

Relative Equity Market Valuation Conditions and Acquirers' Gains*

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Abstract

We examine whether the relative *equity market valuation conditions* (EMVCs) in the merging firms countries help acquirers' managers to time the announcements of domestic and foreign target acquisitions. After controlling for several deal- and merging firms-specific features we find that acquisition activity, as well as acquirers gains, are significantly higher during periods of high-EMVCs at home, irrespective of the domicile of the target. We also find that the higher foreign acquirers' gains that reaped during periods of high-EMVCs at home are realized by deals of targets based in the RoW (=World-G7), rather than G6 (=G7-UK) countries, which is due to the low correlation of EMVCs between the U.K. (home) and the RoW countries. Moreover, acquisition of targets domiciled in the RoW (G6) countries yield higher (lower) gains than domestic targets during periods of high-EMVCs at home. This suggests that the relative EMVCs between the merging firms' countries allow acquirers' managers to time the market and acquire targets at a discount, particularly in countries in which acquirers' stocks are likely to be more overvalued than the targets' stocks.

Keywords: Acquirers' gains; Relative Equity Market Valuation Conditions; Abnormal Returns.

JEL classification: G11, G14, G34.

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“The concerns of boardrooms have generally shifted away from macro issues to valuation when it comes to a deal” June 2015, *Wilhelm Schulz, head of Europe, Middle East and Africa M&A at Citigroup.*

1. Introduction

Record valuations in 2015 point to a new record of Mergers and Acquisitions (M&As) boom with the expectation of M&As continuing for at least another year due to favorable economic conditions (Fontanella-Khan, Massoudi and Rennison, 2015). Favorable market and economic conditions lead to firms financing a large proportion of their financing deficit with net external equity, particularly when the cost of equity is low (Huang and Ritter, 2009). An extant literature has emerged over the last few decades investigating the valuation effects of M&As on the abnormal returns gained by acquirers. Some of the earlier studies focus on the valuation effects of factors pertinent to deal and merger partners¹, while others analyze the implications of *equity market valuation conditions* (EMVCs).²

However, there are still considerable gaps in our understanding of the determinants of merger value creation, and in particular of the impact of EMVCs on the wealth of shareholders of firms engaged in domestic vs. foreign target M&As. This becomes particularly interesting in the presence of the theoretical framework of Shleifer and Vishny (2003) who argue that more overvalued acquirers tend to use their shares to acquire less overvalued targets. Therefore, whether this consensus appeals in domestic vs. foreign deals, especially when EMVCs of the merging firms are not correlated, remains

¹ These studies are mainly concerned with the sensitivity of acquirers' gains to deal and firm-specific characteristics, such as the relative size of the deal (Asquith et al. 1983), the method of payment (Travlos, 1987), the listing status of targets (Draper and Paudyal, 2006), the size of the acquirer (Moeller et al. 2004), and the growth opportunities of the acquirer (Sudarsanam and Mahate, 2003).

² See for example, Shleifer and Vishny (2003) and Rhodes-Kropf and Viswanathan (2004).

to be investigated. We fill this void by empirically examining whether managers time the announcement of both domestic and foreign M&As, as captured by the EMVC at home relative to that in the host markets. The U.K. offers an excellent ground to investigate the above, since UK acquirers are the most active worldwide in engaging in CBA activities,³

Existing evidence confirms that takeovers of domestic targets cluster over time⁴ and several theories attempt to explain this phenomenon, such as the neoclassical theory of mergers, the strategic theory and the behavioral approach, among others. The neoclassical theory of merger waves, which is mainly associated with the work of Gort (1969), posits that M&A activity spikes with technological, economic and/or regulatory industry shocks. Similarly, in an earlier work Nelson (1959) showed that M&A activity is highly associated with business cycles. The behavioral explanation of Shleifer and Vishny (2003), argues that the observed clustering in M&A activity is largely driven by stock market miss-valuations. Rau and Stouraitis (2009) argue that the waves of corporate activity are driven by a time-varying influence of both the neoclassical and the miss-valuation hypotheses.

The strategic theory of merger waves focuses on the acquisition performance, motives, and strategies (Kusewitt, 1985; and Toxvaerd, 2008). Toxvaerd (2008) develops a theoretical model suggesting that competitive pressure interacts with the irreversibility of M&As in an uncertain environment, and argues that acquirers either postpone the bid in order to gain from more favorable future market conditions, or enter the bidding contest. He shows that in complete information model all acquirers rush to bid creating

³ Healy and Palepu (1993) portray the U.K. as a leader in CBA deals accounting for roughly 30% of global activity in the late 1980s. Similarly data available from the United Nations (UNCTAD, 2000) portray the U.K. as holding the same proportion of CBA activity by the late 1990s. In 2007 the value of CBA worldwide reached \$1,197bn compared to only \$39bn in 1987 (UNCTAD, 2009) with the U.K. being the leading country on these figures.

⁴ See for example, Rhodes-Kropf et al. (2005), and Bouwman et al. (2009).

merger waves. However, in an incomplete information environment, various factors representing economic fundamentals, including the benefits from mergers and target scarcity, affect the timing of the merger waves.

High investor sentiment leads to greater mispricing (Stambaugh et al., 2012). The evidence on M&As in the U.S. suggests that the announcement period gains, as well as the long-term performance of acquirers, are also dependent on factors representing stock market conditions at the time of the M&A announcement. For example, Bouwman et al. (2009) show that during periods of high-EMVCs acquirers gain higher abnormal returns in the short-run, but such gains are eliminated in the long-run. Rosen (2006) also confirms the same pattern in the performance of acquirers and argues that the observed superior announcement period gains of acquirers at the time of high-EMVCs are driven by investors' sentiment. However, whether the level of EMVCs, and more specifically, relative EMVCs between the merging firms countries in CBAs, influence the gains of domestic versus foreign acquirers remains to be investigated.

Following the globalization of financial markets and the relaxation of restrictions in capital mobility, *cross-border mergers and acquisitions* (CBAs) have increased substantially. For example, the World Investment Report (UNCTAD) 2009 (p. 11) shows that in 2007 the total value of global CBA deals reached over 1.97bn U.S. dollars compared to only \$39bn in 1987, which represents a record increase of more than 62% over the value of 2006. In the same year, British firms' net purchases reached 21.5% of the global market. Consequently, the literature has turned to investigate the effects of domestic vs. CBAs on acquirers' gains.⁵ Unlike domestic deals, CBAs present additional complexity and valuation risk for acquirers, such as political, economic and foreign

⁵ See for example, Doukas and Travlos (1988), Gregory and McCorrison (2005), and Moeller and Schlingemann (2005).

exchange risk. Along these lines, di Giovanni (2005) shows that financial and other institutional factors play significant roles in explaining CBAs activities, with the size of financial markets being one of the most influential factors. Moreover, the gains of merger partners in CBAs are affected by the strength of the acquirers' domestic currency (Kang, 1993). Froot and Stein (1991) predict that when acquirers' currency is strong against the U.S. dollar they will have an advantage when purchasing U.S. targets. This is empirically confirmed by Harris and Ravenscraft (1991) who study U.S. target firms only and find that a stronger currency – against the U.S. dollar – of foreign acquirers leads to higher short-term wealth effects for U.S. targets at the time of the M&A announcement.

The existing evidence, discussed above, suggests that M&As activities (both domestic and cross-border) are affected by financial and economic conditions in the acquirer's home market. However, little is known about the effect of relative EMVCs on the gains of acquirers targeting domestic vs. foreign firms. We aim to address this issue and identify whether acquirers' managers can extract any benefit by timing the market, namely whether the relative EMVCs in merging firms' countries allow them to time the announcement of domestic and foreign target M&As.

Our results show that acquirers enjoy higher short-run abnormal returns from deals made during high-EMVCs periods at home, regardless of the target being a domestic or a foreign firm. We further find that foreign target acquirers enjoy greater gains from deals made during high-EMVCs at home only when the EMVCs between the merging firms' countries are less likely to be correlated, which falls in the category of the target being in the RoW (=World-G7) rather than in the G6 (=G7-U.K.) countries. We argue that the EMVCs at home, relative to host countries, allow acquirers' managers to time the market and acquire targets at a discount, particularly in markets in which their stocks are likely to be more overvalued than their targets. British acquirers also reap superior gains from

deals announced during relatively strong trade-weighted effective exchange rate of the domestic currency. In the context of domestic deals vs. CBAs we find that foreign M&As of targets in the RoW (G6) countries yield higher (lower) acquirers' gains than domestic ones when made during periods of high-EMVCs at home. We argue that a possible reason for this finding is related to the fact that the EMVCs in the RoW (G6) are lower (similar) to the ones at home and hence, acquirers are more likely to be able (unable) to acquire targets at a discount. Overall, our results suggest that acquirers' managers aiming to maximize their shareholders' wealth could extract signals from EMVCs of the home, relative to those in host countries, and therefore carefully pick the timing of their M&As announcements.

We contribute to the related literature by demonstrating the role of EMVCs at home, relative to EMVCs in the host countries in the case of CBAs, on the gains directed to acquirers' shareholders in the short-run. Our findings suggest that firms willing to engage in acquisitions should consider not only the merging firms and deal specific factors, but also the possible implications of external factors such as EMVCs at home, relative to EMVCs in the host country. Therefore, a simultaneous analysis of EMVCs in the merging firms' countries can help managers in timing the announcement of both domestic and foreign target M&As and maximize shareholders' wealth.

The rest of the paper is organized as follows. Section 2 develops our hypotheses. Section 3 discusses the data and methodology employed. The empirical results are reported in Section 4. Section 5 concludes.

2. Related Literature and Hypotheses

2.1 EMVCs and gains from M&A

A growing body of literature (e.g. Shleifer and Vishny, 2003) suggests that during high-EMVCs periods, managers of firms with overvalued stocks are motivated to use their overvalued stocks to bid for targets that they perceive to be less overvalued than themselves. In the long-run, however, when the market corrects for overvaluation, the acquirers suffer a drop in share price indicating long-term under-performance. This theoretical proposition has been supported by the empirical findings of, among others, Rhodes-Kropf, Robinson and Viswanathan (2005). Although the theoretical proposition of Shleifer and Vishny (2003) is limited to all-share deals, a similar effect of high-EMVCs can occur on the performance of acquirers in other types of deals, such as cash and mixed, due to managerial overconfidence and investors' optimism caused by high-EMVCs. The managers of a company whose market value is increasing are likely to be overconfident about their managerial ability and start bidding for targets, possibly to build their own empire (Draper and Paudyal, 2006). When share prices are increasing, investors are also likely to have increased confidence in their managers and react positively to acquisition decisions. Consequently, acquirers are likely to experience higher announcement period abnormal returns from the bids announced at the time of high-EMVCs irrespective of the payment method. In contrast, at the time of low-EMVCs, investors are likely to be skeptical about the value of deals and react cautiously. This leads to the first testable hypothesis (H1): *'M&A announcements during high-EMVC-periods yield higher short-run abnormal returns than deals announced during low-EMVC-periods'*.

Rosen (2006) suggests that the short-run performance of bidding firms is a function of investors' optimism regarding the acquisition's future prospect. The implications of investors' sentiment, namely confidence, on M&A announcements are likely to differ by the domicile of the target, given that foreign investments generally add to the level of

uncertainty regarding the expected value to be generated from the transaction, mainly due to its additional exchange rate, economic and political risks.

During periods of low-EMVCs, this added uncertainty exacerbates the already low investor's sentiments. Thus, foreign acquisitions during low-EMVC periods are expected to yield less than domestic deals. During high-EMVC periods, however, acquirers of foreign targets are expected to yield a more favorable market reaction than domestic deals, driven by the higher investors' optimism. These arguments lead to the second testable hypothesis (H2): *'CBAs announced during high-EMVC periods at home outperform domestic deals announced during similar periods'*.

2.2 Relative Equity Market Valuation Conditions and the gains from CBA

Shleifer and Vishny (2003) argues that during high-EMVC periods the managers of firms with overvalued stocks are motivated to use their overvalued stocks to bid for targets that they perceive to be less overvalued than themselves. This is particularly interesting in the CBA context as different markets do carry different levels of EMVCs. Therefore, at a given level of EMVCs at home, whether foreign target acquirers time the market and bid for targets abroad is limited to their ability to identify less overvalued (foreign) targets than themselves. In this paper we argue that in CBAs the relative EMVCs (i.e. the extent to which EMVCs in the acquirer's country differ relative to the target's country) provides an additional insight to the acquiring firms' managers aiming to maximize the wealth of their shareholders.

Specifically, at a high level of EMVCs at home, the lower the correlation of EMVCs between the acquiring and target firms' countries imply that the foreign market's EMVCs will be low, or lower than that at home, hence acquirers' managers with overvalued stock may take advantage to bid for less overvalue targets in such countries.

Therefore, acquirers of foreign targets based in low-EMVCs countries are expected to yield a more favorable market reaction. As discussed earlier, while this effect is more pronounced to share deals, it can also apply to other types of deals, such as cash and mixed, due to managerial overconfidence and investors' optimism caused by the level of EMVCs at home. This leads to the third testable hypothesis (*H3*): *'Acquirers gain significantly more from CBAs announced during periods of high-EMVCs at home and low- or lower-EMVCs in the host country'*.

2.3 Strength of domestic currency and gains from M&A

A number of studies on FDI (for example, di Giovanni, 2005) show that the strength of the domestic currency plays a significant role in determining the flow of foreign direct investment. On a theoretical framework Froot and Stein (1991) argue that when the U.S. dollar is weaker compared to foreign acquirers' local currency they will have a purchasing advantage for U.S. targets. In line with this theoretical prediction, Harris and Ravenscraft (1991) find that a weaker U.S. dollar leads to a higher market reaction for U.S. firms being targeted by acquirers with a stronger currency due to their purchasing advantage. When the domestic currency is stronger than its equilibrium value, it is cheaper for acquirers to acquire foreign targets. This phenomenon should not only enhance M&A activity but also generate higher gains to acquirers. This is because when the domestic currency is strong, the effective price (inclusive of premium) paid to foreign targets is more likely to be less than the equilibrium value of the target. Consequently, such deals are more likely to transfer wealth from target company's shareholders to the shareholders of the acquiring company. This leads to the fourth hypothesis (*H4*): *'M&As announced at times of stronger domestic currency generate higher gains to acquirers'*.

3. Data and Methodology

3.1 Data

The information on the deal announcements is extracted from Securities Data Corporation (SDC). The sample comprises of bids announced by U.K. firms between 01/01/1986 and 31/12/2010. SDC records 67,229 M&As announced by U.K. firms during the sample period. However, the sample of acquisitions analyzed by the paper includes 6,260 (4,424 domestic and 1,826 foreign) deals that meet the following criteria: (i) The acquirer is a U.K. company traded in the London Stock Exchange; (ii) the target is a private, a public, or a subsidiary firm, both domestic and foreign; (iii) to avoid the effects of very small transactions, only deals equal to, or greater than, £1 million are included; (iv) the market value of the acquirer is greater than £1 million at four weeks prior to the announcement of the deal; (v) acquiring firms are not involved in multiple bids during the 5-day announcement window of -2 to +2 days around the announcement day; (vi) the daily return to index, market value, and market-to-book-value ratio of the acquirer are obtained from DataStream. Finally, we collect the monthly P/E ratio for the FTSE All Share market index and the monthly P/E ratio for the 9 industry groups from DataStream in order to measure the EMVC.

3.2 Sample features

Table 1 reports the annual distribution of M&A deals announced by U.K. acquirers between 01/01/1986 and 31/12/2010. The table shows that almost one in three M&A deals (29.2%) involve foreign targets. The proportion of CBAs in the U.K. increased steadily over time, exceeding 40% of all deals in 2010. In addition, the proportion of CBA in G6 (=G7-U.K.) countries (19.7%) is well over the proportion of CBA in the Rest of the World (RoW=World-G7) group of countries (9.5%). This sub-classification is inspired by the

evidence that the economic activity and stock market performance of the G7 countries (UK, US, Canada, Germany, France, Italy, and Japan) are more integrated than the rest-of-the-world (Jansen and Stokman, 2004). The statistics also show that in approximately 51% of the deals the merging firms are based in the same-industry (based on the same 2-SIC code) while the remaining 49% are diversified deals. Overall, about one in two deals are settled in cash, while share only deals constitute less than 10% of the total number of deals in the sample. The proportion of cash only deals is much larger in CBA, while only about one in twenty CBA deals are settled in shares.

(Insert table 1 about here)

Table 2 (Panel A) shows that unlisted targets account for about 90% of all deals, while only one in ten deals involve listed targets. The dominance of unlisted targets in U.K. takeover deals is consistent with Draper and Paudyal (2006). The remaining statistics of either transaction- or firm-specific characteristics reported in Panel A show that the number of deals occurring during periods of high- vs. low-EMVCs, is significantly higher (1,825 vs. 1,565). Noticeably, the sum of deal value in each group is substantially higher for deals occurring during periods of booming than depressed markets across all classifications.

(Insert table 2 about here)

The sum deal value of CBA deals is much larger (£345bn) compared to domestic deals (£185bn), while CBA deals are larger in the RoW countries compared to the G6 countries. Table 2 (Panel B) also shows that the acquirers of foreign targets are more mature (19 years) than their counterparts of domestic targets (14 years). Furthermore, the average market capitalization of acquirers acquiring domestic targets (£432m) is less than the average market capitalization of acquirers of foreign targets (£1,600m). Acquirers of targets in the RoW countries (£1,628m) are larger than acquirers in the G6 countries

(£1,586m) albeit the deals being larger for the latter (£235m) than the former (£92m) group. Furthermore, the average acquirer of a domestic target is less liquid than the corresponding acquirers of a foreign target (0.13 vs, 0.15), has higher leverage (22.5 vs. 19.9), and pays lower premia (36% vs. 45%).

3.3 Classification of high-, neutral-, and low-EMVCs

The EMVC is measured by market P/E ratio, using the FT All share index as market proxy and since the measure of EMVCs possesses an up-ward trend, it is de-trended using the method outlined in Bouwman et al. (2009). First, the best straight line fit value of the variable is removed from the observed value in each month and in five years preceding the announcement. Second, each month is categorized as above (below) the average if the de-trended value of the variable for the month is above (below) the average of the previous five years. Finally, the upper half of the above-average months (i.e., the 25% top months) are classified as high value periods and the lower half of the below-average months (i.e., the 25% bottom months) are classified as low value periods. All other months in the sample (i.e., 50% of the middle months) are classified as neutral. As implied by the stock market valuation argument of Shleifer and Vishny (2003), merger activity increases during high-EMVC periods (Table 2, Panel A). Moreover, this pattern holds for both domestic and CBAs.

3.4 Methodology

The performance of acquirers is analyzed by indicators of EMVCs using both univariate and multivariate frameworks. For the univariate analysis, first the excess returns of acquirers announcing bids under various financial conditions are tested, followed by the comparison of the gains of such acquirers. Finally, the gains of acquirers by the domicile

of their targets (domestic targets, foreign targets, acquirers of targets in G6 countries, and in the RoW) and EMVCs at the time of the bid announcement are also compared. Under multivariate analysis, similar tests on the gains of acquirers are performed after controlling for the effects of other factors using cross-sectional regressions that are known to affect the gains to acquirers.

Because of multiple bids by the same acquirers occurring within a short period, sufficiently long time series of stock returns that are free from the effects of takeover bids are not available to apply conventional time-series based excess-return estimation models. For the same reason, recent studies in M&A (Draper and Paudyal, 2008 and the references cited therein) have used a market adjusted model. As a result, for measuring the announcement period abnormal returns of acquirers the market-adjusted model is employed as shown in equation 1:

$$AR_i = R_{it} - R_{mt} \quad (1)$$

where, R_{it} is the return of firm i on day t , and R_{mt} is the market return measured by the changes in FT-All Share Index (inclusive of dividends). The abnormal returns (AR_i) are cumulated for the 5-days (-2,+2) surrounding the M&A bid announcements, as shown in equation 2:

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

3.5 Multivariate analysis

To further investigate the implications of relative EMVCs on announcement period gains of the U.K. acquirers, we examine the impact of relative EMVCs after controlling for other factors that are known to affect acquirers' gains simultaneously. We do so by

employing equation (3) estimated in a nested regression form with various combinations of explanatory variables discussed below.

$$CAR_i = \alpha + \sum_{j=1}^k \beta_j X_{ij} + \varepsilon_i \quad i = 1 \dots N \quad (3)$$

In equation (3), the intercept, α , reflects the excess returns of acquirers after controlling for the effects of all explanatory variables, incorporated in the vector X_i , simultaneously, the impact of which is recorded in the vector β_j . When the model is applied to analyzing the announcement period gains, the dependent variable (CAR_i) is measured by the 5-days cumulative excess return of acquirers as explained in equation (1). The vector of explanatory variables, X_i , includes a set of explanatory variables discussed below.

Earlier literature, based on the experience of listed targets, shows that cash-only acquirers experience the highest gains, while share-only acquirers suffer a loss. However, Travlos (1987) shows that the method of payment interacts with the listing status of targets in shaping the gains of acquirers. Therefore, to control for the *methods of payment*, deals are classified into cash only, shares only, and mixed. Moreover, on the announcement of M&A deals acquirers of unlisted targets gain more than acquirers of listed targets (Draper and Paudyal, 2006). Therefore, we control for the *listing status of targets*, namely listed, private and subsidiary.

Larger acquirers gain less than smaller acquirers on the announcements of bids (Moeller et al., 2004). Therefore, to allow for this effect we control for the *size of the acquirer*, measured by their market capitalization (MV) four weeks before the announcement of the deal. Sudarsanam and Mahate (2003), among others, show that value acquirers (firms with low market-to-book value ratio) outperform glamour acquirers (firms with high market-to-book value ratio) in the short-run. Thus, we control

for the *growth opportunity of bidding firms*, measured by the market-to-book value (MTBV) ratio one month prior to the announcement of the deal.

Draper and Paudyal (2008) suggest that acquirers' announcement period gains are dependent on the level of public information. Barry and Brown (1985) show that more information is available in the public domain in relation to firms with a long trading history. Since mature firms are likely to have a longer trading history, consequently more publicly available information, we control for *acquirer's maturity (age)* measured by the number of days from the date a firm is first recorded on DataStream⁶ and the date of the announcement. Several studies (Asquith et al., 1993) have shown that the acquirers' announcement period returns increase with the size of the target relative to the value of the acquirer. This may be due to the stronger impact on the structure of the organization of the acquiring firm that relatively larger targets may have. It is also possible that the observed positive relation between the relative size of the deal and gains from acquisitions is simply a statistical effect as a relatively larger deal is likely to generate higher synergy gain, which could be substantial relative to the size of acquirer. *The relative size of the deal* is measured by the ratio of the acquirer's market capitalization to the value of the deal.

We also control for the *Effective Exchange Rate* (Effect. Ex. Rate) of Pound Sterling obtained from the Bank of England's statistical database in order to account for the impact of the strength of the domestic currency on acquirers' gains.⁷ In addition, we add a set of dummy variables that is assigned the value of 1 (0 otherwise) to control for: CBA deals, diversifying deals (defined as a deal when target and acquirer do not share the same 2-

⁶ This date corresponds to the first trading day of a listed firm. Since the disclosure requirements of listed firms are much more stringent and systematic, the listing period is a good proxy measure of the level of information in the public domain.

⁷ See www.bankofengland.co.uk. Moreover, the first difference of the effective exchange rate index (i.e. changes in the value) of Pound Sterling does not have any trend and hence its de-trending is not required.

digit SIC code), private targets, cash-only deals, stock-only deals, high EMVC period, period of strong domestic currency, and frequent acquirers. Finally, variables representing interactions between various measures of EMVCs are also introduced in the model.

4. Empirical Results

4.1. Acquirers' announcement period gains

This section presents and discusses the findings from the univariate and multivariate analysis of announcement period gains of acquirers against financial conditions (i.e. EMVCs) at the time of M&As announcements. The gains are also analyzed by the targets' domicile. The results reported in Table 3 (Panel A) show that the average acquirer earns statistically significant gains (1.47%) on the announcement of a takeover bid. This is consistent with recent U.K. studies that include M&As of both listed and unlisted targets (Draper and Paudyal, 2006). The table further shows that firms acquiring domestic targets earn higher abnormal returns (1.56%) than firms acquiring foreign targets (1.27%). Further analysis (Panel B) conveys that domestic target acquirers: (i) outperform acquirers of foreign targets in the G6 by 0.69%; and (ii) yield similar abnormal returns to firms buying targets in the RoW countries. Moreover, among the CBAs, acquirers enjoy 1.21% higher abnormal returns when targets are based in the RoW rather than in the G6 countries (Panel B). Whether these gains to acquirers in the framework of domestic deals vs. CBAs are driven by the impact of EMVCs at home, relative to those in the host countries, remains to be empirically investigated.

(Insert table 3 about here)

4.2. EMVCs and acquirers' gains

Analysis of the acquirers' gains by the EMVCs at the time of the M&A announcement reveal that the gains increase monotonically with EMVCs (Table 3, Panel A). The average gains to all acquirers increase from 1.15% for M&As announced during low-EMVC periods to 2.09% during high-EMVC periods. These findings are consistent with Bouwman et al. (2009) who conclude that acquirers enjoy higher short-term gains from announcing bids in high- rather low-EMVC periods. This pattern holds for the analysis based on the de-trended industry P/E ratio, confirming that the results are robust to the methods of assessment of market conditions. This evidence is not sensitive to the choice of the method of payment and confirms the prediction that acquirers should gain more from bids announced at the time of high-EMVCs due to favorable investors' sentiment (optimism). Overall, the results support part of the first hypothesis (*H1*) and provide additional evidence in support of the neoclassical theory of mergers.

Further analysis shows that EMVCs play a significant role in explaining the difference in acquirers' gains by their targets' domicile (differentials recorded in Panel B). In particular, U.K. acquirers experience similar abnormal from domestic vs. foreign (as a whole) deals regardless the level of EMVC in the U.K. at the time of M&As announcements. However, we find that the groupings of the countries of foreign targets according to the degree of correlation of the EMVCs between home and host markets plays a significant role. Specifically, acquirers' shareholders earn 1.12% higher abnormal returns when they acquire targets in the domestic rather than G6 group of countries. As the EMVCs between the home and host -G6- countries are highly correlated (see Appendix B), the impact of EMVCs between the merging firms markets remains trivial. On the contrary, M&As of foreign targets in the RoW countries (a) earn similar abnormal returns to domestic target acquirers, and (b) enjoy significantly higher abnormal returns

to acquirers in the G6 countries.⁸ We argue that the EMVCs at home relative to those in host countries allow acquirers' managers to time the market and acquire targets at a discount, particularly in markets in which their stocks are likely to be more overvalued than their targets. Therefore, a possible reason for these findings is that the EMVCs in the RoW (G6) are lower (similar) to the home ones and hence British acquirers are able (unable) to acquire targets at a discount. Accordingly, this suggests that the null difference between domestic and foreign targets is balanced out by CBAs in the RoW countries, as CBAs in the G6 group are experiencing losses. These findings support the second and third hypotheses (*H2 and H3*) relating to the level of EMVCs at home, relative to those in host countries, and the gains from domestic vs. CBAs. Overall, the findings reported in Table 3 (Panel A) show that EMVCs interact with the domicile of targets in shaping the gains to acquirers.

In summary, the results of the univariate analysis reported in Table 3 confirm that acquirers' gains are dependent on the EMVCs at the time of bid announcements, as well as the domicile of the target firm. This suggests that in making a takeover decision the managers of bidding companies should consider the EMVCs in the home market.

4.3. Announcement period gains of acquirers – A cross-sectional analysis

We further explore in a multivariate framework the impact of EMVCs at home, relative to EMVCs in host countries, along with several other known determinants that influence merger success, on the short-run acquirers' gains. The results are reported in Table 4.

(Insert table 4 about here)

⁸ This pattern holds when the 9 industry P/E ratios are employed to assess the market valuation conditions.

As indicated by the intercept ' α ' of models 5 and 7 (models 1 to 4, and 6), an average acquirer earns significant gains (breakeven) from M&As after controlling for the impact of several merging firms- and deal-specific factors, as well as the impact of EMVCs. Moreover, models 1 to 3 show that acquirers enjoy significant gains from deals announced during high-EMVC, despite the domicile of the target firm. This finding supports our first hypothesis (*H1*). Model 3 further shows that M&As made during periods of high-EMVCs at home and financed with stock are associated with the highest gains to acquirers' shareholders. This provides great further support to our first hypothesis (*H1*), the empirical findings of Bouwman et al. (2009) and the theoretical findings of Shleifer and Vishny (2003). Among the variables of interest, the strength of the domestic currency exerts a positive effect on acquirers' gains, which supports our fourth hypothesis (*H4*). The favorable effect of the strength of the domestic currency is not limited to acquirers engaged in foreign targets, but it is also important for acquirers of domestic targets. Higher gains from domestic target M&As are possible because the strength of domestic currency reflects expected growth in the economy and investors are willing to pay a higher price for stocks of growing/expanding firms. Hence, the markets react favorably to announcements of (also) domestic M&As.

Model 2 shows that U.K. acquirers of foreign targets in the RoW countries enjoy significant gains in the short-run, which partly supports our second hypothesis (*H2*). Moreover, models 4 and 6 show that U.K. foreign acquirers of targets in the RoW rather than G6 countries enjoy significant gains in the announcement period, which is more pronounced if M&As are announced during high-EMVCs periods at home. This provides great support to our third hypothesis (*H3*), which predicts that M&As with targets in countries with EMVCs being lower than those at home should yield higher gains to acquirers' shareholders. On the contrary, foreign target acquirers in G6 countries

experience significant losses in the announcement period. We argue that this is the outcome of the high correlation of EMVCs between the U.K. and G6 countries (see Appendix B), which ultimately diminishes the impact of EMVCs in such deals and further confirm the findings reported by Moeller and Schlingemann (2005) and Barbopoulos, Paudyal and Pescetto (2012).⁹

The findings also show the importance of firm and deal- and merging firms-specific features in determining the gains to acquirers' shareholders in the domestic vs. foreign target acquisitions. Specifically, the relative size of the deal (across all models), stock payments (models 1, 2, 5 and 7), target listing status (i.e. unlisted, across all models), liquidity of the acquiring firm (models 1 to 3) have a significant and positive effect on acquirers' gains. The positive effect of the relative deal's size is consistent with previous studies, which conclude that the acquiring firm's abnormal returns increase with the target's size relative to the acquirer's size (Asquith et al., 1993). The case of the evidence of positive gains from stock deals is similar to the findings of Draper and Paudyal (2006). In particular, provided that the U.K. market is overpopulated by unlisted target deals (Draper and Paudyal, 2006), stock financing of such deals leads to higher acquirers' abnormal returns in the short-run (Chang, 1998). Finally, the estimates suggest that foreign acquirers with higher market-to-book-value gain more from acquisitions (models 4 to 7).

5. Conclusion

We examine whether the short-run abnormal returns of the shareholders of U.K. firms that engaged in domestic and foreign acquisitions is affected by the home EMVCs at the

⁹ Moeller and Schlingemann (2005) show that U.S. acquires enjoy higher gains from domestic deals rather than foreign target ones. Barbopoulos et al. (2012) show that U.K. bidders' gains from domestic vs. foreign target deals are not significantly different.

time of M&As announcements, as well as the relative EMVCs between the merging firms' countries in CBAs. We find that acquirers enjoy significantly higher announcement period gains from deals made during high- rather than low-EMVC at home, regardless of the domicile of the target firm. We further show that foreign target acquirers enjoy greater gains from deals made during high-EMVCs at home only when the EMVCs between the merging firms' countries are less likely to be correlated, which falls in the category of the target being in the RoW rather than in the G6 countries. Our findings also show that during high-EMVCs at home, domestic deals yield higher gains than foreign ones in the G6 countries. Provided that EMVCs in G6 countries are highly correlated to the ones at home (see Appendix B), U.K. acquirers are less able to extract any gains from CBAs due to the high-EMVCs in the host countries. Hence, in the absence of the impact of EMVCs, the gains of domestic deals vs. CBAs confirm those reported by Moeller and Schlingemann (2005) and Barbopoulos et al. (2012).

However, we find that acquirers of domestic targets, and also foreign targets in the RoW countries, realize similar announcement period gains regardless of the level of EMVCs at home. Moreover, within CBAs, deals of targets in the RoW countries outperform those in the G6 countries when announced during periods of high-EMVCs at home. Provided that the correlation of EMVCs between the U.K. and the RoW (G6) countries is low (high), U.K. acquirers are able (unable) to extract significant gains from foreign deals in the RoW (G6) countries that made during high-EMVCs at home. This is possible due to the low EMVCs in the RoW countries (as the correlation of EMVCs between the U.K. and RoW is low) and hence, acquirers' managers are able to time the market and acquire targets in the RoW countries at a discount, particularly in markets in which their stocks are likely to be more overvalued than their targets.

Overall, our results suggest that acquirers' managers aiming to maximize their shareholders' wealth can extract signals from EMVCs of the home, relative to host countries, and carefully pick the timing of their M&As announcements in both the domestic and foreign market.

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Table 1. Annual M&A Activity by Target Firm's Domicile, Industry, and Method of Payment

The table presents the annual distribution of M&As announced by U.K. acquirers between 01/01/1986 and 31/12/2010. The distribution of M&As is presented according to the target firm's domicile (domestic, foreign, and foreign deals' subgroups including the G6 (=G7-U.K.) and the RoW (=World-G7)), merging firms' industry classification (focused and diversifying), and the various payment methods that used in the financing process of deals (Cash, Stock, and Mixed). Appendix A refers to the definition of each variable.

Year	ALL	DOM	CBA	G6	RoW	FOC	DIV	CASH	STOCK	MIXED
1986	38	24	14	14	0	19	19	20	11	7
1987	118	95	23	18	5	51	67	48	29	41
1988	264	206	58	42	16	98	166	115	23	126
1989	336	247	89	67	22	138	198	163	30	143
1990	204	149	55	39	16	86	118	105	14	85
1991	137	113	24	16	8	55	82	54	15	68
1992	138	107	31	21	10	49	89	59	11	68
1993	210	162	48	33	15	85	125	90	17	103
1994	262	201	61	41	20	127	135	118	24	120
1995	278	200	78	61	17	107	171	106	18	154
1996	315	233	82	58	24	142	173	138	22	155
1997	383	262	121	81	40	165	218	152	23	208
1998	411	282	129	86	43	222	189	212	20	179
1999	434	298	136	97	39	253	181	197	26	211
2000	435	295	140	91	49	244	191	160	44	231
2001	302	208	94	69	25	166	136	104	19	179
2002	217	163	54	32	22	115	102	110	14	93
2003	193	127	66	50	16	123	70	92	10	91
2004	214	151	63	45	18	124	90	81	11	122
2005	292	210	82	52	30	173	119	128	16	148
2006	298	202	96	54	42	180	118	127	9	162
2007	336	226	110	59	51	201	135	129	13	194
2008	183	111	72	47	25	107	76	86	8	89
2009	96	63	33	19	14	56	40	44	12	40
2010	166	99	67	39	28	89	77	93	9	64
Total	6,260	4,434	1,826	1,231	595	3,175	3,085	2,731	448	3,081
%	-	70.83	29.17	19.66	9.50	50.72	49.28	43.63	7.16	49.21

Table 2. Summary statistics

In Panel A the sample is classified by target firm's domicile (domestic, CBA, and CBA sub-groups including the G6 (=G7-U.K.) and the RoW (=World-G7)), SIC 2-digit industry classification (focused and diversifying), method of payment (cash and stock), and target firm's listing status (unlisted and listed). The sample comprises M&As announced by U.K. acquirers between 01/01/1986 and 31/12/2010 and recorded by the SDC. Acquirers are firms listed in the London Stock Exchange (LSE). In Panel A, N represents the number of deals; % is number of deals in a group as a proportion of All deals in each column rounded off to the nearest integer; Sum of DV in billions pounds is the sum of deal values of all deals in each group; the sum of DV is rounded off to the nearest billion pounds. In Panel B the mean and median are the group mean and median. The process of de-trending is discussed in Section 3.3. All variables are defined in the Appendix.

Panel A												
		ALL	DOM	CBA			Focused (FOC)	Diversifying (DIV)	CASH	STOCK	Target Listing Status	
				ALL	G6	RoW					Unlisted	Public
ALL	N	6,260	4,434	1,826	1,231	595	3,175	3,085	2,731	448	5,641	619
	%	-	70.8	29.2	19.7	9.5	50.7	49.3	43.6	7.2	90.1	9.9
	Sum of DV (in £ bn)	530	185	345	290	55	374	156	135	57	186	343
Low-EMVCs	N	1,565	1,152	413	289	124	749	816	692	119	1,423	142
	%	25.0	18.4	6.6	4.6	2.0	12.0	13.0	11.1	1.9	22.7	2.3
	Sum of DV (in £ bn)	75	41	34	27	7	34	41	30	8	43	32
Neutral-EMVCs	N	2,870	2,010	860	566	294	1,498	1,372	1,246	190	2,601	269
	%	45.9	32.1	13.7	9.0	4.7	23.9	21.9	19.9	3.0	41.6	4.3
	Sum of DV (in £ bn)	159	85	75	46	28	105	55	66	27	84	74
High-EMVCs	N	1,825	1,272	553	376	177	928	897	793	139	1,617	208
	%	29.2	20.3	8.8	6.0	2.8	14.8	14.3	12.7	2.2	25.8	3.3
	Sum of DV (in £ bn)	296	59	236	217	20	235	60	39	22	59	237

Panel B																
	MV (in £ bn)		DV (in £ m)		Deal Relative Size		MTBV		Age (in years)		Liquidity		Leverage		Premium	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median
ALL	772.49	119.10	84.61	7.15	0.33	0.07	2.85	2.07	15.93	12.91	0.13	0.08	21.73	17.03	38.84	35.73
Low-EMVCs	618.84	112.56	48.11	6.50	0.28	0.07	3.78	2.04	16.11	13.85	0.13	0.08	18.78	16.67	38.14	36.36
Neutral-EMVCs	793.13	116.80	55.54	7.06	0.32	0.07	2.68	2.06	16.00	12.52	0.14	0.08	19.21	16.68	37.67	33.64
High-EMVCs	871.79	128.01	161.64	7.97	0.41	0.07	2.34	2.16	15.67	12.45	0.14	0.09	28.23	17.95	40.60	37.49
DOMESTIC	431.65	78.86	41.65	6.00	0.35	0.09	2.65	1.90	14.59	10.92	0.13	0.07	22.54	15.89	36.15	34.29
CBA (ALL)	1,600.13	345.41	188.93	11.96	0.30	0.05	3.32	2.43	19.19	20.21	0.15	0.11	19.87	18.76	45.07	36.96
CBA (G6)	1,586.49	356.68	235.58	14.22	0.25	0.05	2.90	2.47	19.72	21.39	0.15	0.11	20.19	19.50	45.12	39.13
CBA (RoW)	1,628.35	289.92	92.42	8.09	0.38	0.04	4.20	2.38	18.10	16.70	0.17	0.11	19.20	17.47	44.85	24.48
Focused	767.95	112.81	117.82	7.60	0.28	0.08	2.89	2.06	13.97	9.91	0.14	0.08	24.50	16.97	39.83	35.52
Diversifying	777.16	124.08	50.44	6.80	0.39	0.06	2.81	2.09	17.96	19.09	0.13	0.08	18.84	17.04	37.83	36.09
Unlisted	663.61	111.79	33.04	6.14	0.31	0.06	2.95	2.10	15.73	12.47	0.13	0.08	21.89	16.82	75.30	62.76
Public	1,764.75	274.32	554.56	50.08	0.54	0.24	1.96	1.90	17.74	18.47	0.13	0.09	20.24	17.94	38.52	35.25
Cash	1,111.27	206.09	49.57	7.50	0.16	0.04	2.25	2.06	18.73	19.96	0.12	0.08	26.14	19.10	41.37	36.59
Stock	530.64	50.30	126.14	9.81	1.34	0.25	2.51	1.95	11.96	8.22	0.18	0.09	17.50	14.18	36.29	31.49

Table 3. Acquirers' Announcement Period Returns by EMVCs and Target Firm's Domicile

The table presents 5-day ($t-2, t+2$) announcement period's cumulative abnormal returns (CAR) of acquirers in percent value. The abnormal returns (AR) are calculated using the equation (1) (please see Section 3.4.1 for more details):

$$AR_{it} = R_{it} - R_{mt} \quad (1)$$

Where: R_{it} is the return of acquirer i at time t , and R_{mt} is the market return measured by the changes in FTSE All-Share Market Index (adjusted for dividends). The returns are reported by the domicile of targets (domestic, CBA, and CBA sub-groups) and equity market valuations conditions (EMVCs). The financial conditions are classified by the de-trended market P/E ratio of FTSE All-Share Market Index. EMVCs is depicted as announcement periods of depressed (Low-EMVCs), neutral (Neutral-EMVCs), and booming (High-EMVCs) markets). *Panel A* reports acquirers' CAR by the state of EMVCs; HML EMVCs stands for High Minus Low EMVCs; *Panel B* reports the differentials between acquirers' gains from domestic and foreign deals. The process of de-trending is discussed in Section 3.3. All variables are defined in the Appendix. The significance of the difference the means of two groups of acquirers is tested by using the t -test of equality of means. The significance of the median is tested by using the 'Sign' test. The significance of the difference between the medians of two groups of acquirers is tested by using the Wilcoxon Two-Sample Test. The number of deals (N) for each group is reported below the estimates of excess returns. ***, **, and * denote significance level at 1, 5, and 10 percent, respectively.

Panel A: Equity Market Valuations Conditions						
		ALL	Low-EMVCs	Neutral-EMVCs	High-EMVCs	HML-EMVCs
ALL	Mean	1.47***	1.15***	1.25***	2.09***	0.94***
	Median	0.50***	0.51***	0.44***	0.63***	0.12*
	N	6260	1565	2870	1825	
Domestic	Mean	1.56***	1.23***	1.30***	2.25***	1.02**
	Median	0.51***	0.50***	0.47***	0.65***	0.15*
	N	4434	1152	2010	1272	
CBA (ALL)	Mean	1.27***	0.91***	1.14***	1.74***	0.83*
	Median	0.47***	0.58***	0.39***	0.57***	-0.01
	N	1826	413	860	553	
CBA (G6)	Mean	0.87***	0.71**	0.78***	1.13**	0.42
	Median	0.36***	0.37*	0.34*	0.39**	0.02
	N	1231	289	566	376	
CBA (RoW)	Mean	2.08***	1.36***	1.83***	3.02***	1.66*
	Median	0.81***	1.14**	0.51***	1.11**	-0.03
	N	595	124	294	177	
Panel B: Differentials						
Domestic vs. CBA (ALL)	Mean	0.29	0.32	0.16	0.51	
	Median	0.04	-0.08	0.08	0.08	
Domestic vs. CBA (G6)	Mean	0.69***	0.52	0.52*	1.12**	
	Median	0.15**	0.13*	0.13	0.26*	
Domestic vs. CBA (RoW)	Mean	-0.52	-0.13	-0.53	-0.77	
	Median	-0.30**	-0.64*	-0.04	-0.46	
G6 vs. RoW	Mean	-1.21***	-0.65	-1.05**	-1.89**	
	Median	-0.45***	-0.77**	-0.17*	-0.72**	

Table 4. Determinants of Announcement Period Gains to Acquirers: Cross Sectional Analysis

Announcement period (5-days) market-adjusted abnormal returns for the full sample of acquirers are regressed against a set of explanatory variables that are known to affect acquirers' returns, including the levels of equity market valuations conditions (EMVCs). The dependent variable (CAR) is measured by the 5-days cumulative abnormal return of acquirers Equation (3) is estimated in a nested regression form using the ordinary least square method:

$$CAR_i = \alpha + \sum_{j=1}^k \beta_j X_{ij} + \varepsilon_i \quad i = 1 \dots N \quad (3)$$

The intercept (α) measures the abnormal returns generated for acquirers' shareholders after accounting for the effects of all explanatory variables. The vector of explanatory variables, X , includes the following: acquirer age estimated as the log of the number of days between the day of bid announcement and the date of the company's first record in DataStream; the relative size of the deal estimated as the log of the ratio of deal value to the market capitalization of the acquirer; the acquirer's market-to-book ratio (MTBV) estimated as the ratio of market-to-book value of equity four weeks prior to the announcement of the bid; liquidity measured as the ratio of total cash and equivalent to the total assets; binary (dummy) variables that take the value of 1 (and 0 otherwise) to represent: CBA deals, diversifying deals (target and acquirer do not share the same 2-digit SIC code), unlisted targets, stock-only deals, High-EMVCs, and periods of strong EER; and Rule of law and Political Stability which are indices measuring the quality of law, stability, and investor protection obtained from World Bank's International Country Risk Guide. The financial conditions are classified by the de-trended market P/E ratio of FTSE All-Share Market Index. The process of de-trending is discussed in Section 3.3. All variables are defined in the Appendix. Standard errors are corrected for possible heteroscedasticity by using White's (1980) Heteroscedasticity Consistent Standard Errors method. VIF represents the Variance Inflation Factor (multicollinearity test: if $VIF > 10$ that variable is highly correlated to another one). ***, **, and * denote significance level at 1, 5, and 10 percent, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
High-EMVCs	0.008***	0.008***	0.005**	0.006*	0.015**	0.001	0.007
Stock	0.014***	0.014***	0.001	0.007	0.020*	0.007	0.020*
Foreign	-0.001		-0.001				
G6		-0.004					
RoW		0.007*		0.012***	0.008	0.008**	0.003
High-EMVCs × Stock			0.041***				
High-EMVCs × RoW						0.015*	0.023*
Effect. Ex. Rate	0.006**	0.006**	0.006**	0.001	-0.002	0.001	-0.001
Diversifying	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Relative Size	0.007***	0.007***	0.007***	0.005***	0.009***	0.005***	0.009***
Acquirer Age	0.001	0.001	0.001	-0.001	-0.002	-0.001	-0.002
Acquirer MTBV	-0.001	-0.001	0.001	0.001**	0.003**	0.002**	0.004**
Unlisted Target	0.037***	0.037***	0.037***	0.015***	0.017***	0.015**	0.018***
Liquidity	0.024***	0.023***	0.024***	0.004	-0.038**	0.004	-0.038**
Political Stability					0.010		0.010
Rule of Law					-0.022**		-0.022**
Intercept	-0.012	-0.012	-0.010	0.015	0.059**	0.016	0.060**
F-stat	18.10***	16.99***	18.18***	4.47***	5.38***	4.28***	5.18***
Adj. R ² (%)	3.12	3.22	3.44	2.07	5.18	2.23	5.48
Mean VIF	1.21	1.08	1.08	1.40	2.59	1.40	2.65
N	5,625	5,625	5,625	1,699	995	1,699	995

Appendix A. Variables definitions

The table describes and defines the variables used in the paper, as well as it indicates the data source. SDC is Thomson-Reuters SDC M&A database. With a dummy variable, a sample observation without the value of 1 has a value of 0.

Variable Name	Description	Data Source
All Deals (ALL)	Refers to the entire sample analyzed in this paper.	-
Acquirer Age (AGE)	Number of days between the day when the acquirer is first recorded on DataStream and bid's announcement day.	DataStream
Periods of high equity market valuation conditions (High-EMVCs)	Dummy = 1 if the M&A deal is announced during period of high equity market valuations conditions (EMVCs) and = 0 otherwise. The financial conditions are classified by the de-trended market P/E ratio of FTSE All-Share Market Index. See the text for the process of de-trending (Section 3.3).	DataStream & SDC
Cash Payment (CASH)	Dummy = 1 when the deal is financed with 100% cash.	SDC
Cross-border Acquisitions (CBAs)	Dummy = 1 with a U.K. acquirer and non-U.K. target and = 0 with both acquirer and target are U.K. firms (= Domestic [DOM]).	SDC
Periods of low equity market valuation conditions (Low-EMVCs)	Dummy = 1 if M&A deal is announced during period of low equity market valuations conditions (EMVCs) and = 0 otherwise. The financial conditions are classified by the de-trended market P/E ratio of FTSE All-Share Market Index. See the text for the process of de-trending (Section 3.3).	DataStream & SDC
Deal Value (DV)	Bid transaction value, in millions pounds.	SDC
Diversifying (DIV)	Dummy = 1 when acquirer and target are based in different 2-digit SIC industries and = 0 when both share the same 2-digit industry (= Focused [FOC]).	SDC
G6 Group of Countries (G6)	G6 = 1 when a U.K. acquirer acquires a target that based in the rest of G7 countries (=G7-U.K.) and = 0 when a U.K. acquirer acquires a target that based in the rest of the world (RoW=World-G7).	SDC
Cash Ratio (Liquidity)	Measured by the ratio of total cash and equivalent to the total assets. Since these are annual ratios M&A deals announced before (after) June are matched with the ratio of the previous (same) year.	DataStream
Mixed Payments (MIXED)	Dummy = 1 when the financing process of the deal includes a mixture of cash, stock, and other methods of payment.	SDC
Market-to-Book Value (MTBV)	Market-to-Book Value of acquirer equity at four weeks and book value of equity from the most recent accounting statement prior to bid announcement.	DataStream
Market Value (MV)	Acquirer's market value of equity at four weeks prior to bid announcement, in million pounds.	DataStream
Periods of neutral equity market valuation conditions (Neutral-EMVCs)	Dummy = 1 when the M&A deal is announced during period of neutral equity market valuations conditions (EMVCs) and = 0 otherwise. The financial conditions are classified by the de-trended market P/E ratio of FTSE All-Share Market Index. See the text for the process of de-trending (Section 3.3).	DataStream & SDC
Acquirer Premium (Premium)	Takeover premium from Thomson Financial SDC computed as the difference between the offer price and the target's stock price four weeks before the acquisition announcement divided by the latter; values beyond the range of [0, 2] are winsorized following Officer (2003).	SDC
Private (PRV)	Dummy = 1 if target is private and = 0 otherwise.	SDC
Public (PUB)	Dummy = 1 if target is public/listed and = 0 otherwise.	SDC
RoW Group of Countries (RoW)	RoW = 1 when a U.K. acquirer acquires a target that based outside the G6 countries (=World-G7) and = 0 when a U.K. acquirer acquires a target that based in the rest of G7 countries (G6=G7-U.K.).	SDC
Relative Size (RS)	Ratio of DV to MV.	DataStream & SDC
Strong Effective Exchange Rate (SEER)	Dummy = 1 when M&A deal is announced during period of strong Effective Exchange Rate (EER), or strong domestic currency, and = 0 otherwise.	Bank of England
Stock Payments (STOCK)	Dummy = 1 when the deal is financed with 100% stock exchange.	SDC
Subsidiary (SUB)	Dummy = 1 if target is subsidiary firm and = 0 otherwise.	SDC
Unlisted (UNL)	Dummy = 1 if target is unlisted i.e. private or subsidiary, and = 0 otherwise.	SDC
Rule of Law	Rule of law is an index measuring the quality and level of law and order in a country obtained from World Bank's International Country Risk Guide (ICRG).	World Bank - ICRG
Political Stability	Rule of law is an index measuring the quality and level of political stability and tensions in a country obtained from World Bank's International Country Risk Guide (ICRG).	World Bank - ICRG

Appendix B. Correlations among Equity Market Valuations Conditions (EMVCs) in G7 countries

The table shows the correlation coefficients among the G7 countries' equity market indices. The P/E ratio is used to classify each of the equity market indices as low (depressed), neutral and high (booming), as in Bouwman et al. (2009).

	U.S.	Germany	France	Australia	Canada	Japan	U.K.
U.S.	1.00						
Germany	0.62	1.00					
France	0.68	0.79	1.00				
Australia	0.72	0.62	0.60	1.00			
Canada	0.68	0.60	0.54	0.79	1.00		
Japan	0.17	0.26	0.42	0.32	0.17	1.00	
U.K.	0.86	0.72	0.77	0.80	0.71	0.41	1.00