# Domestic and cross-border returns to bidders in acquisitions into the E.U.

Samra Chaudary & Nawazish Mirza

Published online: 10 May 2017.

Submit your article to this journal ⬚

Article views: 166

View related articles ⬚

View Crossmark data ⬚

Routledge
Taylor & Francis Group

# Domestic and cross-border returns to bidders in acquisitions into the E.U.

Samra Chaudary[a]  and Nawazish Mirza[b]

[a]Business Administration, Lahore School of Economics, Lahore, Pakistan; [b]SP Jain School of Global Management, Dubai, United Arab Emirates

## ABSTRACT

The article analyses shareholders returns of acquiring banks in the United Kingdom (U.K.) i.e., when U.K. banks acquire domestic banks and when U.K. banks acquire cross-border banks within the European Union (E.U.). The article includes 75% sample of the total population of bank to bank domestic acquisitions within the U.K. and cross-border acquisitions within the E.U. from 2006 until 2013. The article comes to the conclusion, by the means of event study methodology, that the shareholders returns of acquiring banks are negative and statistically insignificant (–2.076%) when they acquire cross-border banks. The results of U.K. banks acquiring domestic banks indicates higher and statistically significant abnormal returns of 1.628% at 5% significance level as compared to cross-border returns gained by U.K. acquiring banks. The research found an overall insignificant abnormal return of –0.448% for shareholders of the acquiring banks for the entire portfolio. It can be concluded that, on average, shareholders of the acquiring banks experience negative abnormal returns and acquisitions do create (short-term) abnormal returns for the acquiring banks' shareholders around the acquisition announcement time.

## 1. Introduction

Mergers and acquisitions (M. & A.) have become a universal phenomenon, with companies acquiring targets all over the world. World M. & A. activity in 2006 witnessed $3.8 trillion, a boost of 37.9% as compared to last year's level, to a total of 36,958 deals (Bernad, Fuentelsaz, & Gómez, 2010). Agbloyor, Abor, Adjasi, and Yawson (2012) demonstrated that cross-border M. & A. activity drives banking sector development in Africa. Different variables determine cross-border M. & A., like deregulation, has a noteworthy effect on a bank merger. One of the explicit reasons of increased banking industry concentration across the E.U. during the last 15 years is the result of the government interventions and forced acquisitions driven by the 2007–2009 financial crisis (Santillán-Salgado, 2011). Barbopoulos, Paudyal, and Pescetto (2012) scrutinised that acquiring a firm in stricter capital control markets brings more value to shareholders' wealth.

Extensive researches have been carried out into whether acquisitions are wealth-creating or wealth-reducing events for acquiring shareholders, and different empirical studies have shown different results. The majority of early research on M. & A. is limited to the United States (U.S.) and U.K. economies than the E.U. markets. M. & A. deals in the E.U. region have significantly increased both in number and value as compared to the former decades (Mateev & Andonov, 2016). Cross-border bank M. & A. deals are increasingly prevalent in Europe since the mid- 1990s (Lozano-Vivas, Kumbhakar, Fethi, & Shaban, 2011). The fraction of domestic to cross-border bank M. & A. in the E.U. region has been almost five to one (Campa & Hernando, 2006).

The emphasis of this research is on U.K. and E.U. M. & A. deals and can be attributed to the competition carried by the single European market. The domestic orientation of E.U. companies resorted to takeover deals as a means to survive the tough domestic rivalries created by the new markets. The E.U., as compared to the U.S. and the U.K., is characterised as a weaker market in terms of investors' protection (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998). This research tries to arrest some evidences of the 2008 crisis and its effects on returns of bidder banks in the U.K. and the E.U.

The worth of the fifth merger wave in Europe was up to U.S.$ 5.6 trillion (Martynova & Renneboog, 2008), which was more than eight times the collective value of the fourth European merger wave (Mateev & Andonov, 2016).

Bhabra and Huang (2013) found no change in operating performance from pre- to post-acquisition period for the bidders. Highlighting the bank mergers, DeLong (2003) concluded that bank (horizontal) mergers do not produce any worth. However, Beladi, Chakrabarti, and Marjit (2013) suggested that vertical mergers can increase the gains from cross-border mergers. Typically, shareholders of target firms benefit from positive short-term returns, whereas shareholders of the bidding firms usually face underperformance of the share prices in the month following the merger announcement (Fraser & Zhang, 2009). For bank-to-bank deals, Cybo-Ottone and Murgia (2000) found that excess gains exist in domestic deals and not for cross-border covenants.

Efficient market hypothesis proposed that share prices completely reproduce the assessment of the available set of information (Aiginger and Tichy, 1991); therefore, it will be observed in the event window. This research empirically examines the effect of U.K. banks acquiring domestic banks and cross-border banks within the E.U. from 2006 to 2013. The research contributes to the already existing body of work that endeavours to explain how merger announcement translates into the value of shareholders' wealth. The centre of attention is only on whether it improves or deteriorates acquirers' shareholders wealth in the short term. The study tries to answer whether there has been a wealth creating or wealth reducing result for the shareholders of acquiring U.K. banks and if there exists a difference in the abnormal return created by U.K. banks in the acquisition of domestic or cross-border banks of the E.U.

The empirical tests of this study are based on event study methodology. The results show that the average cumulative abnormal return (CAR) of U.K. banks acquiring cross-border banks within the E.U. is –2.08% and is not statistically significant. The results of U.K. banks acquiring domestic banks indicate higher abnormal returns as compared to U.K. banks acquiring cross-border banks, and seem to be positive for most of the pre-bid and post-bid period. The average C.A.R. for the domestic acquisition is significantly positive. Moreover,

insignificant negative average abnormal returns –0.44% were seen over the entire event window (–7;+7) for the complete portfolio.

The article is organised as follows. Section 1 gives a brief introduction about the trend and determinants of M. & A., along with the research rationale. Section 2 discusses the trends of M. & A. in the banking sector and empirical evidence in the literature. Section 3 explains the data and methodology. Section 4 presents the empirical results, and Section 5 concludes the study.

## 2. Literature review

U.S. covenants were ruling initially. In recent times, however, M. & A. activity in the European banking industry is booming. Cross-border acquisitions now accounts for 80% of all foreign direct investment by industrialised countries (United Nations Conference on Trade and Development [U.N.C.T.A.D.], 2000). In this merger movement, U.K. acquiring firms have been playing a progressive and imperative role. Conn (2003) showed that the number and the value of cross-border acquisitions by U.K. firms has increased in the mid-1980s and 1990s, and were more or less equal to the worth of domestic acquisitions over this period.

Numerous researches employed the event study methodology to investigate the impact of M. & A. on shareholders' wealth (e.g., Frame & Lastrapes, 1998; Houston, James, & Ryngaert, 2001). The above empirical studies found that shareholders of the target firm enjoy considerable positive abnormal returns and shareholders of the acquiring firm take home negative abnormal returns from mergers. Cybo-Ottone and Murgia (2000) analysed the phenomena of M. & A. in 14 E.U. countries and found that European bank mergers produce returns for both the parties: i.e., target firms win; however, acquirer firms do not lose.

The results of Cybo-Ottone and Murgia (2000) differ from those accounted for in U.S. bank mergers. The justification of different results could arise from the different regulation system of European banking markets, which are more alike among them as compared to the U.S. Conn (2003) and Jensen and Ruback (1983) found that there is a dominance of zero or negative cumulative abnormal returns for (both U.S. and U.K.) bidding firms, and the shareholders of target firms experience significantly positive returns. Nonetheless, the length of the event window determines the uniformity and consistency of the returns to the shareholders of acquiring firms. Cybo-Ottone and Murgia (2000) measured mean abnormal returns for different event windows for a healthier evaluation of the market reaction before and after the merger announcement. The empirical results clearly showed that the M. & A. of European banks depict a significant price effect, numerous days prior to the public declaration. This information is not new in the merger literature, as Bradley (1980) found that in general the market reacts to mergers at least ten days before the announcement. The most recent evidence by Bernad et al. (2010) showed that the valuation is poorly correlated before and after the acquisition. Whichever method is used, the performance effects of mergers and acquisitions can only be cherished in the long term.

## 3. Data and methodology

This article includes the U.K. as an acquirer and the European region as a target region for the period 2006 to 2013. Numbers of banks have been found through the screening process

in the database, Thomson One Banker, that holds data on M. & A. deals for the whole world. Since Thomson One Banker does not include financial data on the banks, that data was extracted from the Datastream database. Furthermore, either the M. & A. deals have been completed or not are included in the sample. The criteria to finalise the sample is to check data availability in the Datastream which narrows down 75% of the sample of the total population that was included in the study.

The rationale for extracting the announcement date and not the completion date is due to the fundamental proposition of efficient markets that believes the information (leaked) is reflected immediately in the stock prices after the merger announcement. Positive approach with the process of deduction and event study methodology has been used to estimate any abnormal return in the event window around the acquisition for the following research questions:

1. Do acquisitions produce abnormal returns for the bidder (U.K.) banks around the period of the acquisition announcement?
2. Does there exist a difference in the abnormal return produced by U.K. (bidder) banks acquiring domestic banks and U.K. (bidder) banks acquiring cross-border banks within the E.U.?

Strong (1992) proposed that the market model has probably been the most well-liked model and is used as a point of reference in event studies. The intention of the event study methodology is to evaluate observed returns of the stock around the announcement period with the performance of the market index. The increase of security prices after the announcement of a merger thus shows how positive the market evaluates the effects of the merger on the profitability of the firm (Aiginer and Tichy, 1990). The reason for choosing the announcement date and not the actual merger date is because, according to the theory of efficient market hypothesis, the moment information is released is instantly reflected in the share prices.

The event window is the number of days for which the abnormal return that is caused by the event can be measured. If the event window is too short, there is a possibility of not catching the consequence of the event. The event window in this research is set to 15 days; seven days prior to and seven days after the announcement date. Daily stock returns will be calculated for the event window of 15 days.

$t = 0$ represents the announcement date, $T_1$-$T_2$ = Event Window and $T_0$-$T_1$ = Estimation Period of 90 days.

The estimation period is used to assess the values of alphas and betas of the stocks. Hence, the period should be sufficiently long to produce a representative measure of returns and also to reduce the biasness, but too long an estimation period can also bring biasness in the estimation with information from other events or changes in the general situations of the firms (MacKinlay, 1997). The estimation period of the study is kept to 90 trading days, whereas the weekends are excluded and the seven days of the event window are kept separate from the estimation period. This is done to make sure that the normal returns do not get affected by event-related returns. The computation of daily return for each bank and for the market index is calculated as follows:

$R_{it}$ = (current day closing price – previous day closing price)/previous day closing price

$R_{mt}$ = (current day market closing price – previous day market closing price)/previous day market closing price

The abnormal return is the actual *ex-post* return of the share over the window period subtracted from the normal return of the firm over the same window period. The normal return can be defined as the expected return without conditioning on the event taking place (MacKinlay, 1997). The market model parameters are obtained in the estimation period and used in the event period to determine the expected return. The abnormal returns $AR_{it}$ can now be calculated in the event window by deducting the actual return $R_{it}$, with the expected return, as shown in the Equation (1):

For any firm $i$ and event date $t$ the abnormal return is:

$$AR_{it} = R_{it} - E(R_{it}) \tag{1}$$

where $AR_{it}$ represents abnormal return in the event window at day $t$, $R_{it}$ represents actual return and $E(R_{it})$ represents normal returns. The assumption of the market model is the linear relation between the market return and the share return. The model's linear design follows the assumption of joint normality of asset returns. Practically, it is a well-built assumption and normally not likely to create any inconvenience, since the assumption is empirically sound and the implication of the normal return models likely to be robust to diverge from the assumption (MacKinlay, 1997). An ordinary least squares (O.L.S.) regression has been executed to estimate the model parameters estimates of $\alpha_i$, $\beta_i$, the intercept and slope respectively, for each stock at every day in the estimation period.

For any given security $i$ the market model is:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \tag{2}$$

where $R_{it}$ = Returns on security $i$ on day $t$, $R_{mt}$ = Return on the market portfolio in the period $t$,

$\varepsilon_{it}$ = the zero mean disturbance term, $\alpha_i$ and $\beta_i$ are the parameter of the market model and are estimated by running an ordinary least-square regression over the estimation window.

The Finacial Times Stock Exchange (F.T.S.E.) 100 index is used for the market portfolio because it will enable to make a fair comparison between the required returns and the returns from the top 100 companies. The market model signifies more perfection over the constant mean return model. By eliminating the section of the return that is associated with the variation in the market's return, the variance of the abnormal return is decreased. This consecutively can lead to increaseing the capability of model to uncover the impact of the event. This study uses the market model because it incorporates all three models i.e., mean adjusted model, market adjusted model and also constant mean return model. The advantage of using the market model will rely upon the value of $R^2$ of the market model regression. The higher the $R^2$, the greater is the variance reduction of the abnormal return, and the larger is the gain (MacKinlay, 1997).

The notion of cumulative abnormal return (C.A.R.) over the event window is employed in the study for the purpose of an overall conclusion of abnormal return in the event window. C.A.R. $(t_1, t_2)$ is the cumulative abnormal return (C.A.R.) from $t_1$ to $t_2$. The C.A.R. from $t_1$ to $t_2$ is the sum of the included abnormal returns:

$$CAR_i(t_1, t_2) = \sum_{\tau 1 = \tau 2}^{\tau 2} AR_{it} \tag{3}$$

For any period in the event window,

$$\overline{CAR}(t_1, t_2) = \sum_{t=t_1}^{t_2} \overline{AR}_t \qquad (4)$$

The average cumulative abnormal returns can then be calculated over the sub-periods and over the entire event window of 15 days using the same method as that used to calculate the C.A.R.s.

## 4. Results and analysis

The event windows are divided into sub-periods, as Cybo-Ottone and Murgia (2000) measured mean abnormal returns over numerous event windows for a healthier appraisal of market reaction before and after the deal's announcement and to analyse the results from different angles to observe if there is any significant abnormal return in any of these durations. C.A.R.s given in Table 1 to the shareholders of acquiring banks over the entire event window period are not statistically significant at 5%. Each of the *t* values corresponds to a separate test therefore, for all of the dates.

Looking at the results of the pre-bid period (−7; −1), the acquiring bank portfolio has realised excess gains of 13.2%, showing acquiring shareholders gaining wealth acquiring either domestic or cross-border banks, as shown in Table 1. The large amount of positive abnormal return can suggest that the information might have leaked a week before the announcement. Pilloff (1996) unveiled a mean value-weighted C.A.R. of 1.44% (significant at 10%) for the 11-day window (−10, 0); however, Cybo-Ottone and Murgia (2000) observed 2.86%, significant at 1%; yet the two results are not significantly different.

Pre-bid event windows of (−1;+1) and (−1; 0) show that shareholders are getting negative returns of 11% and 11% respectively in this study. Zhang (1995) revealed that the weighted average C.A.R. for five days (−2;+2) is about 7%, whereas Cybo-Ottone and Murgia (2000) found a mean around 3%. These two results are significantly different at the 1% level. However, the closest set of the period in this study (−1;+1) realised −11.7% C.A.R. which in not statistically significant.

Moving towards the results of the post-bid period (0;+1) and (+1;+7), the shareholders of the acquiring banks get negative returns of 16%, 4% and 6% respectively. Houston and Ryngaert (1994) showed the average value of weighted C.A.R. of 0.4% for a five-day window (−4; 0). The nearest event window by Cybo-Ottone and Murgia (2000) showed the average of 2.9%, significant at 5%.

**Table 1.** Portfolio C.A.R.s of event sub-periods.

| Event sub-periods | C.A.R.s (%) | T test |
|---|---|---|
| (−7,−1) | 13.211 | 0.365 |
| (−1,+1) | −11.742 | −0.453 |
| (−1,0) | −11.310 | −0.322 |
| (0,+1) | −16.231 | −0.610 |
| (+1,+7) | −4.138 | −0.622 |
| (−7,+7) | −6.725 | −0.254 |

Notes: Table 1 reports C.A.R.s for bidder banks over for different sets of event windows. Abnormal returns are estimated using the market model $AR_{it} = R_{it} - E(R_{it})$. For any given security i the market model $R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}$, where $\alpha_i$ and $\beta_i$ are estimated by running an O.L.S. regression over the estimation window. C.A.R. was calculated through $CAR_i(t_1, t_2) = \sum_{\tau1=\tau2}^{\tau2} AR_{it}$. *, **, and *** indicate statistical significance at 90, 95 and 99% level of significance, respectively.
Source: Authors' calculations.

The abnormal return of the whole period in this study (−7;+7) is also negative (−6.7%), depicting a sign of wealth deterioration of the acquiring bank shareholders in the entire portfolio. All the *t* values are not significant for the entire sub-periods at the 5% significance level. This means that the returns earned pre- and post-announcement are not statistically significant from the returns around the announcement.

The C.A.R. results for the cross-border, domestic and the entire portfolio for each day is shown in the Table 2 and show that average abnormal return of the entire portfolio to the acquiring shareholders for (*t*−7), (*t*−1), (*t*0), (*t*+1), (*t*+2) and (*t*+7) come out to be significant at 5% for (*t*-7) and 1% for all others. The overall trend in this window is that the returns are insignificant in the pre-bid period. However, most of the C.A.R.s are statistically significant in the post-bid period. This situation concludes that acquisitions do create (short-term) abnormal returns for acquiring firm shareholders around the period of the acquisition announcement.

Asimakopoulos and Athanasoglou (2013) and Houston et al. (2001) also found that acquiring shareholders earn negative but non-significant abnormal returns from merger deals. Jenson and Ruback (1983) concluded that the returns for shareholders of the acquiring firms were close to zero. Andrade, Mitchell, and Stafford (2001) revealed that average abnormal return to acquiring shareholders were equal to −0.7% which is very close to the findings of this study, i.e., −0.44%, but both of these results are not statistically significant to conclude whether acquiring shareholders were losers or winners in the acquisition game. Moeller, Schlingemann, and Stulz (2005) revealed that the average abnormal return to the shareholders acquiring firms were 1.1% over the period. Andrade et al. (2001) found that the average abnormal returns for approximately 4,000 completed financial and non-financial mergers was −3.8% for acquirer which also supports the result of this study the large amount of loss in Andrade et al. (2001) could be due to large number of firms.

**Table 2.** Cross-border, domestic, portfolio C.A.R.s and cumulative average abnormal returns (C.A.A.R.).

| Event window | Cross-border C.A.R.s (%) | T test | Domestic C.A.R.s (%) | T test | Portfolio C.A.R.s (%) | T test |
|---|---|---|---|---|---|---|
| t-7 | −8.083 | −1.107 | 1.419 | 0.484 | −6.664 | 1.988** |
| t-6 | 8.676 | 2.154** | 3.465 | 0.610 | 12.141 | 1.345 |
| t-5 | −16.549 | −1.245 | −4.232 | −1.416 | −20.781 | −0.974 |
| t-4 | −6.609 | −1.054 | −0.228 | −0.066 | −6.837 | −0.619 |
| t-3 | −0.033 | −0.025 | 6.231 | 6.587*** | 6.198 | 0.571 |
| t-2 | 6.777 | 0.784 | 17.888 | 2.532*** | 24.665 | 1.282 |
| t-1 | 1.982 | 0.549 | 2.507 | 0.434 | 4.489 | 4.932*** |
| t = 0 | −1.477 | −0.971 | −14.321 | −1.028 | −15.799 | 5.000*** |
| t+1 | −7.658 | −2.404** | 7.226 | 1.139 | −0.432 | 4.898*** |
| t+2 | 0.370 | 0.106 | −2.112 | −0.320 | −1.743 | 2.570*** |
| t+3 | −2.436 | −0.657 | 4.197 | 1.210 | 1.761 | 0.153 |
| t+4 | −5.896 | −1.305 | 5.159 | 1.441 | −0.737 | −0.038 |
| t+5 | 1.288 | 0.310 | 0.458 | 0.207 | 1.746 | 1.215 |
| t+6 | 3.954 | 1.672* | −2.745 | −0.318 | 1.210 | 0.104 |
| t+7 | −5.454 | −0.913 | −0.490 | −0.078 | −5.944 | 2.597*** |
| CAAR | −2.076 | −0.273 | 1.628 | 1.987** | −0.448 | −0.944 |

Notes: Table 2 reports cumulative abnormal returns for bidder banks over 15-day event windows (*t*−7; *t*+7). U.K. banks in domestic acquisitions during 2006–2013 are compared to U.K. banks in cross-border acquisitions during the same period. Abnormal returns are estimated using the market model, i.e., $AR_{it} = R_{it} − E(R_{it})$. For any given security *i* the market model is $R_{it} = α_i + β_i R_{mt} + ε_{it}$, where $α_i$ and $β_i$ are estimated by running an ordinary least-square regression over the estimation window. C.A.R. was calculated through $CAR_i(t_1, t_2) = \sum_{τ1=τ2}^{τ2} AR_{it}$. *, ** and *** indicate statistical significance at 90%, 95% and 99% level of significance respectively.
Source: Authors' calculations.

The C.A.R.s of the entire portfolio, especially on (*t*–7), (*t*–1), (*t*0), (*t*+1), (*t*+2) and (*t*+7), gave significant results. It can be concluded that on average, shareholders of the acquiring firms experience negative returns. Conn (2003) concluded that there is the majority of nil or negative cumulative abnormal returns for acquiring firms for both the U.S. and the U.K. These results are analogous to (Andrade et al., 2001; Sudarsanam & Mahate, 2003) for the U.S. and the U.K. respectively.

The results of the test conducted on U.K. acquiring domestic banks reveals higher abnormal returns as compared to U.K. banks acquiring cross-border banks of the E.U. as shown in Table 2. In addition to that, when U.K. banks acquire U.K. banks, the acquirer returns seem to be positive for most of the pre-bid and post-bid period. The average C.A.R. for the domestic acquisition is significantly positive, 1.628%, at 5%. Feito-Ruiz and Menéndez-Requejo (2011) also found that cumulative average abnormal returns (C.A.A.R.) for the shareholders of acquiring firms for the whole sample is 0.99%, in the period (−1;+1), and was found statistically significant. Daily domestic C.A.R.s for (*t*–3) and (*t*–2) are positive and significant at the 1% significance level as compared to C.A.R.s for cross- border acquisition for the same days. However, for the event windows of (*t*–6) and (*t*+6), cross-border returns are higher as well as significant at 5% and 10% respectively, as compared to domestic returns for the same days. This shows that that the domestic abnormal returns are significantly higher than and dissimilar to the cross-border abnormal returns. Few studies did not support the above results and found significant negative abnormal returns of –0.99% over both the pre-announcement and post-acquisition period (Conn, 2003; Sudarsanam & Mahate, 2003).

Furthermore, investigation of the portfolio of U.K. banks acquiring cross-border banks in the E.U. shows the insignificant average C.A.R. of –2.08%. Thus, it cannot be concluded that the shareholders of acquiring banks create wealth in regard to the acquiring announcement. The explanation of numerous insignificant results could be due to too small abnormal returns for test detection, as Bartholdy, Olson, and Peare (2007) suggested that the abnormal returns need to be above 2% for each day in the event window. Amihud, DeLong, and Saunders (2002) showed that banks involved in international acquisitions realise negative abnormal returns as found in this study, but they are not as negative as in domestic acquisitions.

Figure 1 shows that on average domestic acquisitions have higher returns than cross-border acquisitions. A significant change in returns can be seen after the date of the announcement. It could be due to mispricing, speculation or expectations. Positive returns in cross-border acquisitions can be seen for (*t*–6), (*t*–2), (*t*–1), (*t*+2), (*t*+5) and (*t*+6), and these results are analogous to Doukas and Travlos (1988), who investigated the effect of cross-border acquisitions on the security prices of U.S. acquiring firms and found that shareholders of the bidders enjoy significant positive abnormal returns when firms grow into new business and geographic areas. Conn (2003) also showed insignificant positive returns in cross-border acquisitions. The average C.A.R. of the domestic acquisition comes out to be significantly positive in depicting the shareholder wealth gains, but for cross-border acquisitions it is insignificantly negative, showing wealth deterioration. The common thing in both the graphs is that there is a steep gradient around the announcement days, which suggests that information might have leaked before the announcement or it might be an instant market reaction or scepticism. On the whole, the returns for cross-border acquisitions are inferior to domestic acquisitions. Thus, the internalisation theory of cross-border
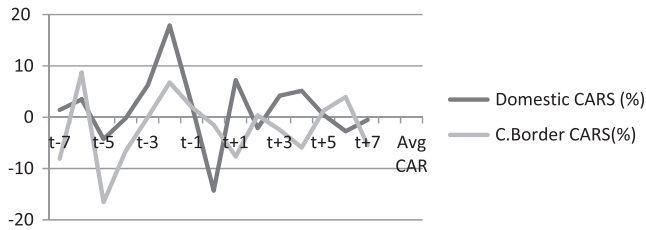
**Figure 1.** C.A.R.s for domestic and cross-border acquisitions. Source: Created by authors.
Note: The above figure shows acquirers' C.A.R.s over the period from seven days prior and seven days after the bid announcement; Day 0. The overall bidders' returns, i.e., for their domestic and cross-border acquisitions, have been reported.

mergers is held up (Conn, 2003). Cybo-Ottone and Murgia's (2000) results seem to signify that positive gains in shareholder wealth are connected to the average domestic bank–to-bank M. & A. and to banking deals.

## 5. Limitations and future research

We investigated the short-term bidder returns. The event window can also be increased to see the long-term bidder returns. There is room to include more sample of other near countries such as the European Free Trade Association (E.F.T.A.) and other European countries, or even Asian markets, as the Asian financial crisis also led to many acquisitions. The research concludes that domestic bidders outperform when acquiring domestic banks. This could be attributed to the additional risks that business transactions carry while cross-border transaction and is not present in domestic transactions. These risks arise as a result of differences in economic structures, policies, socio-political environment and currencies. Further studies can explain the possible risks that led to negative returns in cross-border acquisition. Studies can also see the impact of country specific determinants on the M. & A. value in different stages of economics cycle.

## 6. Conclusion

The focus of this article is on the subject of shareholders' returns of the acquiring banks; more specifically, whether the acquisition by U.K. banks have been wealth-creating or wealth-reducing events for the shareholders. The returns were analysed for the period 2006–2013. The study also highlights the difference in the abnormal returns between domestic bank-to-bank acquisitions and cross-border bank-to-bank acquisitions. Using the event study methodology and data extracted from Thomson One Banker and DataStream databases, research questions were tested using t statistics to detect the significant differences in abnormal returns across the two portfolios, i.e., domestic and cross-border.

The empirical evidence shows insignificant negative average abnormal returns over the entire event window by –0.44% for the entire portfolio. Andrade et al. (2001) and Jensen and Ruback (1983) support the results that the acquirer's shareholders experience insignificant negative returns or the returns are close to zero respectively. Moeller et al. (2005) argued that the average abnormal return to the shareholders of acquiring firms is 1.1% and is near to the statistically significant findings of this study for the average domestic C.A.R. of portfolio. Now, moving to the results of the portfolio of U.K. banks acquiring cross-border banks,

nothing can be concluded about the returns of the shareholders of acquiring banks, since results did not come out to be statistically significant and is analogous to the earlier empirical results of Conn (2003). This could be explained by the motive theories; for instance, one would anticipate a negative return if the market interprets too high a bidding price, possibly as a result of managers' over-optimism or agency basis.

The use of asingle currency, the euro, has laid added stress on E.U. firms, as it abolished all currency risks within Europe, which decreases the home bias of investors (Mateev & Andonov, 2016). Public policy (after crisis) should now focus on the rise of huge and extremely interrelated banks that has transmuted the financial system and are considered 'too important to fail'. The probability of system-wide contamination has increased in the case of distress (Davies, Richardson, Katinaite, & Manning, 2010).

The recent hot debate on 'Brexit' is on whether the U.K. should exit European Union or not. If it does, how will it effect the whole scheme of U.K. banks acquiring domestic banks and cross-border banks within E.U.? There is a very high probability that the U.K. will exit from the E.U. following the referendum on 23 June 2016 (Harmer, 2016). However, despite this fear, the U.K. has outpaced Europe for early-stage M. & A. activity, and this activity is likely to increase in the next six months (Neuwirth, 2016). The stakes are high, as Goldman Sachs and Citigroup recently cautioned that if the U.K. leaves E.U., growth and the pound value of the pound would further decrease (The Brexit delusion, 2016). Moreover, Passporting of British banks into the E.U. would not be likely after a Brexit except there is an exceptional arrangement (Douglas-Henry, Kamerling, & Macpherson, 2015).

In the case of Brexit, E.U. merger regulator rules would remain intact where the jurisdictional tests apply. Yet, there will be two main differences. First, the one–stop-shop rule will not apply, i.e., businesses could be encountered to take separate merger clearances from the U.K. and the E.U. competition authorities. This would increase supervisory ambiguity and also transactional costs. Second, the U.K. would lose its power to 'call in' a merger for U.K. concern where the effects of an E.U. merger were likely to be qualified in the U.K. (Shepherd & Wedderburn, 2015).

It can be concluded that, on average, shareholders of the acquiring banks experience negative returns and acquisitions do create (short-term) abnormal returns for acquiring firm shareholders around the period of the acquisition announcement. Moreover, shareholders gain positive abnormal returns in the case of domestic acquisition; but vice versa in cross-border acquisition. According to Bernad et al. (2010), whichever method is used, the performance effects of merger and acquisitions can only be valued in the long run. The results from the test conducted on the portfolio of U.K. acquiring domestic banks show higher abnormal returns as compared to U.K. acquiring cross-border banks.

## Disclosure statement

## ORCID

*Samra Chaudary* http://orcid.org/0000-0002-4498-6444
*Nawazish Mirza* http://orcid.org/0000-0003-4265-9519

# References

Agbloyor, E. K., Abor, J., Adjasi, C. K., & Yawson, A. (2012). Domestic banking sector development and cross border mergers and acquisitions in Africa. *Review of Development Finance, 2*, 32–42.

Aiginger, K., & Tichy, G. (1991). Small firms and the merger mania. *Small Business Economics, 3*, 83–101.

Amihud, Y., DeLong, G. L., & Saunders, A. (2002). The effects of cross-border bank mergers on bank risk and value. *Journal of International Money and Finance, 21*, 857–877.

Andrade, G., Mitchell, M. L., & Stafford, E. (2001). *New evidence and perspectives on mergers* (HBS Finance Working Paper No. 01-070). Retrieved from SSRN.com http://papers.ssrn.com/sol3/papers.cfm?abstract_id=269313

Asimakopoulos, I., & Athanasoglou, P. P. (2013). Revisiting the merger and acquisition performance of European banks. *International Review of Financial Analysis, 29*, 237–249.

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

Bartholdy, J., Olson, D., & Peare, P. (2007). Conducting event studies on a small stock exchange. *The European Journal of Finance, 13*, 227–252.

Beladi, H., Chakrabarti, A., & Marjit, S. (2013). Cross-border mergers in vertically related industries. *European Economic Review, 59*, 97–108.

Bernad, C., Fuentelsaz, L., & Gómez, J. (2010). The effect of mergers and acquisitions on productivity: An empirical application to Spanish banking. *Omega, 38*, 283–293.

Bhabra, H. S., & Huang, J. (2013). An empirical investigation of mergers and acquisitions by Chinese listed companies, 1997–2007. *Journal of Multinational Financial Management, 23*, 186–207.

Bradley, M. (1980). Interfirm tender offers and the market for corporate control. *Journal of business, 53*, 345–376.

Campa, J. M., & Hernando, I. (2006). M. & A.s performance in the European financial industry. *Journal of Banking and Finance, 30*, 3367–3392.

Conn, R. L. (2003). International mergers: Review of literature and clinical projects. *Journal of Financial Education, 29*, 1–27.

Cybo-Ottone, A., & Murgia, M. (2000). Mergers and shareholder wealth in European banking. *Journal of Banking & Finance, 24*, 831–859.

Davies, R., Richardson, P., Katinaite, V., & Manning, M. J. (2010). Evolution of the UK banking system. *Bank of England Quarterly Bulletin, Q4*, 321–332.

DeLong, G. (2003). Does long-term performance of mergers match market expectations? Evidence from the US banking industry. *Financial Management, 32*, 5–25.

Douglas-Henry, J. P., Kamerling, A., & Macpherson, C. (2015, October 13). Passporting into the EU from the UK would not be possible following a Brexit (unless a special arrangement could be negotiated. *DLA PIPER*. Retrieved from. https://www.dlapiper.com/en/uk/insights/publications/2015/10/banking-disputes-quarterly/brexit/

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

Feito-Ruiz, I., & Menéndez-Requejo, S. (2011). Cross-border mergers and acquisitions in different legal environments. *International Review of Law and Economics, 31*, 169–187.

Frame, W. S., & Lastrapes, W. D. (1998). Abnormal returns in the acquisition market: The case of bank holding companies, 1990–1993. *Journal of Financial Services Research, 14*, 145–163.

Fraser, D. R., & Zhang, H. (2009). Mergers and long-term corporate performance: Evidence from cross-border bank acquisitions. *Journal of Money, Credit and Banking, 41*, 1503–1513.

Harmer, J. (2016, March 10). Economist: 'We don't know what Brexit impact will be'. *The Caterer*. Retrieved from https://www.thecaterer.com/articles/366241/economist-we-dont-know-what-brexit-impact-will-be

Houston, J. F., & Ryngaert, M. D. (1994). The overall gains from large bank mergers. *Journal of Banking & Finance, 18*, 1155–1176.

Houston, J. F., James, C. M., & Ryngaert, M. D. (2001). Where do merger gains come from? Bank mergers from the perspective of insiders and outsiders. *Journal of Financial Economics, 60*, 285–331.

Jensen, M. C., & Ruback, R. S. (1983). The market for corporate control: The scientific evidence. *Journal of Financial Economics, 11*, 5–50.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1998). Law and finance. *Journal of Political Economy, 106*, 1113–1155.

Lozano-Vivas, A., Kumbhakar, S., Fethi, M., & Shaban, M. (2011). Consolidation in the European banking industry: How effective is it? *Journal of Productivity Analysis, 36*, 247–261.

MacKinlay, A. C. (1997). Event studies in economics and finance. *Journal of economic literature, 35*, 13–39.

Martynova, M., & Renneboog, L. (2008). A century of corporate takeovers: What have we learned and where do we stand? *Journal of Banking & Finance, 32*, 2148–2177.

Mateev, M., & Andonov, K. (2016). Do cross-border and domestic bidding firms perform differently? New evidence from continental Europe and the UK. *Research in International Business and Finance, 37*, 327–349.

Moeller, S. B., Schlingemann, F. P., & Stulz, R. M. (2005). Wealth destruction on a massive scale? A study of acquiring-firm returns in the recent merger wave. *The Journal of Finance, 60*, 757–782.

Neuwirth, S. (2016, January 26). UK outpaces Europe for early-stage mergers and acquisitions activity despite Brexit fears. *City A.M.* Retrieved from http://www.cityam.com/233087/uk-outperforms-europe-for-early-stage-mergers-and-acquisitions-activity-despite-brexit-fears

Piloff, S. J. (1996). Performance changes and shareholder wealth creation associated with mergers of publicly traded banking institutions. *Journal of Money, Credit and Banking, 28*, 294–310.

Santillán-Salgado, R. J. (2011). Banking concentration in the European Union during the last fifteen years. *Panoeconomicus, 2*, 245–266.

Shepherd, & Wedderburn. (2015). Brexit analysis bulletin. Retrieved from https://www.shepwedd.co.uk/sites/default/files/Brexit%20bulletin.pdf

Strong, N. (1992). Modelling abnormal returns: A review article. *Journal of Business Finance & Accounting, 19*, 533–553.

Sudarsanam, S., & Mahate, A. A. (2003). Glamour acquirers, method of payment and post-acquisition performance: The UK evidence. *Journal of Business Finance & Accounting, 30*, 299–342.

The Brexit delusion. (2016, January 24). *The Economist*. Retrieved from http://www.economist.com/news/briefing/21693568-david-cameron-will-struggle-win-referendum-britains-eu-membership-if-he-loses

UNCTAD. (2000). *World investment report, cross-border mergers and acquisitions and development*. New York and Geneva: United Nations.

Zhang, H. (1995). Wealth effects of US bank takeovers. *Applied Financial Economics, 5*, 329–336.