively. NObs indicates the number of observations. Adj. R^2 is the adjusted R^2 value. We report heteroskedasticity-robust standard errors (in parentheses), which are clustered at the bidding-firm level. The asterisks *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
CBA_i	3.698***		3.637***	1.505**	-1.151*	0.240	0.507	-0.409	0.120	1.187**
	(0.540)		(0.521)	(0.647)	(0.662)	(0.711)	(0.669)	(0.762)	(0.713)	(0.546)
52wHigh_i		0.125***	0.125***	0.112***	0.0883***	0.0823***	0.0780***	0.0814***	0.0766***	
		(0.00710)	(0.00708)	(0.00778)	(0.00853)	(0.00830)	(0.00826)	(0.00897)	(0.00884)	
$\text{CBA}_i \times 52\text{wHigh}_i$				0.0571***	0.0625***	0.0629***	0.0523***	0.0642***	0.0539***	
				(0.0173)	(0.0170)	(0.0168)	(0.0167)	(0.0178)	(0.0177)	
Tar. Volatility_i					5.219***	2.965***	2.011***	2.558***	1.287**	8.139***
					(0.494)	(0.485)	(0.492)	(0.548)	(0.562)	(0.473)
Inv. Price_i					0.113	1.768***	2.417***	1.735***	2.407***	0.603***
					(0.145)	(0.177)	(0.199)	(0.190)	(0.219)	(0.144)
Cash_i					4.629***	5.475***	5.407***	4.943***	5.043***	4.256***
					(0.573)	(0.564)	(0.560)	(0.595)	(0.590)	(0.577)
Stock_i					-6.357***	-5.099***	-4.986***	-4.918***	-4.920***	-6.059***
					(0.564)	(0.561)	(0.562)	(0.596)	(0.597)	(0.566)
Listed_i					-0.413	-1.283*	-1.638**	-1.023	-1.052	-0.0986
					(0.666)	(0.666)	(0.658)	(0.704)	(0.687)	(0.676)
Private_i					-5.224***	-5.881***	-6.000***	-5.126***	-5.237***	-5.153***
					(0.706)	(0.704)	(0.696)	(0.747)	(0.736)	(0.717)
Diversified_i					-0.000866	-0.507	-0.784*	-0.557	-0.911**	-0.309
					(0.438)	(0.436)	(0.434)	(0.456)	(0.454)	(0.442)
Hostile_i					-1.220	-1.145	-0.636	-0.613	-0.145	-0.932
					(1.013)	(1.032)	(1.011)	(1.101)	(1.080)	(1.020)
Tender_i					1.729***	2.634***	2.965***	3.634***	4.191***	1.761***
					(0.487)	(0.500)	(0.504)	(0.551)	(0.564)	(0.494)
$\#\text{TrgFA}_i$					4.640***	3.362***	3.445***	3.576***	3.434***	4.752***
					(0.604)	(0.606)	(0.611)	(0.653)	(0.662)	(0.608)
$\#\text{BidFA}_i$					-1.410***	-0.305	0.00527	-1.001*	-0.533	-1.149**
					(0.496)	(0.492)	(0.487)	(0.532)	(0.528)	(0.503)
Financial Buyer_i					-1.576***	-1.732***	-1.561***	-1.713***	-1.699***	-1.392***
					(0.491)	(0.487)	(0.484)	(0.519)	(0.513)	(0.496)
HiTech Buyer_i					0.999	-0.129	0.302	0.157	0.476	1.545**
					(0.714)	(0.715)	(0.715)	(0.752)	(0.741)	(0.718)
EV2CF_i					1.417***	1.305***	1.354***	1.314***	1.288***	1.230***
					(0.269)	(0.263)	(0.262)	(0.282)	(0.275)	(0.273)
EV2Sales_i					-0.0402	0.110	0.138	0.0987	0.118	-0.152
					(0.188)	(0.191)	(0.192)	(0.205)	(0.204)	(0.191)
WUI_i					1.133	4.050***	3.986***	0.603	0.863	1.575*
					(0.825)	(0.440)	(0.440)	(0.865)	(0.860)	(0.830)
ERV_i					2.183**	5.950***	2.168**	9.477***	1.104	2.073*
					(0.955)	(1.149)	(0.908)	(1.617)	(0.866)	(1.083)
Time FE	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No
Bidder Country FE	No	No	No	No	No	Yes	No	Yes	No	No
Target Country FE	No	No	No	No	No	No	Yes	No	Yes	No
Adj. R^2	0.032	0.071	0.075	0.077	0.128	0.156	0.158	0.227	0.222	0.105
F-Stat	46.88	309.8	176.7	117.7	55.32	69.11	68.40	54.46	52.53	55.73
NObs	14,268	14,268	14,268	14,268	14,267	14,267	14,267	14,267	14,267	14,267

II. Multivariate analysis of target CAR (Robustness tests)

This table reports OLS regression estimates of the impact of foreign deals (the CBA indicator), the target reference points, the product of CBA and reference points, and several other control variables (depending on specification), on the target firm's cumulative abnormal returns (TCAR_i). We estimate the following regression:

$$\text{TCAR}_i = \alpha + \beta_1 \text{CBA}_i + \beta_2 52\text{wHigh}_i + \beta_3 \Big(CBA_i \times 52\text{wHigh}_i \Big) + \sum_{j=4}^{k} \beta_j X_{j,i} + \varepsilon_i$$

where TCAR_i is the target firm's cumulative abnormal returns over the window $(t-5, t+5)$ (11 days) (see Section 3.1 for calculation details). CBA_i is a dummy variable indicator that is assigned the value of one for CBA, and zero otherwise (domestic M&A) and 52wHigh_i is the high stock price over the year (365 calendar days) ending 31 calendar days prior to the announcement date expressed as a log percentage difference from the target stock price 30 calendar days prior to the announcement date. The control variables $(X_{j,i})$ across Columns (5)-(10) include: Tar. Volatility_i, Inv. Price_i, Cash_i, Stock_i, Listed_i, Private_i, Diversified_i, Hostile_i, Tender_i, $\#\text{TrgFA}_i$, $\#\text{BidFA}_i$, Financial Buyer_i, HiTech Buyer_i, EV2CF_i, EV2Sales_i, WUI_i, and the ERV_i. All variables are defined in Appendix Table (B). All continuous variables have been winsorized at the 1st and 99th percentiles. Time FE, Bidder Country FE, and Target Country FE indicate year, bidder country, and target country fixed effects, respectively. NObs indicates the number of observations. Adj. R^2 is the adjusted R^2 value. We report heteroskedasticity-robust standard errors (in parentheses), which are clustered at the bidding-firm level. The asterisks *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
CBA_i	4.008***		3.935***	2.230***	-0.842	0.635	1.282*	-0.0356	0.880	1.104*
	(0.573)		(0.551)	(0.685)	(0.697)	(0.745)	(0.709)	(0.800)	(0.759)	(0.575)
52wHigh_i		0.151***	0.151***	0.141***	0.109***	0.105***	0.101***	0.102***	0.0984***	
		(0.00754)	(0.00753)	(0.00828)	(0.00912)	(0.00896)	(0.00895)	(0.00958)	(0.00948)	
$\text{CBA}_i \times 52\text{wHigh}_i$				0.0456**	0.0521***	0.0514***	0.0425**	0.0578***	0.0466**	
				(0.0186)	(0.0182)	(0.0180)	(0.0180)	(0.0191)	(0.0191)	
Tar. Volatility_i					6.206***	4.259***	3.207***	3.690***	2.221***	9.670***
					(0.534)	(0.528)	(0.538)	(0.589)	(0.609)	(0.509)
Inv. Price_i					0.286*	1.893***	2.518***	1.911***	2.582***	0.858***
					(0.160)	(0.194)	(0.223)	(0.207)	(0.241)	(0.159)
Cash_i					4.918***	5.468***	5.478***	5.045***	5.291***	4.500***
					(0.605)	(0.599)	(0.595)	(0.630)	(0.624)	(0.613)
Stock_i					-7.183***	-6.234***	-6.103***	-6.007***	-6.010***	-6.816***
					(0.606)	(0.605)	(0.607)	(0.638)	(0.641)	(0.611)
Listed_i					-0.363	-1.189*	-1.538**	-1.201	-1.013	0.0130
					(0.695)	(0.702)	(0.694)	(0.737)	(0.724)	(0.706)
Private_i					-5.793***	-6.459***	-6.600***	-5.920***	-6.091***	-5.703***
					(0.755)	(0.756)	(0.749)	(0.796)	(0.783)	(0.766)
Diversified_i					-0.276	-0.653	-0.938**	-0.777	-1.116**	-0.644
					(0.466)	(0.465)	(0.463)	(0.485)	(0.483)	(0.472)
Hostile_i					-1.398	-0.991	-0.493	-0.122	0.193	-1.047
					(1.042)	(1.051)	(1.036)	(1.149)	(1.124)	(1.050)
Tender_i					2.969***	3.809***	4.321***	4.700***	5.306***	2.991***
					(0.517)	(0.527)	(0.532)	(0.581)	(0.594)	(0.527)
$\#\text{TrgFA}_i$					3.962***	2.758***	2.826***	2.977***	2.820***	4.099***
					(0.653)	(0.658)	(0.665)	(0.706)	(0.720)	(0.657)
$\#\text{BidFA}_i$					-0.359	0.531	0.867*	0.0434	0.463	-0.0334
					(0.526)	(0.525)	(0.520)	(0.564)	(0.559)	(0.534)
Financial Buyer_i					-1.682***	-1.752***	-1.596***	-1.843***	-1.763***	-1.497***
					(0.524)	(0.523)	(0.522)	(0.554)	(0.551)	(0.530)
HiTech Buyer_i					1.164	0.00958	0.505	0.353	0.725	1.815**
					(0.751)	(0.756)	(0.755)	(0.796)	(0.784)	(0.759)
EV2CF_i					1.610***	1.430***	1.461***	1.433***	1.425***	1.386***
					(0.302)	(0.299)	(0.300)	(0.319)	(0.315)	(0.307)
EV2Sales_i					-0.0908	0.176	0.224	0.187	0.225	-0.227
					(0.202)	(0.204)	(0.206)	(0.221)	(0.221)	(0.207)
WUI_i					1.267	3.571***	3.478***	0.678	0.832	1.807**
					(0.878)	(0.472)	(0.472)	(0.926)	(0.919)	(0.887)
ERV_i					1.921*	4.051***	1.938*	5.830***	0.993	1.767
					(1.025)	(1.181)	(1.018)	(1.594)	(0.967)	(1.152)
Time FE	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No
Bidder Country FE	No	No	No	No	No	Yes	No	Yes	No	No
Target Country FE	No	No	No	No	No	No	Yes	No	Yes	No
Adj. R^2	0.036	0.086	0.090	0.090	0.148	0.168	0.167	0.241	0.232	0.122
F-Stat	48.88	399.9	221.4	148.5	66.77	80.23	80.79	64.54	64.41	65.93
NObs	14,268	14,268	14,268	14,268	14,267	14,267	14,267	14,267	14,267	14,267

III. The impact of target domicile and target reference points (3 months) on premia

This table reports OLS regression estimates of the impact of foreign deals (the CBA indicator), the target reference points, the product of CBA and reference points, and several other control variables (depending on specification), on premia. We estimate the following regression:

$$\text{Premia}_i = \alpha + \beta_1 \text{CBA}_i + \beta_2 52\text{wHigh}_i + \beta_3 \left(\text{CBA}_i \times 52\text{wHigh}_i \right) + \sum_{j=4}^{k} \beta_j X_{j,i} + \varepsilon_i$$

where Premia_i is the offer price from Refinitiv expressed as the log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date, CBA_i is a dummy variable that is assigned the value of one for deals in which the bidder and target are based in different countries and the value of zero otherwise (both the bidder and target are based in the same country), and 52wHigh_i is the high stock price over the window from $t-92$ (3 months) to $t-31$ calendar days prior to the deal's announcement date expressed as a log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date. The control variables $(X_{j,i})$ across Columns (5)-(10) include: Tar. Volatility_i, Inv. Price_i, Cash_i, Stock_i, Listed_i, Private_i, Diversified_i, Hostile_i, Tender_i, $\#\text{TrgFA}_i$, $\#\text{BidFA}_i$, Financial Buyer_i, HiTech Buyer_i, EV2CF_i, EV2Sales_i, WUI_i, and the ERV_i. All variables are defined in Appendix Table (B). All continuous variables have been winsorized at the 1st and 99th percentiles. Time FE, Bidder Country FE, and Target Country FE indicate year, bidder country, and target country fixed effects, respectively. NObs indicates the number of observations. Adj. R^2 is the adjusted R^2 value. We report heteroskedasticity-robust standard errors (in parentheses), which are clustered at the bidding-firm level. The asterisks *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
CBA_i	3.592***		3.783***	2.634***	0.869	1.641**	2.299***	1.029	2.509***
	(0.844)		(0.951)	(0.736)	(0.640)	(0.677)	(0.669)	(0.786)	(0.698)
52wHigh_i		0.592***	0.593***	0.575***	0.432***	0.410***	0.395***	0.398***	0.384***
		(0.0160)	(0.0159)	(0.0182)	(0.0241)	(0.0242)	(0.0259)	(0.0241)	(0.0275)
$\text{CBA}_i \times 52\text{wHigh}_i$				0.0906*	0.103**	0.102**	0.0874**	0.146***	0.0875*
				(0.0477)	(0.0480)	(0.0518)	(0.0445)	(0.0479)	(0.0450)
Tar. Volatility_i					5.323***	4.971***	4.351***	3.897***	3.105***
					(0.662)	(0.565)	(0.529)	(0.729)	(0.618)
Inv. Price_i					1.688***	3.048***	3.790***	3.280***	4.116***
					(0.130)	(0.142)	(0.178)	(0.158)	(0.204)
Cash_i					-0.0242	-0.296	-0.189	0.0377	0.250
					(0.791)	(0.724)	(0.687)	(0.658)	(0.674)
Stock_i					-4.307***	-3.385***	-3.346***	-3.789***	-3.665***
					(0.572)	(0.571)	(0.564)	(0.585)	(0.585)
Listed_i					0.665	0.0406	0.0253	-0.00945	0.194
					(0.552)	(0.470)	(0.427)	(0.516)	(0.531)
Private_i					-2.296***	-2.717***	-2.686***	-2.284***	-2.198***
					(0.244)	(0.224)	(0.227)	(0.230)	(0.257)
Diversified_i					-0.345	-0.633	-0.782*	-0.745	-0.859*
					(0.408)	(0.448)	(0.435)	(0.482)	(0.473)
Hostile_i					-0.397	1.239	1.702*	0.619	1.068
					(1.017)	(1.043)	(1.011)	(1.149)	(1.183)
Tender_i					-0.0541	1.696***	1.879***	1.461***	1.771***
					(0.390)	(0.588)	(0.703)	(0.490)	(0.548)
$\#\text{TrgFA}_i$					2.213***	1.114**	1.239**	1.271**	1.236**
					(0.477)	(0.485)	(0.488)	(0.522)	(0.526)
$\#\text{BidFA}_i$					-0.130	0.298	0.686	0.998	1.531**
					(0.624)	(0.614)	(0.598)	(0.693)	(0.735)
Financial Buyer_i					-1.978***	-1.611***	-1.521***	-1.873***	-1.711***
					(0.511)	(0.445)	(0.413)	(0.497)	(0.461)
HiTech Buyer_i					2.234***	1.026*	1.131*	1.453**	1.402**
					(0.610)	(0.610)	(0.627)	(0.619)	(0.661)
EV2CF_i					1.812***	1.740***	1.756***	1.818***	1.887***
					(0.236)	(0.212)	(0.213)	(0.226)	(0.220)
EV2Sales_i					0.924***	1.120***	1.265***	1.227***	1.331***
					(0.265)	(0.211)	(0.226)	(0.233)	(0.278)
WUI_i					-0.798	-0.523	-0.597	-0.890	-1.037
					(0.634)	(0.543)	(0.565)	(0.669)	(0.654)
ERV_i					2.665***	4.179***	2.462***	4.760***	2.292**
					(0.940)	(1.005)	(0.889)	(1.609)	(0.910)
Time FE	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Bidder Country FE	No	No	No	No	No	Yes	No	Yes	No
Target Country FE	No	No	No	No	No	No	Yes	No	Yes
Adj. R^2	0.034	0.133	0.137	0.137	0.182	0.198	0.199	0.272	0.269
F-Stat	18.12	1376	695.8	459.8	124.7	161.4	154.5	134.2	128.8
NObs	15,591	15,578	15,578	15,578	15,578	15,578	15,578	15,578	15,578

IV. The impact of target domicile and target reference points (6 months) on premia

This table reports OLS regression estimates of the impact of foreign deals (the CBA indicator), the target reference points, the product of CBA and reference points, and several other control variables (depending on specification), on premia. We estimate the following regression:

$$\text{Premia}_i = \alpha + \beta_1 \text{CBA}_i + \beta_2 52\text{wHigh}_i + \beta_3 \left(\text{CBA}_i \times 52\text{wHigh}_i \right) + \sum_{j=4}^{k} \beta_j X_{j,i} + \varepsilon_i$$

where Premia_i is the offer price from Refinitiv expressed as the log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date, CBA_i is a dummy variable that is assigned the value of one for deals in which the bidder and target are based in different countries and the value of zero otherwise (both the bidder and target are based in the same country), and 52wHigh_i is the high stock price over the window from $t-182$ (6 months) to $t-31$ calendar days prior to the deal's announcement date expressed as a log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date. The control variables $(X_{j,i})$ across Columns (5)-(10) include: Tar. Volatility_i, Inv. Price_i, Cash_i, Stock_i, Listed_i, Private_i, Diversified_i, Hostile_i, Tender_i, $\#\text{TrgFA}_i$, $\#\text{BidFA}_i$, Financial Buyer_i, HiTech Buyer_i, EV2CF_i, EV2Sales_i, WUI_i, and the ERV_i. All variables are defined in Appendix Table (B). All continuous variables have been winsorized at the 1st and 99th percentiles. Time FE, Bidder Country FE, and Target Country FE indicate year, bidder country, and target country fixed effects, respectively. NObs indicates the number of observations. Adj. R^2 is the adjusted R^2 value. We report heteroskedasticity-robust standard errors (in parentheses), which are clustered at the bidding-firm level. The asterisks *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
CBA_i	3.592***		3.889***	2.900***	1.090**	1.865***	2.553***	1.184	2.744***
	(0.844)		(0.944)	(0.655)	(0.548)	(0.597)	(0.569)	(0.722)	(0.565)
52wHigh_i		0.346***	0.347***	0.338***	0.258***	0.242***	0.233***	0.238***	0.227***
		(0.0113)	(0.0110)	(0.0142)	(0.0230)	(0.0234)	(0.0248)	(0.0231)	(0.0251)
$\text{CBA}_i \times 52\text{wHigh}_i$				0.0458*	0.0543*	0.0551*	0.0429	0.0815***	0.0430
				(0.0253)	(0.0322)	(0.0328)	(0.0298)	(0.0277)	(0.0314)
Tar. Volatility_i					5.100***	4.735***	4.146***	3.696***	2.985***
					(0.736)	(0.632)	(0.582)	(0.784)	(0.651)
Inv. Price_i					1.566***	2.924***	3.652***	3.142***	3.948***
					(0.134)	(0.141)	(0.200)	(0.149)	(0.227)
Cash_i					-0.153	-0.373	-0.284	-0.00404	0.154
					(0.801)	(0.722)	(0.697)	(0.656)	(0.667)
Stock_i					-4.572***	-3.709***	-3.648***	-4.059***	-3.889***
					(0.566)	(0.591)	(0.575)	(0.600)	(0.589)
Listed_i					0.466	-0.177	-0.222	-0.172	0.0223
					(0.544)	(0.463)	(0.423)	(0.508)	(0.533)
Private_i					-2.351***	-2.781***	-2.784***	-2.383***	-2.286***
					(0.268)	(0.246)	(0.246)	(0.240)	(0.275)
Diversified_i					-0.200	-0.473	-0.646	-0.594	-0.762
					(0.405)	(0.456)	(0.446)	(0.490)	(0.477)
Hostile_i					-0.643	0.920	1.418	0.386	0.871
					(0.986)	(1.017)	(0.990)	(1.150)	(1.141)
Tender_i					-0.177	1.487***	1.755***	1.224***	1.646***
					(0.373)	(0.526)	(0.651)	(0.458)	(0.516)
$\#\text{TrgFA}_i$					2.005***	1.052**	1.170**	1.197**	1.133**
					(0.479)	(0.494)	(0.492)	(0.540)	(0.527)
$\#\text{BidFA}_i$					-0.199	0.250	0.660	0.961	1.457**
					(0.621)	(0.608)	(0.584)	(0.679)	(0.709)
Financial Buyer_i					-2.052***	-1.672***	-1.556***	-1.925***	-1.761***
					(0.449)	(0.407)	(0.385)	(0.458)	(0.436)
HiTech Buyer_i					1.955***	0.800	0.908	1.242**	1.192*
					(0.610)	(0.612)	(0.633)	(0.622)	(0.664)
EV2CF_i					1.905***	1.839***	1.851***	1.917***	1.964***
					(0.239)	(0.215)	(0.216)	(0.227)	(0.222)
EV2Sales_i					0.944***	1.137***	1.268***	1.264***	1.349***
					(0.252)	(0.203)	(0.215)	(0.213)	(0.257)
WUI_i					-1.594**	-0.909*	-0.966*	-1.583**	-1.705***
					(0.632)	(0.512)	(0.536)	(0.670)	(0.655)
ERV_i					3.072***	3.908***	2.787***	3.957**	2.722***
					(0.937)	(1.149)	(0.860)	(1.674)	(0.880)
Time FE	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Bidder Country FE	No	No	No	No	No	Yes	No	Yes	No
Target Country FE	No	No	No	No	No	No	Yes	No	Yes
Adj. R^2	0.034	0.137	0.141	0.141	0.183	0.198	0.198	0.273	0.269
F-Stat	18.12	933.4	794.1	530.3	133.5	168.3	165.8	141	136.2
NObs	15,591	15,591	15,591	15,591	15,591	15,591	15,591	15,591	15,591

V. The impact of target domicile and target reference points (2 years) on premia

This table reports OLS regression estimates of the impact of foreign deals (the CBA indicator), the target reference points, the product of CBA and reference points, and several other control variables (depending on specification), on premia. We estimate the following regression:

$$\text{Premia}_i = \alpha + \beta_1 \text{CBA}_i + \beta_2 52\text{wHigh}_i + \beta_3 \left(\text{CBA}_i \times 52\text{wHigh}_i \right) + \sum_{j=4}^{k} \beta_j X_{j,i} + \varepsilon_i$$

where Premia_i is the offer price from Refinitiv expressed as the log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date, CBA_i is a dummy variable that is assigned the value of one for deals in which the bidder and target are based in different countries and the value of zero otherwise (both the bidder and target are based in the same country), and 52wHigh_i is the high stock price over the window from $t-730$ (2 years) to $t-31$ calendar days prior to the deal's announcement date expressed as a log percentage difference from the target stock price 30 calendar days prior to the deal's announcement date. The control variables $(X_{j,i})$ across Columns (5)-(10) include: Tar. Volatility$_i$, Inv. Price$_i$, Cash$_i$, Stock$_i$, Listed$_i$, Private$_i$, Diversified$_i$, Hostile$_i$, Tender$_i$, #TrgFA$_i$, #BidFA$_i$, Financial Buyer$_i$, HiTech Buyer$_i$, EV2CF$_i$, EV2Sales$_i$, WUI$_i$, and the ERV$_i$. All variables are defined in Appendix Table (B). All continuous variables have been winsorized at the 1st and 99th percentiles. Time FE, Bidder Country FE, and Target Country FE indicate year, bidder country, and target country fixed effects, respectively. NObs indicates the number of observations. Adj. R^2 is the adjusted R^2 value. We report heteroskedasticity-robust standard errors (in parentheses), which are clustered at the bidding-firm level. The asterisks *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
CBA$_i$	3.592***		3.548***	2.467***	0.836	1.657**	2.234***	1.130	2.220***
	(0.844)		(0.968)	(0.759)	(0.647)	(0.676)	(0.668)	(0.736)	(0.605)
52wHigh$_i$		0.216***	0.215***	0.209***	0.159***	0.148***	0.142***	0.146***	0.139***
		(0.00645)	(0.00631)	(0.00782)	(0.0136)	(0.0136)	(0.0149)	(0.0143)	(0.0166)
CBA$_i$ × 52wHigh$_i$				0.0293*	0.0342**	0.0358**	0.0301**	0.0456***	0.0346**
				(0.0150)	(0.0159)	(0.0168)	(0.0149)	(0.0164)	(0.0166)
Tar. Volatility$_i$					4.872***	4.425***	3.860***	3.556***	2.812***
					(0.775)	(0.674)	(0.628)	(0.830)	(0.717)
Inv. Price$_i$					1.455***	2.800***	3.499***	3.007***	3.766***
					(0.145)	(0.146)	(0.218)	(0.149)	(0.249)
Cash$_i$					-0.305	-0.457	-0.361	-0.144	0.0690
					(0.757)	(0.696)	(0.667)	(0.625)	(0.626)
Stock$_i$					-4.525***	-3.696***	-3.621***	-4.013***	-3.839***
					(0.565)	(0.589)	(0.573)	(0.596)	(0.589)
Listed$_i$					0.445	-0.265	-0.294	-0.195	-0.00710
					(0.511)	(0.444)	(0.408)	(0.474)	(0.498)
Private$_i$					-2.323***	-2.834***	-2.826***	-2.365***	-2.288***
					(0.269)	(0.255)	(0.254)	(0.238)	(0.279)
Diversified$_i$					-0.211	-0.497	-0.666	-0.607	-0.773
					(0.421)	(0.470)	(0.463)	(0.509)	(0.503)
Hostile$_i$					-0.538	0.923	1.425	0.413	0.881
					(0.994)	(1.020)	(0.985)	(1.152)	(1.164)
Tender$_i$					-0.259	1.347**	1.642**	1.244***	1.625***
					(0.376)	(0.532)	(0.660)	(0.448)	(0.510)
#TrgFA$_i$					1.885***	0.957*	1.067**	1.040*	0.975*
					(0.488)	(0.491)	(0.493)	(0.531)	(0.529)
#BidFA$_i$					-0.351	0.145	0.555	0.804	1.318*
					(0.644)	(0.631)	(0.608)	(0.700)	(0.720)
Financial Buyer$_i$					-2.162***	-1.783***	-1.662***	-2.010***	-1.858***
					(0.426)	(0.387)	(0.372)	(0.442)	(0.417)
HiTech Buyer$_i$					1.738***	0.611	0.747	1.003	1.029
					(0.616)	(0.615)	(0.634)	(0.634)	(0.677)
EV2CF$_i$					1.947***	1.892***	1.899***	1.960***	1.991***
					(0.237)	(0.215)	(0.215)	(0.232)	(0.224)
EV2Sales$_i$					1.017***	1.202***	1.324***	1.312***	1.398***
					(0.261)	(0.212)	(0.223)	(0.224)	(0.266)
WUI$_i$					-1.807***	-1.204**	-1.237**	-1.730**	-1.891***
					(0.633)	(0.504)	(0.515)	(0.672)	(0.655)
ERV$_i$					2.700***	3.495***	2.421***	3.336**	2.498***
					(0.868)	(1.130)	(0.805)	(1.689)	(0.824)
Time FE	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Bidder Country FE	No	No	No	No	No	Yes	No	Yes	No
Target Country FE	No	No	No	No	No	No	Yes	No	Yes
Adj. R^2	0.034	0.138	0.141	0.142	0.181	0.196	0.197	0.270	0.267
F-Stat	18.1***	1118.0***	826.6***	552.8***	134.6***	168.1***	166.7***	138.9***	135.9***
NObs	15,591	15,591	15,591	15,591	15,591	15,591	15,591	15,591	15,591

The Centre for Responsible Banking & Finance
CRBF Working Paper Series
Department of Finance, University of St Andrews
The Gateway, North Haugh,
St Andrews, Fife,
KY16 9RJ.
Scotland, United Kingdom
https://crbf.wp.st-andrews.ac.uk/

Recent CRBF Working papers published in this Series

Fourth Quarter | 2026

26-027 **Alona Bilokha, Mingying Cheng, Iftekhar Hasan:** Recipes for Success: Becoming a CEO.

Third Quarter | 2026

26-026 **Leonidas G. Barbopoulos, Rui Dai, Talis J. Putnins, Anthony Saunders:** Market Efficiency When Machines Access Information.

26-025 **Alona Bilokha, Iftekhar Hasan, Stefano Manfredonia, Ronald W. Masulis:** Corporate Financial Constraints, Minimum Wage Policies, and Employment.

26-024 **Jawad M. Addoum, Dimitrios Gounopoulos, Matthew T. Gustafson, Ryan Lewis, Tam Nguyen:** Pricing the Haze: Evidence on Smoke Exposure and Property Values.

26-023 **Tam Nguyen and Wenke Zhang:** How Likely Do Firms Go Green? Evidence from Asset Redeployability on Green Bond Issuance.

26-022 **Franco Fiordelisi, Giulia Fusi, Angela Maddaloni, David Marques-Ibanez, Maria A. Viola:** Lending in a Crisis under Model-Based Regulation.

26-021 **Alfred Duncan, Charles Nolan:** Structure and Resolution in Banking: Are They Substitutes?

26-020 **John Cotter, Yong Kyu Gam, Yi Hu:** Local Political Uncertainty and Branch Banking: Evidence from Deposit Rate Setting.

26-019 **Christian Oliver Ewald, Xiaotong Suna, Erik Haugomb, Sjur Westgaard:** Pricing Sustainability or Pricing Illiquidity? Evidence from ESG Index Futures.