

# **Economic Policy Uncertainty and Cross-Border Mergers and Acquisitions\***

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## **Abstract**

We examine the effects of economic policy uncertainty (EPU) on cross-border mergers and acquisitions (CBA). The results suggest that a higher degree of EPU at home retards the number and volume of inbound CBA deals. However, the inverse relationship between EPU and inward CBA is positively moderated by the host country's quality of institution, business environment and political risk. The bilateral acquirer-target country-pair investigation reveals that while higher EPU in the target's domicile deters inbound CBA, higher EPU in the acquirer's nation is positively associated with higher number and volume of outbound CBA deals. Finally, on the announcement of the deals, targets (acquirers) based in countries with a larger increase in EPU gain less (more) than the targets (acquirers) based in countries with a smaller increase in EPU. These findings imply that countries aiming to attract cross-border investments should strive to mitigate economic policy-related uncertainties.

*JEL Codes* : F21; G34; G38

*Keywords* : Economic policy uncertainty; Cross-border mergers and acquisitions; Quality of institutions; Business environment; Political risk.

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## 1. Introduction

Cross-border mergers and acquisitions (CBA) play an important role in driving global growth.<sup>1</sup> Thus, identifying the key determinants of CBA activities is of interest to corporate entities as well as regulatory bodies. Studies on political economy (e.g., Dinc and Erel, 2013; Nguyen and Phan, 2017; Bonaime et al., 2018) show that governments can affect the corporate takeover market by influencing uncertainty about their future policies that may alter the decisions of investment communities. Economic uncertainties could be related to an array of policy factors such as government spending, taxation, regulatory changes, monetary policies etc. Thus far, studies document that higher level of policy uncertainty (Gulen and Ion, 2016) and/or electoral uncertainty (Julio and Yook, 2012; Jens, 2017) is associated with lower level of corporate investment. Literature also notes that while domestic investors are generally better endowed with inside/domestic information and local resources to minimize the uncertainty related costs, foreign investors may not have similar advantages (Julio and Yook, 2016). As such, compared to domestic investors, foreign investors could face higher levels of deadweight costs in the event of policy uncertainties (Erel et al., 2012).

Motivated by the possibility that economic policy uncertainty (EPU) could affect the flow of international investments more, this paper examines the following issues pertaining the link between EPU and CBA activities. First, we investigate whether the varying degrees of EPU, in part, can explain the temporal and cross-sectional variations in inbound CBA deals. To answer this question we draw on the economic conjecture of the *investment deterrence* view, which suggests that firms from countries with greater political and regulatory stability

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<sup>1</sup> Reports indicate that there has been an upsurge in CBAs between 1990 and 2017 rising from approximately USD100 billion to over USD869 billion in 2017. The sheer volume reached the milestone of USD1 trillion in 2007 followed by a sharp drop during the 2008 financial crisis with subsequent re-bounce thereafter (UNCTAD World Investment Report, 2017). Given the growth in CBAs and their impact on economic activities across borders, it is imperative to appreciate the drivers of CBA activities. As is common in the literature, this paper uses the terms mergers, acquisitions, and takeovers interchangeably.

are less likely to acquire firms in countries that pose a significant risk of higher EPU (Holburn and Zelner, 2010).

Second, a well-established body of literature documents that host countries with credible institutions of macro-governance exhibit significantly lower possibility of national expropriation along with lower information asymmetry and transaction costs, thus availing a business-friendly environment for international ventures (Bekaert et al., 2005; Stulz, 2005). In other words, prudent macro-governance is likely to provide greater confidence to international investors in their cross-country investment decisions, thus potentially mitigating the risk of higher EPU. As such, we examine whether the quality of macro-institutions, such as more amicable business environment and lower political risk, moderates the link between EPU and inbound CBAs.

Third, literature on international investment also offers the hypothesis of *hedging motive*, whereby a firm in response to domestic uncertainty, could undertake outbound investment as risk-reducing strategy (e.g., Denis et al., 2002; Le and Zak, 2006; Cao et al., 2019). To this end, by exploiting bilateral deals between acquirer-target nation pairs, we examine whether the effect of EPU in the domiciles of acquirers and targets have differential effects on CBA. Specifically, we test the *investment deterrence* view in response to uncertainty faced by the foreign acquirers in targets' domiciles and the *hedging motive* to outbound CBA when the acquirers face higher EPU at home. We also analyse the possible implications of comparative uncertainty between the countries where acquirers and targets are based.

Finally, we test whether the stock market revises its expectation of gains from synergies in order to incorporate EPU considerations. Previous studies provide two seemingly opposing findings on the effect of value-creation in the face of uncertainty. For instance, Nguyen and Phan (2017) show that acquirers undertake less risky transactions with lower premiums and a higher chance of success, which results in the transfer of wealth from target to bidder and better

operational performance on short- and long-term acquired returns. Bonaime et al. (2018), by comparison, find that deal premiums rise during higher EPU periods, which increases the target's bargaining power but has no significant effect on short-run announcement returns or long-run operating performance. Given these opposing views on the value-creation and expected synergy, we examine the effect of the EPU of target and acquirer domiciles on abnormal returns around the CBA announcements.

Despite the economic conjecture that EPU could deter investments, one major challenge in facing empirical investigation to establish a link between EPU and Mergers and Acquisitions (M&As) activities, is to identify an appropriate but exogenous measure of EPU. In this study, we make a sincere attempt to overcome this challenge by applying arguably exogenous variations in a newspaper-based novel economic policy-related uncertainty index constructed by Baker et al. (2016) (henceforth, BBD index).<sup>2</sup> A number of studies argue that the BBD index is able to capture country-specific EPU and is widely used as a plausible measure of exogenous variations in EPU (e.g., Gulen and Ion, 2016; Nguyen and Phan, 2017; Bonaime et al., 2018). Hence, unlike studies that focus on a single dimensional measure of uncertainty, we employ a proxy measure (BBD index) that accounts for a multitude of factors that create uncertainty in economic policy-domains.

Using a sample of CBAs from 20 countries between 1997 and 2017, we find strong evidence that EPU leads to a reduction in inbound CBAs, measured in terms of both number and volume (i.e. deal value) of cross-border deals. In economic terms, the results suggest that a 1% increase in the average monthly BBD index of the host nation is associated with 4.6% fewer inward deals and an 18.7% drop in volume. These findings are consistent with the

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<sup>2</sup> The existing body of research employs various proxies to capture the overall macroeconomic uncertainty faced by firms, such as analyst forecasts or volatility of stock returns (Bali et al., 2014), input and output prices (Leahy and Whited, 1996), total factor productivity (Bloom et al., 2018), and election results (Julio and Yook, 2012; Jens, 2017; Cao et al., 2019).

economic conjecture that higher levels of EPU impede CBA activities in the host nation. Further, these empirical outcomes withstand the rigor of a number of robustness checks.

Our deal level results also show a strong negative association between the EPU level of the target's domicile and the likelihood of inward CBA, again in line with the *investment deterrence* view. We also find evidence that EPU delays the deal completion process as well as decreases the probability of deal completion. All the above stated findings, supported with battery of additional robustness tests, support the view that firms are likely to delay irreversible investments amid uncertainty.

Analysis of the bilateral deals between acquirer-target country-pair offers two important findings. First, in line with the prediction of the *investment deterrence* view, the evidence shows that higher EPU in the target's domicile is associated with lower inbound CBA deals in the following months. Second, the results support the prediction of the *hedging motive* that the outbound CBAs are positively associated with higher EPU in the acquirer's home nation.

Further sensitivity analysis of bilateral deals on the heterogeneity of emerging markets (EM) and developed markets (DM) reveals that the negative effects of EPU on inbound CBA deals are stronger when the acquiring firm is domiciled in DM and the target is based in an EM. The positive effect of higher EPU in the acquirer's domicile on outbound CBAs is stronger when the acquiring firms are based in EMs. These findings suggest that cross-border hedging benefits could accrue more for acquirers based in EM compared to those in DM. Finally, the results on value relevance show that the stock market revises its expected gain from synergies in order to incorporate policy uncertainty considerations (Pástor and Veronesi, 2012).

This paper contributes to several strands of literature. First, it adds to the literature studying the effect of policy-related uncertainty on corporate investment (Gulen and Ion, 2016; Nguyen and Phan, 2017; Bonaime et al., 2018). Our paper is related to that of Nguyen and Phan (2017) and Bonaime et al. (2018) as both find that domestic policy uncertainty hinders

the M&A activities of US firms. However, and as noted above, CBA are more risky investments as the acquirer is at an informational and locational disadvantage with respect to their irreversible investments in a foreign territory. Thus, the issue of assessing EPU is more important in case of CBA. Thus, we extend this body of literature by documenting the link between EPU and CBA, and more so in a global context.

Second, our paper adds to the growing body literature examining the institutional determinants of CBA activities. For example, Erel et al. (2012) document that several target and acquiring country features, such as trade relationships, geographic proximity, disclosure quality, size of stock market and exchange rate stability, all influence M&A activities between two countries. Similarly, Rossi and Volpin (2004) and Ferreira et al. (2010) show that CBA activities are related to cross-country differences in investor protection regimes and foreign institutional ownership. We contribute to this strand of literature by identifying EPU as an important factor in the policy realm that inhibits CBA decisions.

Third, we also contribute to the existing political economics literature by analyzing whether a market revises its expectations about potential synergy gains in the face of policy-uncertainty (Pástor and Veronesi, 2012; Brogaard and Detzel, 2015). We contribute by demonstrating that markets differentially revise the expected synergy gains from proposed inbound and outbound CBA deals when facing policy-related uncertainties stemming from acquirer and target nation pairs.

The remainder of the paper proceeds with Section 2, which briefly discusses the development of our hypotheses. Section 3 describes the dataset we employ in this study while Section 4 presents and discusses the empirical results. Finally, Section 5 concludes the paper.

## 2. Hypotheses Development

### 2.1. EPU in target's domicile and inbound CBA deals

Conventional wisdom suggests that firms from countries with political and regulatory stability are less likely to invest in countries that pose a significant policy-related uncertainty (Holburn and Zelner, 2010). Further, host country governments themselves may create economic uncertainty in the name of economic nationalism, particularly when foreign companies take over domestic firms (Dinc and Erel, 2013). They find that nationalist governments deter foreign bids on domestic firms. These findings suggest that foreign investors may be wary of investing in the industries of these jurisdictions as the governments themselves may create economic uncertainties. This economic reasoning is referred to as the *investment deterrence* view.

Firms engaging in international investments could time the market to avoid any impending uncertainties. For example, Cao et al. (2019) show that the number of CBA deals significantly increases during the year prior to a national election, which can be attributed to the desire to escape from political uncertainty. Similarly, firms could choose not to complete acquisitions of foreign targets before political uncertainty is resolved, in order to maximize the return by waiting for new information and being able to better allocate investments (Julio and Yook, 2012). In summary, higher economic uncertainty should discourage international investors from engaging in CBAs when facing higher EPU in the target's domicile. This leads to our first hypothesis, which examines the *investment deterrence* view of the effect of EPU on CBAs.

*H<sub>1</sub>: A higher level of EPU in the target's domicile is associated with a lower number and volume of inbound CBA deals.*

## 2.2 *EPU in acquirer's domicile and outbound CBA deals*

Existing literature documents seemingly opposing views on the association between EPU and outbound CBA deals. The first view borrows its economic intuition from the theory of real options of waiting, where rational investors, in the face of uncertainty, defer investment decisions until they have greater certainty about the business environment (e.g., Bernanke, 1983; Bloom, 2009). In the case of CBAs, which entails difficulty in reversing large capital commitment, the investment retarding effect of higher EPU in the acquirer country arises for two reasons. First, firms aiming to invest further in a risky environment face higher cost of equity capital (Pástor and Veronesi, 2013). Second, target firms are likely to revise their acquisition premium upwards to compensate, ex-ante, for the added post-merger risk they face because of higher EPU in the acquirer's country (Nguyen and Phan, 2017). Therefore, acquiring firms facing high EPU at home are likely to hold off outbound CBAs until the uncertainty of the acquiring nation settles or the firms have clearer information. This leads to our second hypothesis that:

*H<sub>2A</sub>: A higher level of EPU in the acquirer's domicile is related to a lower number and volume of outbound CBA deals.*

An alternative view, based on the principle of international diversification (*diversification motive*) suggests that firms facing uncertainty at home should boost their international investments (Knight, 1921; Segal et al., 2015). If firms reduce their overseas investment in a period of high domestic uncertainty, their market share and expected returns are likely to decline (Vo and Le, 2017). Acquisition of targets in a foreign country is considered a hedge against uncertainty in home markets. As argued by Cao et al. (2019), global diversification enhances a firm's flexibility through opportunities to respond to differences in tax codes, relative prices, and other institutional differences. Similarly, Denis et al. (2002) consider geographical diversification through acquisitions as a risk-reducing activity. Le and

Zak (2006) suggest that outward investments can help firms avoid policy uncertainties at home market. This leads to an alternative (*hedging motive*) hypothesis that:

*H<sub>2B</sub>: A higher level of EPU in the acquirer's domicile is associated with a higher number and volume of outbound CBA deals.*

### 2.3 Value relevance of EPU

The theory of investment under uncertainty (the *investment deterrence* view) predicts higher costs associated with inbound CBAs in the face of higher EPU in the target's domicile. Similarly, based on the *hedging motive*, higher benefit can be associated with outbound CBAs when acquirers encounter higher EPU at home. In other words, for a CBA announcement, stock prices of target (acquirer) firms domiciled in a country with higher EPU should drop (increase) to reflect the higher (lower) required rate of return amid higher risk caused by higher EPU. This leads to our third hypothesis that:

*H<sub>3A</sub>: CBA deals with a higher degree of EPU in the targets' (acquirers') domiciles is related to lower (higher) announcement period returns of targets (acquirers).*

Notwithstanding the view presented in *H<sub>3A</sub>*, there may arise an alternative economic possibility because of EPU on combined value creation. Firms could become more prudent, delay risky investments and choose only those deals that they believe have an undisputable advantage during periods of high uncertainty (Bonaime et al., 2018). Therefore, the acquirers are likely to choose and pursue only those CBA deals that have better expected outcomes. This suggests positive value gains from CBAs in the face of higher EPU in the domiciles of both targets and acquirers. This leads to our final hypothesis that:

*H<sub>3B</sub>: Higher EPU in targets' and acquirers' domiciles is positively related to larger announcement period gains of merging partners in CBA deals.*

### 3. Data

#### 3.1. Sample composition and data sources

M&A deals of 20 countries from 1997 to 2017 are obtained from the Securities Data Corporation (SDC) database. For the reasons cited in the extant literature on M&A (e.g., Erel et al., 2012), we exclude leverage buyouts, spin-offs, recapitalizations, self-tender offers, exchange offers, repurchases, acquisitions of remaining interest, privatizations, and deals smaller than \$1million from the sample. As pointed out by Rossi and Volpin (2004), the identification of transfers of minority stakes could be affected by cross-country differences in disclosure requirements. Therefore, to ensure that the acquirer exercises control of the target, we include deals (domestic and cross-border) in which the acquirer owns at least 50%.

After applying these filters, 138,050 deals with a total volume of USD31.26 trillion survive in the sample. Of these, 34,229 (24.79%) are cross-border deals constituting an aggregated deal volume of USD9.87 trillion. Table 1 reports the sample distribution of the number and volume (in USD) of all M&A deals by the domiciles of the acquirers and the targets. The US and UK witness the largest volume of domestic as well as CBA deals. The US and UK firms are involved in 46,643 and 15,541 total deals with 6,610 and 4,248 outbound CBA deals respectively. The US and UK are also the two largest recipients of inbound CBA deals, at least in terms of volume. Other countries such as Canada, China, France, Germany and Japan are also very active in the CBA market and account for a significant share of the sample, while many other countries have limited M&A/CBA activities in terms of both number and volume. A key message from Table 1 is that there are substantial cross-country differences in M&A/CBA activities. Among the factors that are potentially responsible for these variations, this study examines the role of EPU.

**[Insert Table 1 here]**

Table 2 presents the bilateral distributions of the number of completed deals for each pair of acquirer (columns) and target (rows) domiciles. The top three target countries involved in the largest number of deals are the US (46,643), the UK (15,541), and China (15,359). Again, we observe substantial differences in the bilateral numbers of CBA activities and these differences are in line with those reported by prior studies, including Rossi and Volpin (2004), Erel et al. (2012), and Ahern et al. (2015). Although a number of studies strive to explain these variations, in this study we focus on the role of EPU in explaining such variations.

**[Insert Table 2 here]**

The data on industry characteristics and security prices are obtained from Datastream. The country and country-pair specific factors are collected from various data sources. All the variables used in this study and their source are described in *Appendix A*.

### 3.2. *Measuring CBA activities and value*

We use number and volume (in deal value) of CBA activities as our dependent variables. For each country and year, we construct these variables at the industry level using 12 industry portfolios of Fama and French (1997).<sup>3</sup> Following Erel et al. (2012), “*Number of CBA<sub>jkt</sub>*” is calculated as the total number of CBA deals per industry-country-year divided by the total number of (domestic and CBA) deals per industry-country-year (see equation (1)).

$$Number\ of\ CBA_{jkt} = \frac{Total\ number\ of\ CBA\ deals_{jkt}}{Total\ number\ of\ all\ (domestic\ and\ CBA)\ deals_{jkt}} \quad (1)$$

where,  $j$ ,  $k$  and  $t$  are industry, target country, and year respectively. Similarly, “*Volume of CBA<sub>jkt</sub>*” is constructed as in equation (2).

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<sup>3</sup> Due to low CBA activity in many industries of certain nations, a more comprehensive classification (such as the 48-FF industries) would inflate the amount of zeros.

$$Volume\ of\ CBA_{jkt} = \frac{Total\ dollar\ value\ of\ CBA\ deals_{jkt}}{Total\ dollar\ value\ of\ all\ (domestic\ and\ CBA)\ deals_{jkt}} \quad (2)$$

Following Bris et al. (2008), bilateral deals between target-acquirer nation pairs ( $NB_{tgt-acq,t}$ ) is calculated as the total number of bilateral deals between target-acquirer nation pair for month  $t$  per 100 listed firms ( $NC_{tgt,t}$ ) in the target nation (see equation (3)). ( $NB_{tgt-acq,t}$ ) can be interpreted as the number of bilateral deals per 100 listed potential targets.<sup>4</sup>

$$NB_{tgt-acq,t} = \frac{Total\ NB_{tgt-acq,t}}{NC_{tgt,t}} \quad (3)$$

where,  $tgt$ ,  $acq$  and  $t$  are target country, acquirer country, and month respectively.  $NC_{tgt,t}$  is expressed in 100s. Similarly, the volume of bilateral deals ( $VB_{tgt-acq,t}$ ) is computed as:

$$VB_{tgt-acq,t} = \frac{Total\ VB_{tgt-acq,t}}{GDP_{tgt,t}} \quad (4)$$

i.e., the dollar volume of bilateral deals between country-pair is divided by GDP (in billions of USD) for the target country for the month  $t$ .<sup>5</sup> This variable is thus interpreted as the volume of cross-border bilateral deals (in millions of USD) associated with one billion economic activities (GDP) in the target domicile. The number of listed firms for each country is retrieved from Datastream while data on GDP are obtained from the World Bank's World Development Indicators (WDIs).

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<sup>4</sup> The variable is expressed per 100 listed companies of the target domicile to make the interpretation of the coefficients more tractable. This can also be read as the percentage of listed companies.

<sup>5</sup> Scaling the CBA number of deals by the number of listed firms allows us to capture the relative intensity of CBA activities across and within countries, mitigating size bias. For the same reason we scale the CBA volume deals by GDP. Further, the scaling of GDP (denominator) is in billions of USD to make the interpretation of the coefficients more tractable.

For our deal-level stock market return analysis, we follow Fuller et al. (2002) and Brown and Warner (1985) and employ the market-adjusted model.<sup>6</sup> As shown in equation (5), the market-adjusted model defines daily abnormal returns as the difference between the firm's return and the market return.

$$AR_{it} = R_{it} - R_{mt} \quad (5)$$

where,  $AR_{it}$  is the abnormal return of firm  $i$  on day  $t$ ,  $R_{it}$  is the realised return of firm  $i$  on day  $t$  and  $R_{mt}$  is the value-weighted market return on day  $t$ . The CAR (cumulative abnormal return) for firm  $i$  is the sum of the abnormal returns over a five-day window ( $t - 2$  to  $t + 2$ ) surrounding the deal announcement day,  $t = 0$ , as in equation (6):

$$CAR_i = \sum_{t=-2}^{t+2} AR_{it}, \quad (6)$$

We employ the CAR of targets, acquirers and combined gains of merging partners in our empirical analysis. To estimate combined CARs we use the value-weighted average of targets' and acquirers' CARs in the target-acquirer deal pair.

### 3.3. *Measuring economic policy uncertainty*

The EPU measure used in this paper is based on the work of Baker et al. (2016) and is sourced from <http://www.policyuncertainty.com>. The authors construct a separate monthly index of policy uncertainty for each of the 20 countries (see Table 1) included in our sample. The BBD index is based on a normalized count of newspaper articles containing key terms related to the broader words: *policy*, *economics* and *uncertainty*. For each of the 20 countries, the authors

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<sup>6</sup> Since prior same events (i.e. earlier acquisition in our sample) may pollute the estimation window, studies on M&As refrain from using the market model. Moreover, for short-window event studies, Brown and Warner (1985) show that weighting the market return by the firm's beta does not significantly improve the estimation. Hence, the use of the market-adjusted return should not affect the reliability of our findings.

search the archives of several large newspapers in that country, counting the number of articles which contain at least one of the terms related to “uncertainty” or “uncertain”, “economy” or “economics” and “policy” and/or “regulation”. Naturally, the set of terms used can differ from country to country and the authors account for that.

In order to take account of the varying number of articles over time, once the total number of policy uncertainty related article counts is obtained for each newspaper, it is then divided by the total number of articles in that newspaper during the same month. Each series is then normalized to have a unit standard deviation.<sup>7</sup>

Figures 1 to 4 plot the monthly average of the nominal GDP scaled BBD index along with the total number of M&A deals (Figure 1), total number CBA deals (Figure 2), total dollar volume of M&A deals (Figure 3) and total dollar volume of CBA deals (Figure 4). A casual eyeballing of Figures 1 to 4 indicates that both total M&A activities and CBA deals spike when EPU is lower, compared to the periods when EPU is higher, indicating a negative potential relationship between EPU and M&A activities. However, the CBA plots (Figures 2 and 4) show a noisier picture, implying a possibility that the effect of EPU on CBAs could be different from those on domestic M&As, indicating the need to control for other factors in the model.

**[Insert Figures 1 - 4 here]**

### *3.4. Control variables*

Drawing on the existing literature, we include a number of country-specific, industry-country-specific, bilateral country-pair specific, deal and firm-specific control variables in all our multivariate regressions. Our first set of controls is specific to the target’s domicile (Rossi and Volpin, 2004; Erel et al., 2012; Ahern et al., 2015). To capture a country’s potential economic

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<sup>7</sup> To normalize we followed the details available in: [www.policyuncertainty.com](http://www.policyuncertainty.com).

growth and development, we use annual percentage change in gross domestic product (*GDPGr*) and GDP per capita (*GDPCap*). We also include the ratio of total stock market capitalization to GDP as a proxy of financial development (*MKTCAP/GDP*). We capture country-specific trade openness (*Trade*) by including the ratio of the sum of the imports and exports value to GDP. Further, we also control for the effect of varying inflation (*Inflation*) by incorporating percentage change in the annual consumer price index. Data on all macroeconomic factors are retrieved from the WDIs.

We also incorporate stock market volatility (*Volatility*) that is computed as the 12 month rolling standard deviation in monthly market return of each country, obtained from Datastream. We further include changes in currency exchange rates (*Exchange rate*) (vis-à-vis USD for non-US firms) from the Penn World Tables. A country's quality macro-governance is measured by four time-varying indices, capturing the quality of institutions (*Bureaucratic quality, Law and Order, Corruption*) and foreign investment specific business environment (*Business environment*). All these rating indices, whereby higher rating reflects better quality of macro-institutions, are taken from the Political Risk Services' (PRS) International Country Risk Guide's (ICRG) database (see *Appendix A* for definition and measurement of the variables). We also incorporate Henisz's political constraints index (*Political risk*) compiled by (Henisz, 2000).

In line with existing studies, we also include a set of variables related to bilateral country-pair investigation (Ahern et al., 2015). We control for the intensity of economic ties between each country-pair in a given year using a dummy variable (*Bilateral investment treaty*). This information on constructing the dummy is obtained from the United Nations Conference on Trade and Development (UNCTAD) database.<sup>8</sup> We also control for geographic

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<sup>8</sup> For example, India and Mexico signed a bilateral treaty in the year 2007. Therefore, the variable takes the value of zero for the bilateral pairs of India and Mexico for years before 2007 and one from the year 2007 onwards.

proximity between the acquirer and target firm countries by using the natural logarithm of (*Geographic distance*) following the measure proposed by Erel et al. (2012).<sup>9</sup> Further, we also control for cultural and institutional dissimilarity using three country-pair dummy variables (*Same language, Same religion* and *Same legal origin*). The language and religion dummies are sourced from the Central Intelligence Agency (CIA) World Factbook and the legal origin from Djankov et al. (2008).

We also include industry average of firm-level variables, all obtained from Datastream. These include the natural logarithm of book-value of the firm's total assets (*Firm size*) to account for firm size. Profitability is captured using return on assets (*ROA*). Leverage is a measure of a firm's long-term financial distress (*Leverage*) and used as long-term debt to book value of equity. We take account of the bidder's mis-valuation implications by including the market-to-book (*MTB*) ratio. The Herfindahl-Hirschman Index (*HHI*) is included to measure industry competition.

Finally, we also incorporate commonly used deal-specific variables in the model. These include *Deal size* measured as the natural logarithm of the dollar value of the M&A deal, *Public target dummy* that takes the value of one if the target firm is a listed firm and zero otherwise. Similarly, we include *Cash deal dummy* that takes the value of one if at least 50% is paid in cash and zero otherwise, and *Diversifying deal dummy* that takes the value of one if the 2-digit SIC codes of the acquirer and target are different and zero otherwise. Data on all deal-specific factors are obtained from the SDC.

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<sup>9</sup> This approach uses the great circle formula to calculate the geographic distance between each country-pair ( $i-j$ ) as  $3963 \times \arccos[\sin(\text{lat}_i) \times \cos(\text{lat}_i) + \cos(\text{lat}_j) \times \cos(\text{lon}_j - \text{lon}_i)]$  where  $\text{lon}_{i(j)}$  and  $\text{lat}_{i(j)}$  are the longitude and latitude of the capital city of the acquirers' (targets') nation. For detailed information see Erel et al. (2012).

### 3.5. Descriptive statistics

Table 3 presents descriptive statistics of the variables used in our analysis. The table reveals CBA deals (volume) occupying an average of 33.66% (35.96%) of total number of deals (total deal value) emerging from a target-country-industry each month. Similarly, an average deal completion is 99.19 days and 81.36% of announced deals are successfully completed. Further, 24.79% of the sample deals are cross-border deals. On the bilateral country-pair, 100 listed companies in the targets' domicile are associated with 0.1195 bilateral deals per month during our study period. In terms of total value (volume) of deals, one billion of GDP (USD) of the target country is associated with 0.43 million (USD) worth of cross-border deals. Finally, the CAR of a 5-day window period around an M&A announcement is 3.87%.

On the EPU variable, we find a three month lagged average percentage change in EPU of the target's (acquirer's) domicile is 8.25% (7.11%) for our sample. This suggests that the change in target countries' EPU is marginally higher than that of the acquirer countries.

Taken together, summary statistics show there is considerable time series and cross-sectional variation in the CBA and EPU, allowing us to employ multivariate analysis. Finally, the average deal size is 226.46 million (USD), 40.97% of deals are settled in cash, diversifying deals account for 50.88%, and 11.88% of the deals involve public target firms.

**[Insert Table 3 here]**

## 4. Regression Results

### 4.1. Target country's EPU and inbound CBA deals

The *investment deterrence* view suggests that an acquirer could be reluctant to acquire targets in countries that have higher EPU, leading to lower inward CBA deals in countries with higher EPU. We empirically test this hypothesis ( $H_1$ ) using the multivariate regression, equation (7).

$$CBA_{jkt} = \alpha + \beta_1 EPU_{k,t-1} + \beta_2' \mathbf{X}_{t-1} + (\vartheta_k \times \gamma_j) + (\gamma_j \times \tau_t) + \epsilon_{jkt}, \quad (7)$$

where,  $CBA$  is defined in equation (1),  $j$  denotes industry,  $k$  refers to the target's domicile and  $t$  refers to month  $t$ . Following Gulen and Ion (2016), we define  $EPU_{k,t-1}$  as the natural logarithm of the arithmetic mean of the BBD index of three months prior to month  $t$  for country  $k$  (i.e.  $EPU_{k,t-1} = \ln \frac{(BBD_{k,t-1} + BBD_{k,t-2} + BBD_{k,t-3})}{3}$ ).  $\mathbf{X}_{t-1}$  is a vector of country and industry level control variables, as explained in Section 3.4 and defined in *Appendix A*.<sup>10</sup>  $\gamma_j$ ,  $\vartheta_k$  and  $\tau_t$  are industry, target country, and year-month fixed effects respectively. All country-level and industry-level control variables are lagged by one year to ensure that they are exogenous to CBA decisions. We cluster the standard errors by the target's country-industry level. Since the dependent variable  $CBA_{jkt}$  is truncated between 0-1, we employ Tobit regression.<sup>11</sup>

Table 4 reports the outcomes of the different variants of equation (7). Estimates reported in Panel A of Table 4 (Models (1)-(5)) are based on the number of CBAs while those in Panel B (Models (6)-(10)) are based on the volume of CBAs. The differences across the Models represent different combinations of explanatory variables and alternative definitions. In Model (1) of Panel A, we analyze inbound CBA deals with the BBD index as the only independent variable. It shows that the inward number of CBA and EPU in the home market are inversely related, which is also statistically significant, suggesting that firms based in countries with higher EPU are less attractive to foreign acquirers. The coefficient of BBD (-0.104) is economically material and statistically significant, which suggests that an increase in EPU of the home market is associated with lower inward CBA deals. Models (2)-(4) examine the effect of EPU on the number of CBA deals after controlling for the effects of industry- and

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<sup>10</sup> In line with existing literature, in cases where the control variables (mostly macroeconomic variables) are yearly figures, we take the same value for each month throughout our regressions (see Gelos and Wei, 2005). Thus, the notation  $t-1$  of the vector  $\mathbf{X}$  represents yearly lag rather than monthly lag for yearly figures.

<sup>11</sup> Tobit regression accounts for the censoring of the response variable and therefore the appropriate analytical method when analyzing bounded dependent variables (Greene, 2004).

country-level factors. The impact of EPU on inward CBA deals remains negative and statistically significant, indicating that higher EPU deters inbound CBAs.

**[Insert Table 4 here]**

Information presented in Table 1 shows that the two most common destinations for the inbound CBAs are the US and UK. To ensure that the results are not driven by the experience of these two countries, we re-estimate equation (7) by dropping the observations pertinent to these two nations. The results reported in Model (4) are qualitatively similar to those in Model (3), indicating that the inverse relationship between EPU and inward CBA is not affected by the cases of the two most active CBA markets. These estimates also confirm the inverse and statistically significant relationship between the EPU at the target's domicile and inward CBA deals.

With the nature of scaling of dependent variables used in Models (1)-(4), the possibility is that the documented negative correlation could be mechanical. This could be in a situation where CBA (the numerator) is not related to EPU, while domestic M&A (part of total deal in the denominator) is positively related to EPU. To address this concern, we follow Cao et al. (2019) and Ahern et al. (2015) and use the number of CBAs (natural logarithm of one plus total number of CBA deals) and volume of CBAs (natural logarithm of one plus the aggregate dollar value of all CBA deals) as additional measures. The results reported in Model (5) of Table 4 show that the EPU level in the target country is statistically significant and inversely related to the number of CBA deals. In terms of economic magnitude, estimates suggest that a 1% increase in the monthly BBD index is associated with a 4.6% drop in the number of inward CBA deals.

As the economy opens up and the stock market grows, it is possible that the market for acquisitions also changes from a higher number of smaller deals to fewer but larger deals.

Consequently, the relationship between EPU and number of CBA deals may not represent the true picture. To address this possibility we replace the dependent variable (number of CBAs) with volume of CBAs (total value of CBA deals divided by total value of all deals). The results are reported in panel B of Table 4 – (Models (6)-(9)). The results corroborate the findings based on the number of CBAs (Models (1)-(4)), indicating that EPUs in the host country and inward CBA deals are inversely related. This evidence reconfirms that firms are reluctant to acquire targets in countries where the EPU level is high (i.e. the *investment deterrence* view). The estimate of Model (10), which includes logarithmic values of one plus dollar volume of CBA deals, implies that a 1% increase in the BBD index in a given year-month is associated with an 18.7% drop in volume of inward CBA deals.

In summary, the results reported in Table 4 support our first hypothesis (H<sub>1</sub>) that “*A higher level of EPU in the target’s domicile is associated with a lower number and volume of inbound CBA deals*”.

#### *4.1.1. Effects of business cycles*

Baker et al. (2016) indicate that episodes of varying business cycles drive economic activities and may be correlated with M&A activities. We therefore employ further checks to ensure our baseline results are not driven by the confounding effect of business cycles. Drawing on the existing literature (e.g., Gulen and Ion, 2016; Drobetz et al., 2018), we employ three different measures of business cycles. First, we use the *Composite Leading Indicator (CLI)* developed by the Organization for Economic Co-operation and Development (OECD), which is a weighted average of several economic variables that is expected to predict the level of business cycle.

Second, we use the *Business Confidence Indicator (BCI)* index, also developed by the OECD, based on a survey of managers, to gauge the economic outlook facing an economy. As

a third measure, we control for expected economic conditions using annual real GDP growth forecasts from the OECD for all the sample countries. Appreciating the possibility that the three proxies are used for identical purposes of predicting the business cycle, we also use the first principal component of these three factors besides employing them separately. The results in Table 5 show that the effects of EPU on CBA, both number and volume of deals, carry negative signs and are statistically significant, even after controlling for the effects of the business cycles. This evidence further corroborates our earlier finding of an inverse relationship between EPU in the target's domicile and inbound CBA deals.

**[Insert Table 5 here]**

#### *4.1.2. Government subsidy/spending*

Foreign investors' tendency to delay CBA amid high levels of the host country's EPU is expected to be stronger when the target firm is from an industry that relies heavily on government spending/contracts (Gulen and Ion, 2016). Thus, the acquisition of firms in industries that are more sensitive to government subsidies/contracts could be differentially affected by economic uncertainties, particularly those stemming from regulatory and policy instabilities. To address this issue we test for the influence of government subsidies on the relationship between EPU and CBA deals. Following Drobetz et al. (2018), we use yearly data for each firm in each sample country from Datastream and calculate correlation coefficients ( $Cor_{ss}$ ) between the firm's sales and government subsidies as a fraction of total government spending.<sup>12</sup>

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<sup>12</sup> We use the GC.XPN.TRFT.ZS time series from the World Bank database (<http://data.worldbank.org>). This variable includes "all unrequited, non-repayable transfers on current account to private and public enterprises; grants to foreign governments, international organizations, and other government units; and social security, social assistance benefits, and employer social benefits in cash and in kind."

We then aggregate these correlations at the Fama-French 12 industry level for each country, and sort them from highest to lowest values. Subsequently, for each country, we generate a dummy variable ( $Dum_{ss}$ ) that takes the value of one for firms belonging to those industries that have above a median value of  $Cor_{ss}$  and zero for those below a median value of  $Cor_{ss}$ . We then interact the BBD index with  $Dum_{ss}$ . This interaction term ( $BBD \times Dum_{ss}$ ) captures the industry heterogeneity of their dependence on government spending/contracts.

We re-run equation (7) with the interaction term ( $BBD \times Dum_{ss}$ ) and report the results in Models (1)-(2) of Table 6. The coefficients of the BBD index remain negative and significant, and the coefficients of the interaction terms are also negative and significant. These estimates indicate that for firms belonging to industries that are dependent on government subsidies, the inverse relationship between home country EPU and inward CBA is more pronounced. Taken together, the evidence indicates that the effect of EPU is symmetrical across industries.

**[Insert Table 6 here]**

#### *4.1.3. Shock-based estimation*

We address the potential issue of endogeneity by exploiting a setting that represents something similar to quasi-experimental.<sup>13</sup> The media-based BBD (2016) measure of EPU can be argued to provide a plausible source of exogenous variation in EPU. Despite the fact that we have included every possible time invariant and time varying control variables in our multivariate regression Models, it is challenging to rule out the possibility that the continuous measure of EPU may be endogenous to other macroeconomic events. We address this concern by exploiting 11 unexpected but very high discrete jumps in the EPU levels from ten sample countries and compare them with 17 comparatively much lower jumps in EPU (i.e. relatively

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<sup>13</sup> We qualify the use of restrictive design to highlight the inclusion criteria for the empirical design.

stable). We do this based on the monthly percentage change in BBD index for the ten sample countries.

We measure such discrete jumps for our sample countries by first computing the monthly percentage change in the BBD index. We next sort these percentage changes from lowest to highest jumps and then classify countries into five quintiles based on the increasing order of the monthly percentage change in BBD index. For each month, the countries falling within the 5<sup>th</sup> quintile are identified as treated (those with highest percentage change in EPU, i.e. highest jumps) and the countries within the 1<sup>st</sup> quintile are identified as comparison (control) countries (those with lowest percentage change in EPU, i.e. lowest jumps). For the identified treated and comparison countries, we further impose a restriction that the absolute jump in the quintile rank in the following three months is not more than one. This ensures persistence of the jumps for each country for at least three months to ensure the EPU level of these countries becomes credible to the bidders. This restriction significantly mitigates the possibility of overlap between pre and post events. Applying these restrictions results in 11 episodes (month-country events) of high EPU shocks and 17 episodes of stable-EPU comparison episodes (month-country events). See *Appendix B* for the jumps and the treated and comparison countries.

To examine the effect of the target's domicile EPU on inbound CBA deals, we estimate the following shock-based regression equation (8).

$$CBA_{jkt} = \alpha + \beta_1 (EPU\_SHOCK_{i,t} \times AFTER_t) + \beta_2' X_{t-1} + (\vartheta_k \times \gamma_j) + (\gamma_j \times \tau_t) + \epsilon_{jkt}, \quad (8)$$

In equation (8),  $j$  denotes an industry,  $k$  refers to the target country and  $t$  refers to the month. The dependent variable,  $CBA_{jkt}$ , is either the CBA number or CBA volume, as defined earlier in equations (1) and (2) (separate Models are estimated). For each identified EPU

episode, the treatment indicator  $EPU\_SHOCK_{it}$  takes the value of one if a country in a given month belongs to one of treated episodes (*high EPU episodes*), and zero if it belongs to one of the comparison episodes (low EPU episodes) as identified in *Appendix B*.  $AFTER_t$  is the dummy variable that takes the value of one for the six subsequent months following a high EPU episode, and zero for six months before the EPU episode, as presented in *Appendix B*.

The above identification strategy is based on the assumption that the outcome variable (i.e. *M&As* activities) would have behaved in a similar way across all groups of countries in the absence of sudden shocks.  $X_{t-1}$  is a vector of country and industry level control variables, as explained in Section 3.4 and defined in *Appendix A*. As the data are aggregated at country-industry level we include  $(\vartheta_k \times \gamma_j)$  for target country ( $\vartheta_k$ ) – industry ( $\gamma_j$ ) fixed effects, to control for country-industry heterogeneity. We also include  $(\gamma_j \times \tau_t)$  for target industry ( $\gamma_j$ ) – year ( $\tau_t$ ) fixed effects, to control for time-varying industry-specific shocks in all specifications. We cluster the standard errors by the target’s country-industry level. The estimates are reported in Table 7.

**[Insert Table 7 here]**

Model (1) in Table 7 shows the estimates of the baseline specification without other country level and country-industry specific characteristics. The effect is statistically significant and economically meaningful (-0.1319) and is consistent with the baseline results reported in Table 4. The outcome of Model (2), which includes country-level control variables, also shows a greater decline in CBA deals when EPU levels are higher, relative to more stable periods. Estimates in Model (3), which incorporate further controls, also corroborate the findings of Models (1) and (2). Turning to the volume of CBA, Models (4)-(6) of Panel B document a similar inverse association between EPU in the target’s domicile and inward CBA deals. In

summary, the estimates reported in Table 7 support our *investment deterrence* hypothesis (H<sub>1</sub>) that suggests a higher degree of EPU in the target's domicile may dampen inbound CBA deals.

#### 4.1.4. *Moderating role of macro institutions*

We investigate whether the effect of host country EPU on inbound CBA deals depends on the country level macro-institutional qualities. Literature on new institutional economics argues that better quality macro-institutions reduce uncertainty in transactions by formulating and enforcing rules. For example, formal institutions, such as legal and regulatory systems, lower transaction costs by offering stable institutional environments (see, for example, North, 1990; Choi et al., 1999). In EMs, where institutions are relatively underdeveloped, higher transaction costs are incurred due to higher enforcement and measurement costs (North, 1990). Further, foreign investors in EMs face greater levels of information asymmetry than in DMs.<sup>14</sup> Similarly, a number of other studies provide convincing evidence that, compared to DMs, EMs have a weaker information environment and a relatively poorer quality of governance and institutions (see, for example, Bekaert and Harvey, 2003; Bekaert et al., 2005).

Further, Khanna and Palepu (2010, p. 17) argue, “Well-functioning markets tend to have relatively low transaction costs and high liquidity, as well as greater degrees of transparency and shorter time periods to complete transactions.” As such, a strong regulatory framework can reduce uncertainty, protecting multinational enterprises (MNEs) and facilitate international competition by addressing market failure, which should increase efficiency and improve profitability (Li and Resnick, 2003; Bailey, 2018).<sup>15</sup> Thus, assuming all other factors,

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<sup>14</sup> Several studies highlight differences in information flow in EMs and DMs. See, for example, Akerlof (1970); Brennan and Cao (1997); Hau (2001); Chan et al. (2005); Choe et al. (2005); Dvořák (2005).

<sup>15</sup> In contrast to DMs largely governed by monetary and fiscal policies, EMs have less effective fiscal and monetary stabilization policies, causing diminishing growth opportunities during bad economic conditions, which could induce fewer inbound CBAs (Bloom, 2014).

including EPU level are constant, international investors would generally prefer to invest in countries with greater transparency and a more cost-effective macro-institutional environment.

To examine this country governance heterogeneity, we re-run equation (7) by interacting the EPU with six different variables that capture various facets of differences in governance and institutional qualities. Among these characteristics, the first is a dummy variable that takes the value of one if the country belongs to the group of EMs and zero otherwise. This is followed by interacting BBD with three country-level measures of quality of institution (i.e. *Bureaucratic quality*, *Law and Order* and *Corruption*). We also interact the BBD index with *Business environment* and *Political risk* (see *Appendix A* for definitions of these variables). The results are presented in Panels A, B, C and D of Table 8 respectively.

**[Insert Table 8 here]**

The negative and significant coefficient of interaction term [ $BBD \times EMs$ ] suggests that the inverse relationship between host country EPU and inbound CBAs is more pronounced in EMs than in DMs. Models (2)-(4) report the results of estimates that have interaction terms between EPU and the individual institutional quality indicators (e.g., *Bureaucratic quality*, *Law and Order* and *Corruption*). As the higher value of these measures indicates better quality, the observed positive coefficients of the interaction terms of Models (2)-(4) are consistent with the view that the inverse relationship between host country EPU and inward CBA deals can be mitigated, at least in part, by better quality of institutions. These results are consistent with the findings of Busse and Hefeker (2007) who report a positive association between institutional quality and the flow of foreign direct investment (FDI).

The interaction term ( $BBD \times Business\ environment$ ) also bears a statistically significant positive coefficient (Model (5)). This suggests that a higher investment profile (lower risk to foreign investors) is positively associated with the levels of inward CBA deals. Finally, the

coefficient of the interaction term between BBD and political risk, whereby higher ratings of political risk reflects lower level of risks, is also positive and statistically significant. This indicates that the possibility of lower political risk, thus lower regulatory and policy uncertainty, partly compensates for the negative effect of higher EPU on inward CBA activities. All results based on CBA volume (Models (7)-(12)) are similar to those reported for number of deals. Overall, these findings suggest that the link between host market EPU and inward flow of CBA deals is also dependent on the quality of countries' macro-institutions.

#### 4.1.5. Cross-border acquisition candidacy

As the EPU of the target's domicile could pose a serious and irrevocable cost for foreign acquirers, the propensity to undertake CBAs could be dampened (Bernanke, 1983; Bloom, 2009). Consequently, the likelihood of firms based in countries with a larger change in EPU being taken over (i.e. acquisition candidacy) should be lower. Further, a larger change in EPU in the acquirer domicile could imply the higher hedging benefits of CBA. To test these propositions on the effect of EPU on CBA propensity, we employ probit regression as in equation (9).

$$\begin{aligned}
 CB - Acquisition\ Candidacy_{tgt-acq,t} = & \alpha + \beta_1 (\Delta BBD_{3m\_avg,t-1}) + \beta_2' X_{t-1} \\
 & + (\vartheta_{tgt} \times \gamma_{tgt}) + (\vartheta_{acq} \times \gamma_{acq}) + (\gamma_{tgt} \times \tau_t) + (\gamma_{acq} \times \tau_t) + \lambda_{tgt-acq,t} + \epsilon_{tgt-acq,t}
 \end{aligned} \tag{9}$$

where,  $CB - Acquisition\ Candidacy_{tgt-acq,t}$  takes the value of one if an M&A deal pair  $tgt - acq$  at time  $t$  is a cross-border deal and zero for domestic deals and  $(\Delta BBD_{3m\_avg,t-1})$  is the difference in the monthly change (in percent) in the BBD indices of targets' and acquirers' nations, estimated as one period lagged value of  $[\Delta BBD_{3m\_avg\_tgt}] - [\Delta BBD_{3m\_avg\_acq}]$ . This

measure helps in estimating the net effect of variations in magnitude of change in EPU of merging partners' domiciles.<sup>16</sup>

To gain further insight into the analysis by examining the effects of EPU in targets' and acquirers' nations separately, we re-estimated equation (9) by replacing  $\Delta BBD_{3m\_avg}$  with the change in EUP of targets' ( $\Delta BBD_{3m\_avg\_tgt}$ ) and acquirers' ( $\Delta BBD_{3m\_avg\_acq}$ ) nations separately. Thus equation (9) is estimated in its three forms to assess the effects of the EPU of target's and acquirer's domiciles separately and their net effect on CBA activities.  $X_{t-1}$  represents a vector of control variables that includes country and industry (*Firm size, ROA, leverage and MTB*) specific characteristics of acquirer and target nations pair (expressed as the difference between the target's and acquirer's variables). The control variables are explained in Section 3.4 and defined in *Appendix A*.

The third set of control variables,  $\lambda_{tgt-acq,t}$  (*deal size, public target, cash payment and diversifying deal*) represent contemporaneous deal level factors that may affect the propensity to engage in CBAs for a deal-pair  $tgt - acq$ . Further, we also control for  $(\vartheta_{tgt} \times \gamma_{tgt})$  and  $(\vartheta_{acq} \times \gamma_{acq})$  to control the target country-industry and acquiring country-industry fixed effects. Finally,  $(\gamma_{tgt} \times \tau_t)$  and  $(\gamma_{acq} \times \tau_t)$  account for industry-specific shocks originating in industries of acquirer and target firms respectively.<sup>17</sup> Standard errors are clustered at the acquirer-target nation pair.

The results of probit regressions that examine the relationship between target (acquirer) country's EPU and probability of target (acquirer) firms being acquired are presented in Table 9. The coefficients of  $[\Delta BBD_{3m\_avg\_tgt}]$  in Models (1) and (2) are negative and statistically

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<sup>16</sup> As the levels of the BBD indices of the pair-countries are unlikely to be comparable, we employ (percentage) change in BBD index,  $\Delta BBD_{3m\_avg,t-1}$ . Whilst  $\Delta BBD_{3m\_avg,t-1}$  appropriately captures the difference in direction and magnitude of the change in EPU of the merging partners' nations, it has limited ability to capture the effect of the level of EPU on long-term investments such as M&A. Therefore, this approach should be considered as a complement to the use of the level of EPU in the baseline regression, equation (7).

<sup>17</sup> Examples include industry-specific technology and innovation shock, or shift in industry-level investment growth, or competition prospects.

significant. This evidence confirms our predictions that firms are less likely to acquire a target that is based in countries with a higher level of EPU. In contrast, the coefficients of  $[\Delta BBD_{3m\_avg\_acq}]$  in Models (3) and (4) are statistically significant but positive, implying that higher EPU in a host country is associated with higher outbound CBA supporting the *hedging motive*. Coefficients of  $([\Delta BBD_{3m\_avg\_tgt}] - [\Delta BBD_{3m\_avg\_acq}])$  in Models (5) and (6) indicate a strong negative net effect of higher EPU on CBA acquisition candidacy. Taken together, the findings lend support to the *investment deterrence* view that the acquisition candidacy of the targets based in countries with increased EPU is reduced (i.e. lower inbound CBA deals) while the acquirers based in countries with increased EPU opt for more international acquisitions, lending support to the *hedging view*.

**[Insert Table 9 here]**

#### 4.1.6. Deal completion

Evidence thus far shows that higher EPU in the home market decreases the likelihood of receiving an inward CBA bid. We now investigate if EPU can complicate the deal completion process after an offer is made. To assess this possibility, we adopt three strategies. First, we evaluate the persistence effect of EPU on CBA. To do so we use lag values of BBD for up to six months, i.e. we include six different lagged values of the BBD index. The estimates are reported in Models (1)-(2) of Table 10. The results reveal that while the effect of EPU is statistically significant all the way up to three months, on average it is strongest in the 3<sup>rd</sup> month. This suggests that the uncertainty would transmit its effect on a CBA investment decision for up to three months; the effect fades gradually after three months. This implies that, on average, after three months, acquirers revise their decision based on information that is more recent.

[Insert Table 10 here]

In the second approach, we compute the time taken to complete a deal, measured as the difference between announcement date and date of completion of a deal (*Deal Compl Dur*<sub>tgt-acq,t</sub>), and estimate equation (10):

$$\begin{aligned} Deal\ Compl\ Dur_{tgt-acq,t} = & \alpha + \beta_1 (\Delta BBD_{3m\_avg,t-1}) + \beta_2' X_{t-1} \\ & + (\vartheta_{tgt} \times \gamma_{tgt}) + (\vartheta_{acq} \times \gamma_{acq}) + (\gamma_{tgt} \times \tau_t) + (\gamma_{acq} \times \tau_t) + \lambda_{tgt-acq,t} + \epsilon_{tgt-acq,t} \end{aligned} \quad (10)$$

Finally, we also estimate the likelihood of deal completion (*Deal - Compl - likl*<sub>tgt-acq,t</sub>) using equation (11):

$$\begin{aligned} Deal - Compl - likl_{tgt-acq,t} = & \alpha + \beta_1 (\Delta BBD_{3m\_avg,t-1}) + \beta_2' X_{t-1} \\ & + (\vartheta_{tgt} \times \gamma_{tgt}) + (\vartheta_{acq} \times \gamma_{acq}) + (\gamma_{tgt} \times \tau_t) + (\gamma_{acq} \times \tau_t) + \lambda_{tgt-acq,t} + \epsilon_{tgt-acq,t} \end{aligned} \quad (11)$$

where, *Deal - Compl - likl*<sub>tgt-acq,t</sub> is a dummy variable that takes the value of one if the deal is “completed” and zero otherwise. In both specifications,  $\Delta BBD_{3m\_avg,t-1}$  is as defined in Section 4.1.5. Models (3)-(8) of Table 10 present the results of OLS and probit estimations of equations (10) and (11) respectively. In Model (3), the coefficient of  $BBD_{3m\_avg\_tgt,t-1}$  is positive and statistically significant. This signifies that deals involving target firms based in countries with higher EPU take longer to complete. Similarly, in Model (4), the coefficient of  $\Delta BBD_{3m\_avg\_acq,t-1}$  is also positive and statistically significant. The sign suggests that it takes a longer duration for acquirers from countries with relatively higher EPU to complete the deals. In Model (5), the coefficient of  $[\Delta BBD_{3m\_avg\_tgt,t-1} - \Delta BBD_{3m\_avg\_acq,t-1}]$  is positive and statistically significant, indicating that when the EPU level of the target firm’s nation is relatively higher than the EPU of the acquiring firm’s nation, deal completion takes longer.

In terms of probability of deal completion, the results reported in Models (6)-(8) mirror those reported in Models (3)-(5). In Model (6), the coefficient of  $\Delta BBD_{3m\_avg\_tgt,t-1}$  is negative and significant, suggesting that a higher level of EPU in the target nation reduces the likelihood of deal completion. The coefficient of  $\Delta BBD_{3m\_avg\_acq,t-1}$  in Model (7) is also negative and significant, implying that a higher level of EPU in acquiring firms' nations has a deterring effect on the likelihood of deal completion. Finally, the coefficient of  $[\Delta BBD_{3m\_avg\_tgt,t-1} - \Delta BBD_{3m\_avg\_acq,t-1}]$  in Model (8) is also negative and significant, indicating that when the EPU of a target firm's domicile is relatively higher than that of the acquiring firm's nation the probability of deal completion is reduced. In sum, the results thus far reflect the view that target firms based in countries with higher EPU are less likely to be acquired and the acquisition process is likely to be lengthier.

#### 4.2. *Bilateral M&A activities*

We extend our analysis of the impact of EPU on bilateral country-pair settings among the 20 sample countries. Country-pair analysis enables us not only to isolate the impact of the EPU originating from the domiciles of targets and acquirers separately but also to gauge the net effect of differences in the changes in EPU between the pair on their CBA activities. We use a specification that is similar to the gravity Model often featured in international economics, to Model bilateral M&A flows. Specifically, our Model (equation (12)) follows that of Erel et al. (2012).

$$\begin{aligned}
 \text{Bilateral Deals}_{tgt-acq,t} = & \alpha + \beta_1 (\Delta BBD_{3m\_avg,t-1}) + \beta_2' X_{t-1} \\
 & + \vartheta_{tgt} + \vartheta_{acq} + \tau_t + \epsilon_{tgt-acq,t}
 \end{aligned}
 \tag{12}$$

In equation (12) the subscript *tgt* represents targets' domiciles and *acq* represents acquirers' countries. We use two measures of the dependent variable. The first measure,

*Number of Bilateral Deals*, is defined as the total number of bilateral deals originating from the acquirer's nation to target's nation as a percentage of firms listed in the target's domicile. The second measure, *Volume of Bilateral Deals*, is defined as the total dollar value of bilateral deals (in millions of USD) originating from the acquiring firm's nation to target's nation divided by GDP (billions of USD) of the target's nation. We employ three variations of  $\Delta BBD_{3m\_avg,t-1}$ , as explained in Section 4.1.5.  $X_{t-1}$  is the bilateral target's and acquirer's country-pair characteristics (expressed as the difference between the target's and the acquirer's variables). We also use  $\vartheta_{tgt}$  and  $\vartheta_{acq}$  to control for the time invariant country-specific factors of the nations in which targets and acquirers are based. Further, we include a year-month dummy  $\tau_t$  to capture possible implications of global economic variations, and  $\epsilon_{tgt-acq,t}$  is the error term. All the first differenced control variables are lagged by one year to ensure that they are exogenous to CBA decisions. We cluster the standard errors by target-acquirer nation pair. The results of the different specifications of equation (11) are presented in Table 11.

**[Insert Table 11 here]**

The dependent variable in Models (1)-(6) is *Number of Bilateral Deals*, while in Models (7)-(12) it is *Volume of Bilateral Deals*. The estimates in Models (1) and (2) support the *investment deterrence* view on inbound bilateral deals when the EPU level of the target's nation is higher than that of the acquirer's nation. In Models (3)-(6) we further estimate the sensitivity of the effect of EPU based on the heterogeneity of EM and DM pairs.<sup>18</sup> Model (3) in particular reveals that such deterrence is stronger when the acquiring firm is from a DM and the target is from an EM. Estimates reported in Models (7)-(12) corroborate the evidence reported in

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<sup>18</sup> In Table 11, we represent DM\_acq - EM\_tgt as bilateral deals between acquirer from DM and target from EM. Similarly, DM\_acq - DM\_tgt represents bilateral deals when both acquirer and target are from DMs. EM\_acq - DM\_tgt is when acquirer is from EM and target is from DM. Finally, EM\_acq - EM\_tgt is a bilateral deal when acquirer and target are both from EMs.

Models (1)-(6) when using a volume-based measure of bilateral deals. Further, estimates in Model (9) show a similarly stronger deterrence effect when the acquirer is from a DM and target is based in an EM.

In Models (13)-(22) in Panel C of Table 11, we report the effects of EPU originating from target's and acquirer's domiciles separately. Results presented in Models (13)-(17) uphold the negative effect of higher EPU in the target's domicile on bilateral deals, supporting the *investment deterrent* view. The results are qualitatively similar (Models (18)-(22)) when the dependent variable is volume-based.

#### 4.3. *Announcement period returns of merging partners*

Findings in previous sections show that EPU affects the number and volume of CBA deals as well as the likelihood of receiving a takeover bid. To the extent that markets factor in risk and cost associated with CBA deals facing higher EPU, we expect that a higher degree of EPU in the target's domicile will be associated with lower gains to the shareholders of target firms and the combined gains of merging partners. On the other hand, we, for reasons of international hedging, expect the acquirers based in countries facing higher acceleration in EPU to gain more from CBA deals. We assess these possibilities by analyzing the gains to targets and acquirers separately, as well as the value weighted combined gains to the merging partners. Following the extant M&A literature (see, for example, Ahern et al., 2015) we measure the cumulative abnormal returns (CAR) of the firms involved in M&A for 5 days (-2 to +2) surrounding the announcement of the deal. The estimates (Table 3) show that from CBAs, on average, targets gain 13.5%, the acquirers gain 4.75% while their combined (value weighted) gain is 6.06%.

To control for the possible implications of other factors on merging partners' gains we estimate equation (13) separately for targets, acquirers and combined (value weighted) gains of merging partners. In equation (13) we employ both variations of  $\Delta BBD_{3m\_avg,t-1}$  as defined

in Section 4.1.5. More specifically, in the Model of targets  $\Delta BBD_{3m\_avg}$  is replaced by  $\Delta BBD_{3m\_avg\_tgt}$ . Similarly, in the Model of acquirers it is replaced by  $\Delta BBD_{3m\_avg\_acq}$ , and by  $([\Delta BBD_{3m\_avg\_tgt}] - [\Delta BBD_{3m\_avg\_acq}])$  in the equation of combined gains.

$$CAR_{i,t} = \alpha + \beta_1 (\Delta BBD_{3m\_avg,t-1}) + \beta_2' X_{t-1} + \lambda_i + \vartheta_k + \tau_t + \epsilon_{i,t}, \quad (13)$$

In equation (13)  $CAR_{i,t}$  is the cumulative abnormal return from deal  $i$  in the five days (-2 to +2) surrounding the announcement of the deal on day  $t$ .  $X_{t-1}$  is a vector of control variables (expressed as the difference between the target and the acquirer variables) as explained in Section 3.4 and defined in *Appendix A*.  $\lambda_i$  controls deal level characteristics.  $\vartheta_k$ , and  $\tau_t$  are country and year fixed effects, respectively. All country-specific control variables are lagged by one year to ensure that they are exogenous to CBA decisions. We cluster the standard errors by target nation - acquiring nation pair.

The results are reported in Table 12. Models (1)-(3) show the effects of EPU on CARs of targets, acquirers, and the combined gains, respectively. Model 1 records a negative and significant coefficient of EPU ( $\Delta BBD_{3m\_avg\_tgt}$ ) on the target's CAR indicating that the targets based in countries with a larger increase in EPU gain less than the targets based in countries with a lower increase (or reduction) in EPU. The estimate suggests a one percentage point increase in EPU is, on average, associated with around a 7.44% decline in target CAR.

**[Insert Table 12 here]**

On the other hand, the positive and significant coefficient of EUP (Model 2) indicates that in CBA deals the market rewards the acquirers based in countries that experience higher increase in EPU, possibly reflecting the value of international diversification (hedging) in the face of increased uncertainty at home. The estimate in Model 3 shows that the larger difference

in the change of EPU of target's and acquirer's domiciles leads to a decline in the combined CAR of merging partners. The findings support the argument that the market penalizes the merging partners if the target is based in a nation whose EPU is accelerating faster.

Models (4)-(7) present additional sensitivity tests based on the heterogeneity of EMs and DMs. The adverse value implication associated with higher EPU of the target's domicile is strongest when the acquirer is from a DM and the target is from an EM (Model 4). The positive effect of larger EPU of the acquirer's domicile on acquirers' gains is strongest when both acquirer and target are based in DMs (Model 5).

Overall, the results lend further support to the *investment deterrence* view of inbound CBAs when the EPU of the target nation is high. The results also support the *hedging motive* of outbound CBA deals as the market positively rewards the merging partners of CBA deals when the acquiring firm is facing higher EPU at home.

## **5. Conclusion**

This study examines whether differences in EPU can explain the cross-sectional and temporal variations in CBA activities. By employing a time-varying media-based index of 20 major economies over the period spanning 1997-2017 as a measure of exogenous variation in EPU, the evidence suggests that country-level EPU is an important driver of CBA deals. Specifically, our results show that countries with higher EPU attract a lower level of foreign acquirers, measured by both number and volume (value) of CBA deals.

These results hold, even after accounting for several additional factors that are known to influence CBA activities, including business cycles and government subsidy. The results are robust to the alternative use of discrete EPU shocks. The outcomes further indicate that the inverse relationship between EPU and inbound CBAs becomes stronger when targets are domiciled in EMs. However, higher quality of institutions, more amicable business

environment and lower level of political risk can mitigate, to some extent, the severity of the adverse effect of EPU on the inward flow of CBA deals. We also find that firms in high EPU countries are actually less likely to be taken over and when they are, completion of the deal takes much longer.

The bilateral country-pair examinations reveal that while higher EPU in the target's domicile discourages inbound CBAs, higher EPU in acquiring firms' countries encourages outbound CBA deals. The results support the *investment deterrence* view for inbound CBAs in the face of higher policy uncertainty in the target's domicile and the *hedging motive* when acquirers face higher EPU in their own home country.

Finally, the value created by the announcement of a CBA deal to the shareholders of targets (acquirers), as measured by their CAR around the announcement of the deal, is negatively (positively) associated with the EPU of the target's (acquirer's) domicile. This finding is consistent with the theoretical argument that the stock market revises expected value synergy from mergers conditional upon the policy uncertainties of the nation in which the merging partners are based. These findings imply that countries aiming to attract foreign capital through cross-border mergers should strive to mitigate economic policy-related uncertainties.

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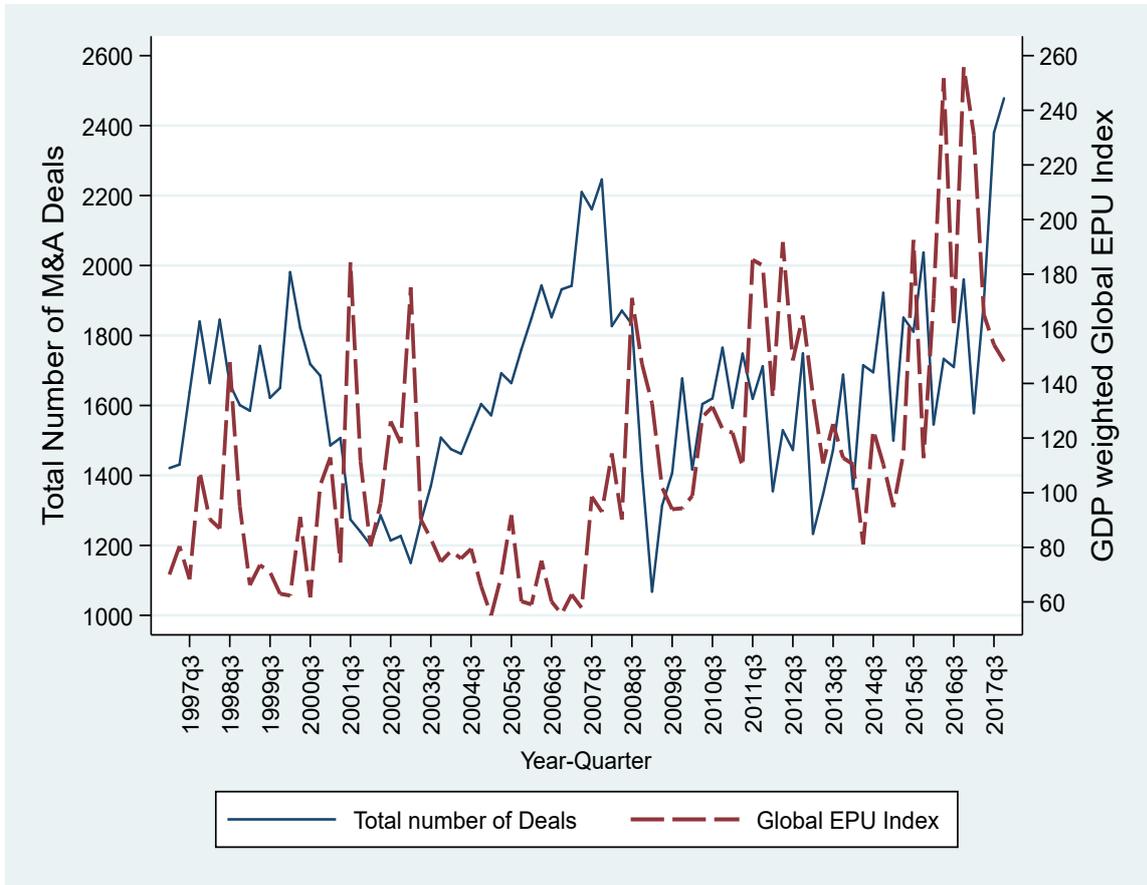
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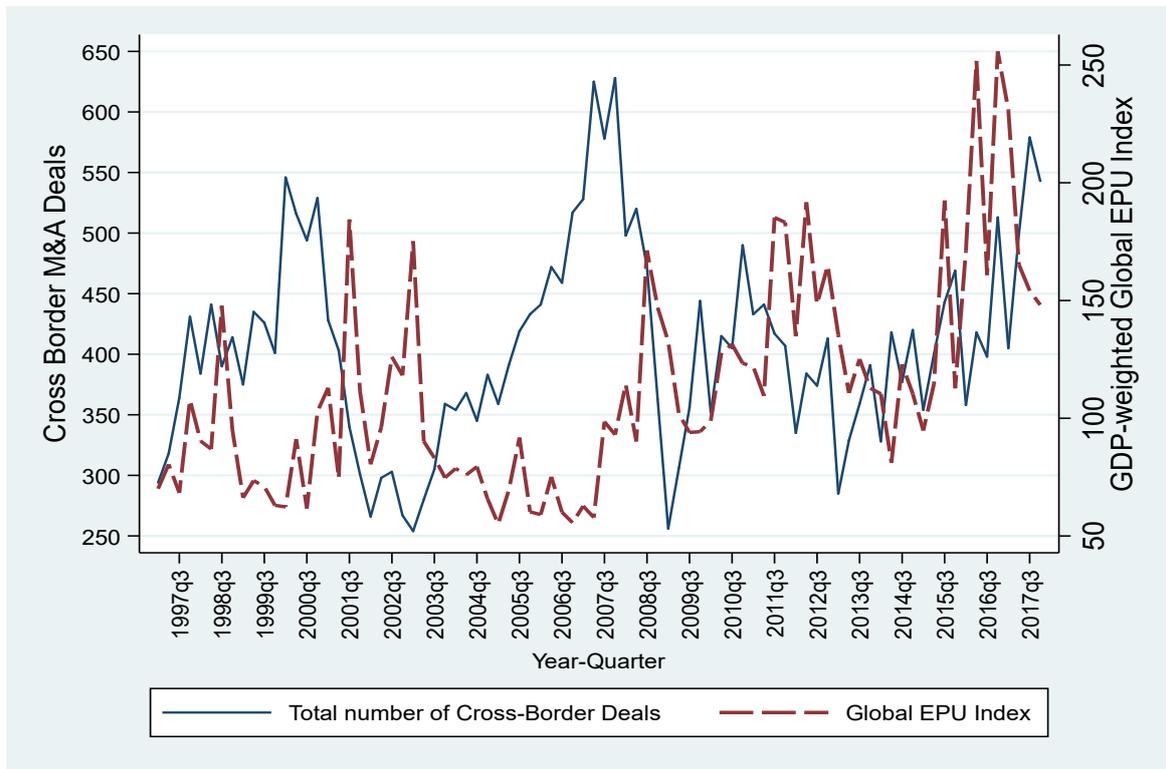
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**Figure 1**  
Times series plot of number of M&A deals and EPU



**Notes:** Figure 1 depicts the time series of nominal GDP scaled global BBD index (dashed line) in the right vertical axis and the number of M&A deals (continuous line) in the left vertical axis. The horizontal axis presents year-month from 1997 to 2017.

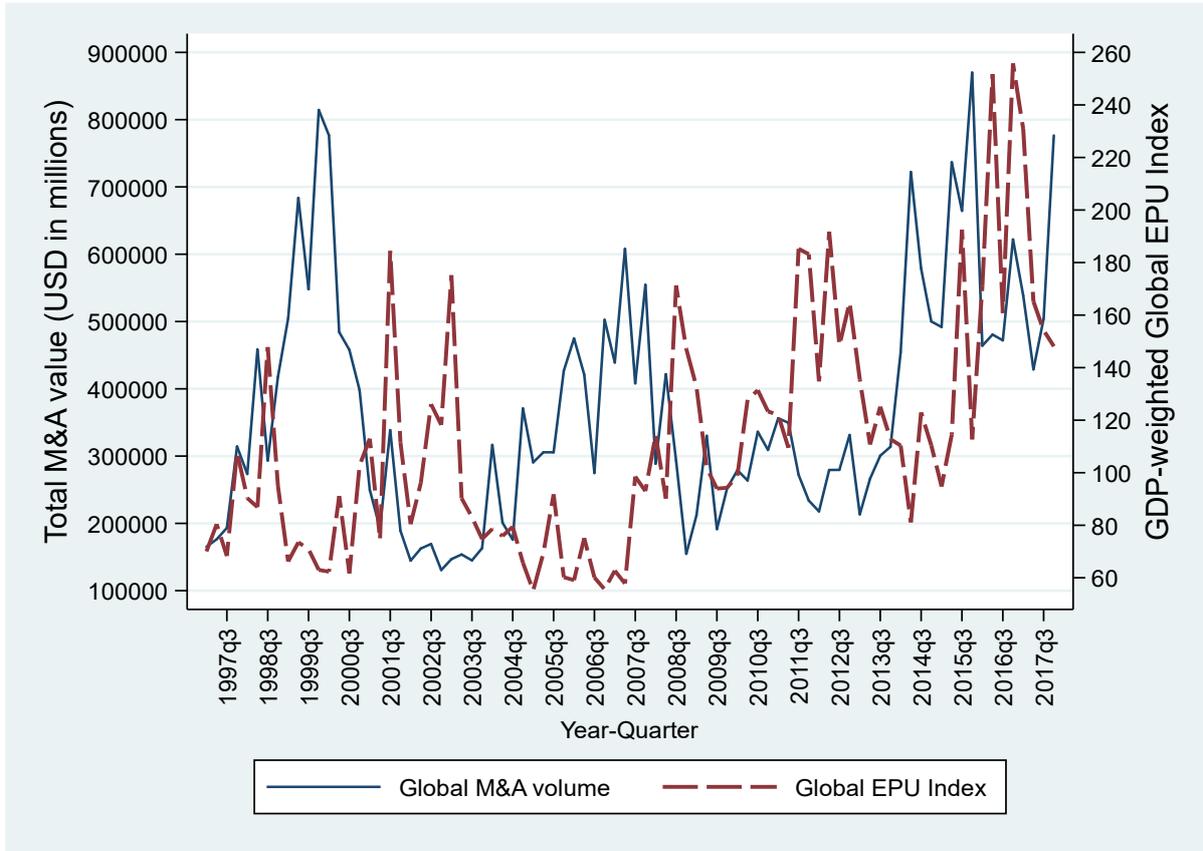
**Figure 2**  
Times series plot of CBA deals and EPU



**Notes:** Figure 2 plots the time series of nominal GDP scaled by global BBD index (dashed line) in the right vertical axis and the natural logarithm of number of CBA deals (continuous line) in the left vertical axis. The horizontal axis presents year-month from 1997 to 2017.

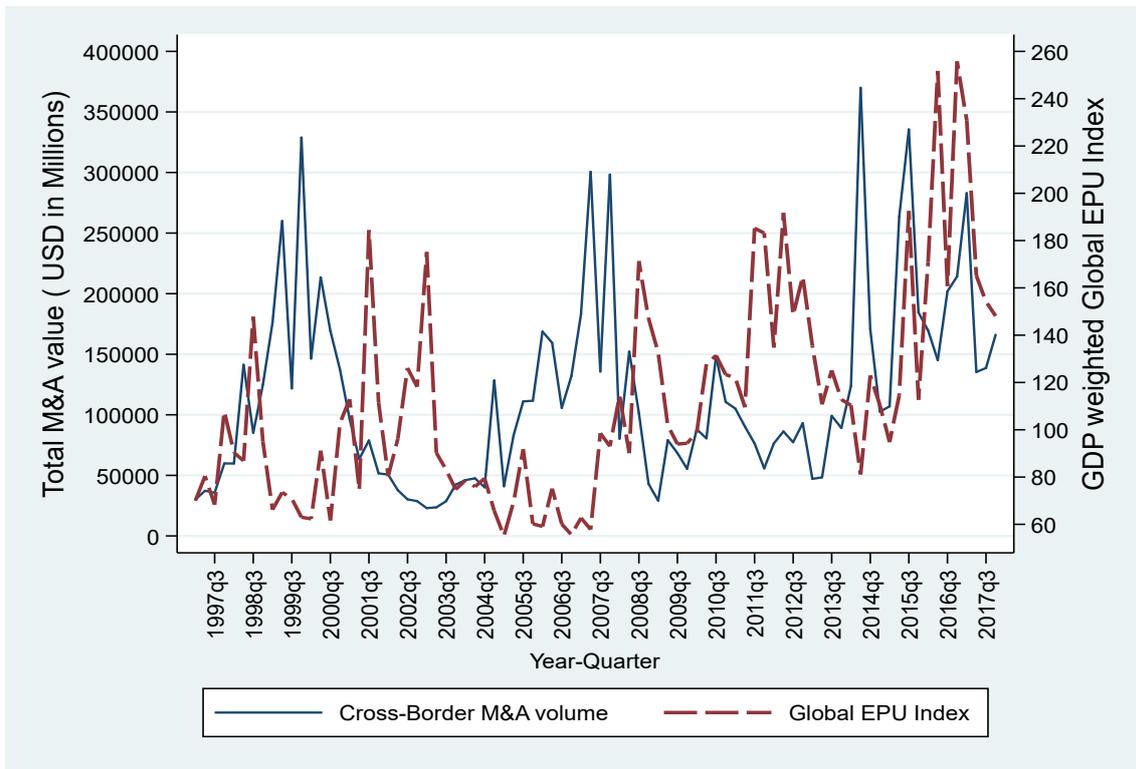
**Figure 3**

Times series plot of number of dollar volume of total M&A deals and EPU.



**Notes:** Figure 3 plots the time series of nominal GDP scaled global BBD index (dashed line) in the right vertical axis and the total volume of total M&A deals measured in millions of USD (continuous line) in the left vertical axis. The horizontal axis presents year-month from 1997 to 2017.

**Figure 4**  
Times series plot of dollar volume of CBA deals and EPU



**Notes:** Figure 4 plots the time series of nominal GDP scaled global BBD index (dashed line) in the left vertical axis and the natural logarithm of volume of CBA deals measured in millions of USD (continuous line) in the right vertical axis. The horizontal axis presents year-month from 1997 to 2017.

**Table 1**  
Number and volume of M&A deals

Country	All deals by acquirer nation		Cross-border deals by acquirer nation		All deals by target nation		Cross-border deals by target nation	
	Number	Volume (USD millions)	Number	Volume (USD millions)	Number	Volume (USD millions)	Number	Volume (USD millions)
Australia (AU)	8,294	942,979.60	1,132	332,984.40	9,449	1,011,850.00	2,287	401,854.60
Brazil (BR)	1,407	384,922.30	82	64,427.17	2,100	471,601.60	775	151,106.50
Canada (CA)	12,300	1,467,039.00	3,809	590,603.40	11,549	1,590,414.00	3,058	713,978.60
Chile (CL)	371	45,726.34	54	10,398.92	661	92,080.56	344	56,753.15
China (CH)	15,359	1,572,180.00	636	219,721.30	17,540	1,615,930.00	2,817	263,471.10
France (FR)	2,580	1,252,518.00	1,117	737,789.20	3,030	855,349.60	1,567	340,620.70
Germany (GR)	1,843	1,174,442.00	858	811,032.30	2,936	1,047,865.00	1,951	684,455.40
India (IN)	1,990	189,843.40	509	45,156.95	2,136	209,194.30	655	64,507.82
Ireland (IR)	949	189,990.90	605	161,271.30	800	253,069.20	456	224,349.60
Italy (IT)	1,984	407,111.50	488	146,470.20	2,339	553,945.40	843	293,304.10
Japan (JP)	7,179	817,667.10	898	289,280.80	6,700	614,630.60	419	86,244.16
Mexico (MX)	449	169,692.70	115	57,832.64	976	180,760.40	642	68,900.33
Netherlands (NT)	1,175	622,662.10	739	482,231.50	1,487	564,970.20	1,051	424,539.60
Russian Fed (RU)	796	285,977.80	90	44,211.62	1,043	323,215.20	337	81,448.94
Singapore (SG)	1,817	186,921.90	650	99,814.40	1,915	187,284.30	748	100,176.80
South Korea (SK)	3,632	330,635.80	307	46,804.93	3,860	359,419.40	535	75,588.52
Spain (SP)	1,785	393,382.90	440	188,069.20	2,271	500,261.40	926	294,947.80
Sweden (SW)	1,746	167,973.10	632	102,556.40	1,950	244,649.60	836	179,232.90
U.K. (UK)	15,541	2,626,182.00	4,248	1,384,429.00	15,755	3,287,360.00	4,462	2,045,607.00
USA (US)	46,643	16,000,000.00	6,610	1,984,895.00	49,553	17,300,000.00	9,520	3,317,033.00
Others	10,210	2,068,140.00	10,210	2,068,140.00	-	-	-	-
<b>Total</b>	<b>138,050</b>	<b>31,295,988.44</b>	<b>34,229</b>	<b>9,868,120.63</b>	<b>138,050</b>	<b>31,263,850.76</b>	<b>34,229</b>	<b>9,868,120.63</b>

**Notes:** This table reports the number and value of all deals, and number and volume of cross-border deals by acquirer country and target country, in the SDC database from 1997 to 2017. The sample excludes leverage buyouts, spin-offs, recapitalizations, self-tender offers, exchange offers, repurchases, acquisitions of remaining interest and privatizations. Only deals with a value of at least USD1 million and more than 50% of the target shares are owned by the acquirer after the merger are included.

**Table 2**  
Bilateral pair-countries number of CBA deals

Target Nation	Acquirer Nation																				Total	
	AU	BR	CA	CL	CH	FR	GR	IN	IR	IT	JP	MX	NT	RU	SG	SK	SP	SW	UK	US		Others
Australia (AU)	7,162	5	201	1	85	31	27	30	16	15	56	2	19	1	118	8	11	17	341	493	810	9,449
Brazil (BR)	30	1,325	106	33	11	45	17	12	5	25	20	23	11	0	5	2	47	5	54	173	151	2,100
Canada (CA)	136	8	8,491	3	55	46	17	16	23	10	23	7	27	9	11	20	6	23	216	1,575	827	11,549
Chile(CL)	44	6	86	317	3	6	4	3	0	5	4	6	3	0	1	0	33	3	13	66	58	661
China (CH)	53	2	88	0	14,723	37	15	6	8	15	74	1	19	1	203	89	7	9	67	282	1,841	17,540
France (FR)	13	4	54	0	28	1,463	78	21	15	75	20	0	73	3	7	3	56	51	307	401	358	3,030
Germany (GR)	39	1	67	0	50	105	985	27	23	57	41	2	74	8	19	7	26	77	357	506	465	2,936
India (IN)	16	2	18	1	3	32	34	1,481	3	13	45	2	22	3	53	14	11	6	57	163	157	2,136
Ireland (IR)	10	0	27	0	4	5	4	4	344	3	3	1	9	0	0	0	1	8	188	121	68	800
Italy (IT)	10	3	15	0	30	79	41	13	8	1,496	20	0	29	8	2	2	44	19	145	151	224	2,339
Japan (JP)	6	1	5	1	30	8	10	3	1	2	6,281	0	10	0	31	25	2	0	20	102	162	6,700
Mexico (MX)	12	5	286	2	5	5	5	3	3	5	1	334	11	0	2	2	26	5	20	187	57	976
Netherlands (NT)	17	2	38	1	22	58	57	8	19	28	22	1	436	6	15	4	19	40	240	220	234	1,487
Russian Fed (RU)	6	0	14	0	5	6	3	2	2	10	2	0	24	706	2	7	3	16	47	41	147	1,043
Singapore (SG)	60	0	5	0	47	12	7	32	2	5	60	1	8	1	1,167	10	1	8	39	85	365	1,915
South Korea (SK)	13	0	12	0	16	20	12	6	1	1	59	0	14	0	28	3,325	5	9	27	129	183	3,860
Spain (SP)	16	6	36	4	10	99	51	10	11	49	12	12	35	1	3	2	1,345	26	162	142	239	2,271
Sweden (SW)	10	0	30	0	8	26	42	3	8	9	9	0	33	2	5	0	9	1,114	132	161	349	1,950
U.K. (UK)	207	7	226	1	40	174	164	85	261	75	82	1	134	17	54	10	49	132	11,293	1,612	1,131	15,755
USA (US)	434	30	2,495	7	184	323	270	225	196	86	345	56	184	30	91	102	84	178	1,816	40,033	2,384	49,553
<b>Total</b>	<b>8,294</b>	<b>1,407</b>	<b>12,300</b>	<b>371</b>	<b>15,359</b>	<b>2,580</b>	<b>1,843</b>	<b>1,990</b>	<b>949</b>	<b>1,984</b>	<b>7,179</b>	<b>449</b>	<b>1,175</b>	<b>796</b>	<b>1,817</b>	<b>3,632</b>	<b>1,785</b>	<b>1,746</b>	<b>15,541</b>	<b>46,643</b>	<b>10,210</b>	<b>138,050</b>

**Notes:** This table reports the distribution of the total number of CBA deals between acquirer nation (columns) and target nation (rows) between 1997 and 2017 and covers all announced and completed cross-border deals in the SDC database. The sample excludes leverage buyouts, spin-offs, recapitalizations, self-tender offers, exchange offers, repurchases, acquisitions of remaining interest and privatizations. Only deals with a value of at least USD1 million and more than 50% of the target shares are owned by the acquirer after the merger, are included.

**Table 3**  
Descriptive statistics

Variables	Number of observations	Mean	Median	Standard deviation	25th percentile	75th percentile
<b>Dependent variables</b>						
Number of CBAs (% of total number of all deals)	28,445	0.3366	0.1875	0.3864	0.0000	0.5000
Volume of CBAs (% of total value of all deals)	28,445	0.3596	0.0636	0.4283	0.0000	0.9171
Deal completion duration (days)	65,515	99.19	60	152.85	30	117
Deal completion (0-1)	138,050	0.8136	1.0000	0.3894	1.0000	1.0000
CB acquisition candidacy (0-1)	138,050	0.2479	0.0000	0.4318	0.0000	0.0000
NB <sub>tgt-acq</sub> (per 100 listed companies in target nation)	12,596	0.1195	0.0557	0.1849	0.0218	0.1538
VB <sub>tgt-acq</sub> (per billion of GDP of target nation)	12,596	0.4295	0.0303	4.2639	0.0069	0.1390
Target CAR [-2, +2] (%)	3,620	0.1350	0.0333	0.2708	-0.0091	0.2203
Acquirer CAR [-2, +2] (%)	24,196	0.0475	0.0179	0.1638	-0.0239	0.0743
Combined CAR [-2, +2] (%)	3,620	0.0606	0.0195	0.1865	-0.0222	0.0883
<b>Key independent variables</b>						
$\Delta\text{BBD}_{3m\_avg\_tgt}$ (%)	12,596	0.0825	0.0441	0.2187	-0.0480	0.1643
$\Delta\text{BBD}_{3m\_avg\_acq}$ (%)	12,596	0.0711	0.0378	0.1983	-0.0497	0.1482
$\Delta\text{BBD}_{3m\_avg\_tgt} - \Delta\text{BBD}_{3m\_avg\_acq}$ (%)	12,596	0.0109	0.0066	0.2512	-0.1081	0.1210
<b>Country-level characteristics</b>						
$\ln(\text{GDPCap})_{tgt}$	12,596	9.8346	10.2474	1.1623	9.2120	10.6459
$\ln(\text{GDPCap})_{acq}$	12,596	9.8148	10.2259	1.1003	9.2305	10.6125
(GDPGr) <sub>tgt</sub> (%)	12,596	0.0347	0.0296	0.0345	0.0174	0.0504
(GDPGr) <sub>acq</sub> (%)	12,596	0.0343	0.0296	0.0357	0.0164	0.0510
(MKTCAP/GDP) <sub>tgt</sub> (%)	12,596	1.0909	0.9253	0.6645	0.6134	1.3785
(MKTCAP/GDP) <sub>acq</sub> (%)	12,596	1.0686	0.8488	0.6952	0.5331	1.3785
Trade (fraction of GDP) <sub>tgt</sub> (%)	12,596	0.9725	0.5671	1.0458	0.4832	0.7937
Trade (fraction of GDP) <sub>acq</sub> (%)	12,596	1.0039	0.5624	1.1033	0.4882	0.7708
Inflation <sub>tgt</sub> (%)	12,596	0.0345	0.0220	0.0609	0.0120	0.0386
Inflation <sub>acq</sub> (%)	12,596	0.0341	0.0224	0.0536	0.0130	0.0403
Bureaucratic quality <sub>tgt</sub>	12,596	8.8228	10.0000	1.8417	7.5000	10.0000
Bureaucratic quality <sub>acq</sub>	12,596	9.2490	10.0000	1.4982	10.0000	10.0000
Law and order <sub>tgt</sub>	12,596	8.3354	8.3333	1.7054	8.3333	10.0000
Law and order <sub>acq</sub>	12,596	8.7493	8.3333	1.2637	8.3333	10.0000
Corruption <sub>tgt</sub>	12,596	6.5996	6.6667	1.7858	5.0000	8.2000
Corruption <sub>acq</sub>	12,596	6.9288	7.5000	1.6273	6.5333	8.3333
Business environment <sub>tgt</sub>	12,596	8.6066	9.1667	1.5494	7.5000	10.0000
Business environment <sub>acq</sub>	12,596	8.8509	9.5833	1.4265	7.9833	10.0000

Political risk <sub>tgt</sub>	12,596	0.4100	0.4116	0.1502	0.3907	0.4890
Political risk <sub>acq</sub>	12,596	0.4239	0.4125	0.1340	0.3954	0.4890
<b>Country-pair characteristics</b>						
Same language (0-1)	12,596	0.2486	0.0000	0.4322	0.0000	0.0000
Same legal origin (0-1)	12,596	0.3709	0.0000	0.4831	0.0000	1.0000
Same religion (0-1)	12,596	0.3509	0.0000	0.4773	0.0000	1.0000
Bilateral investment treaty (0-1)	12,596	0.1652	0.0000	0.3714	0.0000	0.0000
ln (geographic distance)	12,596	8.4484	8.5685	0.6679	8.0878	9.0369
<b>Industry characteristics</b>						
Firm Size [ln(Total assets)]	28,445	11.4927	11.3758	1.4503	10.5162	12.4828
ROA (%)	28,445	0.0369	0.0515	0.0759	-0.0008	0.0859
Leverage (%)	28,445	0.1763	0.1947	0.0921	0.1009	0.2428
MTB	28,445	1.7004	1.5300	0.8158	1.1900	1.9700
Herfindahl-Hirschman Index (HHI)	28,445	0.1197	0.0707	0.1447	0.0313	0.1477
<b>Deal/Bid characteristics</b>						
Deal size (millions of USD)	138,050	226.46	17.75	1980.12	5.2	75
Public target (0-1)	138,050	0.1188	0.0000	0.3235	0.0000	0.0000
Diversifying deal (0-1)	138,050	0.5088	1.0000	0.4999	0.0000	1.0000
Cash deals (0-1)	138,050	0.4097	0.0000	0.4918	0.0000	1.0000

**Notes:** This table presents the descriptive statistics of dependent, key independent and control variables for the full sample which covers 20 countries over the period 1997-2017. The subscripts *tgt* and *acq* represent variables specific to target and acquirer respectively. All variables are defined in *Appendix A*. % figures are expressed in decimals. For instance, the mean value of number of CBA 0.3366 should be read as 33.66%.

**Table 4**  
Target country's EPU: inbound CBA deals analysis

Variables	Panel A – Dependent variable: number of CBA (% of total number of all deals)					Panel B – Dependent variable: volume of CBA (% of total value of all deals)				
	Without control	Country-level characteristics	Industry-country-level characteristics	Excluding US and UK	OLS Model: ln (1+ number of CBA)	Without control	Country-level characteristics	Industry-country-level characteristics	Excluding US and UK	OLS Model: ln (1+ USD volume of CBA)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<b>Independent variables</b>										
BBD	-0.104** (0.0469)	-0.100** (0.0392)	-0.106** (0.0413)	-0.158*** (0.0529)	-0.046*** (0.0104)	-0.105** (0.0460)	-0.108** (0.0429)	-0.114** (0.0445)	-0.163*** (0.0583)	-0.187*** (0.0628)
<b>Country-level characteristics</b>										
ln (GDPCap)		-0.192*** (0.0624)	-0.200*** (0.0655)	-0.208*** (0.0547)	0.173*** (0.0522)		-0.210** (0.0818)	-0.225*** (0.0835)	-0.256*** (0.0770)	0.721*** (0.1849)
GDPGr		-0.624 (0.4683)	-0.639 (0.4926)	-0.696 (0.5721)	0.025 (0.3132)		-0.109* (0.0592)	-0.1008* (0.0607)	-0.113 (0.0804)	0.112 (0.2015)
Trade		-0.120 (0.1348)	-0.175 (0.1248)	-0.125 (0.1384)	0.056 (0.0756)		-0.150 (0.2542)	-0.251 (0.2173)	-0.204 (0.2680)	0.084 (0.3414)
Inflation		-0.704* (0.3987)	-0.607 (0.4716)	-0.871 (0.5424)	0.038 (0.1711)		-0.334 (1.2468)	-0.121 (1.3120)	-0.370 (1.7515)	0.708 (1.7697)
MKTCAP/GDP		-0.140*** (0.0498)	-0.131*** (0.0463)	-0.119** (0.0531)	0.074** (0.0339)		-0.157*** (0.0587)	-0.139*** (0.0520)	-0.142** (0.0699)	0.373*** (0.1261)
Volatility		-0.0179*** (0.0065)	-0.0168*** (0.0063)	-0.02070*** (0.0678)	-0.0115 (0.0171)		-0.083* (0.0410)	-0.076* (0.0388)	-0.076*** (0.0168)	-0.001*** (0.0001)
Exchange rate		0.001*** (0.0004)	0.001*** (0.0004)	0.002*** (0.0003)	0.001** (0.0003)		0.0012** (0.0005)	0.0011** (0.0004)	0.0013*** (0.0005)	0.003** (0.0013)
Domestic M&As					-0.151** (0.0569)					-0.277*** (0.0337)
Bureaucratic quality		0.142** (0.0597)	0.146** (0.0635)	0.083 (0.0659)	0.073*** (0.0245)		0.150** (0.0595)	0.158** (0.0698)	0.115 (0.0943)	0.241** (0.1086)
Law and order		-0.025 (0.0361)	-0.031 (0.0326)	-0.032 (0.0425)	-0.046** (0.0175)		-0.007 (0.0463)	-0.015 (0.0403)	-0.017 (0.0555)	-0.319*** (0.1047)
Corruption		0.005 (0.0330)	-0.000 (0.0329)	-0.024 (0.0423)	0.012 (0.0165)		0.016 (0.0390)	0.009 (0.0393)	-0.019 (0.0534)	0.068 (0.0708)
Business environment		0.007 (0.0125)	0.005 (0.0124)	0.014 (0.0139)	-0.013 (0.0089)		0.008 (0.0144)	0.006 (0.0144)	0.015 (0.0184)	-0.050 (0.0349)
Political risk		-0.187** (0.0868)	-0.197** (0.0901)	-0.193* (0.1105)	-0.061 (0.0615)		-0.222** (0.1128)	-0.235** (0.1160)	-0.238* (0.1391)	-0.142 (0.2262)
<b>Industry-country-level characteristics</b>										
Firm size			0.000 (0.0059)	-0.004 (0.0076)	-0.003 (0.0038)			0.001 (0.0072)	-0.002 (0.0093)	0.000 (0.0145)
ROA			0.041	0.028	0.072**			0.066	0.074	0.248*

Leverage			(0.0428)	(0.0598)	(0.0275)			(0.0580)	(0.0812)	(0.1327)
			0.051	0.050	0.016			0.070	0.073	-0.062
MTB			(0.0577)	(0.0680)	(0.0280)			(0.0730)	(0.0893)	(0.1506)
			-0.009	-0.009	-0.003			-0.012	-0.012	-0.011
HHI			(0.0076)	(0.0090)	(0.0039)			(0.0094)	(0.0113)	(0.0118)
			0.078*	0.066	0.029			0.093*	0.078	0.007
			(0.0436)	(0.0479)	(0.0230)			(0.0477)	(0.0539)	(0.1139)
Country FE × Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE × Year-Month FE	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Prob > $\chi^2$	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	
Adj. R <sup>2</sup>					0.47					0.32
Observations	28,445	28,445	27,387	21,875	27,387	28,445	28,445	27,387	21,875	27,387

**Notes:** This table presents Tobit regressions estimates of the effect of EPU on Number of CBA (Panel A) and Volume of CBA (Panel B) of inbound CBA deals at the target country-industry level. BBD is the natural logarithm of the arithmetic average of the BBD index for immediate three lag months. Depending on specifications, the regressions control for industry-country-level and country-level characteristics. Inclusion of fixed effects (FE) is indicated at the end. All country-level and industry-country-level controls are lagged one year, and are defined in *Appendix A*. Standard errors are clustered at the target country-industry level, and reported in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

**Table 5**  
Controlling for business cyclicality

Variables	Dependent variable: number of CBA (% of total deals)				Dependent variable: volume of CBA (% of total value of all deals)			
	CLI (1)	CCI (2)	Real GDP forecast (3)	1st PC (4)	CLI (5)	CCI (6)	Real GDP forecast (7)	1st PC (8)
<b>Independent variables</b>								
BBD	-0.111*** (0.0189)	-0.091*** (0.0196)	-0.107*** (0.0186)	-0.090*** (0.0198)	-0.161*** (0.0233)	-0.132*** (0.0241)	-0.157*** (0.0228)	-0.129*** (0.0244)
<b>Business cyclicality level characteristics</b>								
CLI	-0.004 (0.0045)				-0.004 (0.0055)			
CCI		0.006 (0.0051)				0.013** (0.0062)		
Real GDP forecast			0.000 (0.0035)				0.002 (0.0044)	
1st PC				0.006 (0.0068)				0.012 (0.0084)
Country-level characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry-country-level characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE × Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE × Year-Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Prob >χ <sup>2</sup>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Observations	25,842	21,937	25,842	21,937	25,842	21,937	25,842	21,937

**Notes:** This table presents the estimation results of four different sets of control variables controlling for business cyclicality. The dependent variable is *Number of CBA*, defined as the total number of CBA deals divided by the total number of domestic and CBA deals (for Models 1-4) and *Volume of CBA*, defined as the total value of CBA deals divided by the total value of domestic and CBA deals (for Models 5-8). BBD is the natural logarithm of the arithmetic average of the BBD index for the immediate three lag months. For each dependent variable, we introduce the following first moment controls individually by Model: OECD composite leading indicator (CLI), an average of business confidence and consumer confidence (CCI), projected real GDP growth (RGDP growth) and the first principal component from the previous three first moment controls (1st PC). The regressions control for industry-country-level and country-level characteristics. Inclusion of fixed effects (FE) is indicated at the end. All country-level and industry-country-level controls are lagged one year, and are defined in *Appendix A*. Standard errors are clustered at the target country-industry level, and reported in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

**Table 6**  
Effect of government subsidy/spending

Variable	Tobit Model: number of CBAs (% of total number of all deals) (1)	Tobit Model: volume of CBAs (% of total value of all deals) (2)
<b>Independent variable</b>		
BBD	-0.089*** (0.0223)	-0.128*** (0.0222)
BBD $\times$ <i>Dum<sub>SS</sub></i>	-0.060** (0.0274)	-0.208*** (0.0521)
Country-level characteristics	Yes	Yes
Industry-country-level characteristics	Yes	Yes
Country FE $\times$ Industry FE	Yes	Yes
Industry FE $\times$ Year-Month FE	Yes	Yes
Prob $>\chi^2$	0.0000	0.0000
Observations	25,027	25,027

**Notes:** This table presents the estimation results of gauging the differential effect of EPU on CBA based on industry heterogeneity. The dependent variable is either number of CBA (% of total number of all deals) in Model (1) or volume of CBA (% of total value of all deals) of CBAs in Model (2). BBD is the natural logarithm of the arithmetic average of the BBD index for the immediate three lag months. *Dum<sub>SS</sub>* is a dummy variable that takes the value of one if the firm belongs to one of the FF-12 industries with firms' sales' correlation with government subsidies and support (as a fraction of total government spending) above the median, and zero otherwise. The regressions control for industry-country-level and country-level characteristics is as in the baseline result in Table 4. The inclusion of fixed effects (FE) is indicated at the end. All country-level and industry-country-level controls are lagged one year, and are defined in *Appendix A*. Standard errors are clustered at the target country-industry level, and reported in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

**Table 7**  
Difference in Differences (DiD) specifications with discrete EPU shocks

	Panel A – Dependent variable: Number of CBA (% of total number of all deals)			Panel B – Dependent variable: Volume of CBA (% of total value of all deals)		
	(1) Without control	(2) Country-level characteristics	(3) Industry-country-level characteristics	(4) Without control	(5) Country-level characteristics	(6) Industry-country-level characteristics
<b>Independent variables</b>						
EPU shock × After	-0.1319*** (0.0419)	-0.0618*** (0.0204)	-0.0879*** (0.0231)	-0.1604*** (0.0523)	-0.1361*** (0.0331)	-0.1325*** (0.0327)
<b>Country-level characteristics</b>						
In (GDPCap)		0.0309*** (0.0093)	-0.0839 (0.2609)		-0.0476 (0.3109)	0.0331 (0.2732)
GDPGr		0.02379* (0.01265)	0.0295 (0.02857)		3.4503 (3.5700)	3.5545 (3.1719)
Trade		-0.00801* (0.00434)	-0.0216** (0.0108)		-0.0243* (0.0136)	-0.0244* (0.0146)
Inflation		0.0098 (0.0026)	0.0020458 (2.3959)		3.1311 (3.0635)	3.6569 (3.1203)
MKTCAP/GDP		-0.0033** (0.0014)	-0.0007 (0.0031)		0.0005 (0.0038)	0.0010 (0.0026)
Volatility		-0.0296*** (0.0027)	-0.0287*** (0.0033)		-0.0196*** (0.0027)	-0.0287*** (0.0033)
Exchange rate		-0.0081* (0.0046)	0.0046 (0.0116)		0.0122 (0.0145)	0.0109 (0.0155)
Bureaucratic quality		-0.0191 (0.0142)	-0.10193 (0.10697)		-0.17850 (0.1399)	-0.1806 (0.1527)
Law and order		0.0195** (0.0925)	0.0276** (0.1099)		0.0337** (0.0153)	0.0321** (0.0151)
Corruption		0.0092 (0.0377)	0.0582 (0.0501)		0.0874 (0.0672)	0.0883 (0.0687)
Business environment		0.0359 (0.0369)	0.0542 (0.0358)		0.0344 (0.0531)	0.0385 (0.0521)
Political risk		-0.0181 (0.0169)	-0.0253 (0.0401)		-0.0412 (0.0502)	-0.0383 (0.0484)
<b>Industry-country-level characteristics</b>						
Firm size			-0.0276 (0.0243)			-0.0382 (0.0348)
ROA			-0.3049 (0.3145)			-0.5747 (0.3978)
Leverage			0.0547** (0.0239)			0.0872*** (0.0295)
MTB			-0.0349 (0.0313)			-0.0361 (0.0389)
HHI			0.0899 (0.1102)			0.1758 (0.1475)
Country FE × Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE × Year-Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Prob >χ <sup>2</sup>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Observations	4,032	4,032	4,032	4,032	4,032	4,032

**Notes:** This table presents Tobit regression in DiD design, examining the effect of restrictive EPU shock on the number of CBA (Panel A) and volume of CBA (Panel B) of inbound CBA deals at the target country-industry level. EPU shock is an indicator variable that takes the value of one for a target nation that witnesses major EPU shock (treated episodes) and zero if the target nation witnesses a lower EPU (comparison episodes) as defined in the notes to *Appendix B*. After is an indicator variable that takes the value of one for six months following the EPU episodes and zero for six month before the EPU episodes as identified in *Appendix B*. Depending on specifications, the regressions control for industry-country-level and country-level characteristics. The inclusion of fixed effects (FE) is indicated at the end. All country-level and industry-country-level controls are lagged one year, and are defined in *Appendix A*. Standard errors are clustered at the target country-industry level, and reported in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

**Table 8**  
Moderating effects of macro-institutions

	Dependent variable: Number of CBA (% of total number of all deals)						Dependent variable: Volume of CBA (% of total value of all deals)					
	(1) Emerging Markets	(2) Bureaucrat ic quality	(3) Law and order	(4) Corruption	(5) Business environment	(6) Political risk	(7) EMs	(8) Bureaucratic quality	(9) Law and order	(10) Corruption	(11) Business environment	(12) Political risk
<b>Panel A: EMs</b>												
BBD	-0.0680*** (0.0105)	-0.0695*** (0.0106)	-0.0681*** (0.0105)	-0.0695*** (0.0106)	-0.0692*** (0.0106)	-0.0690*** (0.0106)	-0.0480*** (0.0105)	-0.0495*** (0.0106)	-0.0481*** (0.0105)	-0.0495*** (0.0106)	-0.0492*** (0.0106)	-0.0490*** (0.0106)
EMs × BBD	-0.0730*** -0.0128						-0.0245*** (0.0018)					
<b>Panel B: quality of institutions</b>												
Bureaucratic quality × BBD		0.0046*** (0.0003)						0.0048*** (0.00040)				
Law and order × BBD			0.0046*** (0.0005)						0.0047*** (0.0006)			
Corruption × BBD				0.0035*** (0.0004)						0.0036*** (0.0004)		
<b>Panel C: business environment</b>												
Business environment × BBD					0.0051*** (0.0006)						0.0055*** (0.0007)	
<b>Panel D: political risk</b>												
Political risk × BBD						0.0036*** (0.0008)						0.0037*** (0.0009)
Country-level characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry-country-level characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE × Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE × Year-Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Prob >χ <sup>2</sup>	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Observations	27,387	27,387	27,387	27,387	27,387	27,387	27,387	27,387	27,387	27,387	27,387	27,387

**Notes:** This table presents the estimation results of several interactions with country governance mechanisms on CBA activity. The dependent variable is *Number of CBA*, defined as the total number of CBA deals divided by the total number of domestic and CBA deals (for Models 1-6) and *Volume of CBA*, defined as the total value of CBA deals divided by the total value of domestic and CBA deals (for Models 7-12). The variables of interest are BBD, (Panel A: EMs), (Panel B: quality of institutions), (Panel C: business environment), (Panel D: political risk), and the interaction between BBD and each panel. As in Table 4, the regressions control for industry-country-level and country-level characteristics. The inclusion of fixed effects (FE) is indicated at the end. All controls are lagged one year, and are defined in *Appendix A*. Heteroscedasticity robust standard errors, clustered at the country-pair level, are reported in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

**Table 9**  
CB acquisition candidacy

	Dependent variable: <i>CB-acquisition candidacy</i>					
	Without controls	With target controls	Without controls	With acquirer controls	Without controls	With target-acquirer controls
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Independent variables</b>						
$\Delta BBD_{3m\_avg\_tgt}$	-0.002*** (0.0003)	-0.001*** (0.0001)				
$\Delta BBD_{3m\_avg\_acq}$			0.005*** (0.0003)	0.001*** (0.0003)		
[ $\Delta BBD(3m\_avg\_tgt) - \Delta BBD(3m\_avg\_acq)$ ]					-0.004*** (0.0012)	-0.003** (0.0012)
<b>Bilateral country-pair characteristics (difference)</b>						
$\ln(GDPCap)_{tgt-acq}$		-0.014*** (0.0024)		-0.018*** (0.0024)		-0.019*** (0.0025)
$GDPGr_{tgt-acq}$		0.040* (0.0243)		0.085*** (0.0243)		0.065** (0.0264)
$Trad_{tgt-acq}$		0.010* (0.0053)		-0.013** (0.0053)		-0.009 (0.0057)
$Inflation_{tgt-acq}$		-0.038** (0.0161)		-0.018 (0.0154)		-0.017 (0.0169)
$MKTCAP_{tgt-acq}$		0.006*** (0.0016)		0.005*** (0.0016)		0.005*** (0.0017)
$Volatility_{tgt-acq}$		-0.004 (0.0276)		0.022 (0.0276)		0.006 (0.0289)
$Exchange\ rate_{tgt\ per\ acq}$		-0.000* (0.0000)		-0.000* (0.0000)		-0.000 (0.0000)
$Bureaucratic\ quality_{tgt-acq}$		-0.005* (0.0028)		-0.003 (0.0028)		-0.007** (0.0031)
$Law\ and\ order_{tgt-acq}$		0.005*** (0.0012)		0.005*** (0.0012)		0.005*** (0.0012)
$Corruption_{tgt-acq}$		0.000 (0.0008)		0.001 (0.0008)		0.001 (0.0009)
$Business\ environment_{tgt-acq}$		0.001* (0.0004)		0.001** (0.0004)		0.001*** (0.0005)
$Political\ risk_{tgt-acq}$		-0.016*** (0.0059)		0.000 (0.0059)		-0.001 (0.0062)

**Industry- bilateral country-pair characteristics (difference)**

Firm size <sub>tgt-acq</sub>		-0.000** (0.0001)		-0.000** (0.0001)		-0.000** (0.0001)
ROA <sub>tgt-acq</sub>		0.004*** (0.0011)		0.004*** (0.0011)		0.004*** (0.0011)
Leverage <sub>tgt-acq</sub>		0.004*** (0.0015)		0.004*** (0.0015)		0.004*** (0.0015)
MTB <sub>tgt-acq</sub>		0.000 (0.0001)		0.000 (0.0001)		0.000 (0.0001)
<b>Deal-level characteristics</b>						
Deal size		0.000 (0.0001)		0.000 (0.0001)		0.000 (0.0001)
Public target		0.001** (0.0003)		0.001** (0.0003)		0.001** (0.0003)
Diversifying deal		0.001*** (0.0002)		0.001*** (0.0002)		0.001*** (0.0002)
Cash deal		0.000*** (0.0002)		0.000*** (0.0002)		0.000*** (0.0002)
Target country FE × Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Acquirer country FE × Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Target Industry FE × Year-Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Acquirer Industry FE × Year-Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Prob > $\chi^2$	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Observations	119,201	119,201	119,303	119,303	119,303	117,029

**Notes:** This table presents the propensity for cross-border-acquisitiveness. The dependent variable is *CB acquisition candidacy* – a dummy that takes the value of one if the M&A deal is cross-border and zero otherwise. Estimation Models employ two variations of change in the BBD index ( $\Delta BBD$ ) as explanatory variables. The estimates of the first variation with the change in EPU at target's nation,  $\Delta BBD_{3m\_avg\_tgt}$ , are in Models (1) and (2), while those for acquirers' nations,  $\Delta BBD_{3m\_avg\_acq}$ , are in Models (3) and (4). The estimates of the second variation that employs the difference between target's and acquirer's  $\Delta BBD_{3m\_avg}$ , i.e. [ $\Delta BBD(3m\_avg\_tgt)$  minus  $\Delta BBD(3m\_avg\_acq)$ ], are in Models (5) and (6). The inclusion of fixed effects (FE) is indicated at the end. Country-level controls are lagged one year, and are defined in *Appendix A*. Heteroscedasticity robust standard errors, clustered at the country-pair level, are reported in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

**Table 10**  
Deal completion

Dependent Variable	Deal Ratio (1)	Volume Ratio (2)	Ln(1+deal complete duration) (3)	(4)	(5)	(6)	Completion dummy (7)	(8)
<b>Independent variables</b>								
Ln[1 month lagged BBD(tgt)]	-0.026* (0.0145)	-0.022* (0.0109)						
Ln[2 month lagged BBD(tgt)]	-0.040** (0.0160)	-0.034* (0.0197)						
Ln[3 month lagged BBD(tgt)]	-0.052*** (0.0160)	-0.053*** (0.0196)						
Ln[4 month lagged BBD(tgt)]	-0.002 (0.0155)	-0.010 (0.0195)						
Ln[5 month lagged BBD(tgt)]	-0.030* (0.0157)	-0.041** (0.0194)						
Ln[6 month lagged BBD(tgt)]	-0.008 (0.0144)	-0.019 (0.0178)						
$\Delta BBD_{3m\_avg\_tgt}$			0.052** (0.0245)			-0.021*** (0.0068)		
$\Delta BBD_{3m\_avg\_acq}$				0.056** (0.0242)			-0.026*** (0.0067)	
$[(\Delta BBD_{3m\_avg\_tgt}) - (\Delta BBD_{3m\_avg\_acq})]$					0.024** (0.0121)			-0.032** (0.0066)
Bilateral country-pair characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry-bilateral country-pair characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Deal-level characteristics	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Target country FE $\times$ Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Acquirer country $\times$ Industry FE	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Target Industry $\times$ Year-Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Acquirer Industry $\times$ Year-Month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Prob $>\chi^2$	0.0000	0.0000				0.0000	0.0000	0.0000
Adj. R <sup>2</sup>			0.14	0.14	0.14			
Observations	27,188	27,188	60,653	60,653	60,653	125,434	125,434	125,434

**Notes:** This table presents the analysis of the duration effect of EPU on CBA. Models (1)-(2) employ Tobit, Models (3)-(5) use OLS, while Models (6)-(8) employ probit regression Models. The dependent variable is Deal ratio in Model (1), Volume Ratio in Model (2), Ln(1+deal completion duration) in Models (3)-(5) or Deal completion dummy in Models (6)-(8). Models (1) and (2) use the natural logarithm of lagged value of BBD of the target domicile up to six months as the main explanatory variable. Models (3)-(8) employ two variations of the  $\Delta BBD_{3m\_avg}$  variable. The first variation is computed as the average of the previous three months'  $\Delta BBD$  of the target nation,  $\Delta BBD_{3m\_avg\_tgt}$ , (used in Models (3) and (6)) and the average of the previous three months'  $\Delta BBD$  of the acquirer nation,  $\Delta BBD_{3m\_avg\_acq}$ , (used in Models (4) and (7)). The second variation, which employs the difference between the target's and acquirer's  $\Delta BBD_{3m\_avg}$ , i.e.  $[(\Delta BBD_{3m\_avg\_tgt}) - (\Delta BBD_{3m\_avg\_acq})]$ , is used in Models (5) and (8). Control variables for Models (1) and (2) are the same as those used in Table 4 (the baseline regression), while control variables for Models (3)-(8) are the same as those used in Table 9 (CB acquisition candidacy). The inclusion of fixed effects (FE) is indicated at the end. Heteroscedasticity robust standard errors, clustered at the country-pair level, are reported in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

**Table 11**  
EPU and bilateral M&A activities

Dependent variable:	Number of bilateral deals						Volume of bilateral deals					
	(1) BBD Indices only	(2) Including all controls	(3) Developed acquirer- emerging target	(4) Developed acquirer- developed target	(5) Emerging acquirer- developed target	(6) Emerging acquirer- emerging target	(7) BBD Indices only	(8) Including all controls	(9) Developed acquirer- emerging target	(10) Developed acquirer- developed target	(11) Emerging acquirer- developed target	(12) Emerging acquirer- emerging target
<b>Panel A: baseline tests</b>												
<b>Independent variables</b>												
$[(\Delta BBD_{3m\_avg\_tgt}) - (\Delta BBD_{3m\_avg\_acq})]$	-0.053*** (0.0145)	-0.059*** (0.0137)	-0.062*** (0.0153)	-0.046*** (0.0153)	-0.058*** (0.0136)	-0.058*** (0.0138)	-0.022*** (0.0014)	-0.022*** (0.0008)	-0.029*** (0.0012)	-0.015*** (0.0016)	-0.017*** (0.0012)	-0.023*** (0.0011)
<b>Bilateral country-pair characteristics (difference)</b>												
In (GDPCap) <sub>tgt-acq</sub>		-0.0154*** (0.0023)	-0.0153*** (0.0023)	-0.0152*** (0.0023)	-0.0154*** (0.0023)	-0.0154*** (0.0023)		-0.0056*** (0.0021)	-0.0049** (0.0022)	-0.0050** (0.0022)	-0.0055** (0.0021)	-0.0055*** (0.0021)
GDPGr <sub>tgt-acq</sub>		0.0011 (0.0012)	0.0010 (0.0012)	0.0012 (0.0012)	0.0011 (0.0012)	0.0013 (0.0012)		-0.0006 (0.0033)	-0.0006 (0.0033)	-0.0005 (0.0033)	-0.0006 (0.0033)	-0.0006 (0.0033)
Trad <sub>tgt-acq</sub>		0.0259*** (0.0089)	0.0259*** (0.0089)	0.0263*** (0.0089)	0.0260*** (0.0089)	0.0261*** (0.0089)		-0.0088 (0.0255)	-0.0082 (0.0254)	-0.0061 (0.0253)	-0.0088 (0.0255)	-0.0087 (0.0255)
Inflation <sub>tgt-acq</sub>		0.0434*** (0.0120)	0.0437*** (0.0120)	0.0447*** (0.0120)	0.0434*** (0.0120)	0.0453*** (0.0121)		0.0263 (0.0214)	0.0277 (0.0214)	0.0272 (0.0213)	0.0261 (0.0214)	0.0275 (0.0214)
MKTCAP <sub>tgt-acq</sub>		-0.0078*** (0.0015)	-0.0080*** (0.0015)	-0.0087*** (0.0016)	-0.0079*** (0.0015)	-0.0080*** (0.0015)		-0.0095 (0.0071)	-0.0102 (0.0071)	-0.0122* (0.0071)	-0.0096 (0.0071)	-0.0098 (0.0072)
Volatility <sub>tgt-acq</sub>		-0.0018 (0.0027)	-0.0018 (0.0027)	-0.0030 (0.0028)	-0.0019 (0.0027)	-0.0019 (0.0027)		-0.0017 (0.0032)	-0.0017 (0.0032)	-0.0030 (0.0034)	-0.0018 (0.0032)	-0.0016 (0.0032)
Exchange rate <sub>tgt per acq</sub>		-0.0003*** (0.0001)	-0.0003*** (0.0001)	-0.0003*** (0.0001)	-0.0003*** (0.0001)	-0.0003*** (0.0001)		-0.0002** (0.0001)	-0.0002** (0.0001)	-0.0002** (0.0001)	-0.0002** (0.0001)	-0.0002** (0.0001)
Bureaucratic quality <sub>tgt-acq</sub>		-0.0001 (0.0001)	-0.0001 (0.0001)	-0.0001 (0.0001)	-0.0001 (0.0001)	-0.0001 (0.0001)		-0.0004*** (0.0001)	-0.0004*** (0.0001)	-0.0004*** (0.0001)	-0.0004*** (0.0001)	-0.0004*** (0.0001)
Law and order <sub>tgt-acq</sub>		-0.0071*** (0.0012)	-0.0070*** (0.0012)	-0.0070*** (0.0012)	-0.0071*** (0.0012)	-0.0072*** (0.0012)		-0.0098*** (0.0019)	-0.0095*** (0.0019)	-0.0094*** (0.0019)	-0.0097*** (0.0019)	-0.0097*** (0.0019)
Corruption <sub>tgt-acq</sub>		-0.0071*** (0.0011)	-0.0072*** (0.0011)	-0.0070*** (0.0011)	-0.0071*** (0.0011)	-0.0071*** (0.0011)		-0.0011 (0.0018)	-0.0013 (0.0018)	-0.0009 (0.0018)	-0.0011 (0.0018)	-0.0012 (0.0018)
Business environment <sub>tgt-acq</sub>		-0.0001*** (0.0000)	-0.0001*** (0.0000)	-0.0001*** (0.0000)	-0.0001*** (0.0000)	-0.0001*** (0.0000)		-0.0001*** (0.0000)	-0.0001*** (0.0000)	-0.0001*** (0.0000)	-0.0001*** (0.0000)	-0.0001*** (0.0000)
Political risk <sub>tgt-acq</sub>		0.0070***	0.0070***	0.0070***	0.0070***	0.0070***		0.0076***	0.0076***	0.0074***	0.0076***	0.0076***
<b>Bilateral country-pair characteristics</b>												
Bilateral investment treaty		0.0001 (0.0007)	0.0004 (0.0007)	0.0001 (0.0007)	0.0003 (0.0007)	0.0004 (0.0007)		0.0032** (0.0015)	0.0027* (0.0014)	0.0027* (0.0014)	0.0029** (0.0015)	0.0029** (0.0014)
Same language		0.0023*** (0.0007)	0.0026*** (0.0007)	0.0024*** (0.0007)	0.0024*** (0.0007)	0.0025*** (0.0007)		0.0088*** (0.0023)	0.0082*** (0.0023)	0.0083*** (0.0023)	0.0086*** (0.0023)	0.0087*** (0.0023)
Same legal origin		0.0024*** (0.0006)	0.0024*** (0.0006)	0.0024*** (0.0006)	0.0024*** (0.0006)	0.0025*** (0.0006)		0.0007 (0.0015)	0.0008 (0.0015)	0.0008 (0.0015)	0.0007 (0.0016)	0.0007 (0.0016)

Same religion	0.0018*** (0.0006)	0.0018*** (0.0006)	0.0019*** (0.0006)	0.0019*** (0.0006)	0.0018*** (0.0006)	0.0052*** (0.0014)	0.0052*** (0.0014)	0.0052*** (0.0014)	0.0052*** (0.0014)	0.0052*** (0.0014)	0.0052*** (0.0014)
ln (Geographic distance)	-0.0046*** (0.0006)	-0.0046*** (0.0006)	-0.0045*** (0.0006)	-0.0045*** (0.0006)	-0.0046*** (0.0006)	-0.0003 (0.0009)	-0.0003 (0.0009)	-0.0003 (0.0009)	-0.0003 (0.0009)	-0.0003 (0.0009)	-0.0003 (0.0009)

**Panel B: subsample and interaction analyses**

DM_acq - EM_tgt		-0.0054*** (0.0014)						-0.0093*** (0.0027)			
DM_acq - DM_tgt			0.0076*** (0.0012)						0.0085*** (0.0029)		
DM_acq - DM_tgt				-0.0079*** (0.0017)						-0.0015 (0.0031)	
EM_acq - DM_tgt					-0.0008 (0.0017)						-0.0046* (0.0028)
[( $\Delta$ BBD <sub>3m,avg,tgt</sub> ) - ( $\Delta$ BBD <sub>3m,avg,acq</sub> )] × DM_acq - EM_tgt		-0.0011*** (0.0001)						-0.004*** (0.0001)			
[( $\Delta$ BBD <sub>3m,avg,tgt</sub> ) - ( $\Delta$ BBD <sub>3m,avg,acq</sub> )] × DM_acq - DM_tgt			-0.0001** (0.0000)						-0.003* (0.0001)		
[( $\Delta$ BBD <sub>3m,avg,tgt</sub> ) - ( $\Delta$ BBD <sub>3m,avg,acq</sub> )] × EM_acq - DM_tgt				-0.0001 (0.0001)						-0.0002 (0.0001)	
[( $\Delta$ BBD <sub>3m,avg,tgt</sub> ) - ( $\Delta$ BBD <sub>3m,avg,acq</sub> )] × EM_acq - EM_tgt					-0.0000 (0.0001)						0.0000 (0.0001)
Target country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Acquirer country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Prob > $\chi^2$	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Observations	11,796	11,796	11,796	11,796	11,796	11,796	11,796	11,796	11,796	11,796	11,796

**Panel C: With EPU of acquirer and EPU of target separately**

	Number of bilateral deals					Volume of bilateral deals				
	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
	Without Interaction	Developed acquirer-emerging target	Developed acquirer-developed target	Emerging acquirer-developed target	Emerging acquirer-emerging target	Without Interaction	Developed acquirer-emerging target	Developed acquirer-developed target	Emerging acquirer-developed target	Emerging acquirer-emerging target
$\Delta BBD_{3m\_avg\_tgt}$	-0.057*** (0.0171)	-0.063*** (0.0203)	-0.055** (0.0213)	-0.054*** (0.0176)	-0.057*** (0.0172)	-0.019*** (0.0016)	-0.032*** (0.0025)	-0.010*** (0.0012)	-0.014*** (0.00156)	-0.019*** (0.00162)
$\Delta BBD_{3m\_avg\_acq}$	0.040*** (0.0109)	0.040*** (0.0119)	0.030* (0.0163)	0.043*** (0.0097)	0.040*** (0.0109)	0.010*** (0.0014)	0.008 (0.0013)	0.018 (0.0022)	0.004 (0.0014)	0.010 (0.0014)
DM_acq - EM_tgt		-0.060*** (0.0210)					-0.056* (0.0300)			
DM_acq - DM_tgt			0.143 (0.0886)					0.059** (0.0275)		
EM_acq - DM_tgt				-0.053*** (0.0197)					-0.049 (0.0309)	
EM_acq - EM_tgt					0.043** (0.0207)					0.048 (0.0304)
$\Delta BBD_{3m\_avg\_tgt} \times DM\_acq - EM\_tgt$		-0.022*** (0.00208)					-0.035*** (0.0028)			
$\Delta BBD_{3m\_avg\_acq} \times DM\_acq - EM\_tgt$		0.01*** (0.0019)					0.008*** (0.0035)			
$\Delta BBD_{3m\_avg\_tgt} \times DM\_acq - DM\_tgt$			-0.003 (0.0280)					-0.015 (0.0275)		
$\Delta BBD_{3m\_avg\_acq} \times DM\_acq - DM\_tgt$			0.012 (0.0145)					0.013 (0.0260)		
$\Delta BBD_{3m\_avg\_tgt} \times EM\_acq - DM\_tgt$				-0.050 (0.0517)					-0.092** (0.0433)	
$\Delta BBD_{3m\_avg\_acq} \times EM\_acq - DM\_tgt$				-0.016 (0.0208)					0.032 (0.0263)	
$\Delta BBD_{3m\_avg\_tgt} \times EM\_acq - EM\_tgt$					0.047 (0.0674)					0.044 (0.0381)
$\Delta BBD_{3m\_avg\_acq} \times EM\_acq - EM\_tgt$					0.090* (0.0488)					-0.024 (0.0492)
All Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Prob $>\chi^2$	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Observations	11,697	11,697	11,697	11,697	11,697	11,697	11,697	11,697	11,697	11,697

**Notes:** The results of the Tobit regressions are presented. Panel A presents the effects of differential EPU between target-acquirer domicile pairs on bilateral M&A activities. Panel B presents the coefficient of EPU in various subsample and interaction tests. Panel C presents the effect of EPU of target and acquirer domicile separately. The dependent variable is *Number of CBA* (per 100 listed firms in target nations) (Models 1-6) and (13-17) and *Volume of CBA* per billion USD of GDP of target nation (Models 7-12 and 18-22). Estimation Models employ three variations of the  $\Delta BBD_{3m\_avg}$ , the first is the average of the previous three months'  $\Delta BBD$  of the targets' nations,  $\Delta BBD_{3m\_avg\_tgt}$ , the second is the acquirers' nations,  $\Delta BBD_{3m\_avg\_acq}$  (Models 13-22). The final variation is the difference between the target's and acquirer's  $\Delta BBD_{3m\_avg}$  i.e.  $[(\Delta BBD_{3m\_avg\_tgt}) - (\Delta BBD_{3m\_avg\_acq})]$  is used in Models 1-12. All controls' variables are lagged one year, and are defined in *Appendix A*. Developed and emerging markets are classified using the IMF classification. The inclusion of fixed effects (FE) is indicated at the end. Heteroscedasticity robust standard errors, clustered at the country-pair level, are reported in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

**Table 12**  
EPU and announcement return analysis

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>Independent variables</b>	Target CAR [-2,+2]	Acquirer CAR [-2,+2]	Combined CAR [-2,+2]	Combined CAR [-2,+2] Developed acquirer- emerging target	Combined CAR [-2,+2] Developed acquirer- developed target	Combined CAR [-2,+2] Emerging acquirer- developed target	Combined CAR [-2,+2] Emerging acquirer- emerging target
<b>Panel A: baseline tests</b>							
$\Delta BBD_{3m\_avg\_tgt}$	-0.0744*** (0.0049)						
$\Delta BBD_{3m\_avg\_acq}$		0.0176*** (0.0055)					
$[(\Delta BBD_{3m\_avg\_tgt}) - (\Delta BBD_{3m\_avg\_acq})]$			-0.0624*** (0.0053)	-0.0625*** (0.0056)	-0.0438*** (0.0092)	-0.0605*** (0.0053)	-0.0575*** (0.0053)
<b>Bilateral country-pair characteristics (difference)</b>							
$\ln(GDP)_{Cap\ tgt-acq}$	-0.0302*** (0.0079)	0.0114 (0.0548)	-0.0235** (0.0093)	-0.0241*** (0.0088)	-0.0241*** (0.0088)	-0.0248*** (0.0088)	-0.0252*** (0.0088)
$GDPGr_{tgt-acq}$	0.1008 (0.0752)	-0.1439 (0.3527)	0.1193 (0.0865)	0.1036 (0.0867)	0.1117 (0.0866)	0.1162 (0.0865)	0.1792** (0.0863)
$MKTCAP/GDP_{tgt-acq}$	-0.0111** (0.0047)	-0.0280 (0.0381)	-0.0150*** (0.0058)	-0.0139** (0.0058)	-0.0147** (0.0058)	-0.0148** (0.0058)	-0.0270*** (0.0058)
$Volatility_{tgt-acq}$	-0.0011 (0.0022)	-0.0011 (0.0027)	-0.0012 (0.0027)	-0.0020 (0.0028)	-0.0020 (0.0028)	-0.0020 (0.0022)	-0.0020 (0.0025)
$Trade_{tgt-acq}$	-0.0361*** (0.0104)	0.0456 (0.0603)	-0.0508*** (0.0121)	-0.0520*** (0.0121)	-0.0505*** (0.0121)	-0.0508*** (0.0121)	-0.0264** (0.0120)
$Inflation_{tgt-acq}$	0.0212 (0.0335)	-0.0336* (0.0204)	0.0373 (0.0365)	0.0418 (0.0367)	0.0433 (0.0366)	0.0371 (0.0363)	0.0371 (0.0363)
$Exchange\ rate_{tgt-per-acq}$	0.0001 (0.0001)	0.0004 (0.0006)	0.0001 (0.0001)	0.0001 (0.0001)	0.0001 (0.0001)	0.0001 (0.0001)	0.0001 (0.0001)
$Bureaucratic\ quality_{tgt-acq}$	-0.0379*** (0.0101)	-0.0803 (0.0784)	-0.0216** (0.0110)	0.0243** (0.0108)	0.0235** (0.0108)	0.0234** (0.0108)	0.0227** (0.0108)
$Law\ and\ order_{tgt-acq}$	-0.0058 (0.0051)	-0.0193 (0.0520)	-0.0028 (0.0060)	-0.0002 (0.0060)	-0.0019 (0.0060)	-0.0035 (0.0059)	-0.0044 (0.0060)
$Corruption_{tgt-acq}$	0.0095** (0.0039)	-0.0032 (0.0283)	0.0053 (0.0043)	0.0068* (0.0039)	0.0065 (0.0040)	0.0067* (0.0039)	0.0065* (0.0040)
$Business\ environment_{tgt-acq}$	-0.0006 (0.0019)	-0.0353** (0.0142)	-0.0030 (0.0023)	-0.0030 (0.0022)	-0.0032 (0.0022)	-0.0032 (0.0022)	-0.0031 (0.0022)
$Political\ risk_{tgt-acq}$	0.0020 (0.0213)	-0.0799 (0.2014)	-0.0352 (0.0332)	-0.0352 (0.0332)	-0.0352 (0.0332)	-0.0352 (0.0332)	-0.0352 (0.0332)
$Bilateral\ investment\ treaty$	0.0270*** (0.0054)	0.0134 (0.0516)	0.0296*** (0.0066)	0.0370*** (0.0073)	0.0361*** (0.0073)	0.0363*** (0.0073)	0.0368*** (0.0074)
$Same\ religion$	0.0092 (0.0330)	0.0223 (0.0249)	-0.0040 (0.0040)	-0.0050 (0.0040)	-0.0052 (0.0040)	-0.0051 (0.0040)	-0.0052 (0.0040)
$Same\ legal\ origin$	0.0068 (0.0053)	-0.0005 (0.0432)	0.0037 (0.0061)	0.0042 (0.0061)	0.0045 (0.0061)	0.0040 (0.0061)	0.0046 (0.0061)
$Same\ language$	-0.0027 (0.0073)	-0.0112 (0.0572)	-0.0033 (0.0080)	0.0011 (0.0080)	0.0010 (0.0080)	0.0021 (0.0080)	0.0010 (0.0080)

**Bilateral country-pair industry-level characteristics (difference)**

Firm size <sub>tgt-acq</sub>	-0.0061** (0.0027)	0.0313 (0.0198)	-0.0059** (0.0030)	-0.0067** (0.0030)	-0.0062** (0.0030)	-0.0061** (0.0030)	-0.0059** (0.0030)
MTB <sub>tgt-acq</sub>	-0.0008 (0.0035)	-0.0179 (0.0300)	-0.0004 (0.0039)	-0.0048 (0.0041)	-0.0053 (0.0041)	-0.0044 (0.0041)	-0.0047 (0.0041)
Leverage <sub>tgt-acq</sub>	-0.0972*** (0.0305)	-0.0158 (0.2097)	-0.0962*** (0.0339)	-0.0947*** (0.0339)	-0.0959*** (0.0339)	-0.0967*** (0.0338)	-0.0949*** (0.0339)
ROA <sub>tgt-acq</sub>	-0.0331 (0.0384)	0.1543 (0.3718)	-0.0013 (0.0475)	-0.0054 (0.0475)	-0.0015 (0.0476)	-0.0042 (0.0478)	-0.0036 (0.0475)

**Deal-level characteristics**

Deal size	-0.0007 (0.0007)	-0.0042 (0.0033)	-0.0001 (0.0008)	-0.0001 (0.0008)	-0.0000 (0.0008)	-0.0000 (0.0008)	-0.0001 (0.0008)
Public target	-0.0170*** (0.0050)	0.1144*** (0.0303)	0.1239*** (0.0081)	0.1238*** (0.0081)	0.1238*** (0.0081)	0.1235*** (0.0081)	0.1239*** (0.0081)
Diversifying deal	0.0193*** (0.0034)	-0.0233 (0.0258)	0.0189*** (0.0038)	0.0184*** (0.0038)	0.0185*** (0.0038)	0.0185*** (0.0038)	0.0184*** (0.0038)
Cash deal	-0.0167*** (0.0032)	0.1168*** (0.0237)	0.0041 (0.0041)	0.0038 (0.0041)	0.0038 (0.0041)	0.0038 (0.0041)	0.0040 (0.0041)

**Panel B: subsample and interaction analyses**

DM <sub>acq</sub> – EM <sub>tgt</sub>				-0.0174** (0.0073)			
DM <sub>acq</sub> – DM <sub>tgt</sub>					0.0302 (0.0578)		
EM <sub>acq</sub> – DM <sub>tgt</sub>						0.1177 (0.0957)	
EM <sub>acq</sub> – EM <sub>tgt</sub>							0.0873 (0.0855)
$[(\Delta BBD_{3m,avg,tgt}) - (\Delta BBD_{3m,avg,acq})] \times DM_{acq} - EM_{tgt}$				-0.0322** (0.0138)			
$[(\Delta BBD_{3m,avg,tgt}) - (\Delta BBD_{3m,avg,acq})] \times DM_{acq} - DM_{tgt}$					-0.0201** (0.0098)		
$[(\Delta BBD_{3m,avg,tgt}) - (\Delta BBD_{3m,avg,acq})] \times EM_{acq} - DM_{tgt}$						0.0035 (0.0147)	
$[(\Delta BBD_{3m,avg,tgt}) - (\Delta BBD_{3m,avg,acq})] \times EM_{acq} - EM_{tgt}$							-0.0140
Target country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Acquirer country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R <sup>2</sup>	0.12	0.11	0.40	0.40	0.40	0.40	0.40
Observations	3,620	20,576	3,620	3,620	3,620	3,620	3,620

**Notes:** This table presents OLS estimates explaining five days announcement period (-2 to +2) returns of targets, acquirers, and their combined returns. Panel A presents the effect of EPU on total samples whereas Panel B shows the effect on the sub-sample tests (with the interaction terms). Estimation Models employ three variations of  $\Delta BBD_{3m,avg}$  to represent the cases of targets ( $\Delta BBD_{3m,avg,tgt}$ ) in Model (1) and acquirers' cases ( $\Delta BBD_{3m,avg,acq}$ ) in Model (2). The third variation applied to the equation of combined returns (Models 3-7) is the difference between target's and acquirer's  $\Delta BBD_{3m,avg}$ , i.e.  $[(\Delta BBD_{3m,avg,tgt}) - (\Delta BBD_{3m,avg,acq})]$ . The regressions control for the effects of deal-level, industry-level, country-level and country-pair characteristics. All controls are lagged one year, and are defined in *Appendix A*. The inclusion of fixed effects (FE) is indicated at the end. Heteroscedasticity robust standard errors, clustered at the country-pair level, are reported in parentheses. \*, \*\*, \*\*\* indicate significance at the 10%, 5%, and 1% levels, respectively.

## Appendices

### Appendix A Variables, definitions and data sources

Variable	Definition	Source
<b>Panel A: Dependent variables</b>		
<i>Target's Country-industry Level</i>		
Number of CBA	The total number of CBA deals divided by the total number of (domestic and CBA) deals in a given target's country-industry and month.	SDC
Volume of CBA	The total dollar value of CBA deals divided by total dollar value of (domestic and CBA) deals in a given target's country-industry and month.	SDC
<i>Bilateral Country-pair level</i>		
Number of Bilateral Deals (NB)	The total NB between country-pair per 100 listed firms in a given target's country.	SDC and Datastream
Volume of Bilateral Deals (VB)	The total VB in millions of USD scaled per billion GDP in a given target country.	SDC and Datastream
<i>Deal Level</i>		
CB acquisition candidacy	Dummy variable equal to one if a deal is cross-border and zero otherwise.	SDC
Deal completion duration	Number of calendar days between the deal announcement date and the completion date.	SDC
Deal completion	Dummy variable equal to one if SDC reports deal status as "completed", and zero otherwise.	SDC
Target CAR [-2,+2]	Refers to target's CAR (-2, +2) in equation (6), Section 3.2.	SDC and Datastream
Acquirer CAR [-2,+2]	Refers to acquirer's CAR (-2, +2) in equation (6), Section 3.2.	SDC and Datastream
Combined CAR [-2,+2]	Refers to combined CAR (-2, +2) in equation (6), Section 3.2.	SDC and Datastream
<b>Panel B: Key independent variables</b>		
BBD	The natural logarithm of the arithmetic average of Baker et al.'s (2016) country-level BBD index during previous three months.	Authors' calculation based on BBD (2016)
$\Delta BBD_{3m\_avg\_tgt}$	Arithmetic average of percentage change in BBD of target nation during previous three months.	Authors' calculation based on BBD (2016)
$\Delta BBD_{3m\_avg\_acq}$	Arithmetic average of percentage change in BBD of acquirer nation during previous three months.	Authors' calculation based on BBD (2016)
$[\Delta BBD(3m\_avg\_tgt) - \Delta BBD(3m\_avg\_acq)]$	Difference between target's and acquirer's $\Delta BBD_{3m\_avg}$ .	Authors' calculation based on BBD (2016)
<b>Panel D: Deal/Bid characteristics</b>		
Deal Size	Natural logarithm of deal transaction value, in millions of USD.	SDC
Diversifying deal	Dummy variable equal to one if the 2-digit SIC codes of the acquirer and target are different and zero otherwise.	SDC
Public target	Dummy variable equal to one if the target's firm is a public firm and zero otherwise.	SDC
Cash deal	Dummy variable equal to one if the deal payment is made with at least 50% cash and zero otherwise.	SDC

<b>Panel E: Industry characteristics</b>		
Firm size	The industry median of the dollar value of the natural logarithm of total assets.	Datastream
ROA	The industry median of return on assets. It is calculated as earnings before interest, taxes, depreciation and amortization (EBITDA) divided by the book value of total assets.	Datastream
Leverage	The industry median of debt-to-equity ratio. It is calculated as long-term debt minus cash and cash equivalents divided by the book value of common equity.	Datastream
MTB	The industry median of market-to-book ratio. It is calculated as the market value of common equity divided by the book value of common equity.	Datastream
Herfindahl-Hirschman Index (HHI)	The sum of squares of the market share of individual firms in the same 12-FF industry. Market share is calculated as the dollar value of sales of a firm divided by the total dollar value of sales volume of the industry (Authors' calculation).	Datastream
<b>Panel F: Country Characteristics</b>		
GDPGr	Growth rate of gross domestic product (GDP) in USD.	WDI
GDPCap	The natural log transformation of per capita GDP in USD.	WDI
Trade	The annual trade (imports + exports) of goods and services divided by GDP.	WDI
Exchange rate	Exchange rate in USD divided by Purchasing Power Parity.	Penn World Tables
MKTCAP/GDP	The total stock market capitalization divided by GDP.	WDI
Inflation	The annual consumer price index (annual %).	WDI
Business environment	Investment Profile Index from ICRG. Time-varying index measuring the government's attitude towards foreign investment. The investment profile is determined by summing the three following components: (1) risk of expropriation or contract viability; (2) payment delays; and (3) repatriation of profits. Each component is scored on a scale from 0 (very high risk) to 4 (very low risk). Thus, Business environment ranges from 0-12 with a higher value reflecting lower potential risk for foreign investors.	ICRG
Corruption	Corruption Index from ICRG. Time-varying index measuring the corruption level within the political system; it is measured on a scale of 0-6, where higher points denote a lower level of corruption.	ICRG
Law and order	Law and Order Index from ICRG. Time-varying indices of law and order are assessed separately, with each sub-component consisting of zero to three points. The Law sub-component is an assessment of the strength and impartiality of the legal system, whereas the Order sub-component is an assessment of popular observance of the law. Thus a country can enjoy a high rating (3) in terms of its judicial system, but a low rating (1) if it suffers from a high crime rate or if the law is routinely ignored without effective sanctions. A higher number denotes lower risk.	ICRG
Bureaucratic Quality	Bureaucratic Quality Index from ICRG. Time-varying index measuring whether the bureaucracy has the strength and expertise to govern without drastic changes in policy or interruptions in government services on a scale of 0-4. In low-risk countries, the bureaucracy tends to be somewhat autonomous from political pressure and to have an established mechanism for recruiting and training.	ICRG
Political risk	Henisz's political constraints index (POLCON). The index ranges from 0-1 with lower scores representing higher levels of political risk. Details of this index are available in Henisz (2000).	Henisz (2000)
<b>Panel G: Country-pair Characteristics</b>		
Bilateral investment treaty	Dummy variable equal to one if the acquirer and target nation signed a bilateral investment treaty.	UNCTAD
Same language	Dummy variable equal to one if the target and acquirers' primary language (English, Spanish, or others) are the same.	CIA World Factbook
Same religion	Dummy variable equal to one if target and acquirers' primary religion (Protestant, Catholic, Muslim, Buddhist, or others) are the same.	CIA World Factbook
Same legal origin	Dummy variable equal to one if the target and acquirer have the same legal origin. Legal origin refers to common or civil law origin countries, with the latter further classified as French, German, or Scandinavian.	Djankov et al., 2008).
Geographic distance	The natural log transformation of geographic distance between capitals in miles. The geographic distances are calculated following the great circle formula, which uses latitudes and longitudes of the most important city (in terms of population) or of its official capital.	CEPII

**Appendix B**  
Low and high EPU episodes

Low EPU Episodes (comparison)				High EPU Episodes (treated)			
Target Nation	Year	Month	Treatment	Target Nation	Year	Month	Treatment
Brazil	1999	5	0	Australia	2017	12	1
Brazil	2012	9	0	Canada	2016	8	1
Canada	1999	2	0	China	2014	10	1
Chile	1998	11	0	Germany	2010	4	1
Chile	2001	10	0	India	2006	7	1
France	1998	8	0	Ireland-Rep	2013	12	1
France	2013	8	0	Japan	2005	8	1
France	2014	8	0	South Korea	2001	8	1
Japan	1998	9	0	United Kingdom	2004	11	1
Russian Fed	2005	5	0	United Kingdom	2016	7	1
Russian Fed	2015	5	0	United States	2012	6	1
South Korea	2010	3	0				
South Korea	2016	3	0				
Sweden	2000	11	0				
United Kingdom	2015	8	0				
United States	2011	11	0				
United States	2013	2	0				

**Notes:** This discrete EPU shock is identified based on the BBD index of sample countries. For each year-month the sample countries are clustered into five quintiles based on a month-on-month percentage change in BBD index (5<sup>th</sup> quintile implying highest percentage change) and countries belonging to the 5<sup>th</sup> quintile (1<sup>st</sup> quintile) are assigned as the treated (comparison) group. We remove years 2008 and 2009 due to coinciding with the global financial crisis period. To further assure the persistence of EPU shocks to impact M&As, we impose a restriction that the change in the quintile rank for three subsequent months following a discrete EPU shock is not more than one for treated and comparison countries. The restriction gives us 17 unique country-months as comparison and 11 unique country-months as treated episodes.