# The Effect of Anchoring Bias on Bid Premia in Cross-Border Acquisitions* 

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# The Effect of Anchoring Bias on Bid Premia in Cross-Border Acquisitions 


#### Abstract

We examine whether premia in cross-border mergers and acquisitions (CBA) is impacted by recent stock price peaks of targets (reference points). We find that the well-established finding of foreign targets receiving higher premia (Harris and Ravenscraft, 1991) is biased towards recent share price peaks of targets. We show that this is more pronounced in deals announced by frequent acquirers (with more than one CBA) than by first time acquirers. Our results remain robust to various reference point and premia measures. We argue 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, a foreign firm.


Keywords: Cross-border M\&As; Multinational Corporations; Behavioral Finance; Anchoring bias; Premia; Frequent Acquirers.

JEL Classification Codes: G10; G12; G14.
"Global foreign direct investment (FDI) flows in 2021 were $\$ 1.58$ trillion, up 64 per cent from the exceptionally low level in 2020. The recovery showed significant rebound momentum, with booming merger and acquisition (M\&A) markets and rapid growth in international project finance because of loose financing
conditions and major infrastructure stimulus packages."

World Investment Report (WIR), 2022

## 1. Introduction

Acquirers engaged in cross-border mergers and acquisitions (CBA) can benefit from building or further expanding their multinational network, through gaining access to new markets, and by enjoying higher diversification and other financial and tax benefits. However, CBA are generally considered as much riskier and more complex to execute than their domestic counterparts, require more intense negotiations and expose both merging firms to considerably higher valuation risks. Despite these risks and complexities, CBA have grown in popularity and continue to play a significant role in the development of the majority of modern multinational corporations (MNC). ${ }^{1}$ The large and growing size of CBA market, as well as the complexities associated with CBA, has led to the emergence of a voluminous literature in finance and international business that investigates the factors associated with the premia offered in CBA (and also how this compares to the premia offered in domestic M\&A), and how CBA impact the acquiring firm's value (Doukas and Travlos, 1988; Moeller and Schlingemann, 2005; Chari et al., 2010; Danbolt and Maciver, 2012; Erel et al., 2012). Among other noticeable findings, 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 acquirers' value around CBA, relative to domestic M\&A, announcements (Moeller and Schlingemann, 2005).

The premia offered in M\&A is often the outcome of negotiations between the merging firms' boards and advisors, their relative bargaining power, as well as a large set of valuation assumptions

[^0]that are needed to determine the consideration price. The same process is particularly challenging in CBA, given higher valuation complexity and often limited familiarity with the other firm's economic environment. ${ }^{2}$ This gives rise to psychological influences on the board of the target and the acquirer, as well as the target shareholders, who ultimately must approve the offer price (Baker et al., 2012). Baker et al. (2012) find the the 52 week high of target shares $\left(52 \mathrm{wHigh}_{i, t}\right)$, defined as the high target stock price over the year (365 calendar days) ending one month (21 trading days) prior to the announcement date, expressed as the log percentage difference from the target stock price 20 trading days prior to the announcement date, has a significant influence on the offer price in domestic U.S. acquisitions. We argue that the role of such reference points, or anchors, is likely to be even more pronounced in cross-border than in domestic acquisitions. Put simply, with limited, and perhaps less transparent available information that can be used to obtain a fair valuation of the target, bidders may be more likely to consider their offer price with reference to what the target company's share price has been in the (recent) past. Similarly, faced with the bid from a potentially unknown foreign firm, target company boards and shareholders may also be more likely to anchor their expectations regarding the offer price with reference to what their share price has been in the (recent) past, and request a significant premium to this to persuade them to sell.

We also explore whether the influence of reference prices on the bid premia offered vary with the acquisition experience of the bidder. When is it more likely for bidders and targets to rely on reference points to design the takeover premia? Specifically, does the bidding firm's experience in CBA affects the relation between target shares recent peaks and premia in CBA? On the one hand, we might expect an inexperienced bidder to possibly be more reliant on simplifying assumptions as a starting point when deciding on the offer price. However, with less acquisition experience, 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. 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

[^1]offer, and may use the $52 \mathrm{wHigh}_{i, t}$ as a simplifying heuristic to speed up the negotiations. The role of the acquirer's takeover experience on the influence of reference prices on the offer price, and whether this varies between domestic and CBA, is an open empirical question which we explore in this paper. Unlike previous research that focused on the role of anchors on domestic target M\&A premia, this study aims to directly compare the pricing effects associated with anchors in the domestic versus CBA framework, as well as between frequent and less experienced acquirers. No prior study, to the best of our knowledge, has examined this relation at this granular level.

We analyse the impact of reference points (recent stock price peaks of targets) on the offer price in deals of foreign versus domestic targets based on a global dataset that covers 12,786 M\&A between 1990 and 2022 (inclusive) from 84 acquiring and 70 target firm countries (see Appendix Table (A) for information). Prior evidence in the literature indicates that CBA are likely to be riskier, and hence psychological influences on offer prices are possibly even more severe than have been observed in domestic acquisitions. What distinguishes our paper from others is that we examine the impact of anchors on CBA, an unexplored yet very important and sizeable market where psychological biases are likely to be more noticeable.

First, and consistent with prior studies (Harris and Ravenscraft, 1991), we find that the mean and standard deviation of both the premia and target abnormal returns are significantly higher in CBA than in domestic M\&A, with a mean "cross-border effect" of almost $3.7 \%$. We also show that the time series average of the difference between the price offered (PPS from Refinitiv) and the 52 week high of target shares $\left(52 \mathrm{wHigh}_{i}\right)$ is significantly higher for CBA $(=0.9 \%)$ compared to the equivalent of domestic $\mathrm{M} \& \mathrm{As}(=-0.7 \%)$, a difference of $1.6 \%$.

Next, we analyse the impact of anchors on premia offered in domestic versus CBA. To understand the differences between how recent targets' stock price peaks distort the premia (defined as the log percentage difference between the PPS and the target stock price 20 trading days prior to the announcement date) in domestic and foreign target $\mathrm{M} \& \mathrm{~A}$, we compare their distributions. Our key result is that the well established finding of foreign targets receiving higher premia compared to their domestic counterparts (Harris and Ravenscraft, 1991) is biased towards recent share price peaks of targets. Specifically, we find that nearly $4 \%$ of the higher premia offered in CBA is biased
towards target share prices reference points. This evidence is robust to the inclusion of various controls and fixed effects, and remains qualitatively similar to alternative ways of defining reference points and premia. In terms of economic significance, a one standard deviation increase in $52 \mathrm{wHigh}_{i, t}$ leads to a $0.563 \%$ increase in premia offered in CBA. ${ }^{3}$

One of the most prominent findings in this paper is that not all CBA offer prices appear to be equally influenced by recent peaks of target share prices (reference points). Following early research of psychological biases, and others on the impact of frequent acquirers on M\&A outcomes (Roll, 1986; Fuller et al., 2002), frequent acquirers may be more likely to be impacted by psychological distortions than less frequent acquirers given the complexity associated with CBA and the merging firms' managers limited knowledge and experience to accommodate such complexities. Managers may increasingly rely on heuristics to simplify the complex tasks of valuation and to speed up the negotiations with foreign targets, with reference prices being a useful anchor for determining the offer price. We partition our sampled domestic and CBA ${ }^{4}$ into three categories each, namely: only one M\&A, first time acquirers, and frequent acquirers. We find that the effects of reference points on CBA managerial decisions and premia stem almost entirely from the group of frequent acquirers, which are most likely to be associated with the psychological distortions highlighted earlier in the paper. Interestingly, the effect of anchors on domestic M\&A, and on CBA by a first time acquirer or an acquirer with only one CBA, is not significantly related to premia. Our results suggest that the decisions of frequent acquirers tend to be biased towards recent peaks of target share prices. Once again, 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.

Our paper makes two main contributions to the M\&A literature. Prior research on reference points and M\&A decisions consider mainly M\&A of domestic targets (Baker et al., 2012). Prior studies do not, however, investigate how decisions about foreign target M\&A are impacted by anchors. We fill this void by examining the impact of reference points on the premia offered in CBA, and also in domestic M\&A versus CBA. Our paper also contributes to the same literature by

[^2]examining how the managers of acquirers with different levels of experience in making decisions on either domestic or foreign target acquisitions are impacted by recent peaks of target shares prices. This relationship has been neglected by prior studies.

## 2. Theoretical Framework

Several branches of the literature help us to understand how reference points impact premia and how that should vary between domestic and CBA, as well as across acquirers with different levels of knowledge and experience in acquiring domestic or foreign targets. Relevant are studies on factors impacting the distribution of M\&A premia, including the effect of reference points. The related theory includes prospect theory and anchoring bias and how recent peaks of targets share prices affect M\&A negotiations and premia via psychological biases, and studies that analyse the effect of 52-week high prices on the same. Relevant are also studies that refer to the complexities of CBA and how that affect M\&A activities and outcomes, and how that may affect managers to depend on reference points.

### 2.1. Factors affecting the distribution of M\&A premia

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). By 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 prioritise maximising 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. ${ }^{5}$

By contrast, behavioural theory assumes that market participants are irrational agents. Shleifer and Vishny (2003) introduce the market timing theory, which predicts that misevaluation drives M\&A activities. Overvalued firms are likely to become acquirers while undervalued firms are likely to become targets. This theory holds that agents are rational while principals not. Dong et al. (2006) find that overvalued bidders tend to overpay, and firms 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 the market is rational while managers are not. As the opportunity to undertake M\&A is limited to the average managers, 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 to overpayment and find that bidders' managers often overestimates 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).

### 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. ${ }^{6}$ They perceive the value of investment choices as changes in wealth relative to a reference point, which is derived from arbitrary expec-

[^3]tations 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 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.

The reference point aspect of the prospect theory implies that people tend to take cognitive shortcuts by choosing a seemingly important but possibly irrelevant value, then make small adjustments away from this value until arriving at what they think is 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 maximising 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 labour 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). ${ }^{7}$

### 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 suggest that reference points may be set based on average and/or extreme values.

[^4]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.

In M\&A research, the target's objective is to seek for 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 perceives 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 mentioned above in the paper by Kahneman (1992), the target may have a biased judgement 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 reference point. It is commonly reported in publications and in communications between management and shareholders. ${ }^{8}$ 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 the prospect theory, as further current prices relative to the targets' 52-week high have weaker impacts on 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

[^5]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 focuses on it for simplicity. There have been a few studies subsequent to Baker et al. (2012), and virtually all exclusively use the 52 -week high price. This calls for future studies to investigate whether other peak prices in time exhibit similar patterns, in order to comprehensively understand the anchoring power of recent peak prices in deal negotiations. Besides the deal premium 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, naming deal success, bidder's post-announcement returns, and merger waves.

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 on a 3-day 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. Another study by Ma et al. (2019) studies the impact of bidder's reference point on market's expectations on bidder's announcement returns. As mentioned before, the position of a firm's share price relative to its 52week 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 targets, due to the added uncertainty and volatility.

### 2.3. The complexity of CBA and 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), national pride of acquiring targets based in developed countries (Hope, Thomas, and Vyas, 2011), (b) acquiring and target firms' characteristics, such as market access Doukas and Travlos (1988), industry affiliation (Denis et al., 2002), accounting quality (Bris and Cabolis, 2008), intangibility of assets (Chari et al., 2010), and previous takeover premia decisions (Malhotra and Zhu, 2013), (c) international taxation (Huizinga, Voget, and Wagner, 2012), and finally (d) deal-specific features (Eckbo, 2009). As predicted by agency theory, by entering foreign markets through acquisitions, 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. agency motive), they could be prepared to pay high premia, higher than synergy value, to ensure that they can acquire targets. Prior studies have shown that the prospect theory (Kahneman and Tversky, 1979) explain the process of decision making in a large scale of economic phenomena, including on M\&A decisions (Baker et al., 2012).

## 3. Data and Methodology

Our sampled M\&A (both domestic and cross-border) are retrieved from Refinitiv (previously SDC Thomson-ONE) database. We include M\&A announced between January 1st 1991 and December 31st 2022. The target firm is required to be listed (public) in one of the exchanges of the target firms' countries (shown in Appendix Table (A)). The acquiring firm is required to be a listed, private, or a subsidiary firm, the country of which is also shown in Appendix Table (A). We further require that both the transaction value and the target firm's market capitalisation ( 20 trading days prior to M\&A announcement) to exceed $\$ 1 \mathrm{~m}$, while the target share price to be available at 20 trading days prior to the M\&A announcement date from the Datastream database. Target firm share prices must be available over the year from 365 calendar days to one month ( 21 trading days) prior to the M\&A announcement from Datastream in order to compute the 52-week target share price peaks.

For deals by listed acquirers, we require the market capitalisation at 20 trading days prior to the M\&A announcement and also that prices of the acquirer to be available from Datastream. In addition, we exclude deals classified as: spin off, recapitalisation, 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 and deal value to be available, i.e., we exclude deals with the payment method being $100 \%$ unknown. Furthermore, the acquirer: (a) owns less than $20 \%$ of the target's shares six months before the deal's announcement, and (b) seeks to acquire at least $50 \%$ of the target's shares in the acquisition. ${ }^{9}$ After applying these filters to our initial dataset, our final sample covers $12,786 \mathrm{M} \& \mathrm{~A}$, of which 2,645 are CBA.

### 3.1. Premia, reference-points, and announcement-period returns measures

We follow standard procedures in the related literature to measure the offered premia to target firms and the 52-week target firm share-price peaks. As in Baker et al. (2012), the 52-week high ( $52 \mathrm{wHigh}_{i, t}$ ) is computed as the high target stock price over the 52 weeks ( 365 calendar) days ending 21 days prior to the announcement date, expressed as the log percentage difference from the target stock price 20 trading days prior to the announcement date. We also calculate, for robustness purposes, the 26-week (13-week) target firm share-price peak as the high target stock price over the 183 (92) calendar days, ending one month (21 trading days) prior to the announcement date expressed as the log percentage difference from the target stock price 20 trading days prior to the announcement date. Following the same source, we calculate the premia ( Premia $_{i, t}$ ) as the log percentage difference between the Price Per Share $\left(P P S_{i}\right)$ from the Refinitiv database and the target stock price 20, 10 and 5 trading days prior to the announcement date. ${ }^{10}$ As our main premia measure exhibits substantial variation, we follow Officer (2003) and exclude deals with premium levels higher than $200 \%$ or lower than $0 \%$.

Our measure of target's or acquirer's announcement period Cumulative Abnormal Returns

[^6](CAR) is calculated as in Brown and Warner $(1980,1985)$. We estimate CAR as the sum of the daily differences between the company's (target or acquirer) returns and their corresponding expected returns 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 trading days prior to the M\&A announcement day and $n$ is the number of trading days after the M\&A announcement day. The CAR is measured by subtracting the $E\left(R_{i}\right)$ from the $\log$ returns of firm $i\left(R_{i}\right)$, where the $E\left(R_{i}\right)$ is computed using the market model that is estimated over the window from $t-250$ trading days to $t-20$. We compute the target CAR over 21-days ( $t-10, t+10$ ), 11-days $(t-5, t+5)$, 5-days $(t-2, t+2)$ and 3 -days $(t-1, t+1)$ windows. As for the acquirer, the acquirer CAR is computed over 5-days $(t-2, t+2)$ window.

### 3.2. Descriptive statistics

The annual distribution of the sample is presented in Table (1). Panel A (All M\&As) shows that $20.7 \%$ of the deals in the sample are CBA, which is approximately equivalent to the percentage reported in extant studies (Chari et al., 2010; Barbopoulos and Sudarsanam, 2012; Erel et al., 2012; Barbopoulos et al., 2018). Moreover, $48.8 \%$ of the deals are industry-diversifying. More than half of the deals in the sample ( $56.0 \%$ ) are fully settled in cash, with the remaining share being roughly equally divided between full stock ( $24.0 \%$ ) and mixed ( $20.0 \%$ ) payments. About 2 -in-3 acquirers in our sample ( $65.7 \%$ ) are publicly traded firms, with the remaining ones being roughly equally divided between private firms (15.6\%) and subsidiaries (18.7\%).

Panel A also reports the annual distributions of $52 \mathrm{wHigh}_{i}$ (reference point), $P P S_{i}$ (Price Per Share) and offered premia (Premia $i_{, t-20}$ ). Panel B further presents the annual distribution of $52 \mathrm{wHigh}_{i}$ (reference point), PPS $_{i}$ (Price Per Share) and offered premia (Premia $i_{, t-20}$ ) for domestic M\&A, and Panel C for CBA. Across all three panels, it is evident that, on average, the $P P S_{i}$ exceeds the $52 \mathrm{wHigh}_{i}$, suggesting that on average, merging firms tend to agree on premia that exceed the 52-week peak of target share prices. We also show that the time series average of the difference between the price offered (PPS from Refinitiv) and the 52-week high of target shares ( $52 \mathrm{wHigh}_{i}$ ) is significantly higher for CBA $(=0.9 \%)$ compared to the equivalent of domestic M\&As $(=-0.7 \%)$, a difference of $1.6 \%$ (see also Figure (1)).

Table (2) presents our summary statistics for our main variables. Panels A and B present summary statistics for our main dependent variables. We find that average premia ( Premia $_{i, t-20}$ ) offered in our sample of all M\&A is $33.5 \%$, which is comparable to Baker et al. (2012). The domestic M\&A premia $32.8 \%$, while the CBA equivalent is $36.5 \%$. The premia offered in CBA exhibits higher variation, as depicted by the the standard deviation of 25.5 , compared to the equivalent of 24.3 of the premia offered in domestic M\&A. Similarly, the median of the premia offered in CBA is $31.5 \%$, significantly higher than the one offered in domestic M\&A of $27.8 \%$. Moreover, Panel C reports the distribution of Premia $_{i, t-20}$ by deal characteristics. We find that in focused deals the premia offered is $33.9 \%$, marginally higher than the equivalent offered in diversifying deals of $33.1 \%$. Stock deals are associated with higher premia of $34.3 \%$, compared to $33.4 \%$ in cash deals and $33.0 \%$ in mixed deals. Lastly, both listed and subsidiary bidders offer higher premia (both averaging 34.0\%) than private bidders offer ( $31.0 \%$ ). Finally, Panel D reports the distribution of Premia $_{i, t-20}$ by the target firm's industry. We find that in the highest premia offered in deals of targets based in the healthcare sector (39.5\%). By contrast, M\&A of targets in the real estate sector are associated with the lowest offered premia ( $21.8 \%$ ).

## 4. Results and Discussion

### 4.1. Results from univariate analysis on the impact of deal's domicile on premia and CAR

Table (3) presents our results from the univariate analysis of Premia $i_{i, t-20}$. Consistent with previous studies in the literature (Harris and Ravenscraft, 1991), we find that targets in CBA receive, on average, $3.68 \%$ higher premia (significant at the $1 \%$ level) compared to their domestic counterparts. Is the higher premia offered to foreign targets concentrated on a specific type of acquirer, or perhaps a specific deal feature? To answer this question we divide our sample according to three firm- and deal-characteristics and repeat our univariate analysis. Results are provided in Panels B where we report results according to the acquirer listing status, in Panel C where we report results according to the deal's currency of financing, and in Panel D where results are reported according to the deal's industrial diversification. We show that listed and subsidiary bidders offer higher premia
(in absolute terms) compared to private ones in both domestic and foreign target M\&A, and that particularly public bidders offer higher premia in CBA than in domestic deals (Panel B). In Panel C we find bidders in stock-settled deals offer higher premia (in absolute terms) in both domestic and foreign target M\&A compared to cash and mixed ones, and still bidders in stock-settled deals offer higher premia in CBA than in domestic deals. Finally, both focused and diversifying deals are associated with higher premia in CBA than in domestic deals (Panel E). These findings are consistent with findings reported in the majority of studies in the literature (for a comprehensive review of these studies, see (Eckbo, 2009)).

Along these lines, for robustness purposes we reproduce our univariate evidence using Premia ${ }_{i, t-10}$ and Premia $i_{i, t-5}$. Results are reported in Appendix Table (C). Our results based on Premia $i_{i, t-10}$ and Premia ${ }_{i, t-5}$ suggest that foreign targets receive, on average, $3.26 \%$ or $3.12 \%$ higher premia (significant at the $1 \%$ level) compared to their domestic counterparts. Finally, we further reproduce our univariate evidence by analysing the target firm's CAR over various windows around the M\&A announcement date, such as $\operatorname{CAR}(t-10, t+10), \operatorname{CAR}(t-5, t+5), \operatorname{CAR}(t-2, t+2)$, and $\operatorname{CAR}(t-1, t+1)$. Our findings from this analysis are reported in Appendix Tables (D) and (E). On average, foreign target shareholders enjoy higher CAR (between $3.64 \%$ and $4.28 \%$, and significant at the $1 \%$ level) relative to shareholders of targets that are acquired by bidders in the same country. Overall, our univariate analysis confirms that CBA are associated with higher premia compared to their domestic counterparts, and the shareholders of foreign targets enjoy higher CAR compared to shareholders of domestic targets. Our primary objective in this paper is to examine whether the higher premia offered in CBA is impacted by recent stock price peaks of targets (or reference points). In the following section we answer this question.

### 4.2. Impact of reference points on M\&A premia

In this section we investigate the effects of recent stock price peaks of targets $\left(52 \mathrm{wHigh}_{i}\right)$ on the distribution of premia offered in CBA in a multivariate setup. First, we examine recent stock price peaks of targets in aggregate. Then we partition $52 \mathrm{wHigh}_{i}$ into three groups and we apply the piecewise linear regression. The simple linear specification is likely to contaminate the true size
of the reference points effect due to large outliers (in the independent variable), which even when winsorized at $1 \%$ and $99 \%$ includes observations with values in excess $500 \%$. The piecewise linear specifications address this.

### 4.2.1. Evidence from our multivariate analysis

We estimate the following regression:

$$
\begin{equation*}
\text { Premia }_{i, t}=\alpha+\beta_{1} 52 \mathrm{wHigh}_{i}+\beta_{2} \mathrm{CBA}_{i}+\beta_{3}(52 \mathrm{wHigh} \times \mathrm{CBA})_{i}+\sum_{j=4}^{k} \beta_{j} X_{i, j}+\varepsilon_{i, t} \tag{1}
\end{equation*}
$$

where Premia $_{i, t}$ is our primary measure of premia, defined in Section (3.1). $52 \mathrm{wHigh}_{i}$ is the target firm's share price 52-week high and $\mathrm{CBA}_{i}$ is a cross-border acquisition indicator, both defined in Appendix Table (B). The control variables, $X_{i}$, include several deal and firm characteristics, such as acquirer listing status and method of payment indicators, whether the deal is a diversifying one and also whether the bidder and target are operating in the financial sector, target firm share price volatility, its equity value to sales or cash flows, as well as the number of bidder and target firm financial advisors. We also include time, acquirer and target nation, and acquirer and target industry fixed effects.

Table (4) presents our results. Consistent with prior literature, we find target firms to receive significantly higher premia in cross-border than in domestic acquisitions, as captured by $\hat{\beta}_{1}$ in Column (1). The results hold when controlling for firm and deal characteristics as well as year and target industry fixed effects (Column 13). Column (2) provides the first evidence that the 52-week high of target firms shares is associated with premia. The coefficient $\hat{\beta}_{2}$ is 0.182 and significant at the $1 \%$ level. While this result is generated from analysing the full sample of $\mathrm{M} \& \mathrm{~A}$, we confirm evidence from prior research from analysing only US M\&A (Baker et al., 2012). In terms of economic significance, one standard deviation increase in $52 \mathrm{wHigh}_{i}$ is associated with $0.303 \%$ higher premia. Column (3) simultaneously accounts for the impact of foreign target deals, indicating that CBA are associated with $3.45 \%\left(\hat{\beta}_{1}\right)$ higher premia compared to domestic deals. This is consistent with our univariate results and also evidence from prior literature (Harris and Ravenscraft, 1991). In Column (4) we include the interaction of $52 \mathrm{wHigh}_{i}$ with $\mathrm{CBA}_{i}$, indicating that foreign targets (with an average level of $52 \mathrm{wHigh}_{i}$ ) receive on average $2.116 \%$ higher premia than domestic targets. But this
cross-border gap of $2.116 \%$ is not the same for every $52 \mathrm{wHigh}_{i}$. The interaction is statistically significant at the $5 \%$ level. For every $1 \%$ increase in $52 \mathrm{wHigh}_{i}$, a foreign target receives an additional premia of $0.210 \%(=0.173+0.0373)$. We find the overall difference in premia in CBA and domestic acquisitions to be largely attributable to the significantly larger impact of reference prices on premia in CBA than in domestic acquisitions. it is noteworthy that When also controlling for bid and deal characteristics in Column (5), the coefficient on the CBA dummy ( $\hat{\beta}_{1}$ ) is no longer significant (Column 5). The evidence of a significant interaction between CBA and the $52 \mathrm{wHigh}_{i}$ is robust to the inclusion of various controls and fixed effects (Columns 6-12), and remains qualitatively similar to alternative ways of defining reference points and premia, as reported in Appendix Tables ( F and G).

### 4.2.2. Evidence from piecewise linear regressions

As we have also discussed earlier in the paper, the simple linear specification is likely to contaminate the true size of the reference points effect due to large outliers (in the independent variable), even when the $52 \mathrm{wHigh}_{i}$ is winsorized at $1 \%$ and $99 \%$. To address this we partition the $52 \mathrm{wHigh}_{i}$ into three groups and apply a piecewise linear regression. Specifically, we estimate the following piecewise regression:

$$
\begin{align*}
\text { Premia }_{i, t}=\alpha & +\sum_{j=1}^{3} \beta_{j} \text { Piecewise }_{1 \rightarrow 3, i, j}+\beta_{4} \text { CBA }_{i}+\sum_{j=5}^{7} \beta_{j}\left(\text { Piecewise }_{1 \rightarrow 3} \times \text { CBA }\right)_{i, j} \\
& +\sum_{j=8}^{k} \beta_{j} X_{i, j}+\varepsilon_{i, t} \tag{2}
\end{align*}
$$

where Premia ${ }_{i, t}$ is our primary measure of premia, defined in Section (3.1). Piecewise ${ }_{1, i}$ is defined as the $\min \left(52 \mathrm{wHigh}_{i, t-20}, 25\right)$, Piecewise $_{2, i}$ is defined as the $\max \left(0, \min \left(52 \mathrm{wHigh}_{i, t-20}-25,50\right)\right)$, and Piecewise $_{3, i}$ is defined as the $\max \left(52 \mathrm{wHigh}_{i, t-20}-75,0\right)$. The control variables, $X_{i}$, include several deal and firm characteristics, as in the multivariate analysis in Table 4. We also include time, target nation, acquirer nation, and acquirer and target industry fixed effects.

Table (5) presents our results. Column (1) shows that the magnitude of $52 \mathrm{wHigh}{ }_{i}$ on premia, while still highly significant, becomes smaller as we move from below $25 \%$ of the 52 -week high reference price (with a coefficient of 0.263 ) to the region of $25 \%$ to $50 \%$ reference price (with a coefficient
of 0.226 ), and smaller again as we move to above $75 \%$ of the 52 -week high reference price (with a coefficient of 0.119 ). This implies that the further the current price is located from the 52 -week high price, the smaller the marginal perceived loss, consistent with the S-shaped value function of prospect theory. In Column (2) we include the cross-border indicator, the coefficient estimate of which confirms that foreign targets receive $3.436 \%$ higher premia. In Column (3) we further include the interaction terms between Piecewise ${ }_{1 \rightarrow 3, i}$ and the cross-border indicator. Our findings further confirm that the impact of reference prices has a significantly larger im pact on premia in CBA than in domestic acquisitions, for $52 \mathrm{wHigh}_{i}$ below $25 \%$. For larger reference prices (Piecewise ${ }_{1, i}$ and Piecewise $2_{, i}$ ), the interactive effect between CBA and $52 \mathrm{wHigh}_{i}$ is no longer significant. The evidence of significant impact on premia in CBA for refernce prices below $25 \%$ is robust to the inclusion of various controls and fixed effects (Columns 4-11), and remains qualitatively similar to alternative ways of defining reference points and premia, as reported in Appendix Tables (H and I).

### 4.2.3. Does the acquisition experience of the bidder matter?

We next explore whether the influence of the 52-week share price peaks (reference prices) on the premia offered vary with the acquisition experience of the bidder. We expect an inexperienced bidder to be more reliant on simplifying assumptions as a starting point when deciding on the offer price. However, with less acquisition experience, 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. By 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 share price peaks 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 acquiring firm overall, only in domestic deals and only in CBA in the three year period prior to the date of the bid announcement. ${ }^{11}$ Specifically, we estimate

[^7]the following regression:
\[

$$
\begin{align*}
\text { Premia }_{i, t}=\alpha & +\beta_{1} 52 \mathrm{wHigh}_{i}+\beta_{2}(\text { First Timer OR Serial IN DOM or CBA })_{i} \\
& +\beta_{3}(52 \mathrm{wHigh} \times(\text { First Timer OR Serial IN DOM } \mid \text { CBA }))_{i} \\
& +\sum_{j=4}^{k} \beta_{j} X_{i, j}+\varepsilon_{i, t} \tag{3}
\end{align*}
$$
\]

where Premia $i_{i, t}$ is our primary measure of premia, defined in Section (3.1). Similarly, the variables FTDOM, FTCBA, FTM\&A, SLDOM, SLCBA, SLM\&A are defined in Section (3.1). The control variables, $X_{i}$, include several deal and firm characteristics, such as acquirer listing status and method of payment indicators, whether the deal is a diversifying one and also whether the bidder and target are operating in the financial sector. We also include time, target nation, acquirer nation, and acquirer and target industry fixed effects.

Table (6) presents our results. Columns (1-6) show that the interaction of the $52 \mathrm{wHigh}_{i}$ with the indicator of first time acquirers has a negative effect on the offered premia in domestic acquisitions, but no effect on premia in CBA. This suggest that inexperienced bidders, or first time acquirers, particularly in CBA where the valuation risks can be severe, may expend more time and effort in considering and negotiating offer terms rather relying on the 52-week share price peak. Columns (7-12) show that the interaction effects between the $52 \mathrm{wHigh}_{i}$ with the indicator of serial acquirers is very different for serial acquirers, particularly for acquirers in foreign markets. Specifically, the effects of reference points on CBA managerial decisions and premia stem almost entirely from the group of frequent acquirers, which are most likely to be associated with the psychological distortions highlighted earlier in the paper. Interestingly, the effect of anchors on serial acquirers of domestic targets (Columns 7-8), is substantially smaller than for CBA (Columns 9-10). Columns (11-12) show that the interaction effects between $52 \mathrm{wHigh}_{i}$ with the indicator of serial acquirers overall (both in the domestic and foreign markets) is much stronger in acquisitions of foreign rather than domestic target deals, with coefficients for CBA approximately twice the size of those for domestic acquisitions. Overall, our results suggest that the decisions of those who frequently acquire foreign targets tend to be biased towards recent peaks of target share prices. Once again, 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.

## 5. Conclusion

Using a global dataset of domestic M\&A and cross-border mergers and acquisitions (CBA), we investigate whether premia in CBA are determined by recent stock price peaks of targets (or reference points). Our results demonstrate that the well established finding of foreign targets receiving higher premia (Harris and Ravenscraft, 1991) is biased towards recent share price peaks of targets. This finding suggests that the merging firms' boards, and in particular the target firms' shareholders who eventually approve the deal, factor in recent stock price peaks of targets in their decision-making process. Consistent with the predictions of prospect theory (Tversky and Kahneman, 1974; Kahneman and Tversky, 1979), decision-makers have the propensity to perceive the value of investment choices as changes in wealth relative to a reference point, which derived from arbitrary expectations rather than a relevant frame of reference.

We also investigate whether the above heuristic is further related to the experience of acquirers in making acquisitions of foreign targets. We show for the first time in the literature that the effects of reference points on CBA managerial decisions and premia stem almost entirely from the group of frequent acquirers, which are most likely to be associated with the psychological distortions. Importantly, the effect of anchors on domestic M\&A, or CBA announced by a first time or an acquirers with only one CBA, is not significantly related to premia, and only in the group of frequent acquirers of foreign targets do we find this. 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

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., 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 Forthcoming, 1-38.

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.

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 XLIII, 1161-1175.

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

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.

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.

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

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, decision Processes in Negotiation.

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.

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

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, decision Processes in Negotiation.

Northcraft, G. B., Neale, M. A., 1987. Experts, amateurs, and real estate: An anchoring-andadjustment 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 pp. 197-216.

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

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

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: Time series differences between offered price and 52-week target share price peaks
This figure shows the time series average of the difference between the price offered (PPS from Refinitiv) and the 52week high of target shares ( $52 \mathrm{wHigh}_{i, t-250 \rightarrow t-21}$ ).

Table 1: Annual distribution of sample
This table presents the annual distribution of our sample, and the main variables entering our analysis. Panel A (B) [C] refers to all (domestic target) [foreign target] M\&A deals. 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; Focused represents deals in which acquirer and target are in the same industry, i.e., hey share the same two-digit SIC code; Cash represents deals settled in cash; Stock corresponds deals settled in stock; Private (Public) represents deals of private
 to the announcement date expressed as a $\log$ percentage difference from the target stock price 20 trading days prior to the announcement date; PPS is the price per share from Refinitiv. All variables are defined in Appendix Table (B).

|  | Panel A: All M\&A |  |  |  |  |  |  |  |  |  |  |  | Panel B: Domestic M\&A |  |  | Panel C: CBA |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | All | Domestic | CBA | Focused | Cash | Stock | Private | Public | Deal Val. | 52wHigh | PPS | Premia | 52wHigh | PPS | Premia | 52wHigh | PPS | Premia |
| 1990 | 53 | 46 | 7 | 24 | 22 | 12 | 10 | 33 | 609 | 14.5 | 15.5 | 45.4 | 14.9 | 16.0 | 44.2 | 12.3 | 11.8 | 53.0 |
| 1991 | 136 | 122 | 14 | 70 | 45 | 52 | 15 | 110 | 434 | 17.6 | 20.0 | 40.4 | 18.2 | 20.7 | 40.9 | 12.9 | 13.6 | 36.3 |
| 1992 | 117 | 105 | 12 | 56 | 40 | 52 | 11 | 88 | 343 | 18.8 | 23.5 | 40.3 | 19.4 | 24.5 | 39.9 | 14.1 | 15.0 | 44.2 |
| 1993 | 125 | 115 | 10 | 66 | 47 | 42 | 15 | 98 | 588 | 16.7 | 20.2 | 39.1 | 17.3 | 21.1 | 39.1 | 9.3 | 10.1 | 39.1 |
| 1994 | 226 | 204 | 22 | 88 | 97 | 95 | 27 | 185 | 513 | 18.9 | 21.2 | 36.7 | 19.1 | 21.4 | 37.2 | 17.5 | 20.0 | 31.9 |
| 1995 | 324 | 295 | 29 | 142 | 123 | 128 | 26 | 259 | 809 | 18.4 | 21.3 | 33.7 | 18.3 | 21.6 | 33.2 | 19.4 | 19.0 | 38.5 |
| 1996 | 356 | 317 | 39 | 146 | 128 | 138 | 42 | 277 | 716 | 18.7 | 19.6 | 33.9 | 19.3 | 19.9 | 33.1 | 13.7 | 16.4 | 40.5 |
| 1997 | 467 | 407 | 60 | 214 | 146 | 190 | 50 | 370 | 850 | 22.4 | 24.7 | 30.7 | 22.6 | 25.2 | 30.3 | 20.7 | 21.4 | 33.1 |
| 1998 | 588 | 503 | 85 | 274 | 246 | 213 | 75 | 453 | 1,457 | 24.3 | 24.2 | 35.8 | 24.2 | 24.4 | 36.3 | 24.8 | 23.2 | 32.5 |
| 1999 | 773 | 613 | 160 | 400 | 362 | 228 | 103 | 567 | 1,359 | 20.9 | 21.3 | 37.4 | 20.6 | 20.7 | 36.5 | 22.2 | 23.4 | 40.9 |
| 2000 | 617 | 487 | 130 | 318 | 283 | 201 | 98 | 453 | 1,517 | 25.3 | 23.9 | 38.2 | 25.8 | 24.0 | 36.9 | 23.3 | 23.8 | 43.1 |
| 2001 | 409 | 338 | 71 | 198 | 181 | 121 | 51 | 310 | 777 | 24.6 | 18.2 | 40.4 | 26.4 | 19.3 | 40.7 | 16.0 | 13.1 | 39.0 |
| 2002 | 289 | 245 | 44 | 143 | 144 | 77 | 43 | 200 | 736 | 15.5 | 13.4 | 35.3 | 15.8 | 13.6 | 35.0 | 13.9 | 12.3 | 37.0 |
| 2003 | 338 | 280 | 58 | 180 | 179 | 76 | 73 | 216 | 779 | 23.4 | 20.6 | 33.0 | 25.1 | 21.4 | 33.2 | 15.1 | 16.6 | 32.4 |
| 2004 | 317 | 257 | 60 | 150 | 154 | 87 | 45 | 235 | 1,644 | 27.0 | 22.7 | 27.3 | 26.4 | 22.4 | 27.2 | 29.5 | 24.0 | 27.4 |
| 2005 | 441 | 372 | 69 | 223 | 261 | 82 | 84 | 299 | 1,574 | 22.4 | 22.4 | 25.9 | 23.1 | 22.7 | 25.3 | 18.3 | 21.1 | 29.2 |
| 2006 | 586 | 461 | 125 | 319 | 373 | 101 | 118 | 354 | 1,871 | 21.5 | 21.1 | 26.7 | 20.2 | 19.8 | 25.2 | 26.4 | 25.8 | 32.3 |
| 2007 | 629 | 458 | 171 | 339 | 398 | 106 | 121 | 362 | 2,361 | 26.2 | 24.6 | 27.2 | 29.1 | 26.0 | 26.6 | 18.5 | 20.6 | 28.7 |
| 2008 | 396 | 289 | 107 | 206 | 278 | 54 | 67 | 240 | 1,271 | 25.9 | 20.8 | 38.3 | 30.0 | 23.5 | 36.9 | 15.0 | 13.5 | 42.3 |
| 2009 | 342 | 275 | 67 | 166 | 179 | 98 | 59 | 224 | 1,048 | 26.9 | 17.4 | 44.3 | 30.7 | 19.3 | 42.7 | 10.9 | 9.5 | 50.9 |
| 2010 | 457 | 342 | 115 | 239 | 305 | 87 | 74 | 275 | 998 | 15.8 | 17.0 | 37.1 | 17.2 | 16.7 | 37.0 | 11.8 | 17.9 | 37.4 |
| 2011 | 395 | 310 | 85 | 228 | 267 | 61 | 58 | 202 | 1,299 | 30.3 | 28.8 | 34.6 | 34.2 | 32.1 | 33.9 | 15.8 | 17.1 | 37.1 |
| 2012 | 383 | 290 | 93 | 202 | 264 | 61 | 71 | 213 | 771 | 20.9 | 19.2 | 33.6 | 23.8 | 21.3 | 32.3 | 11.7 | 12.7 | 37.7 |
| 2013 | 410 | 335 | 75 | 159 | 294 | 49 | 60 | 278 | 986 | 20.1 | 20.1 | 27.5 | 22.3 | 22.0 | 26.3 | 10.5 | 11.6 | 32.8 |
| 2014 | 395 | 302 | 93 | 175 | 255 | 63 | 57 | 277 | 2,802 | 22.1 | 23.3 | 26.8 | 22.7 | 23.3 | 25.4 | 20.2 | 23.1 | 31.1 |
| 2015 | 438 | 323 | 115 | 220 | 257 | 73 | 55 | 297 | 3,346 | 23.2 | 24.4 | 30.1 | 22.8 | 23.6 | 28.6 | 24.3 | 26.7 | 34.4 |
| 2016 | 400 | 291 | 109 | 244 | 271 | 70 | 69 | 233 | 2,300 | 23.8 | 22.5 | 35.1 | 24.6 | 22.6 | 33.3 | 21.5 | 22.1 | 39.8 |
| 2017 | 389 | 278 | 111 | 202 | 259 | 74 | 65 | 229 | 2,255 | 18.6 | 24.1 | 29.4 | 19.7 | 26.5 | 28.0 | 15.9 | 18.0 | 32.7 |
| 2018 | 414 | 307 | 107 | 222 | 256 | 84 | 57 | 247 | 2,363 | 21.4 | 21.6 | 29.2 | 23.2 | 22.5 | 27.1 | 16.4 | 18.9 | 35.0 |
| 2019 | 377 | 258 | 119 | 209 | 237 | 77 | 53 | 209 | 2,784 | 22.8 | 23.5 | 31.8 | 24.7 | 24.7 | 29.9 | 18.8 | 20.9 | 35.8 |
| 2020 | 344 | 260 | 84 | 199 | 224 | 71 | 70 | 176 | 2,027 | 17.3 | 18.7 | 38.3 | 17.4 | 18.5 | 36.1 | 16.8 | 19.3 | 45.1 |
| 2021 | 474 | 357 | 117 | 277 | 304 | 91 | 87 | 246 | 2,292 | 22.0 | 25.7 | 31.6 | 22.3 | 25.9 | 30.4 | 21.2 | 25.3 | 35.2 |
| 2022 | 381 | 299 | 82 | 249 | 276 | 57 | 86 | 181 | 2,206 | 33.7 | 27.7 | 39.3 | 39.4 | 31.6 | 38.8 | 12.8 | 13.7 | 40.9 |
| Total | 12,786 | 10,141 | 2,645 | 6,547 | 7,155 | 3,071 | 1,995 | 8,396 | - | - | - | - | - | - | - | - | - | - |
| \% of All | , | 79.3\% | 20.7\% | 51.2\% | 56.0\% | 24.0\% | 15.6\% | 65.7\% | - | - | , | - | - | - | - | - | - | - |
| Average | - |  | - |  |  |  |  |  | 1445 | 21.9 | 21.6 | 34.4 | 23.1 | 22.4 | 33.6 | 17.3 | 18.2 | 37.2 |

## Table 2: Summary statistics

This table presents summary statistics of our key variables. Panel A presents summary statistics of our main dependent variables; Panel B presents summary statistics of our Premia $i_{i, t-x}$ (with $x=$ the number of trading days prior to the M\&A announcement day), $52 \mathrm{wHigh}_{i}$ and Price Per Share (PPS) variables by domestic and foreign target deals; Panel C presents summary statistics of Premia $i_{i, t-20}$ by deal characteristics; Panel E presents summary statistics of Premia $i_{i, t-20}$ by the target firm's macro-industry, and finally Panel E presents summary statistics of deal characteristics. All variables are defined in Appendix Table (B).

|  | N | Mean | StdDev | Min | 25th Pct | Median | 75th Pct | Max |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Panel A: Dependent Variables |  |  |  |  |  |  |  |
| $52 \mathrm{wHigh}{ }_{i}$ | 12,786 | 22.5 | 65.1 | 0.0 | 2.6 | 9.7 | 24.3 | 970.4 |
| Ref. Point | 12,786 | 35.1 | 42.3 | -3.0 | 6.5 | 20.4 | 46.9 | 219.5 |
| $\mathrm{PPS}_{i}$ | 12,786 | 27.8 | 159.2 | 0.0 | 2.4 | 9.6 | 25.1 | 6265.0 |
| Premia ${ }_{\text {i,t-10 }}$ | 12,696 | 31.1 | 24.0 | -64.7 | 14.8 | 26.9 | 41.6 | 126.9 |
| Premia $i_{\text {it-20 }}$ | 12,786 | 33.5 | 24.5 | 0.0 | 16.5 | 28.6 | 44.0 | 131.9 |
| Premia ${ }_{i, t-30}$ | 12,673 | 34.4 | 26.2 | -119.6 | 17.3 | 29.8 | 46.0 | 138.8 |
| Premia Ref ${ }_{1 d}$ | 12,322 | 36.6 | 39.6 | -77.4 | 13.3 | 27.8 | 47.8 | 248.4 |
| Premia $\operatorname{Ref}_{1 w}$ | 12,289 | 40.6 | 41.7 | -76.9 | 16.3 | 31.4 | 51.9 | 261.4 |
| Premia $\operatorname{Ref}_{4 w}$ | 12,304 | 45.4 | 44.9 | -77.2 | 18.9 | 34.7 | 57.4 | 286.6 |
| $\operatorname{TCAR}(t-1, t+1)$ | 12,718 | 21.6 | 22.0 | -20.8 | 6.1 | 16.6 | 31.2 | 91.1 |
| $\operatorname{TCAR}(t-2, t+2)$ | 12,770 | 22.6 | 22.8 | -24.7 | 6.7 | 17.6 | 32.6 | 96.9 |
| $\operatorname{TCAR}(t-5, t+5)$ | 12,779 | 24.6 | 24.9 | -31.5 | 7.8 | 19.3 | 35.0 | 113.2 |
| $\operatorname{TCAR}(t-10, t+10)$ | 12,780 | 26.8 | 27.1 | -41.0 | 8.8 | 21.5 | 38.2 | 131.2 |
| Panel B: $52 \mathrm{wHigh}_{i}, \mathrm{PPS}_{i}$, Premia $_{i, t-20}$ by Domestic M\&A and CBA |  |  |  |  |  |  |  |  |
| $52 \mathrm{wHigh}{ }_{i}$ (Dom.) | 10,141 | 23.6 | 70.1 | 0.0 | 2.9 | 10.4 | 24.8 | 970.4 |
| Ref Point (Dom.) | 10,141 | 34.8 | 42.0 | -3.0 | 6.5 | 20.4 | 46.5 | 219.5 |
| $\mathrm{PPS}_{i}$ (Dom.) | 10,141 | 29.2 | 166.1 | 0.0 | 2.6 | 10.4 | 25.7 | 6235.2 |
| Premia ${ }_{i, t-20}$ (Dom.) | 10,141 | 32.8 | 24.3 | 0.0 | 16.0 | 27.8 | 43.3 | 131.9 |
| $52 \mathrm{wHigh}{ }_{i}$ (CBA) | 2,645 | 18.4 | 40.0 | 0.0 | 1.8 | 7.0 | 21.9 | 970.4 |
| Ref Point (CBA) | 2,645 | 36.1 | 43.8 | -3.0 | 6.8 | 20.3 | 47.8 | 219.5 |
| $\mathrm{PPS}_{i}(\mathrm{CBA})$ | 2,645 | 22.1 | 129.1 | 0.0 | 1.7 | 7.1 | 23.2 | 6265.0 |
| Premia ${ }_{i, t-20}$ (CBA) | 2,645 | 36.5 | 25.2 | 0.0 | 18.8 | 31.5 | 47.2 | 131.9 |
| Panel C: Premia ${ }_{i, t-20}$ by Deal Characteristics |  |  |  |  |  |  |  |  |
| Focused | 6,547 | 33.9 | 24.4 | 0.0 | 17.1 | 28.8 | 44.4 | 131.9 |
| Diversified | 6,239 | 33.1 | 24.7 | 0.0 | 16.0 | 28.3 | 43.7 | 131.9 |
| Cash | 7,155 | 33.4 | 24.1 | 0.0 | 16.7 | 28.8 | 43.8 | 131.9 |
| Mixed | 2,560 | 33.0 | 23.2 | 0.0 | 17.4 | 28.1 | 42.7 | 131.9 |
| Stock | 3,071 | 34.3 | 26.5 | 0.0 | 15.5 | 28.6 | 46.3 | 131.9 |
| Private | 1,995 | 31.0 | 23.2 | 0.0 | 15.4 | 25.2 | 40.5 | 131.9 |
| Public | 8,396 | 34.0 | 25.0 | 0.0 | 16.6 | 29.0 | 44.9 | 131.9 |
| Subsidiary | 2,395 | 34.0 | 23.7 | 0.0 | 17.6 | 30.0 | 43.2 | 131.9 |
| Panel D: Premia ${ }_{i, t-20}$ by Target Macro Industry |  |  |  |  |  |  |  |  |
| Cons. Prod. \& Ser. | 836 | 34.0 | 24.1 | 0.0 | 17.4 | 29.0 | 44.2 | 131.9 |
| Cons. Staples | 556 | 31.9 | 22.7 | 0.1 | 16.2 | 27.1 | 43.3 | 131.9 |
| Energy \& Power | 1,085 | 31.0 | 23.9 | 0.2 | 14.6 | 26.0 | 40.1 | 131.9 |
| Financials | 2,084 | 29.8 | 22.4 | 0.0 | 14.7 | 25.7 | 39.3 | 131.9 |
| Healthcare | 1,282 | 39.5 | 26.7 | 0.2 | 20.8 | 34.5 | 51.7 | 131.9 |
| High Tech. | 2,121 | 36.7 | 25.3 | 0.0 | 19.2 | 32.0 | 48.1 | 131.9 |
| Industrials | 1,219 | 33.5 | 23.5 | 0.0 | 17.2 | 29.2 | 44.6 | 131.9 |
| Materials | 1,430 | 36.5 | 25.5 | 0.0 | 18.9 | 32.0 | 47.6 | 131.9 |
| Media \& Entert. | 621 | 33.1 | 26.1 | 0.0 | 15.7 | 26.2 | 41.7 | 131.9 |
| Real Estate | 570 | 21.8 | 19.2 | 0.0 | 9.2 | 17.3 | 27.6 | 131.9 |
| Retail | 598 | 31.9 | 23.3 | 0.0 | 16.0 | 26.9 | 42.2 | 131.9 |
| Telecomm. | 384 | 34.5 | 25.2 | 0.0 | 16.6 | 29.5 | 46.6 | 131.9 |
| Panel E: Deal Characteristics |  |  |  |  |  |  |  |  |
| Deal Value (in m\$) | 12,786 | 1,047.7 | 1,963.5 | 1.1 | 61.0 | 216.6 | 916.9 | 8,374.2 |
| Traget MV (in m\$) | 12,786 | 1,099.0 | 3,085.8 | 3.2 | 45.6 | 163.9 | 701.1 | 24,633.4 |
| Acquirer MV (in m\$) | 8,143 | 10,855.7 | 24,932.9 | 8.7 | 330.5 | 1,543.1 | 7,388.4 | 128,640.0 |
| Relative Size | 8,143 | 0.4 | 0.6 | 0.0 | 0.1 | 0.2 | 0.6 | 2.6 |

## Table 3: Univariate results

This table presents univariate results on the impact of CBA versus domestic target M\&As on premia, measured by Premia $_{i, t-20}$ for all deals (Panel A), and for deals sorted by: the acquirer listing status (Panel B), the deal's method of payment (Panel C), and the deal's industry diversification (Panel D). The Premia ${ }_{i, t-20}$ is the offer price from Refinitiv expressed as a log percentage difference from the target stock price 20 trading days prior to the M\&A 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 versus Domestic target M\&A. All variables are defined in Appendix Table (B). ${ }^{* * *}{ }^{* *}$, and * denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels, respectively.


## Table 4: Multivariate analysis

This table presents OLS regressions of the Premia ${ }_{i, t-20}$ on the 52-week target high price, the foreign target indicator, the product of the two, and other variables.

$$
\text { Premia }_{i, t}=\alpha+\beta_{1} \mathrm{CBA}_{i}+\beta_{2} 52 \mathrm{wHigh}_{i}+\beta_{3}(52 \mathrm{wHigh} \times \mathrm{CBA})_{i}+\sum_{i=1}^{k} \beta_{j} X_{i, j}+\varepsilon_{i, t}
$$

where Premia ${ }_{i, t-20}$ is the offer price from Refinitiv and $52 \mathrm{wHigh}_{i}$ is the high stock price over the year ( 365 calendar days) ending 21 trading days prior to the announcement date, with both expressed as a log percentage difference from the target stock price 20 trading days prior to the announcement date. $\mathrm{CBA}_{i}$ is a dummy variable indicator that is assigned the value of one for CBA, and zero otherwise (domestic M\&A). All variables are defined in Appendix Table (B). ${ }^{* * *}$, ${ }^{* *}$, and * denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels, respectively.

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{CBA}_{i}$ | $\begin{gathered} 3.681^{* * *} \\ (0.867) \end{gathered}$ |  | $\begin{gathered} 3.452^{* * *} \\ (0.908) \end{gathered}$ | $\begin{gathered} 2.116^{* * *} \\ (0.720) \end{gathered}$ | $\begin{gathered} 0.912 \\ (0.590) \end{gathered}$ | $\begin{aligned} & 1.125^{*} \\ & (0.605) \end{aligned}$ | $\begin{gathered} 0.720 \\ (0.547) \end{gathered}$ | $\begin{gathered} 0.608 \\ (0.547) \end{gathered}$ | $\begin{gathered} 1.719^{* * *} \\ (0.595) \end{gathered}$ | $\begin{gathered} 1.909 * * * \\ (0.694) \end{gathered}$ | $\begin{aligned} & 1.371^{* *} \\ & (0.550) \end{aligned}$ | $\begin{gathered} 1.575^{* * *} \\ (0.536) \end{gathered}$ | $\begin{gathered} 2.733^{* * *} \\ (0.670) \end{gathered}$ |
| Ref. Point ${ }_{i}$ |  | $\begin{gathered} 0.182^{* * *} \\ (0.00992) \end{gathered}$ | $\begin{gathered} 0.181^{* * *} \\ (0.00990) \end{gathered}$ | $\begin{aligned} & 0.173^{* * *} \\ & (0.0119) \end{aligned}$ | $\begin{aligned} & 0.104^{* * *} \\ & (0.0183) \end{aligned}$ | $\begin{aligned} & 0.103^{* * *} \\ & (0.0161) \end{aligned}$ | $\begin{aligned} & 0.107^{* * *} \\ & (0.0185) \end{aligned}$ | $\begin{aligned} & 0.109^{* * *} \\ & (0.0186) \end{aligned}$ | $\begin{aligned} & 0.104^{* * *} \\ & (0.0182) \end{aligned}$ | $\begin{aligned} & 0.105^{* * *} \\ & (0.0176) \end{aligned}$ | $\begin{aligned} & 0.165^{* * *} \\ & (0.0140) \end{aligned}$ | $\begin{aligned} & 0.149^{* * *} \\ & (0.0148) \end{aligned}$ |  |
| $\mathrm{CBA}_{i} \times$ Ref. Point $_{i}$ |  |  |  | $\begin{aligned} & 0.0373^{* *} \\ & (0.0165) \end{aligned}$ | $\begin{gathered} 0.0479^{* * *} \\ (0.0173) \end{gathered}$ | $\begin{gathered} 0.0473^{* * *} \\ (0.0169) \end{gathered}$ | $\begin{gathered} 0.0483^{* * *} \\ (0.0175) \end{gathered}$ | $\begin{gathered} 0.0464^{* * *} \\ (0.0177) \end{gathered}$ | $\begin{aligned} & 0.0451^{* *} \\ & (0.0177) \end{aligned}$ | $\begin{gathered} 0.0472 * * * \\ (0.0162) \end{gathered}$ | $\begin{aligned} & 0.0408^{* *} \\ & (0.0175) \end{aligned}$ | $\begin{aligned} & 0.0414^{* *} \\ & (0.0181) \end{aligned}$ |  |
| Tar. Volatility $i_{i}$ |  |  |  |  | $\begin{gathered} 11.36^{* * *} \\ (0.988) \end{gathered}$ | $\begin{gathered} 10.76^{* * *} \\ (1.057) \end{gathered}$ | $\begin{gathered} 10.72^{* * *} \\ (0.977) \end{gathered}$ | $\begin{gathered} 10.75^{* * *} \\ (0.986) \end{gathered}$ | $\begin{gathered} 11.31^{* * *} \\ (0.912) \end{gathered}$ | $\begin{gathered} 11.32^{* * *} \\ (0.905) \end{gathered}$ |  |  | $\begin{gathered} 13.55^{* * *} \\ (0.708) \end{gathered}$ |
| $\mathrm{Cash}_{i}$ |  |  |  |  | $\begin{aligned} & -0.615 \\ & (0.475) \end{aligned}$ | $\begin{aligned} & -0.175 \\ & (0.481) \end{aligned}$ | $\begin{gathered} -0.991^{* *} \\ (0.476) \end{gathered}$ | $\begin{gathered} -1.006^{* *} \\ (0.485) \end{gathered}$ | $\begin{aligned} & -0.500 \\ & (0.482) \end{aligned}$ | $\begin{gathered} -0.558 \\ (0.474) \end{gathered}$ |  |  | $\begin{aligned} & -0.891^{*} \\ & (0.496) \end{aligned}$ |
| Stock $_{i}$ |  |  |  |  | $\begin{gathered} -2.445^{* * *} \\ (0.694) \end{gathered}$ | $\begin{gathered} -2.769 * * * \\ (0.729) \end{gathered}$ | $\begin{gathered} -2.559^{* * *} \\ (0.684) \end{gathered}$ | $\begin{gathered} -2.595^{* * *} \\ (0.697) \end{gathered}$ | $\begin{gathered} -2.027^{* * *} \\ (0.654) \end{gathered}$ | $\begin{gathered} -2.093^{* * *} \\ (0.632) \end{gathered}$ |  |  | $\begin{gathered} -2.194^{* * *} \\ (0.733) \end{gathered}$ |
| Public $_{i}$ |  |  |  |  | $\begin{aligned} & -0.220 \\ & (0.417) \end{aligned}$ | $\begin{aligned} & -0.128 \\ & (0.411) \end{aligned}$ | $\begin{aligned} & -0.465 \\ & (0.419) \end{aligned}$ | $\begin{aligned} & -0.548 \\ & (0.441) \end{aligned}$ | $\begin{aligned} & -0.630^{*} \\ & (0.374) \end{aligned}$ | $\begin{gathered} -0.784^{*} \\ (0.385) \end{gathered}$ |  |  | $\begin{gathered} -0.416 \\ (0.455) \end{gathered}$ |
| Private $_{i}$ |  |  |  |  | $\begin{gathered} -3.269^{* * *} \\ (0.236) \end{gathered}$ | $\begin{gathered} -3.159^{* * *} \\ (0.232) \end{gathered}$ | $\begin{gathered} -3.217^{* * *} \\ (0.274) \end{gathered}$ | $\begin{aligned} & -3.112^{* * *} \\ & (0.255) \end{aligned}$ | $\begin{gathered} -3.328^{* * *} \\ (0.221) \end{gathered}$ | $\begin{gathered} -3.449^{* * *} \\ (0.224) \end{gathered}$ |  |  | $\begin{gathered} -3.059^{* * *} \\ (0.293) \end{gathered}$ |
| Diversified $_{i}$ |  |  |  |  | $\begin{gathered} -0.670 \\ (0.848) \end{gathered}$ | $\begin{gathered} -0.534 \\ (0.816) \end{gathered}$ | $\begin{aligned} & -0.398 \\ & (0.808) \end{aligned}$ | $\begin{aligned} & -0.389 \\ & (0.847) \end{aligned}$ | $\begin{gathered} -0.748 \\ (0.858) \end{gathered}$ | $\begin{gathered} -0.782 \\ (0.815) \end{gathered}$ |  |  | $\begin{aligned} & -0.623 \\ & (0.778) \end{aligned}$ |
| Hostile $_{i}$ |  |  |  |  | $\begin{gathered} 4.030^{* * *} \\ (1.118) \end{gathered}$ | $\begin{aligned} & 2.763^{* *} \\ & (1.185) \end{aligned}$ | $\begin{gathered} 4.175 * * * \\ (1.137) \end{gathered}$ | $\begin{gathered} 4.086^{* * *} \\ (1.135) \end{gathered}$ | $\begin{gathered} 4.148^{* * *} \\ (1.008) \end{gathered}$ | $\begin{gathered} 4.445^{* * *} \\ (1.107) \end{gathered}$ |  |  | $\begin{gathered} 3.737^{* * *} \\ (1.252) \end{gathered}$ |
| Tender ${ }_{i}$ |  |  |  |  | $\begin{gathered} 3.042^{* * *} \\ (0.376) \end{gathered}$ | $\begin{gathered} 2.632^{* * *} \\ (0.396) \end{gathered}$ | $\begin{gathered} 2.882^{* * *} \\ (0.372) \end{gathered}$ | $\begin{gathered} 2.826^{* * *} \\ (0.375) \end{gathered}$ | $\begin{gathered} 3.385^{* * *} \\ (0.444) \end{gathered}$ | $\begin{gathered} 3.376 * * * \\ (0.440) \end{gathered}$ |  |  | $\begin{gathered} 2.624^{* * *} \\ (0.404) \end{gathered}$ |
| \#AcqFA ${ }_{i}$ |  |  |  |  | $\begin{gathered} 0.168 \\ (0.600) \end{gathered}$ | $\begin{gathered} 0.571 \\ (0.545) \end{gathered}$ | $\begin{aligned} & 0.0571 \\ & (0.574) \end{aligned}$ | $\begin{gathered} -0.00264 \\ (0.570) \end{gathered}$ | $\begin{gathered} 0.146 \\ (0.557) \end{gathered}$ | $\begin{aligned} & 0.0728 \\ & (0.552) \end{aligned}$ |  |  | $\begin{gathered} 0.201 \\ (0.551) \end{gathered}$ |
| \# $\operatorname{TrgFA}_{i}$ |  |  |  |  | $\begin{gathered} 0.772 \\ (0.555) \end{gathered}$ | $\begin{gathered} 0.794 \\ (0.534) \end{gathered}$ | $\begin{gathered} 0.802 \\ (0.555) \end{gathered}$ | $\begin{gathered} 0.706 \\ (0.546) \end{gathered}$ | $\begin{aligned} & -0.0192 \\ & (0.539) \end{aligned}$ | $\begin{gathered} 0.204 \\ (0.532) \end{gathered}$ |  |  | $\begin{gathered} 0.511 \\ (0.599) \end{gathered}$ |
| EV2SAles ${ }_{i}$ |  |  |  |  | $\begin{gathered} 0.917^{* * *} \\ (0.182) \end{gathered}$ | $\begin{gathered} 1.002^{* * *} \\ (0.202) \end{gathered}$ | $\begin{gathered} 1.295^{* * *} \\ (0.191) \end{gathered}$ | $\begin{gathered} 1.348^{* * *} \\ (0.201) \end{gathered}$ | $\begin{gathered} 1.071^{* * *} \\ (0.184) \end{gathered}$ | $\begin{gathered} 1.072^{* * *} \\ (0.180) \end{gathered}$ |  |  | $\begin{gathered} 1.127^{* * *} \\ (0.206) \end{gathered}$ |
| $\mathrm{EV} 2 \mathrm{CF}_{i}$ |  |  |  |  | $\begin{gathered} 1.763^{* * *} \\ (0.318) \end{gathered}$ | $\begin{gathered} 1.647^{* * *} \\ (0.282) \end{gathered}$ | $\begin{gathered} 1.731^{* * *} \\ (0.318) \end{gathered}$ | $\begin{gathered} 1.743^{* * *} \\ (0.319) \end{gathered}$ | $\begin{gathered} 1.613^{* * *} \\ (0.272) \end{gathered}$ | $\begin{gathered} 1.623^{* * *} \\ (0.274) \end{gathered}$ |  |  | $\begin{gathered} 1.233^{* * *} \\ (0.304) \end{gathered}$ |
| Fixed Effects Fixed Effects |  |  |  |  |  | Year | TMcInd | TMdInd | TNatn | BNatn | TMcInd | Year+ <br> TMcInd | Year+ <br> TMcInd |
| Adj. $R^{2}$ | 0.004 | 0.098 | 0.102 | 0.102 | 0.169 | 0.179 | 0.177 | 0.183 | 0.178 | 0.181 | 0.116 |  | 0.189 |
| F-Stat | 18.1*** | 335.4*** | 451.1*** | 302.1*** | 155.4*** | 127.4*** | 141.1*** | 131.9*** | 153.5*** | 157.2*** | 196.3*** | 149.9*** | 87.1*** |
| NObs | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 |

## Table 5: Multivariate analysis (Piecewise)

This table presents piecewise OLS regressions of the Premia $i_{i, t-20}$ on the 52-week target high price, the foreign target indicator, the product of the two, and other variables that include firm and deal characteristics $\left(X_{i}\right)$.

$$
\text { Premia }_{i, t}=\alpha+\beta_{1} \text { CBA }_{i}+\sum_{j=2}^{4} \beta_{j} \text { Piecewise }_{2 \rightarrow 4, i, j}+\sum_{j=5}^{7} \beta_{j}\left(\text { Piecewise }_{5 \rightarrow 7} \times \text { CBA }\right)_{i, j}+\sum_{j=8}^{k} \beta_{j} X_{i, j}+\varepsilon_{i, t}
$$

where Premia $i_{, t-20}$ is the offer price from Refinitiv expressed as a log percentage difference from the target stock price 20 trading days prior to the announcement date. Piecewise ${ }_{1}$ is the $\min \left(52 \mathrm{wHigh}_{i, t-20}, 25\right)$, Piecewise $_{2}$ is the $\max \left(0, \min \left(52 \mathrm{wHigh}_{i, t-20}-25,50\right)\right)$ and Piecewise $_{3}$ is the $\max \left(52 \mathrm{wHigh}_{i, t-20}-75,0\right) . \mathrm{CBA}_{i}$ is a dummy variable indicator that is assigned the value of one for CBA, and zero otherwise (domestic M\&A). All variables are defined in Appendix Table (B). ${ }^{* * *},{ }^{* *}$, and * denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels, respectively.

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{CBA}_{i}$ |  | $\begin{gathered} 3.475^{* * *} \\ (0.553) \end{gathered}$ | $\begin{gathered} 1.155 \\ (0.907) \end{gathered}$ | $\begin{gathered} -0.250 \\ (0.884) \end{gathered}$ | $\begin{gathered} -0.0130 \\ (0.875) \end{gathered}$ | $\begin{gathered} -0.451 \\ (0.870) \end{gathered}$ | $\begin{aligned} & -0.448 \\ & (0.869) \end{aligned}$ | $\begin{gathered} 0.632 \\ (0.895) \end{gathered}$ | $\begin{gathered} 0.816 \\ (0.941) \end{gathered}$ | $\begin{gathered} 0.381 \\ (0.869) \end{gathered}$ | $\begin{gathered} 0.810 \\ (0.902) \end{gathered}$ |
| Piecewise $_{1, i}$ | $\begin{aligned} & 0.263^{* * *} \\ & (0.0271) \end{aligned}$ | $\begin{aligned} & 0.264^{* * *} \\ & (0.0272) \end{aligned}$ | $\begin{aligned} & 0.238 * * \\ & (0.0314) \end{aligned}$ | $\begin{aligned} & 0.148^{* * *} \\ & (0.0311) \end{aligned}$ | $\begin{aligned} & 0.137 * * * \\ & (0.0310) \end{aligned}$ | $\begin{aligned} & 0.143^{* * *} \\ & (0.0304) \end{aligned}$ | $\begin{aligned} & 0.147 * * * \\ & (0.0308) \end{aligned}$ | $\begin{aligned} & 0.151^{* *} \\ & (0.0307) \end{aligned}$ | $\begin{aligned} & 0.151^{* * *} \\ & (0.0307) \end{aligned}$ | $\begin{aligned} & 0.209^{* * *} \\ & (0.0304) \end{aligned}$ | $\begin{aligned} & 0.193^{* * *} \\ & (0.0304) \end{aligned}$ |
| Piecewise $_{2, i}$ | $\begin{aligned} & 0.226^{* * *} \\ & (0.0200) \end{aligned}$ | $\begin{aligned} & 0.225^{* * *} \\ & (0.0200) \end{aligned}$ | $\begin{aligned} & 0.227^{* * *} \\ & (0.0219) \end{aligned}$ | $\begin{aligned} & 0.144^{* * *} \\ & (0.017) \end{aligned}$ | $\begin{aligned} & 0.143^{* *} \\ & (0.0211) \end{aligned}$ | $\begin{aligned} & 0.150^{* * *} \\ & (0.0215) \end{aligned}$ | $\begin{aligned} & 0.151^{* * *} \\ & (0.0215) \end{aligned}$ | $\begin{aligned} & 0.146^{* * *} \\ & (0.0215) \end{aligned}$ | $\begin{aligned} & 0.147^{* * *} \\ & (0.0217) \end{aligned}$ | $0.222^{* * *}$ | $\begin{aligned} & 0.201^{* * *} \\ & (0.0226) \end{aligned}$ |
| Piecewise ${ }_{3, i}$ | $\begin{aligned} & 0.119^{* * *} \\ & (0.0206) \end{aligned}$ | $\begin{aligned} & 0.118^{* * *} \\ & (0.0208) \end{aligned}$ | $\begin{aligned} & 0.106^{* *} \\ & (0.0239) \end{aligned}$ | $\begin{gathered} 0.0597^{* * *} \\ (0.0230) \end{gathered}$ | $\begin{gathered} 0.0629^{* * *} \\ (0.0226) \end{gathered}$ | $\begin{aligned} & 0.0631^{* * *} \\ & (0.0228) \end{aligned}$ | $\begin{aligned} & 0.0634^{* * *} \\ & (0.0230) \end{aligned}$ | $\begin{aligned} & 0.0573^{* *} \\ & (0.0228) \end{aligned}$ | $\begin{aligned} & 0.0582^{* *} \\ & (0.0228) \end{aligned}$ | $\begin{aligned} & 0.103^{* * *} \\ & (0.0232) \end{aligned}$ | $\begin{gathered} 0.0908^{* * *} \\ (0.0219) \end{gathered}$ |
| $\mathrm{CBA}_{i} \times$ Piecewise $_{1, i}$ |  |  | $\begin{gathered} 0.128^{*} \\ (0.0657) \end{gathered}$ | $\begin{aligned} & 0.152^{* *} \\ & (0.0636) \end{aligned}$ | $\begin{aligned} & 0.150^{* *} \\ & (0.0641) \end{aligned}$ | $\begin{aligned} & 0.156^{* *} \\ & (0.0631) \end{aligned}$ | $\begin{aligned} & 0.147^{* *} \\ & (0.0629) \end{aligned}$ | $\begin{aligned} & 0.147_{* *} \\ & (0.0627) \end{aligned}$ | $\begin{aligned} & 0.147^{* *} \\ & (0.0641) \end{aligned}$ | $\begin{aligned} & 0.137^{* *} \\ & (0.0647) \end{aligned}$ | $\begin{gathered} 0.113^{*} \\ (0.0682) \end{gathered}$ |
| Piecewise $_{2, i}$ |  |  | $\begin{gathered} -0.00774 \\ (0.0495) \end{gathered}$ | $\begin{aligned} & 0.00419 \\ & (0.0470) \end{aligned}$ | $\begin{aligned} & 0.00592 \\ & (0.0472) \end{aligned}$ | $\begin{aligned} & 0.00267 \\ & (0.0467) \end{aligned}$ | $\begin{gathered} -0.000600 \\ (0.0465) \end{gathered}$ | $\begin{aligned} & -0.00331 \\ & (0.0469) \end{aligned}$ | $\begin{aligned} & 0.00172 \\ & (0.0474) \end{aligned}$ | $\begin{gathered} -0.00474 \\ (0.0492) \end{gathered}$ | $\begin{gathered} 0.0141 \\ (0.0513) \end{gathered}$ |
| Piecewise ${ }_{3, i}$ |  |  | $\begin{gathered} 0.0516 \\ (0.0422) \end{gathered}$ | $\begin{gathered} 0.0547 \\ (0.0405) \end{gathered}$ | $\begin{gathered} 0.0529 \\ (0.0403) \end{gathered}$ | $\begin{gathered} 0.0557 \\ (0.0402) \end{gathered}$ | $\begin{gathered} 0.0568 \\ (0.0403) \end{gathered}$ | $\begin{gathered} 0.0568 \\ (0.0404) \end{gathered}$ | $\begin{gathered} 0.0572 \\ (0.0401) \end{gathered}$ | $\begin{gathered} 0.0530 \\ (0.0419) \end{gathered}$ | $\begin{gathered} 0.0465 \\ (0.0415) \end{gathered}$ |
| Trg. Volatility ${ }_{i}$ |  |  |  | $\begin{gathered} 11.16^{* * *} \\ (0.564) \end{gathered}$ | $\begin{gathered} 10.54^{* * *} \\ (0.593) \end{gathered}$ | $\begin{gathered} 10.56^{* * *} \\ (0.588) \end{gathered}$ | $\begin{gathered} 10.60^{* * *} \\ (0.585) \end{gathered}$ | $\begin{gathered} 11.08^{* * *} \\ (0.591) \end{gathered}$ | $\begin{gathered} 11.10^{* * *} \\ (0.574) \end{gathered}$ |  |  |
| $\mathrm{Cash}_{i}$ |  |  |  | $\begin{aligned} & -0.673 \\ & (0.540) \end{aligned}$ | $\begin{aligned} & -0.208 \\ & (0.543) \end{aligned}$ | $\begin{gathered} -1.046^{* *} \\ (0.523) \end{gathered}$ | $\begin{gathered} -1.056^{* *} \\ (0.526) \end{gathered}$ | $\begin{aligned} & -0.551 \\ & (0.532) \end{aligned}$ | $\begin{aligned} & -0.611 \\ & (0.538) \end{aligned}$ |  |  |
| Stock ${ }_{i}$ |  |  |  | $\begin{gathered} -2.521^{* * *} \\ (0.681) \end{gathered}$ | $\begin{gathered} -2.832^{* * *} \\ (0.667) \end{gathered}$ | $\begin{gathered} -2.633^{* * *} \\ (0.671) \end{gathered}$ | $\begin{gathered} -2.679^{* * *} \\ (0.665) \end{gathered}$ | $\begin{gathered} -2.086^{* * *} \\ (0.671) \end{gathered}$ | $\begin{gathered} -2.158^{* * *} \\ (0.667) \end{gathered}$ |  |  |
| Public $_{i}$ |  |  |  | $\begin{aligned} & -0.249 \\ & (0.609) \end{aligned}$ | $\begin{aligned} & -0.164 \\ & (0.596) \end{aligned}$ | $\begin{aligned} & -0.490 \\ & (0.593) \end{aligned}$ | $\begin{aligned} & -0.566 \\ & (0.590) \end{aligned}$ | $\begin{gathered} -0.672 \\ (0.623) \end{gathered}$ | $\begin{aligned} & -0.825 \\ & (0.623) \end{aligned}$ |  |  |
| Private $_{i}$ |  |  |  | $\begin{gathered} -3.245^{* * *} \\ (0.701) \end{gathered}$ | $\begin{gathered} -3.150^{* * *} \\ (0.711) \end{gathered}$ | $\begin{gathered} -3.196^{* * *} \\ (0.694) \end{gathered}$ | $\begin{gathered} -3.095^{* * *} \\ (0.698) \end{gathered}$ | $\begin{gathered} -3.310^{* * *} \\ (0.711) \end{gathered}$ | $\begin{gathered} -3.427^{* * *} \\ (0.709) \end{gathered}$ |  |  |
| Diversified $_{i}$ |  |  |  | $\begin{gathered} -0.646 \\ (0.444) \end{gathered}$ | $\begin{aligned} & -0.522 \\ & (0.427) \end{aligned}$ | $\begin{gathered} -0.372 \\ (0.436) \end{gathered}$ | $\begin{gathered} -0.383 \\ (0.449) \end{gathered}$ | $\begin{aligned} & -0.726 \\ & (0.450) \end{aligned}$ | $\begin{aligned} & -0.761^{*} \\ & (0.439) \end{aligned}$ |  |  |
| Hostile $_{i}$ |  |  |  | $\begin{gathered} 3.773^{* * *} \\ (1.147) \end{gathered}$ | $\begin{aligned} & 2.536^{* *} \\ & (1.143) \end{aligned}$ | $\begin{gathered} 3.940^{* * *} \\ (1.135) \end{gathered}$ | $\begin{gathered} 3.847^{* * *} \\ (1.127) \end{gathered}$ | $\begin{gathered} 3.880^{* * *} \\ (1.098) \end{gathered}$ | $\begin{gathered} 4.174^{* * *} \\ (1.110) \end{gathered}$ |  |  |
| Tender $_{i}$ |  |  |  | $\begin{gathered} 3.046 * * * \\ (0.485) \end{gathered}$ | $\begin{gathered} 2.624^{* * *} \\ (0.501) \end{gathered}$ | $\begin{gathered} 2.896^{* * *} \\ (0.473) \end{gathered}$ | $\begin{gathered} 2.849^{* * *} \\ (0.476) \end{gathered}$ | $\begin{gathered} 3.412 * * * \\ (0.555) \end{gathered}$ | $\begin{gathered} 3.397^{* * *} \\ (0.526) \end{gathered}$ |  |  |
| \#AcqFA ${ }_{i}$ |  |  |  | $\begin{gathered} 0.180 \\ (0.522) \end{gathered}$ | $\begin{gathered} 0.586 \\ (0.525) \end{gathered}$ | $\begin{aligned} & 0.0778 \\ & (0.519) \end{aligned}$ | $\begin{aligned} & 0.0255 \\ & (0.520) \end{aligned}$ | $\begin{gathered} 0.161 \\ (0.511) \end{gathered}$ | $\begin{aligned} & 0.0947 \\ & (0.509) \end{aligned}$ |  |  |
| $\# \operatorname{TrgFA}_{i}$ |  |  |  | $\begin{gathered} 0.843 \\ (0.644) \end{gathered}$ | $\begin{gathered} 0.860 \\ (0.645) \end{gathered}$ | $\begin{gathered} 0.872 \\ (0.632) \end{gathered}$ | $\begin{gathered} 0.765 \\ (0.636) \end{gathered}$ | $\begin{aligned} & 0.0410 \\ & (0.656) \end{aligned}$ | $\begin{gathered} 0.264 \\ (0.643) \end{gathered}$ |  |  |
| EV2SAles ${ }_{i}$ |  |  |  | $\begin{gathered} 0.945^{* * *} \\ (0.217) \end{gathered}$ | $\begin{gathered} 1.029^{* * *} \\ (0.214) \end{gathered}$ | $\begin{gathered} 1.319^{* * *} \\ (0.218) \end{gathered}$ | $\begin{gathered} 1.368^{* * *} \\ (0.222) \end{gathered}$ | $\begin{gathered} 1.098^{* * *} \\ (0.223) \end{gathered}$ | $\begin{aligned} & 1.100^{* * *} \\ & (0.220) \end{aligned}$ |  |  |
| EV2CF ${ }_{i}$ |  |  |  | $\begin{gathered} 1.789^{* * *} \\ (0.296) \end{gathered}$ | $\begin{gathered} 1.673^{* * *} \\ (0.289) \end{gathered}$ | $\begin{gathered} 1.740^{* * *} \\ (0.300) \end{gathered}$ | $\begin{gathered} 1.739^{* * *} \\ (0.307) \end{gathered}$ | $\begin{gathered} 1.631^{* * *} \\ (0.299) \end{gathered}$ | $\begin{gathered} 1.645^{* * *} \\ (0.297) \end{gathered}$ |  |  |
| Fixed Effects Fixed Effects |  |  |  |  | Year | TMcInd | TMdInd | TNatn | BNatn | TMcInd | Year+ <br> TMcInd |
| Adj. $R^{2}$ | 0.102 | 0.105 | 0.106 | 0.171 | 0.181 | 0.179 | 0.185 | 0.181 | 0.183 | 0.119 | 0.171 |
| F-Stat | 239.8*** | 185.6*** | 109.8*** | 78.1*** | 65.6*** | 72.9*** | 67.3*** | 80.2*** | 83.9*** | 110.1*** | 79.4*** |
| Nobs | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 | 12,786 |

## Table 6: Multivariate analysis: The impact of frequent domestic of foreign target acquirers

This table presents OLS regressions of the Premia ${ }_{i, t-20}$ on the 52 -week target high price ( $52 \mathrm{wHigh}{ }_{i}, t$ ), for the first time domestic acquirer [Fist Timer DOM (FTDOM)], the first time cross-border acquirer [FTCBA], the first time overall acquirer [FTM\&A], the serial domestic acquirer [Serial DOM (SLDOM)], the serial cross-border acquirer [Serial CBA (SLCBA)], the serial overall acquirer [SLM\&A], the interaction of the $52 \mathrm{wHigh}, t$ with each of the previous dummies, and other variables that include firm and deal characteristics $\left(X_{i}\right)$.

$$
\text { Premia }_{i, t}=\alpha+\beta_{1} 52 \mathrm{wHigh}_{i}+\beta_{2}(\text { First Timer OR Serial DOM or CBA })_{i}+\beta_{3}(52 \mathrm{wHigh} \times(\text { First Timer OR Serial DOM } \mid \text { CBA }))_{i}+\sum_{i=1}^{k} \beta_{j} X_{i, j}+\varepsilon_{i, t}
$$

where Premia ${ }_{i, t-20}$ is the offer price from Refinitiv expressed as a log percentage difference from the target stock price 20 trading days prior to the announcement date. All variables are defined in Appendix Table (B). ${ }^{* * *},{ }^{* *}$, and * denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels, respectively.

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 52whigh ${ }_{i}$ | $\begin{aligned} & 0.166^{* * *} \\ & (0.0104) \end{aligned}$ | $\begin{aligned} & 0.102^{* * *} \\ & (0.0113) \end{aligned}$ | $\begin{aligned} & 0.160^{* * *} \\ & (0.00947) \end{aligned}$ | $\begin{aligned} & 0.0955^{* * *} \\ & (0.0104) \end{aligned}$ | $\begin{aligned} & 0.166^{* * *} \\ & (0.0104) \end{aligned}$ | $\begin{aligned} & 0.101^{* * *} \\ & (0.0114) \end{aligned}$ | $\begin{aligned} & 0.150^{* * *} \\ & (0.0102) \end{aligned}$ | $\begin{gathered} 0.0899^{* * *} \\ (0.0107) \end{gathered}$ | $\begin{gathered} 0.117^{* * *} \\ (0.00986) \end{gathered}$ | $\begin{gathered} 0.0931^{* * *} \\ (0.0107) \end{gathered}$ | $\begin{aligned} & 0.146^{* * *} \\ & (0.0107) \end{aligned}$ | $\begin{gathered} 0.0857^{* * *} \\ (0.0111) \end{gathered}$ |
| $\mathrm{FTDOM}_{i}$ | $\begin{aligned} & 1.626^{*} \\ & (0.985) \end{aligned}$ | $\begin{aligned} & 1.723^{*} \\ & (0.947) \end{aligned}$ |  |  | $\begin{aligned} & 1.741^{*} \\ & (0.993) \end{aligned}$ | $\begin{aligned} & 1.753^{*} \\ & (0.954) \end{aligned}$ |  |  |  |  |  |  |
| 52whigh ${ }_{i} \times \mathrm{FTDOM}_{i}$ | $\begin{aligned} & -0.0439^{* *} \\ & (0.0212) \end{aligned}$ | $\begin{aligned} & -0.0418^{*} \\ & (0.0218) \end{aligned}$ |  |  | $\begin{gathered} -0.0439 * * \\ (0.0213) \end{gathered}$ | $\begin{aligned} & -0.0411^{*} \\ & (0.0219) \end{aligned}$ |  |  |  |  |  |  |
| $\mathrm{FTCBA}_{i}$ |  |  | $\begin{aligned} & 3.947^{* *} \\ & (1.780) \end{aligned}$ | $\begin{gathered} 1.007 \\ (1.660) \end{gathered}$ | $\begin{aligned} & 4.192^{* *} \\ & (1.802) \end{aligned}$ | $\begin{gathered} 1.251 \\ (1.681) \end{gathered}$ |  |  |  |  |  |  |
| 52 whigh $_{i} \times$ FTCBA $_{i}$ |  |  | $\begin{aligned} & 0.00402 \\ & (0.0435) \end{aligned}$ | $\begin{gathered} 0.0299 \\ (0.0385) \end{gathered}$ | $\begin{aligned} & -0.00197 \\ & (0.0436) \end{aligned}$ | $\begin{gathered} 0.0242 \\ (0.0386) \end{gathered}$ |  |  |  |  |  |  |
| $\mathrm{SLDOM}_{i}$ |  |  |  |  |  |  | $\begin{aligned} & -1.090 \\ & (0.695) \end{aligned}$ | $\begin{gathered} -0.399 \\ (0.654) \end{gathered}$ |  |  | $\begin{gathered} -0.977 \\ (0.702) \end{gathered}$ | $\begin{aligned} & -0.442 \\ & (0.660) \end{aligned}$ |
| $52 \mathrm{whigh}_{i} \times \mathrm{SLDOM}_{i}$ |  |  |  |  |  |  | $\begin{gathered} 0.0513^{* * *} \\ (0.0171) \end{gathered}$ | $\begin{aligned} & 0.0327^{*} \\ & (0.0171) \end{aligned}$ |  |  | $\begin{aligned} & 0.0549^{* * *} \\ & (0.0170) \end{aligned}$ | $\begin{aligned} & 0.0368^{* *} \\ & (0.0169) \end{aligned}$ |
| $\mathrm{SLCBA}_{i}$ |  |  |  |  |  |  |  |  | $\begin{gathered} 1.772 \\ (1.812) \end{gathered}$ | $\begin{aligned} & -1.321 \\ & (1.722) \end{aligned}$ | $\begin{gathered} 1.564 \\ (1.835) \end{gathered}$ | $\begin{aligned} & -1.354 \\ & (1.747) \end{aligned}$ |
| 52 whigh $_{i} \times \mathrm{SLCBA}_{i}$ |  |  |  |  |  |  |  |  | $\begin{aligned} & 0.0961^{*} \\ & (0.0512) \end{aligned}$ | $\begin{aligned} & 0.0978^{*} \\ & (0.0506) \end{aligned}$ | $\begin{aligned} & 0.107^{* *} \\ & (0.0512) \end{aligned}$ | $\begin{aligned} & 0.105^{* *} \\ & (0.0505) \end{aligned}$ |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Fixed Effects | Year | Year | Year | Year | Year | Year | Year | Year | Year | Year | Year | Year |
| Adj. $R^{2}$ | 0.109 | 0.184 | 0.109 | 0.183 | 0.109 | 0.184 | 0.110 | 0.184 | 0.110 | 0.184 | 0.112 | 0.185 |
| F-Stat | 96.8*** | 49.6*** | 98.4*** | 49.7*** | 59.8 *** | 44.5*** | 104.8*** | 50.6*** | 107.3*** | 50.2*** | 70.5*** | 46.1*** |
| NObs | 8,446 | 8,446 | 8,446 | 8,446 | 8,446 | 8,446 | 8,446 | 8,446 | 8,446 | 8,446 | 8,446 | 8,446 |

Table 7: Multivariate analysis on Bidder Gains
This table presents OLS regressions of the Premia ${ }_{i, t-20}$ on the 52 -week target high price ( $52 \mathrm{wHigh}{ }_{i}, t$ ), for the first time domestic acquirer [Fist Timer DOM (FTDOM)], the first time cross-border acquirer [FTCBA], the first time overall acquirer [FTM\&A], the serial domestic acquirer [Serial DOM (SLDOM)], the serial cross-border acquirer [Serial CBA (SLCBA)], the serial overall acquirer [SLM\&A], the interaction of the $52 \mathrm{wHigh}, t$ with each of the previous dummies, and other variables that include firm and deal characteristics $\left(X_{i}\right)$.
$\operatorname{BCAR}_{i, t}=\alpha+\beta_{1} 52 \mathrm{wHigh}_{i}+\beta_{2}(\text { First Timer OR Serial IN DOM or CBA })_{i}+\beta_{3}(52 \mathrm{wHigh} \times(\text { First Timer OR Serial IN DOM } \mid \text { CBA }))_{i}+\sum \beta_{j} X_{i, j}+\varepsilon_{i, t}$
where Premia ${ }_{i, t-20}$ is the offer price from Refinitiv expressed as a log percentage difference from the target stock price 20 trading days prior to the announcement date. All variables are defined in Appendix Table (B). ${ }^{* * *}{ }^{* *}$, and ${ }^{*}$ denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels, respectively.

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 52 whigh $_{i}$ | $\begin{gathered} 21.65^{* * *} \\ (1.076) \end{gathered}$ | $\begin{gathered} 21.38^{* * *} \\ (1.134) \end{gathered}$ | $\begin{gathered} 21.34^{* * *} \\ (0.994) \end{gathered}$ | $\begin{gathered} 21.05^{* * *} \\ (1.032) \end{gathered}$ | $\begin{gathered} \hline 21.73^{* * *} \\ (1.090) \end{gathered}$ | $\begin{gathered} 21.46^{* * *} \\ (1.146) \end{gathered}$ | $\begin{gathered} 21.10^{* * *} \\ (1.080) \end{gathered}$ | $\begin{gathered} 20.94^{* * *} \\ (1.130) \end{gathered}$ | $\begin{gathered} \hline 20.97^{* * *} \\ (0.975) \end{gathered}$ | $\begin{gathered} \hline 20.68^{* * *} \\ (1.015) \end{gathered}$ | $\begin{gathered} \hline 20.75 * * * \\ (1.081) \end{gathered}$ | $\begin{gathered} 20.58^{* * *} \\ (1.130) \end{gathered}$ | $\begin{gathered} \hline 21.73^{* * *} \\ (1.090) \end{gathered}$ | $\begin{gathered} 21.46^{* * *} \\ (1.146) \end{gathered}$ | $\begin{gathered} \hline 20.66^{* * *} \\ (0.927) \end{gathered}$ | $\begin{gathered} 20.44^{* * *} \\ (0.968) \end{gathered}$ | $\begin{gathered} \hline 21.10^{* * *} \\ (1.034) \end{gathered}$ | $\begin{gathered} \hline 20.90^{* * *} \\ (1.093) \end{gathered}$ |
| $\mathrm{FTDOM}_{i}$ | $\begin{aligned} & 2.387^{* *} \\ & (1.034) \end{aligned}$ | $\begin{aligned} & 2.295^{* *} \\ & (1.097) \end{aligned}$ |  |  | $\begin{aligned} & 2.507 * * \\ & (1.027) \end{aligned}$ | $\begin{aligned} & 2.398^{* *} \\ & (1.093) \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 52 whigh $_{i} \times \mathrm{FTDOM}_{i}$ | $\begin{aligned} & -4.105^{*} \\ & (2.393) \end{aligned}$ | $\begin{aligned} & -4.178^{*} \\ & (2.444) \end{aligned}$ |  |  | $\begin{aligned} & -4.190^{*} \\ & (2.387) \end{aligned}$ | $\begin{aligned} & -4.255^{*} \\ & (2.440) \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\mathrm{FTCBA}_{i}$ |  |  | $\begin{aligned} & 6.103^{* *} \\ & (2.657) \end{aligned}$ | $\begin{gathered} 4.531 \\ (2.676) \end{gathered}$ | $\begin{aligned} & 6.361^{* *} \\ & (2.663) \end{aligned}$ | $\begin{aligned} & 4.795^{*} \\ & (2.676) \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 52 whigh $_{i} \times \mathrm{FTCBA}_{i}$ |  |  | $\begin{aligned} & -5.245 \\ & (7.334) \end{aligned}$ | $\begin{aligned} & -4.785 \\ & (7.402) \end{aligned}$ | $\begin{gathered} -5.659 \\ (7.349) \\ \hline \end{gathered}$ | $\begin{aligned} & -5.204 \\ & (7.423) \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| $\mathrm{SLDOM}_{i}$ |  |  |  |  |  |  | $\begin{gathered} 0.473 \\ (0.757) \end{gathered}$ | $\begin{gathered} 0.675 \\ (0.741) \end{gathered}$ |  |  | $\begin{gathered} 0.490 \\ (0.754) \end{gathered}$ | $\begin{gathered} 0.700 \\ (0.727) \end{gathered}$ |  |  |  |  |  |  |
| 52 whigh $_{i} \times$ SLDOM $_{i}$ |  |  |  |  |  |  | $\begin{aligned} & 1.361 \\ & (1.535) \end{aligned}$ | $\begin{gathered} 0.473 \\ (1.609) \end{gathered}$ |  |  | $\begin{gathered} 1.713 \\ (1.545) \end{gathered}$ | $\begin{gathered} 0.855 \\ (1.620) \end{gathered}$ |  |  |  |  |  |  |
| $\mathrm{SLCBA}_{i}$ |  |  |  |  |  |  |  |  | $\begin{gathered} 0.727 \\ (1.272) \end{gathered}$ | $\begin{gathered} -0.799 \\ (1.266) \end{gathered}$ | $\begin{gathered} 0.840 \\ (1.257) \end{gathered}$ | $\begin{aligned} & -0.559 \\ & (1.241) \end{aligned}$ |  |  |  |  |  |  |
| 52 whigh $_{i} \times$ SLCBA $_{i}$ |  |  |  |  |  |  |  |  | $\begin{aligned} & 13.97^{* * *} \\ & (3.982) \end{aligned}$ | $\begin{gathered} 13.99 * * * \\ (3.831) \end{gathered}$ | $\begin{aligned} & 14.20^{* * *} \\ & (3.998) \end{aligned}$ | $\begin{gathered} 14.08^{* * *} \\ (3.841) \end{gathered}$ |  |  |  |  |  |  |
| TFM\& $\mathrm{A}_{i}$ |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} 3.046^{* * *} \\ (0.972) \end{gathered}$ | $\begin{aligned} & 2.733^{* *} \\ & (1.021) \end{aligned}$ |  |  | $\begin{gathered} 3.055^{* * *} \\ (0.943) \end{gathered}$ | $\begin{gathered} 2.891^{* * *} \\ (0.990) \end{gathered}$ |
| 52 whigh $_{i} \times$ FTM $^{\text {a }}{ }_{i}$ |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & -4.415^{*} \\ & (2.304) \end{aligned}$ | $\begin{aligned} & -4.399^{*} \\ & (2.364) \end{aligned}$ |  |  | $\begin{aligned} & -3.771 \\ & (2.265) \end{aligned}$ | $\begin{gathered} -3.853 \\ (2.322) \end{gathered}$ |
| SLM\& $\mathrm{A}_{i}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} -0.540 \\ (0.756) \end{gathered}$ | $\begin{gathered} -0.313 \\ (0.692) \end{gathered}$ | $\begin{gathered} -0.216 \\ (0.724) \end{gathered}$ | $\begin{aligned} & 0.0941 \\ & (0.662) \end{aligned}$ |
| 52 whigh $_{i} \times$ SLM\& $^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & 8.3566^{* * *} \\ & (1.899) \\ & \hline \end{aligned}$ | $\begin{gathered} 7.488^{* * *} \\ (1.861) \end{gathered}$ | $\begin{gathered} 7.924^{* * *} \\ (1.842) \end{gathered}$ | $\begin{gathered} 7.023^{* * *} \\ (1.804) \end{gathered}$ |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Time FE | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Adj. R-sq | 0.167 | 0.176 | 0.167 | 0.176 | 0.168 | 0.176 | 0.167 | 0.176 | 0.169 | 0.177 | 0.169 | 0.177 | 0.168 | 0.176 | 0.169 | 0.177 | 0.170 | 0.178 |
| F-Stat | 176.6*** | 64.7*** | 158.1*** | 65.6*** | 107.7*** | 56.3*** | 176.7*** | 88.2*** | 167.8*** | 72.2*** | 110.6*** | 83.5*** | 176.4*** | 66.1*** | 166.6*** | 66.9*** | 111.2*** | 62.6*** |
| NObs | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 |

## Appendix

## A. Countries of Acquirers and Targets

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

| Panel A: Acquirer country \& \# of deals |  |  |  | Panel B: Target country \& \# of deals |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Argentina | 3 | Lithuania | 1 | Argentina | 1 | Norway | 63 |
| Australia | 442 | Luxembourg | 28 | Australia | 543 | Pakistan | 3 |
| Austria | 8 | Malaysia | 42 | Austria | 7 | Papua N Guinea | 4 |
| Bahamas | 2 | Malta | 2 | Bahamas | 3 | Peru | 1 |
| Bahrain | 3 | Marshall Is | 1 | Belgium | 28 | Philippines | 2 |
| Belgium | 42 | Mauritius | 5 | Belize | 1 | Poland | 20 |
| Belize | 1 | Mexico | 11 | Bermuda | 25 | Portugal | 2 |
| Bermuda | 57 | Mongolia | 1 | Brazil | 21 | Puerto Rico | 2 |
| Botswana | 1 | Neth Antilles | 2 | British Virgin | 2 | Qatar | 1 |
| Brazil | 28 | Netherlands | 169 | Canada | 986 | Russian Fed | 4 |
| British Virgin | 16 | New Zealand | 22 | Chile | 7 | Saudi Arabia | 1 |
| Bulgaria | 1 | Nigeria | 1 | China | 53 | Sierra Leone | 1 |
| Canada | 839 | Norway | 46 | Colombia | 3 | Singapore | 80 |
| Cayman Islands | 25 | Oman | 2 | Croatia | 1 | South Africa | 57 |
| Chile | 3 | Pakistan | 2 | Cyprus | 2 | South Korea | 44 |
| China | 92 | Panama | 1 | Czech Republic | 1 | Spain | 41 |
| Colombia | 2 | Papua N Guinea | 4 | Denmark | 43 | Sri Lanka | 10 |
| Cyprus | 4 | Peru | 1 | Egypt | 1 | Sweden | 164 |
| Czech Republic | 1 | Philippines | 8 | Finland | 32 | Switzerland | 42 |
| Denmark | 42 | Poland | 14 | France | 124 | Taiwan | 64 |
| Egypt | 1 | Portugal | 3 | Germany | 43 | Thailand | 12 |
| Estonia | 1 | Puerto Rico | 2 | Gibraltar | 2 | Turkey | 14 |
| Finland | 34 | Qatar | 3 | Greece | 14 | United Kingdom | 1410 |
| France | 215 | Russian Fed | 12 | Guernsey | 12 | United States | 5691 |
| Germany | 136 | Saudi Arabia | 1 | Hong Kong | 78 | Uruguay | 1 |
| Ghana | 4 | Seychelles | 3 | Iceland | 1 | US Virgin Is | 1 |
| Gibraltar | 2 | Singapore | 84 | India | 56 | Utd Arab Em | 3 |
| Greece | 10 | Slovak Rep | 1 | Indonesia | 5 | Vietnam | 7 |
| Guernsey | 9 | South Africa | 58 | Ireland-Rep | 47 |  |  |
| Honduras | 1 | South Korea | 51 | Isle of Man | 5 |  |  |
| Hong Kong | 105 | Spain | 55 | Israel | 48 |  |  |
| Iceland | 5 | Sri Lanka | 9 | Italy | 61 |  |  |
| India | 60 | Sweden | 161 | Japan | 491 |  |  |
| Indonesia | 5 | Switzerland | 91 | Jersey | 9 |  |  |
| Ireland-Rep | 61 | Taiwan | 60 | Kuwait | 2 |  |  |
| Isle of Man | 8 | Thailand | 13 | Lithuania | 2 |  |  |
| Israel | 32 | Turkey | 10 | Luxembourg | 6 |  |  |
| Italy | 76 | Ukraine | 1 | Malaysia | 49 |  |  |
| Japan | 560 | United Kingdom | 1287 | Mexico | 1 |  |  |
| Jersey | 11 | United States | 5452 | Monaco | 1 |  |  |
| Kuwait | 2 | Utd Arab Em | 16 | Netherlands | 103 |  |  |
| Liechtenstein | 1 | Vietnam | 8 | New Zealand | 30 |  |  |
|  |  | Total: | 10,695 |  |  | Total: | 10,695 |

## 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 $_{i, t-x}$ | The offer price from Refinitiv expressed as a log percentage difference from the target stock price $x$ trading days prior to the announcement date. | Refinitiv |
| $\operatorname{TCAR}_{i}(t-m, t+n)$ | 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 $\mathrm{M} \& \mathrm{~A}$ announcement day and $n$ is the number of trading days after the M\&A announcement day. The CAR is measured by subtracting the $E\left(R_{i}\right)$ from the log returns of firm $i\left(R_{i}\right)$, where the $E\left(R_{i}\right)$ is computed using the market model that is estimated over the window from $t-250$ trading days to $t-20$. | Refinitiv |
| $\operatorname{BCAR}_{i}(t-m, t+n)$ | 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. The CAR is measured by subtracting the $E\left(R_{i}\right)$ from the log returns of firm $i\left(R_{i}\right)$, where the $E\left(R_{i}\right)$ is computed using the market model that is estimated over the window from $t-250$ trading days to $t-20$. | Refinitiv |
| $52 \mathrm{wHigh}{ }_{i}$ | The high target stock price over the year ( 365 calendar days) ending 21 trading days prior to the announcement date expressed as a log percentage difference from the target stock price 20 trading days prior to the announcement date. | Refinitiv |
| $\mathrm{PPS}_{i}$ | The price per share. | Refinitiv |
| Piecewise $_{1, i}$ | It is the $\min \left(52 \mathrm{wHigh}_{i, t-20}, 25\right)$ | Refinitiv |
| Piecewise ${ }_{2, i}$ | It is the max $\left(0, \mathrm{~min}\left(52 \mathrm{wHigh}{ }_{i, t-20}-25,50\right)\right.$ ) | Refinitiv |
| Piecewise ${ }_{3, i}$ | It is the max ( $52 \mathrm{wHigh}_{i, t-20}-75,0$ ) | Refinitiv |
| Target $\mathrm{MV}_{i, t-20}$ | It is the target firm's market capitalisation in million U.S. dollars at 20 trading days prior to the M\&A announcement day | Refinitiv |
| Target Volatility ${ }_{i}$ | It is the volatility of target firm's stock return from 250 to 21 trading days prior to the M\&A announcement day | Refinitiv |
| $\mathrm{FTDOM}_{i}$ | Dummy equal to one if the acquirer is acquiring for the first time a domestic target, and zero otherwise. | Refinitiv |
| $\mathrm{FTCBA}_{i}$ | Dummy equal to one if the acquirer is acquiring for the first time a foreign target, and zero otherwise. | Refinitiv |
| FTM\& ${ }_{i}$ | Dummy equal to one if the acquirer is acquiring a target for the first time in general, and zero otherwise. | Refinitiv |
| $\mathrm{SLDOM}_{i}$ | Dummy equal to one if the acquirer of domestic targets is a serial one, and zero otherwise. | Refinitiv |
| $\mathrm{SLCBA}_{i}$ | Dummy equal to one if the acquirer of foreign targets is a serial one, and zero otherwise. | Refinitiv |
| SLM\& ${ }_{i}$ | Dummy equal to one if the acquirer is a serial one, and zero otherwise. | Refinitiv |
| Panel B: Other variables |  |  |
| All | All M\&As (both domestic and foreign target ones). | Refinitiv |
| $\mathrm{DOM}_{i}$ | Dummy equal to one if both the acquirer and the target firms are based in the same country, and zero otherwise. | Refinitiv |
| $\mathrm{CBA}_{i}$ | Dummy equal to one if the acquirer and the target firms are based in different countries, and zero otherwise. | Refinitiv |


| Variable | Definition | Source |
| :---: | :---: | :---: |
| Panel B: Other variables |  |  |
| Friendly ${ }_{i}$ | Dummy equal to one if the deal's attitude is friendly, and zero otherwise. | Refinitiv |
| Tender Offer ${ }_{i}$ | Dummy equal to one if the deal is classified as tender offer, and zero otherwise. | Refinitiv |
| Focused $_{i}$ | Dummy equal to one if the acquirer and target are in the same industry, i.e., they share the same first two-digit SIC code, and zero otherwise. | Refinitiv |
| Diversified $_{i}$ | Dummy equal to one if the acquirer and target are in different industries, i.e., they do not share the same first two-digit SIC code, and zero otherwise. | Refinitiv |
| Private $_{i}$ | A dummy variable equal to one if the target firm is a private firm, and zero otherwise. | Refinitiv |
| Public $_{i}$ | A dummy variable equal to one if the target firm is a listed or publicly traded firm, and zero otherwise. | Refinitiv |
| Subsidiary $_{i}$ | A dummy variable equal to one if the target firm is a subsidiary firm, and zero otherwise. | Refinitiv |
| $\mathrm{Cash}_{i}$ | A dummy variable equal to one if the deal is settled in pure cash, and zero otherwise. | Refinitiv |
| Stock ${ }_{i}$ | A dummy variable equal to one if the deal is settled in pure stock, and zero otherwise. | Refinitiv |
| $\operatorname{Mixed}_{i}$ | A dummy variable equal to one if the deal is settled in a combination of cash and stock, and zero otherwise. | Refinitiv |
| Acq in Fin $\mathrm{Sec}_{i}$ | A dummy variable equal to one if the acquiring firm is a financial firm, and zero otherwise. | Refinitiv |
| Tar in Fin Sec $i_{i}$ | A dummy variable equal to one if the target firm is a financial firm, and zero otherwise. | Refinitiv |

## C. Univariate results based on alternative premia measures (Robustness tests)

This table presents univariate results on the impact of CBA versus domestic target M\&As on premia, measured by Premia $i_{i, t-10}$ and Premia $i_{, t-5}$ for all deals (Panel A), and for deals sorted by: the acquirer listing status (Panel B), the deal's method of payment (Panel C), and the deal's industry diversification (Panel D). The Premia ${ }_{i, t-10}$ or Premia $_{i, t-5}$ is the offer price from Refinitiv expressed as a log percentage difference from the target stock price 10 or 5 trading days prior to the M\&A 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 versus Domestic target M\&A. All variable are defined in Appendix Table (B). ${ }^{* * *}{ }^{* *}$, and * denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels, respectively.

|  |  | Premia ${ }_{i, t-10}$ |  |  |  | Premia ${ }_{i, t-5}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | All | Domestic | CBA | Diff. | All | Domestic | CBA | Diff. |
|  |  | Panel A: All M\&A |  |  |  |  |  |  |  |
| All | Mean <br> t-stat N | $\begin{gathered} \hline 32.85^{* * *} \\ (148.06) \\ 10695 \end{gathered}$ | $\begin{gathered} 32.16^{* * *} \\ (130.01) \\ 8444 \end{gathered}$ | $\begin{gathered} \hline 35.43^{* * *} \\ (71.38) \\ 2251 \end{gathered}$ | $\begin{gathered} 3.26^{* * *} \\ (6.01) \end{gathered}$ | $\begin{gathered} \hline 31.07^{* * *} \\ (143.92) \\ 10695 \end{gathered}$ | $\begin{gathered} 30.41^{* * *} \\ (126.74) \\ 8444 \end{gathered}$ | $\begin{gathered} 33.53^{* * *} \\ (68.66) \\ 2251 \end{gathered}$ | $\begin{gathered} 3.12^{* * *} \\ (5.91) \end{gathered}$ |
|  |  | Panel B: Acq. Listing Status |  |  |  |  |  |  |  |
| PrivatePublicSubsidiary | Mean t-stat N | $\begin{gathered} \hline 30.18^{* * *} \\ (52.91) \\ 1568 \end{gathered}$ | $\begin{gathered} 29.51^{* * *} \\ (48.09) \end{gathered}$ | $\begin{gathered} 33.19^{* * *} \\ (22.46) \\ 287 \end{gathered}$ | $\begin{aligned} & 3.68^{* *} \\ & (2.51) \end{aligned}$ | $\begin{gathered} \hline 28.68^{* * *} \\ (51.29) \\ 1568 \end{gathered}$ | 27.97*** <br> (46.87) <br> 1281 | $\begin{gathered} \hline 31.87^{* * *} \\ (21.47) \\ 287 \end{gathered}$ | $\begin{gathered} 3.89 * * * \\ (2.71) \end{gathered}$ |
|  | Mean t-stat N | $\begin{gathered} 33.49^{* * *} \\ (121.37) \\ 6998 \end{gathered}$ |  | $\begin{gathered} 36.29^{* * *} \\ (60.71) \\ 1504 \end{gathered}$ | $\begin{gathered} 3.56^{* * *} \\ (5.32) \end{gathered}$ | $\begin{gathered} 31.54^{* * *} \\ (118.36) \\ 6998 \end{gathered}$ | $\begin{gathered} 30.80^{* * *} \\ (103.05) \\ 5494 \end{gathered}$ | $\begin{gathered} 34.27^{* * *} \\ (58.79) \\ 1504 \end{gathered}$ | $\begin{gathered} 3.47^{* * *} \\ (5.36) \end{gathered}$ |
|  | Mean <br> t-stat <br> N | $\begin{gathered} 32.71^{* * *} \\ (66.73) \\ 2129 \end{gathered}$ | $\begin{gathered} 32.35^{* * *} \\ (59.22) \\ 1669 \end{gathered}$ | $\begin{gathered} 34.02^{* * *} \\ (30.83) \\ 460 \end{gathered}$ | $\begin{gathered} 1.66 \\ (1.41) \end{gathered}$ | $\begin{gathered} 31.25^{* * *} \\ (64.23) \\ 2129 \end{gathered}$ | $\begin{gathered} 31.00^{* * *} \\ (57.27) \\ 1669 \end{gathered}$ | $\begin{gathered} 32.15^{* * *} \\ (29.18) \\ 460 \end{gathered}$ | $\begin{gathered} 1.15 \\ (0.97) \end{gathered}$ |
|  |  | Panel C: Method of Payment |  |  |  |  |  |  |  |
| Cash | Mean t-stat N | $\begin{gathered} \hline 33.15^{* * *} \\ (113.57) \\ 5853 \end{gathered}$ | 32.37*** <br> (96.41) 4251 | $\begin{gathered} 35.23^{* * *} \\ (60.41) \\ 1602 \end{gathered}$ | $\begin{gathered} 2.85^{* * *} \\ (4.37) \end{gathered}$ | $\begin{gathered} \hline 31.49 * * * \\ (109.57) \\ 5853 \end{gathered}$ | $\begin{gathered} 30.81^{* * *} \\ (93.68) \\ 4251 \end{gathered}$ | $\begin{gathered} 33.29 * * * \\ (57.24) \\ 1602 \end{gathered}$ | $\begin{gathered} 2.47^{* * *} \\ (3.85) \end{gathered}$ |
| Stock | Mean t-stat N | $\begin{gathered} 32.96^{* * *} \\ (68.06) \\ 2619 \end{gathered}$ | $32.38^{* * *}$ <br> (64.05) | $\begin{gathered} 37.83^{* * *} \\ (23.44) \\ 275 \end{gathered}$ | $\begin{gathered} 5.44^{* * *} \\ (3.46) \end{gathered}$ | $\begin{gathered} 30.79 * * * \\ (66.64) \\ 2619 \end{gathered}$ | $\begin{gathered} 30.26^{* * *} \\ (62.64) \\ 2344 \end{gathered}$ | $\begin{gathered} 35.31^{* * *} \\ (23.09) \\ 275 \end{gathered}$ | $\begin{gathered} 5.04^{* * *} \\ (3.35) \end{gathered}$ |
| Mixed | Mean <br> t-stat <br> N | $\begin{gathered} 31.93^{* * *} \\ (67.61) \\ 2223 \end{gathered}$ | $\begin{gathered} 31.40^{* * *} \\ (60.47) \\ 1849 \end{gathered}$ | $\begin{gathered} 34.52^{* * *} \\ (30.65) \\ 374 \end{gathered}$ | $\begin{aligned} & 3.12 * * \\ & (2.52) \end{aligned}$ | $\begin{gathered} 30.28^{* * *} \\ (66.19) \\ 2223 \end{gathered}$ | $\begin{gathered} 29.67^{* *} \\ (58.94) \\ 1849 \end{gathered}$ | $\begin{gathered} 33.26^{* * *} \\ (30.75) \\ 374 \end{gathered}$ | $\begin{gathered} 3.58^{* * *} \\ (3.01) \end{gathered}$ |
|  |  | Panel D: Industry Diversification |  |  |  |  |  |  |  |
| Focused | Mean t-stat N | $\begin{gathered} \hline 33.37^{* * *} \\ (108.73) \\ 5681 \end{gathered}$ | 32.64*** (96.22) 4501 | $\begin{gathered} 36.16^{* * *} \\ (51.08) \\ 1180 \end{gathered}$ | $\begin{gathered} 3.52^{* * *} \\ (4.67) \end{gathered}$ | $\begin{gathered} \hline 31.56^{* * *} \\ (106.38) \\ 5681 \end{gathered}$ | $\begin{gathered} 30.85^{* * *} \\ (94.94) \\ 4501 \end{gathered}$ | $\begin{gathered} 34.26^{* * *} \\ (48.64) \\ 1180 \end{gathered}$ | $\begin{gathered} 3.41^{* * *} \\ (4.68) \end{gathered}$ |
| Diversified | Mean <br> t-stat <br> N | $\begin{gathered} 32.26^{* * *} \\ (100.54) \\ 5014 \end{gathered}$ | $\begin{gathered} 31.62^{* * *} \\ (87.46) \\ 3943 \end{gathered}$ | $\begin{gathered} 34.62^{* * *} \\ (50.03) \\ 1071 \end{gathered}$ | $\begin{gathered} 3.00^{* * *} \\ (3.84) \end{gathered}$ | $\begin{gathered} 30.51^{* * *} \\ (97.01) \\ 5014 \end{gathered}$ | $\begin{gathered} 29.91^{* * *} \\ (84.14) \\ 3943 \end{gathered}$ | $\begin{gathered} 32.72^{* * *} \\ (48.77) \\ 1071 \end{gathered}$ | $\begin{gathered} 2.81^{* * *} \\ (3.67) \end{gathered}$ |

## D. Univariate results based on alternative target CAR periods I (Robustness tests)

This table presents univariate results on the impact of CBA versus domestic target M\&As on target Cumulative Abnormal Returns (CAR) over the windows $t-10, t+10$ and $t-5, t+5$ for all deals (Panel A), and for deals sorted by: the acquirer listing status (Panel B), the deal's method of payment (Panel C), and the deal's industry diversification (Panel D). The target CAR is measured by subtracting the $E\left(R_{i}\right)$ from the log returns of firm $i\left(R_{i}\right)$, where the $E\left(R_{i}\right)$ is computed using the market model that is estimated over the window from $t-250$ trading days to $t-20$. 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 versus Domestic target M\&A. All variable are defined in Appendix Table (B). ***, **, and * denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels, respectively.

|  |  | $\boldsymbol{T C A R}(t-10, t+10)$ |  |  |  | $\mathbf{T C A R}(t-5, t+5)$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | All | Domestic | CBA | Diff. | All | Domestic | CBA | Diff. |
|  |  | Panel A: All M\&A |  |  |  |  |  |  |  |
| All | Mean t-stat N | $\begin{gathered} \hline 29.68^{* * *} \\ (112.14) \\ 10695 \end{gathered}$ | $\begin{gathered} 28.78 * * * \\ (98.77) \\ 8444 \end{gathered}$ | $\begin{gathered} 33.05^{* * *} \\ (53.62) \\ 2251 \end{gathered}$ | $\begin{gathered} 4.27^{* * *} \\ (6.61) \end{gathered}$ | $\begin{gathered} \hline 27.45^{* * *} \\ (111.76) \\ 10695 \end{gathered}$ | $\begin{gathered} 26.54 * * * \\ (98.51) \end{gathered}$ | $\begin{gathered} 30.83^{* * *} \\ (53.39) \\ 2251 \end{gathered}$ | $\begin{aligned} & 4.28^{* * *} \\ & (7.14) \end{aligned}$ |
|  |  | Panel B: Acq. Listing Status |  |  |  |  |  |  |  |
| Private | Mean <br> t-stat | $\begin{gathered} 28.41^{* * *} \\ (40.71) \end{gathered}$ | $\begin{gathered} 27.87^{* * *} \\ (37.08) \end{gathered}$ | $\begin{gathered} 30.82^{* * *} \\ (17.02) \\ 287 \end{gathered}$ | $\begin{aligned} & \hline 2.94^{*} \\ & (1.73) \end{aligned}$ | $\begin{gathered} \hline 26.16^{* * *} \\ (40.73) \end{gathered}$ | $\begin{gathered} 25.62^{* * *} \\ (37.05) \\ 1281 \end{gathered}$ | $\begin{gathered} 28.55 * * * \\ (17.17) \end{gathered}$ | $\begin{aligned} & 2.93^{*} \\ & (1.77) \end{aligned}$ |
| Public | Mean <br> t-stat | $\begin{gathered} 29.03^{* * *} \\ (90.41) \end{gathered}$ | $\begin{gathered} 27.79 * * * \\ (78.59) \end{gathered}$ | $\begin{gathered} 33.56^{* * *} \\ (45.39) \end{gathered}$ | $\begin{gathered} 5.76^{* * *} \\ (7.41) \end{gathered}$ | $\begin{gathered} 26.75 * * * \\ (90.09) \end{gathered}$ | $\begin{gathered} 25.48 * * * \\ (78.48) \end{gathered}$ | $\begin{gathered} 31.39 * * * \\ (45.11) \end{gathered}$ | $\begin{gathered} 5.90^{* * *} \\ (8.21) \end{gathered}$ |
| Subsidiary | Mean t-stat N | $\begin{gathered} 32.74^{* * *} \\ (52.85) \\ 2129 \end{gathered}$ | $\begin{gathered} 32.73 * * * \\ (47.52) \\ 1669 \end{gathered}$ | $\begin{gathered} 32.80^{* * *} \\ (23.29) \\ 460 \end{gathered}$ | $\begin{gathered} 0.07 \\ (0.05) \end{gathered}$ | $\begin{gathered} 30.67^{* * *} \\ (52.65) \\ 2129 \end{gathered}$ | $\begin{gathered} 30.74^{* * *} \\ (47.36) \\ 1669 \end{gathered}$ | $\begin{gathered} 30.45^{* * *} \\ (23.16) \\ 460 \end{gathered}$ | $\begin{gathered} -0.2 \\ (-0.21) \end{gathered}$ |
|  |  | Panel C: Method of Payment |  |  |  |  |  |  |  |
| Cash | Mean t-stat N | $\begin{gathered} \hline 33.44^{* * *} \\ (89.97) \\ 5853 \end{gathered}$ | $\begin{gathered} 32.74^{* * *} \\ (76.52) \\ 4251 \end{gathered}$ | $\begin{gathered} 35.27 * * * \\ (47.51) \\ 1602 \end{gathered}$ | $\begin{gathered} 2.52^{* * *} \\ (3.03) \end{gathered}$ | $\begin{gathered} \hline 31.23^{* * *} \\ (89.56) \\ 5853 \end{gathered}$ | $\begin{gathered} 30.64^{* * *} \\ (76.25) \\ 4251 \end{gathered}$ | $\begin{gathered} 32.82^{* * *} \\ (47.13) \\ 1602 \end{gathered}$ | $\begin{gathered} 2.18^{* * *} \\ (2.79) \end{gathered}$ |
| Stock | Mean t-stat | $\begin{gathered} 23.21^{* * *} \\ (46.56) \end{gathered}$ | $\begin{gathered} 23.05^{* * *} \\ (44.45) \end{gathered}$ | $\begin{gathered} 24.59^{* * *} \\ (14.19) \end{gathered}$ | $\begin{gathered} 1.53 \\ (0.95) \end{gathered}$ | $\begin{gathered} 20.59 * * * \\ (46.67) \end{gathered}$ | $\begin{gathered} 20.37^{* * *} \\ (44.61) \end{gathered}$ | $\begin{gathered} 22.50^{* * *} \\ (14.24) \end{gathered}$ | $\begin{gathered} 2.12 \\ (1.48) \end{gathered}$ |
| Mixed | Mean <br> t-stat | $\begin{gathered} 2619 \\ 27.39^{* * *} \\ (51.98) \end{gathered}$ | $\begin{gathered} 2344 \\ 26.91^{* * *} \\ (47.08) \end{gathered}$ | $\begin{gathered} 275 \\ 29.77^{* * *} \\ (22.12) \end{gathered}$ | $\begin{aligned} & 2.86^{* *} \\ & (2.03) \end{aligned}$ | $\begin{gathered} 2619 \\ 25.55^{* * *} \\ (52.23) \end{gathered}$ | $\begin{gathered} 24.964 * * \\ (47.38) \end{gathered}$ | $\begin{gathered} 275 \\ 28.46^{* * *} \\ (22.18) \end{gathered}$ | $\begin{gathered} 3.50^{* * *} \\ (2.68) \end{gathered}$ |
| Panel D: Industry Diversification |  |  |  |  |  |  |  |  |  |
| Focused | Mean <br> t-stat <br> N | $\begin{gathered} 29.24^{* * *} \\ (80.04) \\ 5681 \end{gathered}$ | $\begin{gathered} 28.18^{* * *} \\ (71.15) \\ 4501 \end{gathered}$ | $\begin{gathered} 33.27 * * * \\ (37.34) \\ 1180 \end{gathered}$ | $\begin{gathered} 5.08^{* * *} \\ (5.66) \end{gathered}$ | $\begin{gathered} \hline 27.00^{* * *} \\ (79.94) \\ 5681 \end{gathered}$ | $\begin{gathered} 25.93^{* * *} \\ (71.19) \\ 4501 \end{gathered}$ | $\begin{gathered} 31.07^{* * *} \\ (37.23) \\ 1180 \end{gathered}$ | $\begin{gathered} 5.14 * * * \\ (6.21) \end{gathered}$ |
| Diversified | Mean t-stat N | $\begin{gathered} 30.17^{* * *} \\ (78.63) \\ 5014 \end{gathered}$ | $\begin{gathered} 29.46 * * * \\ (68.53) \\ \hline 943 \end{gathered}$ | $\begin{gathered} 32.82^{* * *} \\ (38.78) \\ 1071 \end{gathered}$ | $\begin{aligned} & 3.36^{* * *} \\ & (3.59) \end{aligned}$ | $\begin{gathered} 27.95^{* * *} \\ (78.17) \\ 5014 \end{gathered}$ | $\begin{gathered} 27.24^{* * *} \\ (68.13) \\ 3943 \end{gathered}$ | $\begin{gathered} 30.57 * * * \\ (38.57) \\ 1071 \end{gathered}$ | $\begin{aligned} & 3.32 * * * \\ & (3.81) \end{aligned}$ |

## E. Univariate results based on alternative target CAR periods II (Robustness tests)

This table presents univariate results on the impact of CBA versus domestic target M\&As on target Cumulative Abnormal Returns (CAR) over the windows $t-2, t+2$ and $t-1, t+1$ for all deals (Panel A), and for deals sorted by: the acquirer listing status (Panel B), the deal's method of payment (Panel C), and the deal's industry diversification (Panel D). The target CAR is measured by subtracting the $E\left(R_{i}\right)$ from the log returns of firm $i\left(R_{i}\right)$, where the $E\left(R_{i}\right)$ is computed using the market model that is estimated over the window from $t-250$ trading days to $t-20$. 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 versus Domestic target M\&A. All variable are defined in Appendix Table (B). ${ }^{* * *}$, **, and * denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels, respectively.

|  |  | $\boldsymbol{\operatorname { T C A R }}(t-2, t+2)$ |  |  |  | $\operatorname{TCAR}(t-1, t+1)$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | All | Domestic | CBA | Diff. | All | Domestic | CBA | Diff. |
|  |  | Panel A: All M\&A |  |  |  |  |  |  |  |
| All | Mean | 25.14*** | 24.34*** | 28.12*** | 3.78*** | 23.78*** | 23.02*** | 26.66*** | 3.64 *** |
|  | t-stat | (110.99) | (98.18) | (52.39) | (6.82) | (107.57) | (95.22) | (50.67) | (6.74) |
|  | N | 10695 | 8444 | 2251 |  | 10695 | 8444 | 2251 |  |
|  |  | Panel B: Acq. Listing Status |  |  |  |  |  |  |  |
| Private | Mean | 23.88*** | 23.31*** | 26.41*** | 3.09** | 22.32*** | 21.70*** | 25.11*** | 3.40** |
|  | t-stat | (41.15) | (37.66) | (17.04) | (2.07) | (39.32) | (35.87) | (16.54) | (2.33) |
|  | N | 1568 | 1281 | 287 |  | 1568 | 1281 | 287 |  |
| Public | Mean | 24.47*** | 23.35*** | 28.58*** | 5.23 *** | 23.23*** | $22.14^{* * *}$ | 27.18*** | 5.03 *** |
|  | t-stat | (88.68) | (77.38) | (44.11) | (7.82) | (86.41) | (75.47) | (42.82) | (7.73) |
|  | N | 6998 | 5494 | 1504 |  | 6998 | 5494 | 1504 |  |
| Subsidiary | Mean | 28.23*** | 28.38*** | 27.67*** | -0.70 | 26.69*** | 26.90*** | 25.93*** | -0.96 |
|  | t-stat | (53.05) | (48.05) | (22.77) | (-0.55) | (51.08) | (46.41) | (21.72) | (-0.76) |
|  | N | 2129 | 1669 | 460 |  | 2129 | 1669 | 460 |  |
|  |  | Panel C: Method of Payment |  |  |  |  |  |  |  |
| Cash | Mean | 28.68*** | 28.20*** | 29.97*** | 1.76** | 27.07*** | 26.57*** | 28.40*** | $1.83^{* * *}$ |
|  | t-stat | (89.41) | (76.62) | (46.31) | (2.45) | (86.17) | (73.81) | (44.71) | (2.61) |
|  | N | 5853 | 4251 | 1602 |  | 5853 | 4251 | 1602 |  |
| Stock | Mean | 18.68*** | 18.48*** | 20.38*** | 1.90 | 17.68*** | 17.45*** | 19.59*** | 2.13* |
|  | t-stat | (45.99) | (43.91) | (14.11) | (1.43) | (45.27) | (43.21) | (13.95) | (1.77) |
|  | N | 2619 | 2344 | 275 |  | 2619 | 2344 | 275 |  |
| Mixed | Mean | 23.40*** | 22.89*** | 25.92*** | 3.02** | 22.32*** | 21.90*** | 24.42*** | 2.52** |
|  | t-stat | (51.49) | (46.92) | (21.44) | (2.49) | (49.63) | (45.29) | (20.48) | (2.11) |
|  | N | 2223 | 1849 | 374 |  | 2223 | 1849 | 374 |  |
|  |  | Panel D: Industry Diversification |  |  |  |  |  |  |  |
| Focused | Mean | 24.72*** | 23.73*** | 28.50*** | 4.77*** | 23.60*** | 22.64*** | 27.26*** | 4.62*** |
|  | t-stat | (79.07) | (70.24) | (37.11) | (6.22) | (77.37) | (68.71) | (36.33) | (6.17) |
|  | N | 5681 | 4501 | 1180 |  | 5681 | 4501 | 1180 |  |
| Diversified | Mean | 25.61*** | 25.04*** | 27.70*** | 2.66 *** | 23.99*** | 23.44*** | 26.00*** | 2.55*** |
|  | t-stat | (77.98) | (68.67) | (37.13) | (3.33) | (74.77) | (65.95) | (35.41) | (3.27) |
|  | N | 5014 | 3943 | 1071 |  | 5014 | 3943 | 1071 |  |

## Multivariate results with alternative premia I (Robustness tests)

This table presents piecewise OLS regressions of the Premia ${ }_{i, t-10}$ on the 52-week target high price, the foreign target indicator, the product of the two, and other variables.

## Premia $_{i, t}=\alpha+\beta_{1} 52 \mathrm{wHigh}+\beta_{2} \mathrm{CBA}_{i}+\beta_{3}(52 \mathrm{wHigh} \times \mathrm{CBA})_{i}+\sum^{k} \beta_{j} X_{i, j}+\varepsilon_{i, t}$

where Premia ${ }_{i, t-10}$ is the offer price from Refinitiv and $52 \mathrm{wHigh}_{i}$ is the high stock price over the 250 trading days ending 11 days prior to the announcement date, with both expressed as a $\log$ percentage difference from the target stock price 10 trading days prior to the announcement date. $\mathrm{CBA}_{i}$ is a dummy variable indicator that is assigned the value of one for CBA, and zero otherwise (domestic M\&A). Variable are defined in Appendix Table (B). ${ }^{* * *}$, ${ }^{* *}$, and ${ }^{*}$ denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels, respectively.

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 52wHigh ${ }_{i}$ | $\begin{gathered} 20.59^{* * *} \\ (1.168) \end{gathered}$ | $\begin{gathered} 20.58^{* * *} \\ (1.165) \end{gathered}$ | $\begin{gathered} 19.50^{* * *} \\ (0.949) \end{gathered}$ | $\begin{gathered} 19.32 * * * \\ (0.997) \end{gathered}$ | $\begin{gathered} 18.50^{* * *} \\ (0.911) \end{gathered}$ | $\begin{gathered} 19.21^{* * *} \\ (1.014) \end{gathered}$ | $\begin{gathered} 17.75 * * * \\ (0.961) \end{gathered}$ | $\begin{gathered} 19.34^{* * *} \\ (1.043) \end{gathered}$ | $\begin{gathered} 18.00^{* * *} \\ (0.993) \end{gathered}$ | $\begin{gathered} 18.96^{* * *} \\ (0.996) \end{gathered}$ | $\begin{gathered} 17.84^{* * *} \\ (0.971) \end{gathered}$ | $\begin{gathered} 18.74^{* * *} \\ (1.054) \end{gathered}$ | $\begin{gathered} 17.76 * * * \\ (0.949) \end{gathered}$ |
| $\mathrm{CBA}_{i}$ |  | $\begin{gathered} 3.190^{* * *} \\ (0.651) \end{gathered}$ | $\begin{aligned} & 1.509^{* *} \\ & (0.656) \end{aligned}$ | $\begin{gathered} 0.601 \\ (0.667) \end{gathered}$ | $\begin{gathered} 0.907 \\ (0.607) \end{gathered}$ | $\begin{gathered} 1.052 \\ (0.729) \end{gathered}$ | $\begin{gathered} 1.199 \\ (0.785) \end{gathered}$ | $\begin{aligned} & 1.765^{* *} \\ & (0.775) \end{aligned}$ | $\begin{aligned} & 1.866^{* *} \\ & (0.907) \end{aligned}$ | $\begin{gathered} 0.260 \\ (0.622) \end{gathered}$ | $\begin{gathered} 0.616 \\ (0.645) \end{gathered}$ | $\begin{aligned} & 0.0985 \\ & (0.616) \end{aligned}$ | $\begin{gathered} 0.320 \\ (0.634) \end{gathered}$ |
| $52 \mathrm{wHigh}_{i} \times \mathrm{CBA}_{i}$ |  |  | $\begin{aligned} & 4.849^{* *} \\ & (1.928) \end{aligned}$ | $\begin{aligned} & 5.104^{* *} \\ & (1.926) \end{aligned}$ | $\begin{aligned} & 4.895^{* *} \\ & (1.934) \end{aligned}$ | $\begin{aligned} & 4.878^{* *} \\ & (1.899) \end{aligned}$ | $\begin{aligned} & 5.652^{* *} \\ & (2.270) \end{aligned}$ | $\begin{gathered} 5.186^{* * *} \\ (1.874) \end{gathered}$ | $\begin{aligned} & 5.000^{* *} \\ & (2.078) \end{aligned}$ | $\begin{gathered} 5.219^{* * *} \\ (1.826) \end{gathered}$ | $\begin{aligned} & 4.532^{* *} \\ & (1.963) \end{aligned}$ | $\begin{gathered} 5.357^{* * *} \\ (1.804) \end{gathered}$ | $\begin{aligned} & 5.078^{* *} \\ & (1.873) \end{aligned}$ |
| $\mathrm{Cash}_{i}$ |  |  |  | $\begin{aligned} & 1.340^{* *} \\ & (0.640) \end{aligned}$ | $\begin{aligned} & 1.491^{* *} \\ & (0.596) \end{aligned}$ | $\begin{aligned} & 1.822^{* * *} \\ & (0.635) \end{aligned}$ | $\begin{gathered} 2.206^{* * *} \\ (0.596) \end{gathered}$ | $\begin{aligned} & 1.718^{* *} \\ & (0.648) \end{aligned}$ | $\begin{gathered} 2.166^{* * *} \\ (0.618) \end{gathered}$ | $\begin{gathered} 0.729 \\ (0.606) \end{gathered}$ | $\begin{gathered} 0.698 \\ (0.582) \end{gathered}$ | $\begin{gathered} 0.757 \\ (0.615) \end{gathered}$ | $\begin{aligned} & 1.088^{*} \\ & (0.618) \end{aligned}$ |
| Stock $_{i}$ |  |  |  | $\begin{aligned} & -1.287 \\ & (0.879) \end{aligned}$ | $\begin{aligned} & -1.562^{*} \\ & (0.885) \end{aligned}$ | $\begin{gathered} -0.808 \\ (0.921) \end{gathered}$ | $\begin{gathered} -1.416 \\ (0.966) \end{gathered}$ | $\begin{aligned} & -0.832 \\ & (0.877) \end{aligned}$ | $\begin{aligned} & -1.292 \\ & (0.888) \end{aligned}$ | $\begin{gathered} -1.815^{* *} \\ (0.842) \end{gathered}$ | $\begin{gathered} -2.182^{* *} \\ (0.860) \end{gathered}$ | $\begin{aligned} & -1.516^{*} \\ & (0.840) \end{aligned}$ | $\begin{aligned} & -1.605^{*} \\ & (0.804) \end{aligned}$ |
| Private ${ }_{i}$ |  |  |  | $\begin{gathered} -2.220^{* *} \\ (0.812) \end{gathered}$ | $\begin{gathered} -1.936^{* *} \\ (0.818) \end{gathered}$ | $\begin{gathered} -2.816^{* * *} \\ (0.828) \end{gathered}$ | $\begin{gathered} -1.956^{* *} \\ (0.892) \end{gathered}$ | $\begin{gathered} -2.827^{* * *} \\ (0.858) \end{gathered}$ | $\begin{gathered} -2.248^{* *} \\ (0.994) \end{gathered}$ | $\begin{gathered} -2.562^{* * *} \\ (0.790) \end{gathered}$ | $\begin{gathered} -2.550^{* * *} \\ (0.861) \end{gathered}$ | $\begin{gathered} -2.247^{* * *} \\ (0.779) \end{gathered}$ | $\begin{gathered} -1.770^{* *} \\ (0.803) \end{gathered}$ |
| Public $_{i}$ |  |  |  | $\begin{aligned} & -0.268 \\ & (0.608) \end{aligned}$ | $\begin{aligned} & -0.141 \\ & (0.564) \end{aligned}$ | $\begin{aligned} & -0.915 \\ & (0.682) \end{aligned}$ | $\begin{gathered} -0.413 \\ (0.712) \end{gathered}$ | $\begin{aligned} & -0.831 \\ & (0.651) \end{aligned}$ | $\begin{gathered} -0.708 \\ (0.673) \end{gathered}$ | $\begin{gathered} 0.688 \\ (0.529) \end{gathered}$ | $\begin{gathered} 0.461 \\ (0.588) \end{gathered}$ | $\begin{gathered} -0.0419 \\ (0.531) \end{gathered}$ | $\begin{gathered} -0.162 \\ (0.511) \end{gathered}$ |
| Diversified $_{i}$ |  |  |  | $\begin{aligned} & 0.0122 \\ & (0.435) \end{aligned}$ | $\begin{aligned} & -0.0921 \\ & (0.436) \end{aligned}$ | $\begin{gathered} 0.409 \\ (0.445) \end{gathered}$ | $\begin{gathered} 0.241 \\ (0.486) \end{gathered}$ | $\begin{gathered} 0.236 \\ (0.446) \end{gathered}$ | $\begin{aligned} & 0.0887 \\ & (0.515) \end{aligned}$ | $\begin{gathered} -0.941^{* *} \\ (0.447) \end{gathered}$ | $\begin{aligned} & -0.855^{*} \\ & (0.459) \end{aligned}$ | $\begin{gathered} -0.280 \\ (0.428) \end{gathered}$ | $\begin{gathered} -0.230 \\ (0.462) \end{gathered}$ |
| Tar in Fin Sec ${ }_{i}$ |  |  |  | $\begin{aligned} & 2.093^{* *} \\ & (0.768) \end{aligned}$ | $\begin{aligned} & 1.464^{*} \\ & (0.768) \end{aligned}$ | $\begin{aligned} & 1.624^{* *} \\ & (0.782) \end{aligned}$ | $\begin{gathered} 0.817 \\ (0.832) \end{gathered}$ | $\begin{aligned} & 1.498^{*} \\ & (0.769) \end{aligned}$ | $\begin{gathered} 0.860 \\ (0.861) \end{gathered}$ |  |  |  |  |
| Acq in Fin $\mathrm{Sec}_{i}$ |  |  |  | $\begin{gathered} -3.723^{* * *} \\ (0.754) \end{gathered}$ | $\begin{gathered} -3.718^{* * *} \\ (0.729) \end{gathered}$ | $\begin{gathered} -3.444^{* * *} \\ (0.739) \end{gathered}$ | $\begin{gathered} -3.487^{* * *} \\ (0.796) \end{gathered}$ | $\begin{gathered} -3.515^{* * *} \\ (0.732) \end{gathered}$ | $\begin{gathered} -3.669^{* * *} \\ (0.767) \end{gathered}$ |  |  |  |  |
| Time FE |  |  |  |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |
| Tar Nation FE |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |
| Acq Nation FE |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |
| Tar Macro-Ind FE |  |  |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |
| Acq Macro-Ind FE |  |  |  |  |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |
| Adj R-sq | 0.141 | 0.144 | 0.146 | 0.152 | 0.171 | 0.160 | 0.204 | 0.159 | 0.194 | 0.160 | 0.183 | 0.159 | 0.184 |
| F-Stat | 311.1*** | 156.4*** | 145.7*** | 94.1*** | 92.2*** | $86.2^{* * *}$ | 82.2*** | 100.6*** | 86.6*** | 59.6*** | 52.1*** | 44.7*** | 48.9*** |
| NObs | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 |

Multivariate results with alternative premia II (Robustness tests)
This table presents piecewise OLS regressions of the Premia ${ }_{i, t-5}$ on the 52-week target high price, the foreign target indicator, the product of the two, and other variables.

[^8]|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 52wHigh ${ }_{i}$ | $\begin{gathered} 19.45^{* * *} \\ (1.210) \end{gathered}$ | $\begin{gathered} 19.44^{* * *} \\ (1.207) \end{gathered}$ | $\begin{gathered} 18.35^{* * *} \\ (1.028) \end{gathered}$ | $\begin{gathered} 18.29^{* * *} \\ (1.063) \end{gathered}$ | $\begin{gathered} 17.58^{* * *} \\ (0.963) \end{gathered}$ | $\begin{gathered} 18.13^{* * *} \\ (1.074) \end{gathered}$ | $\begin{gathered} 16.64^{* * *} \\ (1.025) \end{gathered}$ | $\begin{gathered} 18.26^{* * *} \\ (1.099) \end{gathered}$ | $\begin{gathered} 16.87 * * * \\ (1.049) \end{gathered}$ | $\begin{gathered} 17.99 * * * \\ (1.055) \end{gathered}$ | $\begin{gathered} 17.06^{* * *} \\ (1.025) \end{gathered}$ | $\begin{gathered} 17.80^{* * *} \\ (1.105) \end{gathered}$ | $\begin{gathered} 16.99^{* * *} \\ (1.013) \end{gathered}$ |
| $\mathrm{CBA}_{i}$ |  | $\begin{gathered} 3.049^{* * *} \\ (0.632) \end{gathered}$ | $\begin{aligned} & 1.358^{* *} \\ & (0.636) \end{aligned}$ | $\begin{gathered} 0.494 \\ (0.666) \end{gathered}$ | $\begin{gathered} 0.764 \\ (0.626) \end{gathered}$ | $\begin{gathered} 0.935 \\ (0.740) \end{gathered}$ | $\begin{gathered} 0.913 \\ (0.821) \end{gathered}$ | $\begin{aligned} & 1.412^{*} \\ & (0.758) \end{aligned}$ | $\begin{gathered} 1.436 \\ (0.928) \end{gathered}$ | $\begin{gathered} 0.214 \\ (0.616) \end{gathered}$ | $\begin{gathered} 0.519 \\ (0.657) \end{gathered}$ | $\begin{aligned} & 0.0456 \\ & (0.624) \end{aligned}$ | $\begin{gathered} 0.253 \\ (0.651) \end{gathered}$ |
| $52 \mathrm{wHigh}_{i} \times \mathrm{CBA}_{i}$ |  |  | $\begin{gathered} 4.875^{* * *} \\ (1.546) \end{gathered}$ | $\begin{gathered} 5.057 * * * \\ (1.559) \end{gathered}$ | $\begin{gathered} 4.842^{* * *} \\ (1.579) \end{gathered}$ | $\begin{gathered} 4.943^{* * *} \\ (1.559) \end{gathered}$ | $\begin{gathered} 6.014^{* * *} \\ (2.012) \end{gathered}$ | $\begin{gathered} 5.382^{* * *} \\ (1.544) \end{gathered}$ | $\begin{gathered} 5.405^{* * *} \\ (1.828) \end{gathered}$ | $\begin{gathered} 5.149^{* * *} \\ (1.466) \end{gathered}$ | $\begin{aligned} & 4.439^{* * *} \\ & (1.608) \end{aligned}$ | $\begin{gathered} 5.278 * * * \\ (1.455) \end{gathered}$ | $\begin{gathered} 4.893^{* * *} \\ (1.521) \end{gathered}$ |
| $\mathrm{Cash}_{i}$ |  |  |  | $\begin{aligned} & 1.256^{*} \\ & (0.636) \end{aligned}$ | $\begin{aligned} & 1.323^{* *} \\ & (0.586) \end{aligned}$ | $\begin{aligned} & 1.731^{* * *} \\ & (0.626) \end{aligned}$ | $\begin{gathered} 2.111^{* * *} \\ (0.579) \end{gathered}$ | $\begin{aligned} & 1.618^{* *} \\ & (0.634) \end{aligned}$ | $\begin{gathered} 2.025^{* * *} \\ (0.610) \end{gathered}$ | $\begin{gathered} 0.682 \\ (0.608) \end{gathered}$ | $\begin{gathered} 0.439 \\ (0.574) \end{gathered}$ | $\begin{gathered} 0.754 \\ (0.611) \end{gathered}$ | $\begin{gathered} 0.935 \\ (0.591) \end{gathered}$ |
| Stock $_{i}$ |  |  |  | $\begin{gathered} -1.696^{* *} \\ (0.813) \end{gathered}$ | $\begin{gathered} -1.924^{* *} \\ (0.818) \end{gathered}$ | $\begin{aligned} & -1.289 \\ & (0.840) \end{aligned}$ | $\begin{gathered} -1.888^{* *} \\ (0.862) \end{gathered}$ | $\begin{aligned} & -1.295 \\ & (0.805) \end{aligned}$ | $\begin{gathered} -1.658^{* *} \\ (0.804) \end{gathered}$ | $\begin{gathered} -2.174^{* *} \\ (0.807) \end{gathered}$ | $\begin{gathered} -2.424^{* * *} \\ (0.835) \end{gathered}$ | $\begin{gathered} -1.904^{* *} \\ (0.797) \end{gathered}$ | $\begin{gathered} -1.924^{* *} \\ (0.764) \end{gathered}$ |
| Private ${ }_{i}$ |  |  |  | $\begin{gathered} -2.321^{* * *} \\ (0.781) \end{gathered}$ | $\begin{gathered} -1.957^{* *} \\ (0.751) \end{gathered}$ | $\begin{gathered} -2.940^{* * *} \\ (0.799) \end{gathered}$ | $\begin{gathered} -1.948^{* *} \\ (0.769) \end{gathered}$ | $\begin{gathered} -2.777^{* * *} \\ (0.829) \end{gathered}$ | $\begin{gathered} -2.158^{* *} \\ (0.890) \end{gathered}$ | $\begin{gathered} -2.620^{* * *} \\ (0.754) \end{gathered}$ | $\begin{gathered} -2.550^{* * *} \\ (0.787) \end{gathered}$ | $\begin{gathered} -2.374^{* * *} \\ (0.750) \end{gathered}$ | $\begin{gathered} -1.800^{* *} \\ (0.705) \end{gathered}$ |
| Public $_{i}$ |  |  |  | $\begin{aligned} & -0.486 \\ & (0.619) \end{aligned}$ | $\begin{aligned} & -0.277 \\ & (0.552) \end{aligned}$ | $\begin{aligned} & -1.169^{*} \\ & (0.681) \end{aligned}$ | $\begin{gathered} -0.442 \\ (0.698) \end{gathered}$ | $\begin{gathered} -0.999 \\ (0.656) \end{gathered}$ | $\begin{gathered} -0.734 \\ (0.695) \end{gathered}$ | $\begin{gathered} 0.333 \\ (0.569) \end{gathered}$ | $\begin{gathered} 0.201 \\ (0.589) \end{gathered}$ | $\begin{aligned} & -0.235 \\ & (0.557) \end{aligned}$ | $\begin{gathered} -0.177 \\ (0.534) \end{gathered}$ |
| Diversified $_{i}$ |  |  |  | $\begin{aligned} & -0.209 \\ & (0.382) \end{aligned}$ | $\begin{gathered} -0.255 \\ (0.380) \end{gathered}$ | $\begin{gathered} 0.196 \\ (0.386) \end{gathered}$ | $\begin{aligned} & 0.0546 \\ & (0.435) \end{aligned}$ | $\begin{aligned} & -0.0141 \\ & (0.394) \end{aligned}$ | $\begin{gathered} -0.122 \\ (0.458) \end{gathered}$ | $\begin{gathered} -1.081^{* * *} \\ (0.391) \end{gathered}$ | $\begin{gathered} -0.967^{* *} \\ (0.419) \end{gathered}$ | $\begin{gathered} -0.488 \\ (0.361) \end{gathered}$ | $\begin{gathered} -0.391 \\ (0.423) \end{gathered}$ |
| Tar in Fin Sec ${ }_{i}$ |  |  |  | $\begin{aligned} & 1.971^{* *} \\ & (0.732) \end{aligned}$ | $\begin{aligned} & 1.514^{*} \\ & (0.782) \end{aligned}$ | $\begin{aligned} & 1.598^{* *} \\ & (0.753) \end{aligned}$ | $\begin{gathered} 0.986 \\ (0.860) \end{gathered}$ | $\begin{aligned} & 1.440^{*} \\ & (0.729) \end{aligned}$ | $\begin{gathered} 0.912 \\ (0.921) \end{gathered}$ |  |  |  |  |
| Acq in Fin $\mathrm{Sec}_{i}$ |  |  |  | $\begin{gathered} -3.170^{* * *} \\ (0.744) \end{gathered}$ | $\begin{gathered} -3.259^{* * *} \\ (0.735) \end{gathered}$ | $\begin{gathered} -2.904^{* * *} \\ (0.739) \end{gathered}$ | $\begin{gathered} -3.082^{* * *} \\ (0.810) \end{gathered}$ | $\begin{gathered} -2.989^{* * *} \\ (0.737) \end{gathered}$ | $\begin{gathered} -3.205^{* * *} \\ (0.802) \end{gathered}$ |  |  |  |  |
| Time FE |  |  |  |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |
| Tar Nation FE |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |
| Acq Nation FE |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |
| Tar Macro-Ind FE |  |  |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |
| Acq Macro-Ind FE |  |  |  |  |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |
| Adj R-sq | 0.133 | 0.136 | 0.138 | 0.143 | 0.163 | 0.151 | 0.198 | 0.150 | 0.189 | 0.151 | 0.178 | 0.149 | 0.175 |
| F-Stat | 258.2*** | 130.6*** | 112.6*** | 91.5*** | 85.7*** | $74.1^{* * *}$ | 69.7*** | 85.1*** | 75.7*** | 51.7*** | 44.2*** | 34.7*** | 38.8 *** |
| NObs | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 |


H. Multivariate results based on Piecewise OLS with alternative premia I (Robustness tests)
This table presents OLS regressions of the Premia ${ }_{i, t-10}$ on the 52 -week target high price, the foreign target indicator, the product of the two, and other variables that include firm and deal characteristics $\left(X_{i}\right)$.

## Premia $_{i, t}=\alpha+\sum^{3} \beta_{j}$ Piecewise $_{1 \rightarrow 3, i, j}+\beta_{4}$ CBA $_{i}+\sum^{7} \beta_{j}\left(\text { Piecewise }_{1 \rightarrow 3} \times \text { CBA }\right)_{i, j}+\sum^{k} \beta_{j} X_{i, j}+\varepsilon_{i, t}$

where Premia ${ }_{i, t-10}$ is the offer price from Refinitiv expressed as a log percentage difference from the target stock price 10 trading days prior to the announcement
 denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels, respectively.

|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Piecewise $_{1, i}$ | $\begin{gathered} 40.07 * * * \\ (2.892) \end{gathered}$ | $\begin{gathered} 40.13^{* * *} \\ (2.953) \end{gathered}$ | $\begin{gathered} 37.18^{* * *} \\ (3.258) \end{gathered}$ | $\begin{gathered} 36.35^{* * *} \\ (3.346) \end{gathered}$ | $\begin{gathered} 34.44^{* * *} \\ (3.487) \end{gathered}$ | $\begin{gathered} 37.17^{* * *} \\ (3.405) \end{gathered}$ | $\begin{gathered} 34.76 * * * \\ (3.827) \end{gathered}$ | $\begin{gathered} 37.13^{* * *} \\ (3.385) \end{gathered}$ | $\begin{gathered} 35.57 * * * \\ (3.794) \end{gathered}$ | $\begin{gathered} 34.69^{* * *} \\ (3.397) \end{gathered}$ | $\begin{gathered} 32.84^{* * *} \\ (3.455) \end{gathered}$ | $\begin{gathered} 34.50^{* * *} \\ (3.493) \end{gathered}$ | $\begin{gathered} 32.96^{* * *} \\ (3.665) \end{gathered}$ |
| Piecewise $_{2, i}$ | $\begin{gathered} 20.14^{* * *} \\ (2.392) \end{gathered}$ | $\begin{gathered} 20.19^{* * *} \\ (2.399) \end{gathered}$ | $\begin{gathered} 19.41 * * * \\ (2.830) \end{gathered}$ | $\begin{gathered} 19.41^{* * *} \\ (2.819) \end{gathered}$ | $\begin{gathered} 18.26^{* * *} \\ (2.924) \end{gathered}$ | $\begin{gathered} 19.08^{* * *} \\ (2.813) \end{gathered}$ | $\begin{gathered} 18.38^{* * *} \\ (2.980) \end{gathered}$ | $\begin{gathered} 19.29^{* * *} \\ (2.776) \end{gathered}$ | $\begin{gathered} 18.45 * * * \\ (3.019) \end{gathered}$ | $\begin{gathered} 19.31^{* * *} \\ (2.759) \end{gathered}$ | $\begin{gathered} 17.85^{* * *} \\ (2.903) \end{gathered}$ | $\begin{gathered} 18.87^{* * *} \\ (2.791) \end{gathered}$ | $\begin{gathered} 17.26^{* * *} \\ (2.898) \end{gathered}$ |
| Piecewise $_{3, i}$ | $\begin{gathered} 14.97^{* * *} \\ (2.227) \end{gathered}$ | $\begin{aligned} & 14.89^{* * *} \\ & (2.223) \end{aligned}$ | $\begin{gathered} 14.03^{* * *} \\ (1.972) \end{gathered}$ | $\begin{aligned} & 14.04^{* * *} \\ & (2.041) \end{aligned}$ | $\begin{gathered} 13.83^{* * *} \\ (1.836) \end{gathered}$ | $\begin{gathered} 13.84^{* * *} \\ (2.059) \end{gathered}$ | $\begin{gathered} 12.19^{* * *} \\ (1.939) \end{gathered}$ | $\begin{gathered} 13.97^{* * *} \\ (2.127) \end{gathered}$ | $\begin{gathered} 12.39 * * * \\ (2.023) \end{gathered}$ | $\begin{aligned} & 13.93^{* * *} \\ & (2.000) \end{aligned}$ | $\begin{aligned} & 13.28^{* * *} \\ & (1.727) \end{aligned}$ | $\begin{gathered} 13.88^{* * *} \\ (2.018) \end{gathered}$ | $\begin{gathered} 13.45^{* * *} \\ (1.747) \end{gathered}$ |
| $\mathrm{CBA}_{i}$ |  | $\begin{gathered} 3.240^{* * *} \\ (0.641) \end{gathered}$ | $\begin{gathered} 0.326 \\ (0.906) \end{gathered}$ | $\begin{aligned} & -0.491 \\ & (0.948) \end{aligned}$ | $\begin{aligned} & -0.116 \\ & (0.892) \end{aligned}$ | $\begin{aligned} & 0.00997 \\ & (0.964) \end{aligned}$ | $\begin{gathered} 0.106 \\ (0.809) \end{gathered}$ | $\begin{gathered} 0.960 \\ (1.063) \end{gathered}$ | $\begin{gathered} 0.796 \\ (1.214) \end{gathered}$ | $\begin{gathered} -0.871 \\ (0.896) \end{gathered}$ | $\begin{gathered} -0.705 \\ (0.884) \end{gathered}$ | $\begin{aligned} & -1.011 \\ & (0.925) \end{aligned}$ | $\begin{gathered} -0.593 \\ (0.904) \end{gathered}$ |
| Piecewise $_{1, i} \times \mathrm{CBA}_{i}$ |  |  | $\begin{aligned} & 13.63^{* *} \\ & (5.010) \end{aligned}$ | $\begin{aligned} & 13.58^{* *} \\ & (5.259) \end{aligned}$ | $\begin{aligned} & 12.71^{* *} \\ & (5.175) \end{aligned}$ | $\begin{aligned} & 12.90^{* *} \\ & (5.541) \end{aligned}$ | $\begin{aligned} & 15.39^{* *} \\ & (6.157) \end{aligned}$ | $\begin{aligned} & 11.12^{*} \\ & (5.527) \end{aligned}$ | $\begin{aligned} & 13.12^{* *} \\ & (6.188) \end{aligned}$ | $\begin{aligned} & 14.21^{* * *} \\ & (5.125) \end{aligned}$ | $\begin{aligned} & 14.85^{* * *} \\ & (5.158) \end{aligned}$ | $\begin{aligned} & 13.86^{* *} \\ & (5.175) \end{aligned}$ | $\begin{aligned} & 11.84^{* *} \\ & (5.033) \end{aligned}$ |
| Piecewise $_{2, i} \times \mathrm{CBA}_{i}$ |  |  | $\begin{gathered} 4.193 \\ (4.620) \end{gathered}$ | $\begin{gathered} 4.616 \\ (4.714) \end{gathered}$ | $\begin{gathered} 4.861 \\ (4.843) \end{gathered}$ | $\begin{gathered} 4.397 \\ (4.786) \end{gathered}$ | $\begin{gathered} 3.076 \\ (5.964) \end{gathered}$ | $\begin{gathered} 4.788 \\ (4.873) \end{gathered}$ | $\begin{gathered} 3.844 \\ (6.128) \end{gathered}$ | $\begin{gathered} 4.406 \\ (4.506) \end{gathered}$ | $\begin{gathered} 4.039 \\ (4.860) \end{gathered}$ | $\begin{gathered} 5.261 \\ (4.649) \end{gathered}$ | $\begin{aligned} & 5.685 \\ & (4.935) \end{aligned}$ |
| Piecewise $_{3, i} \times \mathrm{CBA}_{i}$ |  |  | $\begin{gathered} 3.312 \\ (3.573) \end{gathered}$ | $\begin{gathered} 3.414 \\ (3.594) \end{gathered}$ | $\begin{gathered} 3.078 \\ (3.590) \end{gathered}$ | $\begin{gathered} 3.361 \\ (3.601) \end{gathered}$ | $\begin{gathered} 5.163 \\ (4.296) \end{gathered}$ | $\begin{gathered} 4.111 \\ (3.666) \end{gathered}$ | $\begin{gathered} 4.048 \\ (4.327) \end{gathered}$ | $\begin{gathered} 3.581 \\ (3.476) \end{gathered}$ | $\begin{gathered} 2.230 \\ (3.655) \end{gathered}$ | $\begin{gathered} 3.319 \\ (3.497) \end{gathered}$ | $\begin{gathered} 3.026 \\ (3.606) \end{gathered}$ |
| Cash ${ }_{i}$ |  |  |  | $\begin{aligned} & 1.209^{*} \\ & (0.641) \end{aligned}$ | $\begin{aligned} & 1.385^{* *} \\ & (0.601) \end{aligned}$ | $\begin{aligned} & 1.697^{* *} \\ & (0.633) \end{aligned}$ | $\begin{gathered} 2.088^{* * *} \\ (0.603) \end{gathered}$ | $\begin{aligned} & 1.597^{* *} \\ & (0.646) \end{aligned}$ | $\begin{aligned} & 2.049 * * \\ & (0.625) \end{aligned}$ | $\begin{gathered} 0.628 \\ (0.607) \end{gathered}$ | $\begin{gathered} 0.605 \\ (0.594) \end{gathered}$ | $\begin{gathered} 0.659 \\ (0.615) \end{gathered}$ | $\begin{gathered} 1.004 \\ (0.622) \end{gathered}$ |
| Stock $_{i}$ |  |  |  | $\begin{gathered} -1.429 \\ (0.889) \end{gathered}$ | $\begin{aligned} & -1.677^{*} \\ & (0.895) \end{aligned}$ | $\begin{gathered} -0.929 \\ (0.926) \end{gathered}$ | $\begin{gathered} -1.500 \\ (0.970) \end{gathered}$ | $\begin{gathered} -0.946 \\ (0.882) \end{gathered}$ | $\begin{gathered} -1.387 \\ (0.897) \end{gathered}$ | $\begin{gathered} -1.926^{* *} \\ (0.861) \end{gathered}$ | $\begin{aligned} & -2.314^{* *} \\ & (0.887) \end{aligned}$ | $\begin{aligned} & -1.623^{*} \\ & (0.860) \end{aligned}$ | $\begin{aligned} & -1.719^{* *} \\ & (0.827) \end{aligned}$ |
| Private $_{i}$ |  |  |  | $\begin{gathered} -2.163^{* *} \\ (0.791) \end{gathered}$ | $\begin{gathered} -1.897^{* *} \\ (0.794) \end{gathered}$ | $\begin{gathered} -2.753^{* * *} \\ (0.815) \end{gathered}$ | $\begin{gathered} -1.866^{* *} \\ (0.865) \end{gathered}$ | $\begin{gathered} -2.743^{* * *} \\ (0.841) \end{gathered}$ | $\begin{gathered} -2.140^{* *} \\ (0.965) \end{gathered}$ | $\begin{gathered} -2.489^{* * *} \\ (0.769) \end{gathered}$ | $\begin{gathered} -2.493^{* * *} \\ (0.840) \end{gathered}$ | $\begin{gathered} -2.216^{* * *} \\ (0.758) \end{gathered}$ | $\begin{gathered} -1.754^{* *} \\ (0.780) \end{gathered}$ |
| Public $_{i}$ |  |  |  | $\begin{gathered} -0.267 \\ (0.595) \end{gathered}$ | $\begin{aligned} & -0.149 \\ & (0.553) \end{aligned}$ | $\begin{gathered} -0.913 \\ (0.669) \end{gathered}$ | $\begin{gathered} -0.407 \\ (0.704) \end{gathered}$ | $\begin{gathered} -0.806 \\ (0.640) \end{gathered}$ | $\begin{gathered} -0.659 \\ (0.661) \end{gathered}$ | $\begin{gathered} 0.636 \\ (0.524) \end{gathered}$ | $\begin{gathered} 0.423 \\ (0.580) \end{gathered}$ | $\begin{aligned} & 0.00573 \\ & (0.522) \end{aligned}$ | $\begin{gathered} -0.119 \\ (0.501) \end{gathered}$ |
| Diversified $_{i}$ |  |  |  | $\begin{aligned} & -0.120 \\ & (0.425) \end{aligned}$ | $\begin{gathered} -0.207 \\ (0.428) \end{gathered}$ | $\begin{gathered} 0.285 \\ (0.430) \end{gathered}$ | $\begin{gathered} 0.118 \\ (0.465) \end{gathered}$ | $\begin{gathered} 0.109 \\ (0.434) \end{gathered}$ | $\begin{aligned} & -0.0303 \\ & (0.502) \end{aligned}$ | $\begin{gathered} -1.014^{* *} \\ (0.441) \end{gathered}$ | $\begin{aligned} & -0.896^{*} \\ & (0.452) \end{aligned}$ | $\begin{gathered} -0.445 \\ (0.422) \end{gathered}$ | $\begin{gathered} -0.340 \\ (0.451) \end{gathered}$ |
| Tar in Fin Sec ${ }_{i}$ |  |  |  | $\begin{aligned} & 2.280^{* * *} \\ & (0.797) \end{aligned}$ | $\begin{aligned} & 1.643^{* *} \\ & (0.780) \end{aligned}$ | $\begin{aligned} & 1.808^{* *} \\ & (0.812) \end{aligned}$ | $\begin{gathered} 1.054 \\ (0.849) \end{gathered}$ | $\begin{aligned} & 1.690^{* *} \\ & (0.795) \end{aligned}$ | $\begin{gathered} 1.065 \\ (0.859) \end{gathered}$ |  |  |  |  |
| Acq in Fin $\mathrm{Sec}_{i}$ |  |  |  | $\begin{gathered} -3.516^{* * *} \\ (0.729) \end{gathered}$ | $\begin{gathered} -3.529^{* * *} \\ (0.703) \end{gathered}$ | $\begin{gathered} -3.231^{* * *} \\ (0.714) \end{gathered}$ | $\begin{gathered} -3.306^{* * *} \\ (0.773) \end{gathered}$ | $\begin{gathered} -3.309^{* * *} \\ (0.701) \end{gathered}$ | $\begin{gathered} -3.460^{* * *} \\ (0.725) \end{gathered}$ |  |  |  |  |
| Time FE |  |  |  |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |
| Tar Nation FE |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  |  |
| Acq Nation FE |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |
| Tar Macro-Ind FE |  |  |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |
| Acq Macro-Ind FE |  |  |  |  |  |  |  |  |  |  |  | $\checkmark$ | $\checkmark$ |
| Adj R-sq | 0.149 | 0.152 | 0.153 | 0.159 | 0.177 | 0.167 | 0.211 | 0.166 | 0.201 | 0.167 | 0.189 | 0.165 | 0.189 |
| F-Stat | 246.5*** | 176.3*** | 110.9*** | 158.1*** | 107.5*** | 110.3*** | 78.5*** | 142.9*** | 101.3*** | 90.7*** | 57.4*** | 73.4*** | 57.3*** |
| NObs | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 | 10,695 |

## Multivariate results based on Piecewise OLS with alternative premia II (Robustness tests)

This table presents OLS regressions of the Premia ${ }_{i, t-10}$ on the 52-week target high price, the foreign target indicator, the product of the two, and other variables that include firm and deal characteristics $\left(X_{i}\right)$.
where Premia ${ }_{i, t-5}$ is the offer price from Refinitiv expressed as a log percentage difference from the target stock price 5 trading days prior to the announcement date. Piecewise $_{1}$ is the $\min \left(52 \mathrm{wHigh}_{i, t-10}, 25\right)$, Piecewise $_{2}$ is the $\max \left(0, \min \left(52 \mathrm{wHigh}_{i, t-10}-25,50\right)\right.$ ) and Piecewise 3 is the $\max \left(52 \mathrm{wHigh}_{i, t-10}-75,0\right)$. $\mathrm{CBA}_{i}$ is a dummy variable indicator that is assigned the value of one for CBA, and zero otherwise (domestic M\&A). Variable are defined in Appendix Table (B). ${ }^{* * *}$, ${ }^{* *}$, and ${ }^{*}$ denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels, respectively.



[^0]:    ${ }^{1}$ The cross-border market for corporate control has grown rapidly in recent years to exceed $\$ 1.95$ tn in 2021 from $\$ 93.7$ bn in 1987 (Refinitiv). Similarly, the global foreign direct investment (FDI) flows showed a strong rebound in 2021, up $77 \%$ to an estimated $\$ 1.65$ tn, from $\$ 929$ bn in 2020, surpassing their pre-COVID-19 level, according to UNCTAD's Investment Trends Monitor.

[^1]:    ${ }^{2}$ Recent studies argue that the higher valuation challenges of foreign targets can be controlled and mitigated via earnout contracts, especially if the acquirer has limited or no experience in negotiating with a foreign target firm (Barbopoulos et al., 2018).

[^2]:    ${ }^{3}$ For comparison purposes, the domestic equivalent corresponds to a $0.257 \%$ increase in premia offered for one standard deviation increase in $52 \mathrm{wHigh}_{i, t}$.
    ${ }^{4}$ We repeat this analysis by employing the population of all M\&A to eliminate any contamination in our measures due to filters we have imposed in our sample.

[^3]:    ${ }^{5}$ Kesner et al. (1994) finds that the principal-agent problem not only exists between shareholders and managers, but also in the case of deal representatives. They find a misalignment in the objectives of the bidders and the investment banks that represent them, as compensation for the representative is positively related to deal premia.
    ${ }^{6}$ 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 their probabilities, (b) the utility function reflects the decision maker's riskaversion 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.

[^4]:    ${ }^{7}$ In the field of real estate, studies have shown that anchoring bias affect real estate agents and sellers alike. 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.

[^5]:    ${ }^{8}$ In a recent article in 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.

[^6]:    ${ }^{9}$ 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.
    ${ }^{10}$ We use Premia $i_{i, t-20}$ as our main premia variable, with Premia $a_{i, t-10}$ and Premia $a_{i, t-5}$ used in robustness tests reported in the Appendix.

[^7]:    ${ }^{11}$ 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.

[^8]:    both expressed as a $\log$ percentage difference from the target stock price 5 trading days prior to the announcement date. $\mathrm{CBA}_{i}$ is a dummy variable indicator that is assigned the value of one for CBA, and zero otherwise (domestic M\&A). Variable are defined in Appendix Table (B). ***, **, and * denote statistical significance at the $1 \%, 5 \%$, and $10 \%$ levels, respectively.

    ## where Premia $i_{i, t-5}$ is the offer price from Refinitiv and $52 \mathrm{wHigh}_{i}$ is the high stock price over the 250 trading days ending 6 days prior to the announcement date, with <br> Premia $_{i, t}=\alpha+\beta_{1} 52 \mathrm{wHigh}_{i}+\beta_{2} \mathrm{CBA}_{i}+\beta_{3}(52 \mathrm{wHigh} \times \mathrm{CBA})_{i}+\sum_{j=4}^{k} \beta_{j} X_{i, j}+\varepsilon_{i, t}$

