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MERGERS AND ACQUISITIONS IN THE BANKING SECTOR

An Empirical Review of the Impact of Merger Announcement on Abnormal Returns

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ABSTRACT

This dissertation reviews and summarizes previous findings of merger announcement related abnormal returns. A sample of 183 event windows is collected and analyzed to observe cross-country differences. The results are discussed under five specific topics: location, payment method, strategic focus, size and corporate governance. The findings of this review indicate that target banks enjoy high abnormal returns both in the U.S. and in Europe. Bidding banks seem to incur negative returns on average while small value creation was observed for the merged entity. Target banks are generating higher returns in USA while bidding banks show better performance in Europe. A minor indication of decreasing U.S. bank returns is observed as the measurement period increases. Geographical and activity focus as well as use of cash as a payment method are seen to contribute to the higher abnormal returns.

Mergers and Acquisitions in the Banking Sector: An Empirical Review of the Impact of Merger Announcement on Abnormal Returns

Keywords: Mergers, Banks, Abnormal Returns, Market Reaction

1. Introduction

The objective of this work project (WP) is to conduct an extensive empirical review by answering the following research question: "*What conclusions and suggestions for research can be made by reviewing existing findings on abnormal returns related to bank merger announcements?*". The small amount of reviews and the scattered nature of previous findings make this an interesting subject to study.

The existing literature on bank merger effects can be divided into two approaches: 1.) the examination of efficiency gains through financial ratios or cost and profit functions[1] and 2.) the study of stock market reactions to merger announcements. This review focuses on the latter. Previous efforts to examine bank merger related abnormal returns are vast especially for the American market but few studies holistically review and analyze these results. Amel et al. (2004) and Pilloff and Santomero (1997) conduct a review of merger related efficiency effects. They provide a brief overview of abnormal returns without categorizing results from previous studies. Rhoades (1994) summarizes previous merger performance studies in tables but does not directly refer to numerical results of these works.

More detailed reviews on bank merger related abnormal returns are presented in subsections of empirical and theoretical papers. Becher (2000) collects 6 observations without distinguishing between event windows lengths. Hagendorff, Collins and Keasey (2007b) collect 15 observations[2] from previous studies and present six observations for the (-1/+1) window allowing initial cross-country comparisons. Beitel and Schiereck (2001) offer the most extensive review with a table of 31 observations[3] but their cross-country comparison is limited due to the different window lengths between Europe and USA.

[1] *See e.g. Vander Vennet (1996) and Altunbas and Marques (2008) for Europe and Berger, Hancock and Humphrey (1993) and Akhavein, Berger and Humphrey (1997) for U.S.*
[2] *12 American/3 European*
[3] *27 American / 2 European / 1 Norwegian /1 German-American*

Most recently Yang and Liu (2008) review 29 observations[4] from previous studies. Regarding existing studies the small amount of comparable observations as well as organization of the data according to the publication year instead of the event window length and the lack of consideration for specific transaction related characteristics hinder the discovery of patterns and differences to the full extent. Thus, the existing evidence can be considered incomplete.

This WP will provide a holistic examination of previous findings while addressing the identified shortcomings. First, a brief and illustrative review of the methods for measuring abnormal returns (ARs) and cumulative abnormal returns (CARs) is presented. This is followed by a discussion of the five determining factors of CARs: 1. location, 2. method of payment, 3. strategy focus, 4. size and 5. corporate governance. The division of results is important as previous empirical works address these factors and their examination might provide valuable findings for investors and bank managers indicating what type of mergers produce the highest returns.

Location incorporates three aspects identified in previous empirical works: 1. national differences, 2. interstate vs. intrastate differences and 3. domestic versus cross-border differences. These are important since cross-country variations in e.g. regulations, market structure, market characteristics and culture can effect the generation of CARs. The level of branch overlapping can further impact the resulting cost efficiencies[5]. In this WP a review of 183 different event windows[6] is conducted. Collection of a large sample of mergers and acquisitions is important for comparing abnormal returns across time. However, this review does not distinguish the results between mergers and acquisitions. Due to previous findings[7] of negative market reaction to issues of new shares

[4] *26 American/ 2 European / 1 Norwegian*
[5] *See Becher and Campbell, 2005*
[6] *Presented in Table 9 in the Appendices*
[7] *See Krasker, 1996*

distinguishing the results between different payment methods is important. The general view regards to strategy tends to support mergers with activity focus and concentration on core competences. However, in banking diversification into related industries such as insurance can allow benefits from cross-selling and diversification of risk exposure. The issue of size plays important role in revenue generation as consolidation and centralization of functions can help smaller banks to obtain scale economies. Mergers between larger banks can lead to increased market power and benefits from being too-big-to-fail (TBTF), although diseconomies of scale have also been reported[8]. Consideration of corporate governance related issues accounts for managerial motivations and compensation, which can effect decisions to engage in non-value maximizing mergers and thus potentially destroy shareholder value.

This WP contributes to the existing literature by organizing and categorizing previous findings in a coherent way. Collection and analysis of a large sample allows discovery of cross-country differences. The large amount of observations also enables the study of CARs across time. The findings of this review validate the previous empirical results in the literature and provide a minor indication that U.S. banks returns might decrease as the event window is stretched.

The remainder of this WP is organized according to the following structure: Section 2. covers how to measure abnormal returns and cumulative abnormal returns. Section 3. reviews and discusses previous empirical results under five subsections: 3.1. location, 3.2. method of payment, 3.3. strategy focus, 3.4. size and 3.5. corporate governance. Section 4. concludes the findings of this review and provides suggestions for future research. The terms of return and abnormal return are used interchangeably in the following sections.

[8] *See Hensel, 2006*

2. Measuring Abnormal Returns

This section reviews the basic methodological approaches used for measuring abnormal returns. The focus is on empirical studies based on the event study methodology. In this methodology researchers consider a sample of selected merger events and then measure the return resulting from the mergers against a pre-determined benchmark to determine the abnormal returns. This benchmark is usually based on a national bank industry index or a general market index such as the S&P 500, NYSE, AMEX or NASDAQ, or a weighted combination of these. A common approach is to apply multivariate regression approaches in order to control for exogenous effects that might distort the benchmark.

2.1. Event Window

Apart from few exceptions, returns are measured on a daily level by using a time interval called an event window. Event windows incorporate a specific number of days around the date of the merger announcement. The date of the merger announcement is often referred as the event date. It is usually the date when the merger is announced in Financial Times or reported to a national regulatory entity.

2.1.1 Length of the Event Window

Caruso and Palmucci (2008) criticize the use of announcement date when studying abnormal returns. They note that in less efficient markets leakages of information can significantly distort the results. Houston and Ryngaert (2007) address this by setting the announcement date as the information leakage date. Caruso and Palmucci (2008) find that by using the rumor date instead of the announcement date the overall market value creation can actually alter from negative to positive. Other studies have tried to address this problem by incorporating pre-announcement event days in the event windows. The use of pre-announcement event days is beneficial as it can reveal leakages of information, market anticipation or miss-identification of the correct event date (Whalen, 1997).

Shorter windows might fail to capture efficiency gains related to the merger as rationalization of branches, integration of data systems, refocusing of lending policies and providing new product training for the target bank can take time to generate the aspired improvements (Amel et al, 2004). On the other hand narrower windows reduce the probability that external events can distort the returns (Whalen, 1997). This review finds a minor indication that the negative returns of U.S. banks might augment as the length of the length of the event window increases[9].

2.2. Testing for Abnormal Returns

The most common approach for testing abnormal returns is a method that was originally presented by Brown and Warner (1985). The calculation of abnormal returns incorporates a model where the return of the market (R_{mt}) and a bank stock (R_{it}) are linearly linked to each other. In this model the abnormal returns (AR_{it}) are determined by subtracting the predicted returns $(\alpha_i + \beta_i R_{mt})$ from the actual realized returns (R_{it}). The α_i and β_i coefficients found within the predicted return formula represent ordinary least square – estimates for the market model parameters of the firm. [I]

I $$AR_{it} = R_{it} - (\hat{\alpha} + \hat{\beta}_i R_{mt})$$

As the samples tend to include more than one bank, it is necessary to calculate the average abnormal returns on a specific day. Baradwaj, Fraser and Furtado (1990) have conducted this using the following formula, which is just a simple average of all of the abnormal returns at a specific time (e.g. merger announcement date ***t -1***).

[II]

$$\overline{AR} = \left(\frac{1}{N_t}\right)\left(\sum_{i=1}^{Nt} AR_{it}\right)$$

In this formula the N_t denotes the number of shares that have a return on day ***t***.

[9] *See Section 3.1.1. and for a comprehensive discussion for determining the appropriate length of the window See Krivin et al. (2003).*

2.3 Calculation of CARs

As the common approach in the literature is to examine event windows, it is necessary to adjust the daily abnormal returns (AR) according to the chosen window length. This is done by calculating cumulative abnormal returns (CARs) for the time interval that has been decided. The CARs are calculated by summing up the average daily abnormal returns according to the length of the event window. The following formula gives the CARs for one of the most popular event windows -1/+1, where ***t*** denotes the date of the merger announcement. [III]

$$\overline{CAR_{t-1,t+1}} = \sum_{t-1}^{t+1} \overline{AR}_{it}$$

The procedure explained above is able to provide the CARs for the bidder and the target bank. However, in order to calculate the returns for the merged entity further steps have to be taken. The combined return for the target and the bidder is achieved by calculating a weighted average of the CARs that have been generated due to the merger. This is illustrated in the following formula by Houston and Ryngaert (1994). [IV]

$$\overline{CAR} = \frac{(V_{i\ (bidder\ )} * CAR_{i\ (bidder\ )}) + (V_{i\ (target\ )} * CAR_{i\ (target\ )})}{(V_{i\ (bidder\ )} + V_{I\ (target\ )})}$$

The common approach seems to be using market value as the weight in this formula. However, some studies have included results with different weighting factors like total assets or total equity as reported in the balance sheet (see e.g. Cybo-Ottone and Murgia, 2000). In case of using market value, the weights are calculated for a date before the actual merger announcement e.g. ***t – 10***. This approach is criticized by Delong (2001) as the resulting value gains might not realize symmetrically between the two parties and thus this presents a risk of positive or negative distortion for the combined results. Becher (2000)

having previously used a simple method of weighting the CARs, later (Becher and Campbell, 2005) addressed Delong's concerns by using her model that accounts for the daily changes in the sum of the acquirer and target bank during the event window, as presented below, with MV denoting market value. [V]

$$\overline{CAR} = \sum_{n=1}^{window\ \ lengt\,h-1} log\,(\frac{MV_{it\ (target\ )} + MV_{it\ (bidder\ )}}{MV_{it-1\ (target\ )} + MV_{it-1\ (bidder\ )}})$$

3. Determinants of CARs

This section discusses CARs under five determining factors[10]. These factors have often been addressed in the empirical literature and a wider examination of them might reveal valuable findings for investors and bank managers indicating what type of mergers produce the highest returns.

3.1. Location

In this first subsection CARs are discussed in relation to location under three topics identified in previous empirical works. Consideration of these location related aspects is important as cross-country variations e.g. in regulations, market structure, market characteristics and culture can influence the CARs.

3.1.1 Cross-Country Comparison[11]

The smaller amount of European observations has limited identification of cross-country patterns and only few studies have compared results between U.S. and non-US sub-samples[12]. Since European results did not start to emerge until the late 1990's there is a real need for cross-country comparisons. Discovery of similarities is important as they might justify the extension of certain U.S. findings to Europe while discovery of differences can propose interesting opportunities for future research.

[10] *1. location, 2. method of payment, 3. strategy focus, 4. size and 5. corporate governance.*
[11] *For summarized results from previous studies see Table 10 in the Appendices*
[12] *See Amihud, Delong and Saunders (2002), Delong (2003b), Hagendorff, Collins and Keasey (2007), Valkonov and Kleimeier (2007)*

3.1.1.1. Return on Target Banks

Previous U.S. studies find higher CARs for the target banks than for the bidders. Similar findings are presented also in European studies[13]. Valkanov and Kleimeier (2007) explain this result by a zero-sum game, where the targets are beneficiaries at the expense of the bidders.

When examining CARs from under 10 day event windows [Graph I] American banks generate most of the CARs that exceed 15% while European banks generate most of the CARs below 5%. The calculated average CAR (13,1%) for the U.S. banks is higher than the European average (9,7%)[14]. Similar finding can be observed with the daily AAR[15] (U.S. 1,6%/ Europe 0,8%)[16] as well as with samples of specific event windows[17]. While European CARs from over 20 day event windows are scattered there seems to be a slight indication of reducing CARs for the U.S. banks as the measurement period increases [Graph I]. The returns of the Italian target banks are more similar to the other European observations while Canadian observations seem to more coincide with their U.S. counterparts. By reviewing the empirical findings it can be concluded that American target banks do generate higher CARs, which has already been found in previous studies[18]. In addition, European and US target banks are seen to have more deviating CARs than the bidders and the merged entity[19].

Ismail and Davidson (2005) suggest that the lower European returns originate from differences in regulatory frameworks and market structure as well as from increased competition following the EU integration. Rad and Van Beek (1999) blame the inflexible European employment markets, which might hinder realization of cost reductions from

[13] *See e.g. Valkonov and Kleimeier (2007), Beitel and Schiereck (2001) and Cybo-Ottone and Murgia (2000*
[14] *For more details see Table 2 in the Appendices*
[15] *Calculated by dividing the sample average CAR with average length of event windows in the sample*
[16] *For more details see Table 2in the Appendices*
[17] *For more details see Table 1in the Appendices*
[18] *See e.g. Valkanov and Kleimeier (2007), Delong (2003b) and Rad and Van Beek (1999)*
[19] *For more details see Table 1 and 2 in the Appendices*

branch office closures and staff reductions. This WP confirms the suggestions of previous reviews and empirical studies regarding the higher CARs of U.S. targets and gives a slight indication that U.S. target bank returns might reduce as the measurement period increases.

3.1.1.2. Return on Bidding Banks

Existing empirical works have established that returns of the bidding banks are significantly lower than of the target banks. The general logic for this is that the market does not believe in the abilities of the bidding banks to achieve the foreseen synergy and efficiency benefits to an extent that would justify the size of the bid premium.

Comparison of CARs from under 15 day event windows [Graph II] shows higher amount of European banks with positive returns and higher amount of U.S. banks with negative CARs. Some of these negative U.S. CARs even exceed -2%. The calculated average CAR supports the better performance of the European banks (0,3%) against the American banks (-1,7%)[20]. This difference diminishes with daily AARs but is still observable ($_{Europe}$ 0,02% / $_{U.S.}$ -0,2%)[21]. European banks are also seen to generate higher returns across common event windows: 0/0, -1/+1 and -5/+5[22]. The minimum U.S. CARs [Graph II] seem to decline when the event window is extended to 20 days and over. This can be also observed when moving from the 0/0 and -1/+1 event windows to the -5/+5 event window[23]. Madura and Wiant (1994) provide further evidence for the declining CARs by measuring abnormal returns over a 36 month window and observing a highly negative return of -27,1%. From reviewing all this evidence it can be concluded that European bidding banks do outperform their American counterparts.

Previous European studies observe positive CARs or no returns when using short event windows (Beitel and Schiereck, 2001 and Cybo-Ottone and Murgia, 2000). Valkanov and

[20] *For more details see Table 2 in the Appendices*
[21] *For more details see Table 2 in the Appendices*
[22] *For more details see Table 1 in the Appendices*
[23] *For more details see Table 1. in the Appendices*

Kleimeier (2007) make a similar European finding but later discover that when extending the event window the returns turn negative. They suggest that this is due to the market's reconsideration of the bank value when signs of potential integration challenges start to arise. This might also be a partial explanation for the declining U.S. CARs. Amel et al. (2004) suggest that the poor performance of bidders could be due to using short event windows that cannot capture the efficiency gains, which might require longer time to realize. This might either indicate that investors do not believe in the bidding bank's ability to achieve the gains or that the time of achieving the gains exceeds the investors' time horizon, suggesting potential inefficiency of the market. This WP confirms previous findings[24] of higher returns by European bidding banks and finds a minor indication that as the measurement period increases the minimum CAR observations of U.S. bidding banks turn more negative.

3.1.1.3. Return on Merged Entity

The general view regarding returns on the merged entity suggests that there is no overall value creation. It is argued that this is due to the losses of the bidding bank offsetting the gains of the target (Amel et al, 2004 and Valkanov and Kleimeier, 2007). Moreover, U.S. banks have been observed to generate higher CARs in the early 90's when bidding banks did not incur negative CARs (Valkanov and Kleimeier, 2007).

The U.S. returns are high in under 5 day event windows, reaching almost 4% [Graph III]. The maximum U.S. CARs reduce when extending the window to 10 days and continue to decrease towards the 20 and 30 day windows. None of the European observations in Graph III show a negative return while there are 7 observations of negative American returns. In addition to having higher deviation, the U.S. average return (1,10%) is also

[24] *See e.g. Delong, 2003b*

lower from the European average (1,76%) [25]. However, the higher deviation and shorter window length of U.S. observations can distort the results and no significant difference can be observed between the U.S. (1,1%) and European (1,14%) daily AARs[26]. From examination of all these findings it can be concluded that although the daily AARs do not present clear differences, the 7 negative U.S. CARs and the reducing maximum U.S. CARs could indicate lower performance for American mergers. Previous studies also observe smaller CARs for American mergers (Delong, 2003b and Cybo-Ottone and Murgia, 2000). While the target CARs are very high often above 10% and even exceeding 20%, the CARs for the merged entities do not generally exceed 4%. The two observations exceeding the 4% limit are likely due to geographical coverage[27] and the American observation by Zhang (1995) might be explained by methodological differences. This WP provides further evidence for the better performance of merged European banks and finds that maximum returns of U.S. banks decrease as the measurement period increases. The better performance of European merged banks likely originates from better performance of the bidders that due to their larger size have more weight in the calculation of combined returns.

3.1.2. Intrastate vs. Interstate Mergers[28]

Comparison of CARs between interstate and intrastate mergers can be seen interesting as geographical diversification tends entail more limited possibilities for cost reduction. On the other hand the market might react positively to cross-state expansions presenting high growth potential. In the existing literature there seems to be different views on the definition of intrastate mergers and thus some researchers have decided to use two different approaches. Becher (2000) offers the following general definition:

[25] *Average CAR (US) 1,10% vs. 1,76% (Europe)*
[26] *See Table 1in the Appendices for more details*
[27] *Djankov, Jindra and Klapper (2005) when studying East-Asian bank insolvencies and Caruso and Palmucci (2008) when studying inefficient Italian market*
[28] *For summarized results from previous studies see Table 3 in the Appendices*

> "*Intrastate mergers are defined as those mergers that take place between targets and bidders within the same state. Interstate mergers are defined as those mergers that take place among bidder firms that are not in the same state as the target firm they are acquiring.*"

Houston and Ryngaert (1994) have criticized these types of definitions as they don't consider the possibility of the bidding bank having operations in the state of the target. Thus they propose that calculation of overlapping branch offices in a specific city can be seen more appropriate, as shown in the formula below[29]: [VI]

$$OVERLAP = \frac{\sum_{i=1}^{n}(T_i,\ B_i)}{\sum_{i=1}^{n}(T_i + B_i)}$$

Several empirical studies have found intrastate mergers performing better than interstate mergers by producing higher CARs for the target banks[30], the bidding banks[31] and the merged entity[32]. The intrastate merger CARs for the targets are quite significant ranging from 11,00% (-1/0) to 24,6% (-4/+1). The extent to which intrastate mergers can create higher returns varies between studies. While Becher and Campbell (2005) observe smaller difference ($_{intra}$16,69% / $_{inter}$13,98%) Houston, James and Ryngaert (2001) find stronger evidence ($_{intra}$24,62 / $_{inter}$16,17%). The bidding banks generate negative CARs across the line but these losses are smaller in case of the intrastate mergers. Siems (1996) actually finds that the top 5 "branch overlap mergers" produce positive bidder CARs of 2,80% against the negative CARs of -1,58% from the bottom 5 "branch overlap mergers". Becher and Campbell (2005) find intrastate mergers producing more negative CARs but they observe that the difference ($_{intra}$-1,59% /$_{inter}$ -1,29%) is not statistically significant. Regarding the merged entity, Whalen (1997) finds that intrastate mergers outperform the overall sample within the -2/0 window ($_{intra}$1,49% / 1,22%) and underperforms it with the -1/0 window ($_{intra}$0,78% / 0,94%). Becher and Campbell (2005) provide further evidence

[29] *In the formula n denotes the total number of cities where the target or the bidder have offices, Ti denotes the total number of offices the target has in city I and Bi denotes the corresponding figure for the bidder.*
[30] *See Cornett and Tehranian (1992), Siems (1996), Houston, James and Ryngaert (2001),Delong (2001) and Becher and Campbell (2005).*
[31] *See Baradwaj, Dubofsky and Fraser (1991), Siems (1996), Houston, James and Ryangaert (2001), Cornett et al. (2003)*
[32] *See Becher and Campbell (2005)*

that intrastate mergers generate higher CARs for the merged banks ($_{intra}$0,87% / $_{inter}$0,79%). Moreover, with few exceptions, Delong (2001, 2003a) finds that the target CARs increase across the line when the companies follow a strategy of activity focus or intrastate focus.

From reviewing all this empirical evidence it can be concluded that the existing results clearly support intrastate mergers. This is in line with the conclusion of Houston, James and Ryngaert (2001) who observe that differences between intrastate and interstate are significant and argue that most bank merger value gains arise from elimination of overlapping operations, consolidation of backroom operations and other opportunities to cut costs. They further note that potential for revenue enhancement is not valued as highly in the market.

3.1.3 Domestic vs. Cross-Country Mergers[33]

Comparison of domestic and cross-country mergers can be seen interesting as cross-border transactions are exposed to a variety of challenges ranging from different language and culture to regulatory and market inconsistencies. Moreover, limited branch overlaps and cost cutting opportunities can also impact the CARs.

Campa and Hernando (2008) study the differences between these two types of mergers and find that target banks generate lower CARs with domestic mergers when using the -1/+1 event window ($_{dom}$3,22% / $_{cross}$3,82%). Similar finding with targets is made by Cybo-Ottone and Murgia (2000) when using a longer -10/0 event window but the returns are not considered statistically significant. The higher target returns in cross-country mergers might be due to larger bid premiums paid by foreign banks. The results regarding bidding banks in cross-border deals are conflicting. Cybo-Ottone and Murgia (2000) report higher and statistically significant bidder CARs for cross-border deals ($_{cross}$1,38% / $_{dom.}$-0,49%) while Beitel and Schiereck (2001) and Bessler and Murtagh (2002) present contradictory

[33] *See Table 4 in the Appendices for summarized results from previous studies*

results. Amihud, Delong and Saunders (2002) discover higher negative bidder CARs when European banks merge with Non-European banks ($_{cross}$-1,29% / $_{dom}$-0,16%). Ismail and Davidson (2005) also suggest that the market might consider more favorably mergers taking place within Europe. Soussa and Wheeler (2006) find that this does not apply to the expansion of U.K. banks to the East European markets. Comparable results by Campa and Hernando (2008) are inconclusive even when median CARs and the percentage of positive returns are examined. However, Ismail and Davidson (2005) find that purely domestic mergers generate higher returns with shorter event windows but with longer windows the findings turn to opposite. They also note that insignificance of the results within several of their event windows can be a sign of investors still having too many difficulties in assessing the benefits of cross-border diversification.

Regarding the merged entity, a study by Rad and Van Beek (1999) gives an indication that mergers with domestic focus lead to less negative CARs within the -1/+1 window ($_{dom}$-0,12% / $_{cross}$-0,41%). Cybo-Ottone and Murgia (2000) find similar evidence when observing a sample with high yearly overlap, although they establish significance only for the cross-border CARs. They explain the lower return from cross-border deals by the smaller deal size and the smaller size of the target banks. Campa and Hernando (2008) find higher average but lower median CARs for the merged banks in cross-border deals. This can indicate existence of extreme returns that augment the mean CARs for the combined entity. Moreover, the domestic deals are observed to have higher percentage of positive returns. Campa and Hernando (2008) rationalize this result with higher potential synergy effects and competition impact of domestic deals.

Review of all of these findings suggests that purely domestic mergers tend to generate higher returns for the bidder and the merged entity, although several inconsistencies are observed. The few findings on target banks seem to support cross-country mergers, which

might be due to potentially higher bid premiums paid by foreign banks. The findings regarding the bidder and merged bank coincide with the results of Lepetit, Patry and Rous (2004) who by using a bivariate GARCH-model find that market reacts positively to mergers with geographical specialization. This reaction is suggested to result from expected scale economies and increased market power.

3.2. Method of Payment[34]

The chosen payment method can impact the way how the market reacts to the merger announcement. Myers and Majluf (1984) argue that it is more favorable for companies to issue equity when their shares are overvalued. Krasker (1996) further states that investors should interpret new issues unfavorably and larger issues even more unfavorably than smaller ones.

Regarding target banks Cornett and De (1991b) observe cash deals (12,55%) generating higher CARs than stock (9,46%) or mixed payment deals (6,28%). Grullon, Michaely and Swary (1997) similarly observe the highest returns for cash deals (10,95%) with the exception of mixed payments (9,82%) performing slightly better than pure stock deals (9,74%). This is in line with Becher's (2000) results, which indicate that mix-payment transactions rate significantly better compared to pure stock deals.

When studying bidding banks Sushka and Bendeck (1988) find that equity transactions generate higher negative CARs (-1,94%) than pure cash transactions (-0,80%). Although the cash observation is not statistically significant this finding implies that the market might view cash transactions more favorably. Later results by Cornett and De (1991b), Grullon, Michaely and Swary (1997) and Cornett et al. (2003) also show higher returns for pure cash deals. By using a cross-sectional regression Grullon, Michaely and Swary (1997) further discover that the share price reaction for the acquirer is more positive with

[34] *For summarized results from previous studies see Table 5 in the Appendices*

all-cash transactions that incorporate low premiums and a target company that is located in the same state.

When studying the overall value creation for the merged entity Cornett and De (1991a) observe that mixed payments generate the highest returns (0,89%) against stock (0,71%) and cash payments (0,34%) but the differences between these are not statistically significant. Grullon, Michaely and Swary (1997) discover a contrary result where cash deals (5,01%) rate better when compared to stock (3,59%) or mixed transactions (3,83%). Ismail and Davidson (2005) similarly observe that cash deals generate the highest returns. However, this result only applies to the longer event windows and with shorter windows mixed payment deals actually produce the highest returns.

Although statistical significance for CAR differences is not established in all of studies works, the overall review suggests that pure cash and mixed-payments tend to generate higher CARs than pure stock deals. This conclusion follows the logic of Ismail and Davidson (2005) who argue that merger deals financed with equity tend to earn lower returns due to the overvaluation of the bidder's shares. Amel et al. (2004) further note that mergers in the 90's performed better due to the higher use of cash.

3.3. Strategy Focus[35]

The current view seems to support companies that focus on their core competencies. These types of companies are easier for investors to analyze and allow investors to diversify their own portfolios. However, in banking expansion into related industries like insurance can reap benefits from cross-selling and diversification of risk exposure. Thus, strategic focus should be included in the examination of merger CARs.

Previous empirical results regarding target banks seem to vary. Cybo-Ottone and Murgia (2000) find that in Europe activity diversification (15,02%) generates higher CARs than

[35] *For summarized results from the previous studies see Table 6 in the Appendices*

activity focus (14,72%). Beitel and Schiereck (2001) discover a similar European result with even more extensive differences between diversification (25,39%) and focus (9,90%). Delong (2001) finds contrary evidence from the American market observing higher CARs with activity focus ($_{diver}$15,32% / $_{focus}$18,30%).

This cross-country division of results is not as clear with the bidding banks. Delong (2001) finds smaller negative bidder CARs for activity focus ($_{diver}$-1,85% / $_{focus}$-1,46%). Cornett et al. (2003) make a similar discovery with the U.S. bidders although CARs with activity focus are not significant. Cybo-Ottone and Murgia (2000) provide evidence from the European market stating positive CARs with diversification (1,02%) and negative returns with focus (-0,47%). Ismail and Davidson (2005) observe positive returns for European bidding banks but make a contradictory finding showing slightly lower CARs for diversifying mergers. Bessler and Murtagh (2002) observe Canadian banks having higher CARs when acquiring domestic retail banks (9,6%) instead of domestic wealth management companies (-2,5%). The results regarding the merged entities are also divided. Three U.S. studies find evidence for focusing mergers[36], while Cybo-Ottone and Murgia (2000) find contrary evidence in the European market. Cybo-Ottone and Murgia assume that the high CARs originate from ability to cross-selling banking and insurance products, which leads to improved economies of scope and revenue efficiencies

The contradictory results by Ismail and Davidson (2005) make it harder to establish a coherent view of the impact of activity/product focus. However, overall examination of the results shows that on average product diversification tends to lead to higher CARs in Europe while contrary evidence is observed in the USA. The Canadian banks are seen to perform more like their U.S. counterparts.

[36] *Delong (2001), Delong (2003a) with geo-focusing and Cornett, McNutt and Tehranian (2006)*

3.4. Size[37]

The bank efficiency literature often speaks for creation of larger banks as this can result to synergy benefits from reducing overlapping functions and centralizing certain operations like back office. However, according to some arguments improvements in efficiency can be achieved only up to a certain degree and after this problems related the larger size start to generate adverse efficiency effects and diseconomies of scale[38]. Thus, the issue of size and its relation to abnormal returns should be addressed in this review.

Rad and Van Beek (1999) argue that if economies of scale and scope have significance, small European bidding banks should outperform their larger counterparts. Their results reveal that small bidding banks do actually generate higher CARs[39] in most the event windows but the differences are not statistically significant. In a more recent study Cornett McNutt and Tehranian (2006) find that mergers involving large banks (4,69%) are able to generate higher returns than smaller banks (2,21%) and the differences are statistically significant. By using a different methodology Kane and Pennachi (2000) discover that banks generate higher returns when the target institution is large. They rationalize this result by the Too-Big-To-Fail – factor that they refer to as Too-Big-To-Be-Disciplined-Adequately. This benefits the bank in the form of lower financing costs, subsidies in the face of insolvency and passing of the uninsured credit risk to the taxpayers. A similar finding is made on the Norwegian market by Karceksi, Ongena and Smith (2005). They reveal that the target banks earn higher CARs when the bidding bank is large or when both the bidding bank and the target bank are large. Although the scale of CAR differences in their study is high, the small amount of mergers between small banks does not allow generalization of their results.

[37] *For summarized results from previous studies see Table 7 in the Appendices*
[38] *See Hensel (2006)*
[39] *In the -1/+1 window the smaller bidders generate 0,14% against. the – 0,77% of the large bidders.*

The size of the merger deal has also been addressed by some scholars. Becher and Campbell (2005) define large mergers to be any transactions that are greater or equal to $400 millions and small mergers are considered those below this limit. Although they find some variations between small and large deals, these differences are not statistically significant. Campa and Hernando (2008) define large deals as those positioned in the upper quartile when measuring the joint market capitalization of the merging banks. They establish that large deals produce significantly higher returns for the bidder. In case of smaller deals targets experience higher CARs around the event date but examination of long term effects -1/+360 supports large deals. Cybo-Ottone and Murgia (2000) note that European merger deals in their sample are significantly larger when compared to American deals, which is mostly due to the higher average size of European banks. They discover that small deals generate higher returns, although the results are significant only for the bidding banks.

It is not easy to make clear conclusions from this review. However, regarding the bank size it can be argued that existing results seem to imply that mergers including larger banks can lead to higher CARs, although statistical insignificance hinders certainty. The contradictory results by Rad and Van Beek (2005) might be due to the pure concentration on the bidding banks. The findings regarding deal size are inconclusive and interestingly do not clearly support the argument for large size, although one would expect this from the relationship between the bank size and the deal size.

3.5. Corporate Governance[40]

Bank efficiency literature has previously discussed adverse effects related to agency problems and management hubris. Thus, managerial motivations, compensation and other

[40] *For summarized results from previous studies see Table 8 in the Appendices*

issues are addressed in this review as they can effect decisions to engage in non-value maximizing mergers and thus potentially destroy shareholder value.

Gupta and Misra (2007) assume that the market can distinguish between managerial motivations and that value enhancing mergers are primarily driven by expected synergy benefits. By analyzing a sample of 503 bids between U.S. banks they find that value enhancing mergers tend to generate higher CARs for the target and the merged bank. Datta, Iskandar-Datta and Raman (2001) observe that companies with high equity based compensation schemes for managers generate higher CARs and thus benefit the shareholders. In addition they observe that merger premiums paid in high equity based compensation firms are lower than in firms that do not offer significant stock options.

Hagendorff, Collins and Keasey (2008) study the relation of investor protection to CARs by using a sample of 204 US and European bank acquirers. The findings of their study indicate that bidding banks generated higher CARs when they acquire targets from countries that have low level of investor protection regulations, such as many European countries. They suggest that this relates to investors demanding additional compensation for low governance standards and from higher risk of insider expropriation. Baradwaj, Fraser and Furtado (1990) study how hostility in bank takeovers can impact the CARs. From a sample of 23 bidding banks they find that target banks receive significantly higher returns when they are subject to a hostile takeover. Differences are also observed within the negative CAR of the Bidders, although they are not significant. Baradwaj, Dubofsky and Fraser (1991) examine the way how regulatory changes impact CARs. By comparing CARs from a subsample of 18 banks that engaged in defensive mergers to strengthen their position in anticipation of interstate merger deregulation, they reveal higher negative returns for the defensive bidders compared to the overall sample. This seems logical as a mergers with defensive objectives might not have as heavy focus on improving cost and

profit efficiencies. Sushka and Bendeck (1988) find bidders taking on emergency mergers with the will of bank regulators generating higher but insignificant returns. These higher returns are suggested to arise from potential strengthening of the market position, elimination of competitors as well as potential funding and validation received from the financial regulator. Moreover, successful restructuring of the target through staff reduction and branch closures might help to sort out the distressed banks as has been previously observed in the 1990's financial crisis (Honkapohja, 2009). The findings from this review suggest that governance practices have positive impact on abnormal returns as lack of managerial entrenchment and high investor protection reap better results. Moreover, the benefits of aligning the interests of managers and shareholders can also be observed.

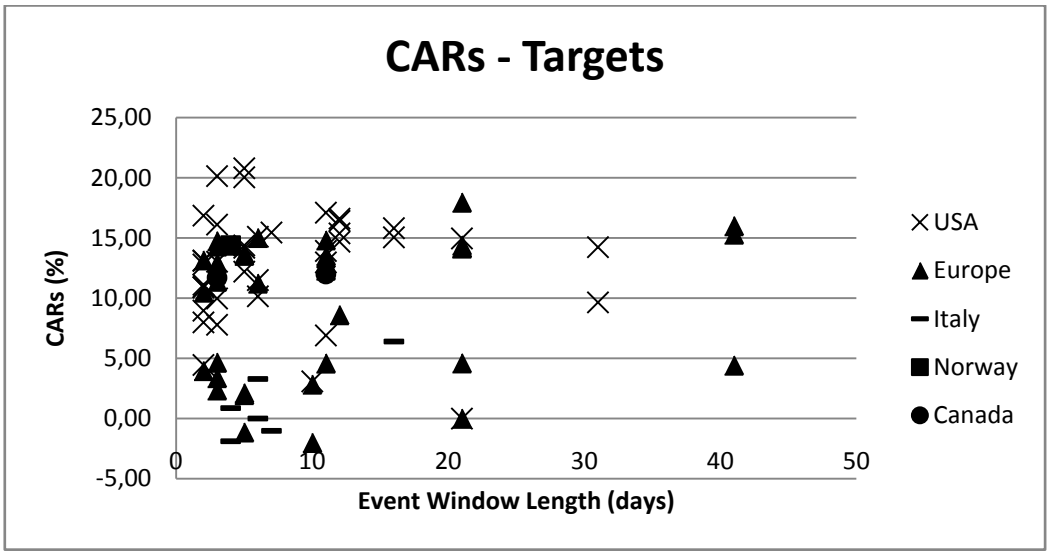
4. Conclusion

This empirical review of merger announcement related CARs suggests differences between the CAR determinants. It is found that target banks enjoy significant merger related wealth effects both in the U.S. and in Europe. Bidding banks seem to generate negative and merged banks slightly positive CARs on average. U.S. targets outperform their European counterparts, while European bidding banks and merged banks beat American counterparts by generating slightly positive CARs. A minor indication of declining U.S. bank returns is found when the event window is extended. Review of the findings further suggests that market seems to value more mergers that lead to activity focus and geographical focus. The use of cash and a mix of cash/shares are observed to dominate pure stock as the optimal payment method. Small evidence is found to support bank size but results regarding deal size are inconclusive. Moreover, correct motivations for engaging in mergers and high equity compensation are seen to increase CARs.

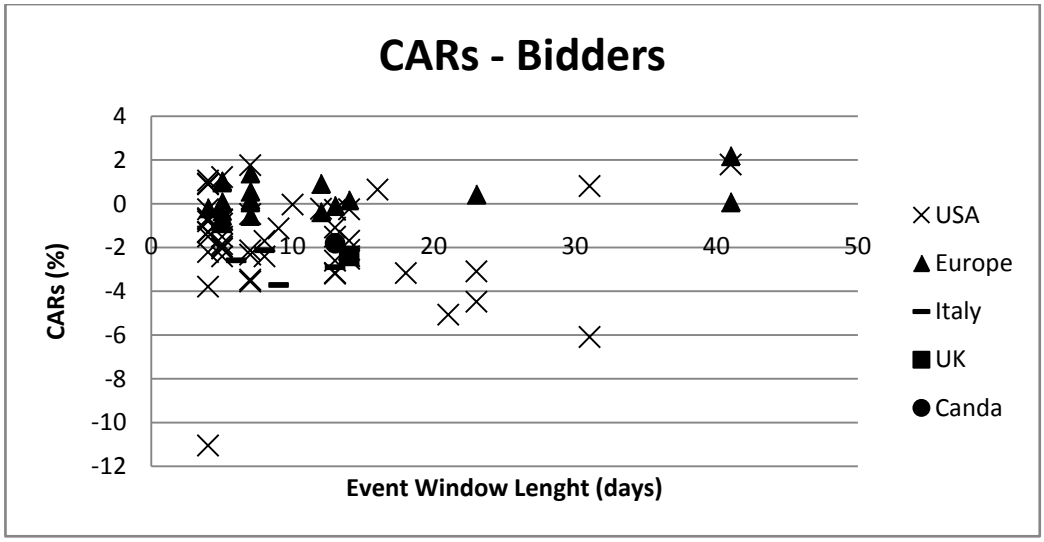
This review has evoked several interesting questions that could be pursued in future works. First, the current US and Europe dominated focus could be extended to emerging

markets, especially to the BRIC-economies. The saturation of the banking market in the developed economies leads to banks seeking new growth opportunities. In this regard understanding the shareholder value effects that relate to global mergers would be interesting and might potentially allow extension of previous findings to a global scale. Future works should use standardized even window lengths as this would facilitate comparison. Moreover, there is clear need for studying merger effects using longer measurement periods. Only few studies measure CARs with over 20 day event windows and thus some impacts might remain hidden. In addition, longer event windows might provide validation for the suggestion of declining CARs of U.S. banks. Regards to the financial crisis event studies examining distressed banks would be welcomed. These might confirm the suggestions of Sushka and Bendeck (1988) of the potential benefits of taking over distressed targets. Studies on activity diversification mergers should focus more on cross-selling benefits with insurance companies as these could explain some of the inconsistent results found in Cybo-Ottone and Murgia (2000). Previous research has already established relationship between specific antitakeover provisions and firm value. Kadyrzhanova (2006) observes antitakeover provisions leading to higher shareholder value in concentrated industries and lower value in unconcentrated industries. Bebchuk, Cohen and Ferrel (2009) find several (IRRC) provisions leading to large negative abnormal returns. Brown and Caylor (2006) further discover that poison pills and staggered boards have negative impact on firm valuation. It would be interesting to expand these studies to market reactions to merger announcements. Previous studies (Ramaswamy, 1997) have also established that strategic similarities between bidder and target lead to better performance and it would be interesting to see if similar finding can be observed with CARs.

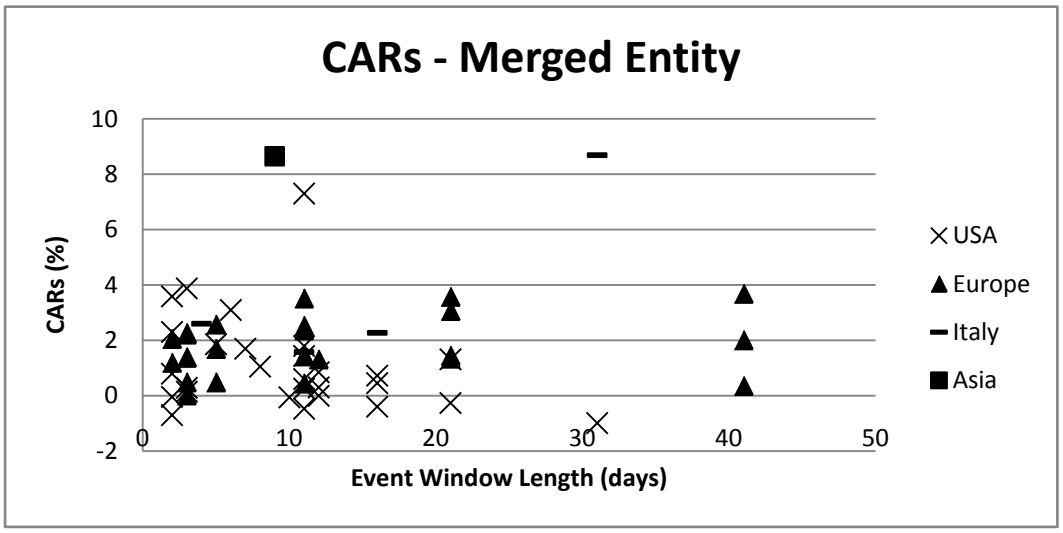
Graph I. Target CARs - Country Comparison



Graph II. Bidder CARs - Country Comparison



Graph III. Merged Entity CARs - Country Comparison



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APPENDICES

Table 1. Average and Median CARs for 3 Event Windows[1]

	-5/+5						-1/+1						0/0					
	n	mean	med.	Stdev	t-stat	[Min;Max]	n	mean	med.	Stdev	t-stat	[Min;Max]	n	mean	med.	Stdev	t-stat	[Min;Max]
Targets (US)	4	12,7	13,5	4,26	0,69	[6,9 ; 17,1]	5	13,4	13,0	4,90	2,19	[7,8 ; 20,2]	3	9,6	11,4	5,35	0,50	[3,6 ; 13,9]
Targets (EUR)	4	11,0	13,0	4,30	-0,68	[4,6 ; 13,5]	7	8,9	12,1	5,23	-1,71	[2,4 ; 14,8]	3	8,0	8,3	4,16	-0,55	[3,8 ; 12,1]
Bidders (US)	6	-2,0	-2,1	1,20	-0,43	[-3,2 ; -0,3]	8	-1,5	-1,7	0,66	-1,88	[-2,4 ; -0,7]	5	-1,0	-1,4	0,80	-0,57	[-1,5 ; 0,4]
Bidders (EUR)	1	-0,1	-0,1	nr	nr	[-0,1 ; -0,1]	7	0,1	0,0	0,73	2,00	[-0,9 ; 1,0]	3	-0,2	-0,1	0,56	0,91	[-0,8 ; 0,4]
Combined (US)	4	2,2	1,0	3,51	-0,02	[-0,5 ; 7,3]	2	2,1	2,1	2,54	0,43	[0,3 ; 3,9]	0	-	-	-	-	-
Combined (EUR)	3	2,3	2,5	0,74	0,04	[1,5 ; 2,9]	5	1,4	1,4	1,12	-0,32	[0,02 ; 2,7]	1	0,9	0,9	nr	nr	[0,9 ; 0,9]

Table 2. Summary Statistics for Graphs 1,2 and 3[2]

Item	n	Mean	Median	Stdev	AVG Window	AAR (1 day)	T-Stat
Targets (US)	39	13,11	13,53	3,99	8,28	1,58	8,79
Targets (EUR)	35	9,68	12,35	5,66	11,51	0,84	-0,29
Bidders (US)	52	-1,66	-1,50	2,14	10,35	-0,16	-2,11
Bidders (EUR)	20	0,26	0,09	0,74	11,50	0,02	5,66
Combined (US)	28	1,10	0,67	1,74	9,93	0,11	-1,09
Combined (EUR)	26	1,76	1,46	1,01	12,81	0,14	1,38

[1] This table presents median CARs and Average CARs calculated for 3 event windows, the t-stat is refers to difference between the specific subsample and the overall sample (US + Europe sample) and is calculated with the general formula for unequal sample sizes with unequal variance. nr denotes that the observation is not representative.

[2] This table presents median CARs and Average CARs for the observations in Graphs I,II and III. Similar to the Graphs this table only considers statistically significant previous findings. The 1 day AAR is calculated by dividing the sample average CAR by the average number of days the event windows include in the sample. The t-stat is calculated similarly as in Table 1.

Table 3. CARs – Intrastate and Interstate Mergers

Table 3		Geo-Focusing			Geo-Diversifying			Sample Info		
Paper	**Comment**	**Target**	**Bidder**	**Combined**	**Target**	**Bidder**	**Combined**	**Sample Period**	**Event Window**	**Country Coverage**
Hannan and Wolken (1989)	Unweighted entity	-	-	19,59ns	-	-	-25,87ns	1982-1987	-15/0	USA
		-	-	8,67ns	-	-	-41,36ns	1982-1987	-15/+15	USA
	Weighted entity	-	-	1,82ns	-	-	-1,62ns	1982-1987	-15/0	USA
		-	-	0,43ns	-	-	-3,16ns	1982-1987	-15/+15	USA
Baradwaj, Dubofsky and Fraser (1991)		-	-1,11***	-	-	-1,91***	-	1981-1987	-1/0	USA
		-	-1,45***	-	-	-2,87***	-	1981-1987	-2/+2	USA
		-	-2,09***	-	-	-3,65***	-	1981-1987	-5/+5	USA
Cornett and Tehranian (1992)		11,00***	-1,90***	-	4,70***	0,34ns	-	1982-1987	-1/0	USA
Siems (1996)	Top5 vs. Bottom5 Office Overlaps	13,82***	2,80**	-	6,95***	-1,58*	-	1995/1995	-1/+1	USA
Whalen (1997)	diversifying = divers.+ non-divers.	-	-	1,49**	-	-	1,22**	n/a	-2/0	USA
	diversifying = divers.+ non-divers.	-	-	0,78***	-	-	0,94***	n/a	-1/0	USA
Houston, James and Ryngaert (2001)		23,28na	-5,45na	-	11,43na	-4,23na	-	1985-1990	-4/+1	USA
		24,88na	-1,73na	-	23,93na	-4,93na	-	1991-1996	-4/+1	USA
		24,62na	-2,69na	-	16,17na	-4,4na	-	1985-1996	-4/+1	USA
DeLong (2001)		18,3***	-1,46***	0,62ns	15,32***	-1,85***	-0,40ns	1988-1995	-10/+1	USA
	With Activity Diversification	18,02***	-2,70***	-2,17**	14,53***	-1,80***	-0,69ns	1988-1995	-10/+1	USA
	With Activity Focusing	18,66***	0,14ns	3,00***	16,61***	-1,68***	0,04ns	1988-1995	-10/+1	USA
DeLong (2003a)	With Activity Diversification	10,58***	-4,04***	-1,3ns	10,48***	-1,16ns	-0,72ns	1991-1995	-10/+1	USA
	With Activity Focusing	16,78***	0,65ns	4,35***	20,79***	-5,18***	-1,23ns	1991-1995	-10/+1	USA
Cornett et al. (2003)		-	-0,38na	-	-	-0,97na	-	1988-1995	-1/0	USA
		-	-0,40na	-	-	-1,06na	-	1988-1995	-1/+1	USA
Becher and Campbell (2005)		16,69na	-1,59na	0,87na	13,98na	-1,29na	0,79na	1990-1999	-5/+1	USA

The information in this table refers to sub-samples or studies that focus on interstate and intrastate mergers and thus differs from the results presented in Graphs 1-3 and Table 9.

(*,**,***) denote statistical significance at 10%, 5% and 1% level. (ns) denotes insignificance and (na) denotes that observation for significance is missing.

Table 4. Domestic vs. Cross-Border Mergers

Table 4		Geo-Focusing			Geo-Diversifying			Sample Info		
Paper	**Comment**	**Target**	**Bidder**	**Combined**	**Target**	**Bidder**	**Combined**	**Sample Period**	**Event Window**	**Country Coverage**
Rad and Van Beek (1999)		-	-	-0,12na	-	-	-0,41na	1989-1996	-1/0	Europe
		-	-	-0,29na	-	-	-0,37na	1989-1996	-1/+1	Europe
		-	-	-0,01na	-	-	-0,19na	1989-1996	-5/+5	Europe
		-	-	0,48na	-	-	-0,16na	1989-1996	-40/+40	Europe
Cybo-Ottone and Murgia (2000)	with cancelled deals	13,74na	-0,49na	4,00na	18,29na	1,38na	2,28na	1988-1997	-10/0	Europe
	completed deals	14,28na	0,19na	4,47na	22,22na	2,00na	2,92na	1988-1997	-10/0	Europe
Beitel and Schiereck (2001)		-	0,57**	-	-	-0,62*	-	1985-2000	-1/0	Mixed
		-	0,62*	-	-	-0,85**	-	1985-2000	-1/+1	Mixed
		-	0,77*	-	-	-0,61na	-	1985-2000	-2/+2	Mixed
		-	1,46*	-	-	-0,87na	-	1985-2000	-5/+5	Mixed
		-	1,34*	-	-	-1,23na	-	1985-2000	-10/+10	Mixed
		-	-	-	-	-0,99*	-	1985-2000	-1/0	Europe
		-	-	-	-	-1,56**	-	1985-2000	-1/+1	Europe
		-	-	-	-	-1,41*	-	1985-2000	-2/+2	Europe
		-	-	-	-	-1,68na	-	1985-2000	-5/+5	Europe
		-	-	-	-	-2,29na	-	1985-2000	-10/+10	Europe
Bessler and Murtagh (2002)	retail bank targets	11,7***	2,20ns	-	-	-0,5ns	-	1998-2001	-1/+1	Canada
	retail bank targets	12,0***	9,6***	-	-	-1,1***	-	1998-2001	-5/+5	Canada
Amihud, Delong and Saunders (2002)		-	-0,16ns	-	-	-1,29*	-	1985-1998	-10/+1	Europe
Ismail and Davidson (2005)		-	0,52na	-	-	0,29na	-	1987-1999	-1/+1	Europe
		-	0,35na	-	-	0,25na	-	1987-1999	-1/0	Europe
		-	0,46na	-	-	0,37na	-	1987-1999	-5/0	Europe
		-	0,44na	-	-	0,22na	-	1987-1999	0/+1	Europe
		-	-0,04na	-	-	0,81na	-	1987-1999	0/+5	Europe
		-	0,17na	-	-	0,86na	-	1987-1999	0/+10	Europe
		-	-0,05na	-	-	1,26na	-	1987-1999	0/+20	Europe
Soussa and Wheeler (2006)	Emerging Europe	-	-	-	-	-0,7ns	-	1990-2003	-1/+7	Europe
	Latin America	-	-	-	-	-0,09*	-	1990-2004	-1/+7	Europe
	Emerging Asia	-	-	-	-	-1,5***	-	1990-2005	-1/+7	Europe
	Middle East & Africa	-	-	-	-	-0,1ns	-	1990-2006	-1/+7	Europe
Campa and Hernando (2008)		3,89*	1,00na	2,42na	3,33*	1,95na	3,04**	1998-2006	-90/-1	Europe
		3,22**	-0,54na	0,01na	3,82**	-0,55na	0,05na	1998-2006	-1/+1	Europe
		1,64na	-1,96*	-1,29na	1,95na	-0,13na	-0,29na	1998-2006	-1/+30	Europe
		3,9na	-1,78na	-1,82na	-5,33na	-2,06na	-2,83na	1998-2006	-1/+360	Europe

The information in this table refers to sub-samples or studies that focus on domestic and and cross-border mergers and thus differs from the results presented in Graphs 1-3 and Table 9.

(*,**,***) denote statistical significance at 10%, 5% and 1% level. (ns) denotes insignificance and (na) denotes that observation for significance is missing.

Table 5. CARs – Method of Payment

Table 5	Bidder			Target			Combined			Sample Info		
Paper	**Cash**	**Stock**	**Mixed**	**Cash**	**Stock**	**Mixed**	**Cash**	**Stock**	**Mixed**	**Sample Period**	**Event Window**	**Country Coverage**
Sushka and Bendeck (1988)	-0,80na	-1,94*	-	-	-	-	-	-	-	1972-1985	-4/0	USA
Cornett and De (1991a)	-	-	-	-	-	-	0,34na	0,71na	0,89na	1982-1986	n/a	USA
Cornett and De (1991b)	1,05na	0,97na	0,48na	12,55na	9,46na	6,28na	-	-	-	1982-1990	-1/+1	USA
Grullon, Michaely and Swary (1997)	-0,87na	-2,46na	-1,93na	10,95na	9,74na	9,82na	5,01na	3,59na	3,83na	1981-1990	-1/1	USA
Becher (2000)	-	-1,04na	0,65na	-	20,84na	25,38na	-	-	-	1980-1997	-30/+5	USA
	-	-0,86na	-0,03na	-	17,33na	23,74na	-	-	-	1980-1985	-30/+5	USA
	-	-3,94na	0,65na	-	16,41na	25,76na	-	-	-	1986-1990	-30/+5	USA
	-	-0,12na	1,12na	-	22,86na	26,28na	-	-	-	1991-1997	-30/+5	USA
	-	-1,55na	-0,32na	-	15,88na	19,07na	-	-	-	1980-1997	-5/+5	USA
	-	-1,76na	-0,47na	-	13,34na	17,57na	-	-	-	1980-1985	-5/+5	USA
	-	-2,74na	-0,26na	-	14,49na	23,14na	-	-	-	1986-1990	-5/+5	USA
	-	-1,12na	-0,25na	-	16,76na	17,41na	-	-	-	1991-1997	-5/+5	USA
Cornett et al. (2003)	0,55**	-0,75**	-	-	-	-	-	-	-	1988-1995	-1/0	USA
	0,50**	-0,85**	-	-	-	-	-	-	-	1988-1995	-1/+1	USA
Ismail and Davidson (2005)	-	-	-	-	-	-	0,62na	0,47na	1,59na	1989-1999	-1/+1	Europe
	-	-	-	-	-	-	0,81na	0,18na	0,73na	1989-1999	-1/+10	Europe
	-	-	-	-	-	-	1,51na	-0,02na	0,24na	1989-1999	-20/+20	Europe
	-	-	-	-	-	-	1,52na	0,42na	-0,24na	1989-1999	-20/+20	Europe
	-	-	-	-	-	-	0,30na	0,44na	1,21na	1989-1999	-5/0	Europe
	-	-	-	-	-	-	0,69na	0,40na	1,83na	1989-1999	0/+2	Europe

The information in this table refers to sub-samples or studies that method of payment and thus differs from the results presented in Graphs 1-3 and Table 9.

(*,**,***) denote statistical significance at 10%, 5% and 1% level. (ns) denotes insignificance and (na) denotes that observation for significance is missing.

Table 6. CARs – Strategy Focus

Table 6		Activity-Focusing			Activity-Diversifying			Sample Info		
Paper	**Comment**	**Target**	**Bidder**	**Combined**	**Target**	**Bidder**	**Combined**	**Sample Period**	**Event Window**	**Country Coverage**
Cybo-Ottone and Murgia (2000)	with cancelled deals	14,72na	-0,47na	2,54na	15,02na	1,02na	5,49na	1988-1997	-10/0	Europe
	completed deals	15,26na	0,26na	2,81na	18,11na	1,54na	6,33na	1988-1997	-10/0	Europe
DeLong (2001)		18,3***	-1,46***	0,62ns	15,32***	-1,85***	-0,40ns	1988-1995	-10/+1	USA
	With Geo-Diversification	16,61***	-1,68***	0,04ns	14,53***	-1,80***	-0,69ns	1988-1995	-10/+1	USA
	With Geo-Focusing	18,66***	0,14ns	3,00***	18,02***	-2,70***	-2,17**	1988-1995	-10/+1	USA
Beitel and Schiereck (2001)	Bank2Bank vs. Bank2Non-Bank	7,76***	-	.	19,34***	-	-	1985-2000	-1/0	Europe
		9,46***	-	.	21,94***	-	-	1985-2000	-1/+1	Europe
		9,90***	-	.	25,39***	-	-	1985-2000	-2/+2	Europe
		10,20***	-	.	23,64***	-	-	1985-2000	-5/+5	Europe
		10,98***	-	.	25,54***	-	-	1985-2000	-10/+10	Europe
	Bank2Non-Bank	-	-	-	-	-	1,71***	1985-2000	-1/0	Europe
		-	-	-	-	-	2,58***	1985-2000	-1/+1	Europe
		-	-	-	-	-	2,35***	1985-2000	-2/+2	Europe
		-	-	-	-	-	1,85**	1985-2000	-5/+5	Europe
		-	-	-	-	-	2,44**	1985-2000	-10/+10	Europe
DeLong (2003a)	With Geo-Diversification	10,58***	-4,04***	-1,30na	10,48***	-1,16na	-0,72na	1991-1995	-10/+1	USA
	With Geo-Focusing	16,78***	0,65na	4,35***	20,79***	-5,18***	-1,23na	1991-1995	-10/+1	USA
Cornett et al. (2003)		-	-0,19ns	-	-	-1,21***	-	1988-1995	-1/0	USA
		-	-0,17ns	-	-	-1,31***	-	1988-1995	-1/+1	USA
Ismail and Davidson (2005)	Bank2Bank vs. Cross-Product	-	0,66na	-	-	0,28na	-	1989-1999	-1,+1	Europe
		-	0,41na	-	-	0,22na	-	1989-1999	-1/0	Europe
		-	0,43na	-	-	0,20na	-	1989-1999	-2/0	Europe
		-	0,53na	-	-	-0,30na	-	1989-1999	0/+5	Europe
		-	0,53na	-	-	0,39na	-	1989-1999	0/+10	Europe
Cornett, McNutt and Tehranian (2006)		-	-	3,62***	-	-	0,68ns	1990-2000	-1/0	USA

The information in this table refers to sub-samples or studies that focus on activity focusing and diversification and thus differs from the results presented in Graphs 1-3 and Table 9.

(*,**,***) denote statistical significance at 10%, 5% and 1% level. (ns) denotes insignificance and (na) denotes that observation for significance is missing.

Table 7. CARs – Size

Table 7		SMALL			LARGE			Sample Info		
Paper	**Comment**	**Target**	**Bidder**	**Combined**	**Target**	**Bidder**	**Combined**	**Sample Period**	**Event Window**	**Country Coverage**
Rad and Van Beek (1999)	Small vs. Large Bidding Banks	-	-	-0,91na	-	-	-0,78na	1989-1996	-40/-1	Europe
		-	-	-0,47na	-	-	-0,96na	1989-1996	-10/-1	Europe
		-	-	-1,12na	-	-	-0,04na	1989-1996	-5/-1	Europe
		-	-	-0,06na	-	-	-0,57na	1989-1996	-1/0	Europe
		-	-	0,16na	-	-	-0,38na	1989-1996	0/0	Europe
		-	-	0,36na	-	-	-0,58na	1989-1996	0/+1	Europe
		-	-	0,55na	-	-	0,26na	1989-1996	+1/+5	Europe
		-	-	1,22na	-	-	0,82na	1989-1996	+1/+10	Europe
		-	-	1,22na	-	-	0,99na	1989-1996	+1/+40	Europe
		-	-	0,14na	-	-	-0,77na	1989-1996	-1/+1	Europe
		-	-	-0,41na	-	-	-0,16na	1989-1996	-5/+5	Europe
		-	-	0,92na	-	-	-0,52na	1989-1996	-10/+10	Europe
		-	-	0,48na	-	-	-0,17na	1989-1996	-40/+40	Europe
Cybo-Ottone and Murgia (2000)	Small vs. Large Deals	16,18ns	0,87*	3,40ns	11,49ns	-1,53*	3,75*	1988-1997	-10/0	Europe
Karceski, Ongena and Smith (2005)	large2large vs. Small2small	2,25na	2,70na	-	12,14***	-0,18na	-	1983-2000	-3/0	Norway
		0,64na	1,85na	-	7,48**	-0,85na	-	1983-2000	0/0	Norway
	Large 2 Small	19.84***	-	-	-	-0,39na	-	1983-2000	-3/0	Norway
		8,81***	-	-	-	-0,55na	-	1983-2000	0/0	Norway
Becher and Campbell (2005)	Small vs. Large Deals	*16,46****	-1,10***	*1,03***	*17,63****	-2,00***	*0,56na*	1990-1999	-5/+1	USA
Cornett, McNutt and Tehranian (2006)	Large vs. Small Banks	-	-	2,21**	-	-	4,69***	1990-2000	-1/0	USA
Campa and Hernando (2008)	Small vs. Large Deals	0,05na	2,26na	3,27na	5,30**	2,23na	3,12**	1998-2006	-90/-1	EU
		4,55**	-1,46na	-0,37na	1,52na	-0,97**	-0,50na	1998-2006	-1/+1	EU
		1,51na	-2,38na	-1,08na	0,94na	-0,77na	-0,59na	1998-2006	-1/+30	EU
		-1,1na	-11,34na	-7,05na	1,97na	5,96na	4,64na	1998-2006	-1/+360	EU

The information in this table refers to sub-samples or studies that focus on deal or bank size and thus differs from the results presented in Graphs 1-3 and Table 9.

(*,**,***) denote statistical significance at 10%, 5% and 1% level. (ns) denotes insignificance and (na) denotes that observation for significance is missing.

Table 8. CARs – Corporate Governance

Table 8		Abnormal Returns			Sample Info		
Paper	**Comment**	**Target**	**Bidder**	**Combined**	**Sample Period**	**Event Window**	**Country Coverage**
Baradwaj, Fraser and Furtado (1990)	Hostile	17,29***	-1,28***	-	1980-1987	-1/0	USA
		18,81***	-2,07***	-	1980-1987	-2/+2	USA
		20,92***	-1,08ns	-	1980-1987	-5/+5	USA
		27,41***	-1,47ns	-	1980-1987	-60/+60	USA
	Non-Hostile	10,92***	-1,27***	-	1980-1987	-1/0	USA
		12,21***	-2,12***	-	1980-1987	-2/+2	USA
		12,98***	-3,19***	-	1980-1987	-5/+5	USA
		14,35***	-4,20ns	-	1980-1987	-60/+60	USA
Baradwaj, Dubofsky and Fraser (1991)	Defensive Bidders	-	-3,537***	-	1981-1987	-1/0	USA
		-	-3,762***	-	1981-1987	-2/+2	USA
		-	-4,966***	-	1981-1987	-5/+5	USA
	Non-Defensive Bidders	-	-1,020***	-	1981-1987	-1/0	USA
		-	-1,599***	-	1981-1987	-2/+2	USA
		-	-2,240***	-	1981-1987	-5/+5	USA
Datta, Iskandar-Datta and Raman (2001)	Low Equity Compensation	-	-0,25**	-	1993-1998	-1/0	USA
	High Equity Compensation	-	0,30**	-	1993-1998	-1/0	USA
Gupta and Misra (2007)	*Value Enhancing Mergers*	*20,21****	-0,08ns	3,35***	1981-2004	-1/+1	USA
	Value Reducing Mergers	*11,99****	-3,62***	-2,8***	1981-2004	-1/+1	USA
	Value Enhancing and Reducing	*16,12****	-1,84***	0,29**	1981-2004	-1/+1	USA
Hagendorff, Collins, Keasey (2007)	High Investor Protection	-	-2,22na	-	1996-2004	-2/+2	Europe & USA
	Medium Investor Protection	-	-0,32na	-	1996-2004	-2/+2	Europe & USA
	Low Investor Protection	-	1,31na	-	1996-2004	-2/+2	Europe & USA

The information in this table refers to sub-samples or studies that focus on corporate governace and thus differs from the results presented in Graphs 1-3 and Table 9.

(*,**,***) denote statistical significance at 10%, 5% and 1% level. (ns) denotes insignificance and (na) denotes that observation for significance is missing.

Table 9. CARs – Main Table of Cross-Country Differences

Table 1		Target			Bidder			Combined			Sample Info		
Study	Sample Description	n	CAR (%)	Pos. (%)	n	CAR (%)	Pos. (%)	n	CAR (%)	Pos. (%)	Years	Even Window	Focus Region
Whalen (1997)	-	-	-	-	39	-3,93na	-	-	-	-	n/a	-90/-11	USA
Campa and Hernando (2008)	-	218	3,74**	60	218	-0,54*	57	196	2,60**	59	1998-2006	-90/-1	EU
Baradwaj, Fraser and Furtado (1990)	Non-Hostile	30	14,35***	-	30	-4,20ns	-	-	-	-	1980-1987	-60/+60	USA
Rad and Van Beek (1999)	-	17	5,93na	-	56	-0,73na	-	-	-	-	1989-1996	-40/-1	Europe
Rad and Van Beek (1999)	-	17	5,71na	-	56	0,18ns	-	-	-	-	1989-1996	-40/+40	Europe
Caruso and Palmucci (2008)	-	28	7,40**	-	28	-2,08ns	-	28	2,54ns	-	1994-2003	-30/0	Europe
Becher (2000)	-	558	22,64na	-	558	-0,10na	-	558	3,03na	-	1980-1997	-30/+5	USA
Caruso and Palmucci (2008)	-	28	2,54ns	-	28	-3,06ns	-	28	8,44ns	-	1994-2003	-30/+30	Italy
Caruso and Palmucci (2008)	-	28	3,28**	-	28	-1,86ns	-	28	8,69***	-	1994-2003	-15/+15	Italy
Beitel and Schiereck (2001)	-	98	14,16***	73	98	0,42ns	54	98	1,46***	65	1985-2000	-20/0	Europe
Cybo-Ottone and Murgia (2000)	w = TA, Gen. Ind.	72	17,95na	74	54	1,46ns	63	54	3,58na	76	1988-1997	-20/0	Europe
Cybo-Ottone and Murgia (2000)	w= EV, Bank Ind.	72	16,63na	75	54	0,31ns	59	54	4,49na	78	1988-1997	-20/0	Europe
Pilloff (1996)	-	-	-	-	-	-	-	48	1,32na	-	1982-1991	-20/0	USA
Hagendorff, Collins, Keasey (2008)	-	-	-	-	204	-0,12ns	32	-	-	-	1996-2004	-20/+5	Mix
Hagendorff, Collins, Keasey (2008)	-	-	-	-	53	-0,03ns	-	-	-	-	1996-2004	-20/+5	Europe
Hagendorff, Collins, Keasey (2008)	-	-	-	-	151	-0,14ns	-	-	-	-	1996-2004	-20/+5	USA
Cybo-Ottone and Murgia (2000)	w = TA, Gen. Ind.	72	15,30na	69	54	2,19na	63	54	3,69na	65	1988-1997	-20/+20	Europe
Cybo-Ottone and Murgia (2000)	w= EV, Bank Ind.	72	14,01na	64	54	1,03ns	56	54	4,27na	65	1988-1997	-20/+20	Europe
Beitel and Schiereck (2001)	-	98	16,00***	77	98	-0,20ns	52	98	2,01***	64	1985-2000	-20/+20	Europe
Ismail and Davidson (2005)	-	89	4,41na	69	89	0,08na	55	76	0,36na	58	1987-1999	-20/+20	Europe
Schiereck and Straus (2000) (A)	-	1	30,1na	-	-	-	-	-	-	-	1998-1999	-20/+20	USA/Ger
Seidel (1995) (A)	-	-	-	-	123	1,8na	-	-	-	-	1989-1991	-20/+20	USA
Caruso and Palmucci (2008)	-	28	6,40***	-	28	-1,65ns	-	28	2,27**	-	1994-2003	-15/0	Italy
Pilloff (1996)	-	-	-	-	-	-	-	48	0,73na	-	1982-1991	-15/0	USA
Hannan and Wolken (1989)	w= stock value	69	15,81na	86	43	-5,06na	33	43	0,46na	49	1982-1987	-15/0	USA
James and Wier (1987)	-	-	-	-	60	0,65na	63	-	-	-	1971-1983	-15/0	USA
Cornett and De (1991a)	-	37	9,66na	48	152	-0,40ns	41	-	-	-	1982-1986	-15/+15	USA

Hannan and Wolken (1989)	w= stock value	69	14,25na	75	43	-6,09na	28	43	-0,99na	42	1982-1987	-15/+15	USA
James and Wier (1987)	-	-	-	-	60	0,81na	68	-	-	-	1971-1983	-15/+15	USA
Aggarwal, Akhigbe, McNulty (2006)	-	271	3,08***	58	271	-0,23na	47	271	-0,06na	49	1986-2001	-11/-2	USA
Whalen (1997)	-	-	-	-	39	-0,03na	-	-	-	-	n/a	-10/-3	USA
Djankov, Jindra and Klapper (2005)	-	-	-	-	-	-	-	9	8,65***	-	1998-1999	-10/-2	Asia
Rad and Van Beek (1999)	-	17	2,84na	-	56	-0,37na	-	-	-	-	1989-1996	-10/-1	Europe
Beitel and Schiereck (2001)	-	98	12,31***	74	98	0,14ns	58	98	1,46***	65	1985-2000	-10/0	Europe
Cybo-Ottone and Murgia (2000)	Includes cancelled	72	14,82na	75	54	0,03ns	48	54	3,52na	67	1987-1998	-10/0	Europe
Cybo-Ottone and Murgia (2000)	Excluces cancelled	61	16,1na	75	46	0,70ns	57	46	4,03na	67	1987-1998	-10/0	Europe
Pilloff (1996)	-	-	-	-	-	-	-	48	1,44*	-	1982-1991	-10/0	USA
Amihud, DeLong and Saunders (2002)	-	-	-	-	28	-2,38***	29	-	-	-	1985-1998	-10/+1	UK
Hagendorff, Collins, Keasey (2008)	-	-	-	-	54	0,03ns	-	-	-	-	1996-2004	-10/+1	Europe
Delong (2003b)	-	41	8,60***	-	41	0,17na	-	41	1,32*	-	1988-1999	-10/+1	Non-USA
Delong (2003b)	-	438	14,76***	-	438	1,89***	-	438	0,12na	-	1988-1999	-10/+1	Mix
Hagendorff, Collins, Keasey (2008)	-	-	-	-	204	-0,18*	34	-	-	-	1996-2004	-10/+1	Mix
Amihud, DeLong and Saunders (2002)	-	-	-	-	214	-0,98***	37	-	-	-	1985-1998	-10/+1	Mix
DeLong (2001)	-	280	16,61***	87	280	-1,68***	34	280	0,04ns	49	1988-1995	-10/+1	USA
DeLong (2003a)	-	54	14,70***	-	54	-2,51***	-	54	0,85na	-	1991-1995	-10/+1	USA
Delong (2003b)	-	397	15,39***	-	397	-2,10***	-	397	0,00na	-	1988-1999	-10/+1	USA
Delong and Deyoung (2007)	-	216	16,43***	-	216	-2,39***	-	216	0,30na	-	1987-1999	-10/+1	USA
Amihud, DeLong and Saunders (2002)	-	-	-	-	19	-0,53ns	53	-	-	-	1985-1998	-10/+1	USA
Hagendorff, Collins, Keasey (2007)	-	-	-	-	151	-0,25***	-	-	-	-	1996-2004	-10/+1	USA
Delong and Deyoung (2007)	-	216	15,05***	-	216	-3,16***	-	216	-0,39na	-	1987-1999	-10/+5	USA
Beitel and Schiereck (2001)	-	98	14,39***	78	98	0,24ns	53	98	1,35**	65	1985-2000	-10/+10	Europe
Cybo-Ottone and Murgia (2000)	w = TA, Gen. Ind.	72	14,16na	69	54	1,16ns	44	54	3,07na	59	1988-1997	-10/+10	Europe
Cybo-Ottone and Murgia (2000)	w= EV, Bank Ind.	72	12,95na	67	54	0,11ns	43	54	3,41na	59	1988-1997	-10/+10	Europe
Rad and Van Beek (1999)	-	17	4,6na	-	56	0,43na	-	-	-	-	1989-1996	-10/+10	Europe
Soussa and Wheeler (2006)	-	-	-	-	66	-0,01na	-	-	-	-	1990-2003	-10/+10	Mix
DeLong and DeYoung (2007)	-	216	14,96***	-	216	-3,09***	-	216	-0,26na	-	1987-1999	-10/+10	USA
Pilloff (1996)	-	-	-	-	-	-	-	48	1,05na	-	1982-1991	-7/0	USA
Rad and Van Beek (1999)	-	17	1,97na	-	56	-0,54na	-	-	-	-	1989-1996	-5/-1	Europe

Caruso and Palmucci (2008)	-	28	3,28***	-	28	-0,54ns	-	28	1,58***	-	1994-2003	-5/0	Italy
Beitel and Schiereck (2001)	-	98	11,23***	69	98	0,38ns	54	98	1,43***	64	1985-2000	-5/0	Europe
Cybo-Ottone and Murgia (2000)	w = TA, Gen. Ind.	72	15,02na	72	54	0,58ns	44	54	2,37na	67	1988-1997	-5/0	Europe
Cybo-Ottone and Murgia (2000)	w= EV, Bank Ind.	72	14,21na	76	54	-0,40ns	52	54	2,88na	67	1988-1997	-5/0	Europe
Ismail and Davidson (2005)	-	-	-	-	-	-	-	76	0,45na	58	1987-1999	-5/0	Europe
Black et al. (2005)	-	-	15,11***	-	-	-0,09ns	-	-	-	-	1986-1998	-5/0	USA
Pilloff (1996)	-	-	-	-	-	-	-	-	0,6na	-	1982-1991	-5/0	USA
Anderson, Becher and Campbell (2004)		97	15,45na	-	97	-1,12na	-	97	1,7na	-	1990-1997	-5/+1	USA
Allen and Cebenoyan (1991) (A)	-	-	-	-	138	ns.	-	-	-	-	1979-1986	-5/+1	USA
Caruso and Palmucci (2008)	-	28	-0,37ns	-	28	-2,90*	-	28	2,29ns	-	1994-2003	-5/+5	Italy
Bessler and Murtagh (2002)	targets are national	-	12,00***	-	-	-1,80***	-	-	-	-	1998-2001	-5/+5	Canada
Beitel and Schiereck (2001)	-	98	13,35***	72	98	0,46ns	47	98	1,45***	63	1985-2000	-5/+5	Europe
Cybo-Ottone and Murgia (2000)	w = TA, Gen. Ind.	72	13,52na	71	54	1,08ns	46	54	2,53na	61	1988-1997	-5/+5	Europe
Cybo-Ottone and Murgia (2000)	w= EV, Bank Ind.	72	12,55na	72	54	-0,17ns	50	54	2,86na	59	1988-1997	-5/+5	Europe
Rad and Van Beek (1999)	-	17	4,59na	-	56	-0,09na	-	-	-	-	1989-1996	-5/+5	Europe
Hayward and Hambrick (1997) (B)	-	-	-	-	106	nr	-	-	-	-	1989-1992	-5/+5	USA
Zhang (1995) (A)	-	107	6,9na	-	107	ns	-	107	7,3na	-	1980-1990	-5/+5	USA
Palia (1994) (A)	-	-	-	-	48	-1,5na	-	-	-	-	1984-1987	-5/+5	USA
Baradwaj et al. (1992) (A)	-	-	-	-	108	-2,6na	-	-	-	-	1981-1987	-5/+5	USA
Baradwaj, Dubofsky and Fraser (1991)	-	-	-	-	-	-	-	76	0,26na	62	1981-1987	-5/+5	USA
Baradwaj, Fraser and Furtado (1990)	Non-Hostile	30	12,98***	-	30	-3,19***	-	-	-	-	1980-1987	-5/+5	USA
Becher (2000)	-	-	17,10na	-	-	-1,08na	-	-	1,8na	-	1980-1997	-5/+5	USA
Zollo and Leshchinkskii (2000)	-	-	-	-	307	-0,27na	-	-	-	-	1964-1995	-5/+5	USA
Allen and Cebenoyan (1991) (A)	-	-	-	-	138	ns	-	-	-	-	1979-1986	-5/+5	USA
DeLong and DeYoung (2007)	-	216	13,92***	-	216	-3,15***	-	216	-0,47na	-	1987-1999	-5/+5	USA
Hannan and Wolken (1989)	-	69	14,19na	83	43	-3,55na	21	-	-	-	1982-1987	-4/0	USA
Houston and Ryngaert (1994)	-	153	14,39***	-	153	-2,32***	-	153	0,38ns	-	1985-1991	-4/0	USA
Sushka and Bendeck (1988)	Non-Emergency	-	-	-	39	-0,74ns	-	-	-	-	1972-1985	-4/0	USA
James and Wier (1987)	-	-	-	-	60	1,77na	68	-	-	-	1971-1983	-4/0	USA
Houston, James and Ryngaert (2001)	-	64	20,80na	-	64	-3,47na	-	64	1,86na	-	1985-1996	-4/0	USA
Houston and Ryngaert (1997) (A)	-	209	20,4na	-	209	-2,4na	-	-	-	-	1985-1992	-4L/+1A	USA

Caruso and Palmucci (2008)	-	28	0,87***	-	28	-0,79ns	-	28	2,60***	-	1994-2003	-3/0	Italy
Karceski, Ongena and Smith (2005)	Completed M&AS	8	24,89**	-	14	-1,24ns	-	-	-	-	1983-2000	-3/0	Norway
Karceski, Ongena and Smith (2005)	Announced M&As	27	14,38***	-	33	0,34ns	-	-	-	-	1983-2000	-3/0	Norway
Caruso and Palmucci (2008)	-	28	-1,02*	-	28	-3,71***	-	28	1,81ns	-	1994-2003	-3/+3	Italy
Whalen (1997)	-	-	-	-	39	0,89na	-	-	-	-	n/a	-2/-1	USA
Beitel and Schiereck (2001)	-	98	11,38***	76	98	0,07ns	53	98	1,38***	70	1985-2000	-2/0	Europe
Cybo-Ottone and Murgia (2000)	w = TA, Gen. Ind.	72	14,31na	81	54	0,70ns	52	54	2,27na	70	1988-1997	-2/0	Europe
Cybo-Ottone and Murgia (2000)	w= EV, Bank Ind.	72	13,68na	82	54	-0,20ns	52	54	2,81na	74	1988-1997	-2/0	Europe
Whalen (1997)	-	-	-	-	39	1,22na	-	-	-	-	n/a	-2/0	USA
Pilloff (1996)	-	-	-	-	-	-		48	0,15na	-	1982-1991	-2/0	USA
Ismail and Davidson (2005)	-	89	2,11na	66	89	0,18na	49	76	0,49na	64	1987-1999	-2/+2	Europe
Beitel and Schiereck (2001)	-	98	13,54***	77	98	0,18ns	43	98	1,70***	63	1985-2000	-2/+2	Europe
Cybo-Ottone and Murgia (2000)	w = TA, Gen. Ind.	72	13,68na	76	54	1,40na	52	54	2,58na	67	1988-1997	-2/+2	Europe
Cybo-Ottone and Murgia (2000)	w= EV, Bank Ind.	72	12,77na	75	54	0,16ns	48	54	2,89na	72	1988-1997	-2/+2	Europe
Hagendorff, Collins, Keasey (2008)	-	-	-	-	53	0,08***	-	-	-	-	1996-2004	-2/+2	Europe
Hagendorff, Collins, Keasey (2008)	-	-	-	-	204	-0,32***	32	-	-	-	1996-2004	-2/+2	Mix
Baradwaj, Fraser and Furtado (1990)	Non-Hostile	30	12,21***	-	30	-2,12***	-	-	-	-	1980-1987	-2/+2	USA
Hagendorff, Collins, Keasey (2008)	-	-	-	-	151	-0,47**	-		-	-	1996-2004	-2/+2	USA
Djankov, Jindra and Klapper (2005)	-	-	-	-	-	-	-	9	-1,27ns	-	1998-1999	-1/0	Asia
Cybo-Ottone and Murgia (2000)	w = TA, Gen. Ind.	72	13,16na	81	54	0,62ns	59	54	2,06na	69	1988-1997	-1/0	Europe
Cybo-Ottone and Murgia (2000)	w= EV, Bank Ind.	72	12,55na	82	54	-0,17ns	52	54	2,65na	74	1988-1997	-1/0	Europe
Beitel and Schiereck (2001)	-	98	10,48***	71	98	0,06ns	54	98	1,20***	66	1985-2000	-1/0	Europe
Aggarwal, Akhigbe, McNulty (2006)	-	204	8,96***	75	204	-11,05***	34	204	2,31**	51	1986-2001	-1/0	USA
Baradwaj, Fraser and Furtado (1990)	Non-Hostile	30	10,92***	-	30	-1,27***	-	-	-	-	1980-1987	-1/0	USA
Cornett and Tehranian (1992)	-	30	8,00***	-	30	-0,80**	-	-	-	-	1982-1987	-1/0	USA
Cornett et al. (2003)	-	-	-	-	423	-0,70**	40	-	-	-	1988-1995	-1/0	USA
Black et al. (2005)	-	-	13,14***	-	-	-0,04ns	-	-	-	-	1986-1998	-1/0	USA
Cornett, McNutt and Tehranian (2006)	-	-	16,87***	-	-	-0,65**	-	-	3,59***	-	1990-2000	-1/0	USA
Datta, Iskandar-Datta and Raman (2001)	-	-	-	-	1719	0,02ns	-	-	-	-	1993-1998	-1/0	USA
Hannan and Wolken (1989)	-	69	11,12na	77	43	-3,78na	19	-	-	-	1982-1987	-1/0	USA
James and Wier (1987)	-	-	-	-	60	1,07na	66	-	-	-	1972-1983	-1/0	USA

Pilloff (1996)	-	-	-	-	-	-	-	48	-0,04na	-	1982-1991	-1/0	USA
Rad and Van Beek (1999)	-	17	4,46**	-	56	-0,25na	-	-	-	-	1989-1996	-1/0	USA
Siems (1996)	Megamergers	19	12,81***	-	19	-1,49***	-	-	-	-	1995-1995	-1/0	USA
Kwan and Eisenbeis (1999) (A)	-	-	-	-	-	-	-	3844	0,8na	-	1989-1996	-1/0	USA
Cyree and DeGannaro (1999) (A)	-	-	-	-	132	ns	-	-	-	-	1989-1995	-1/0	USA
Toyne and Tripo (1998) (A)	-	68	10,9na	-	68	-2,2na	-	68	-0,7na	-	1991-1995	-1/0	USA
Banerjee and Cooperman (1998) (A)	-	92	13,1na	-	92	-1,3na	-	-	-	-	1990-1995	-1/0	USA
Whalen (1997)	-	-	-	-	39	0,94na	-	-	-	-	n/a	-1/0	USA
Bessler and Murtagh (2002)	targets are national	-	11,70***	-	-	0,4ns	-	-	-	-	1998-2001	-1/+1	Canada
Beitel and Schiereck (2001)	-	98	12,39***	72	98	-0,01ns	49	98	1,40***	60	1985-2000	-1/+1	Europe
Campa and Hernando (2006) (B)	-	-	-	-	244	-0,87na	-	-	-	-	1998-2002	-1/+1	Europe
Campa and Hernando (2008)	-	218	3,38**	58	218	-0,54*	49	196	0,02na	53	1998-2006	-1/+1	Europe
Cybo-Ottone and Murgia (2000)	w = TA, Gen. Ind.	72	12,93na	76	54	0,99na	56	54	2,22na	70	1988-1997	-1/+1	Europe
Cybo-Ottone and Murgia (2000)	w= EV, Bank Ind.	72	12,09na	75	54	-0,19ns	50	54	2,67na	70	1988-1997	-1/+1	Europe
Hagendorff, Collins, Keasey (2008)	-	-	-	-	53	0,09***	-	-	-	-	1996-2004	-1/+1	Europe
Ismail and Davidson (2005)	-	89	2,35na	67	89	0,03na	46	76	0,49na	62	1987-1999	-1/+1	Europe
Rad and Van Beek (1999)	-	17	4,65**	-	56	-0,33na	-	-	-	-	1989-1996	-1/+1	Europe
Valkanov and Kleimeier (2007)	-	-	14,75***	-	-	1,04**	-	-	-	-	1997-2003	-1/+1	Europe
Hagendorff, Collins, Keasey (2008)	-	-	-	-	204	-0,50***	31	-	-	-	1996-2004	-1/+1	Mix
Valkanov and Kleimeier (2007)	-	-	19,06***	-	-	-0,99***	-	-	-	-	1997-2003	-1/+1	Mix
Cornett et al. (2003)	-	-	-	-	423	-0,74**	40	-	-	-	1988-1995	-1/+1	USA
Gupta and Misra (2007)	-	503	16,12***	-	503	-1,84***	-	503	0,29**	-	1981-2004	-1/+1	USA
Hagendorff, Collins, Keasey (2008)	-	-	-	-	151	-0,70***	-	-	-	-	1996-2004	-1/+1	USA
Siems (1996)	-	19	13,04***	-	19	-1,96***	-	-	-	-	1995-1995	-1/+1	USA
Valkanov and Kleimeier (2007)	-	-	20,15***	-	-	-1,50***	-	-	-	-	1997-2003	-1/+1	USA
Hudgins and Seifert (1996) (A)	-	160	7,80na	-	160	ns	-	-	-	-	1970-1989	-1/+1	USA
Bliss and Rosen (2001) (B)		-	-	-	66	-2,40na	-	-	-	-	1986-1995	-1/+1	USA
Subrahmanyan et al. (1997) (A)	-	-	-	-	225	-0,90na	-	-	-	-	1982-1987	-1/+1	USA
Grullon, Michaely and Swary (1997)	-	146	9,97***	-	146	-2,04***	-	146	3,88***	-	1981-1990	-1/+1	USA
Campa and Hernando (2008)	-	218	1,73*	52	218	-1,46*	45	196	-1,00na	46	1998-2006	-1/+30	Europe
Campa and Hernando (2008)	-	218	1,32na	51	218	0,31na	51	196	-2,11na	51	1998-2006	-1/+360	Europe
Karceski, Ongena and Smith (2005)	Completed M&AS	8	10,84*	-	14	-0,59ns	-	-	-	-	1983-2000	0/0	Norway

Karceski, Ongena and Smith (2005)	Announced M&As	27	7,11***	-	33	-0,11ns	-	-	-	-	1983-2000	0/0	Norway
Hagendorff, Collins, Keasey (2008)	-	-	-	-	53	0,36***	-	-	-	-	1996-2004	0/0	Europe
Valkanov and Kleimeier (2007)	-	-	12,08***	-	-	-0,76**	-	-	-	-	1997-2003	0/0	Europe
Beitel and Schiereck (2001)	-	98	8,27***	65	98	-0,14ns	47	98	0,91***	56	1985-2000	0/0	Europe
Rad and Van Beek (1999)	-	17	3,77**	-	56	-0,12na	-	-	-	-	1989-1996	0/0	Europe
Valkanov and Kleimeier (2007)	-	-	13,51***	-	-	-0,48***	-	-	-	-	1997-2003	0/0	Mix
Hagendorff, Collins, Keasey (2008)	-	-	-	-	204	-0,93***	36	-	-	-	1996-2004	0/0	Mix
Valkanov and Kleimeier (2007)	-	-	13,87***	-	-	-0,79***	-	-	-	-	1997-2003	0/0	USA
Hagendorff, Collins, Keasey (2008)	-	-	-	-	151	-1,40**	-	-	-	-	1996-2004	0/0	USA
Hannan and Wolken (1989)	-	69	3,62na	57	43	-1,45na	37	-	-	-	1982-1987	0/0	USA
Kane (2000) (A)	-	110	11,4na	-	110	-1,5na	-	-	-	-	1991-1998	0/0	USA
James and Wier (1987)	-	-	-	-	60	0,39na	56	-	-	-	1971-1983	0/0	USA
Rad and Van Beek (1999)	-	17	3,96**	-	56	-0,19na	-	-	-	-	1989-1996	0/+1	Europe
Brewer et al. (2000) (A)	-	327	[8,3-14,0)	-	-	-	-	-	-	-	1990-1998	0/+1	USA
Caruso and Palmucci (2008)	-	28	-1,89***	-	28	-2,58***	-	28	-1,16ns	-	1994-2003	0/+3	Italy
Caruso and Palmucci (2008)	-	28	-1,95***	-	28	-2,12***	-	28	-1,78ns	-	1994-2003	0/+5	Italy
Hawawini and Swary (1990) (A)	-	123	11,50na	-	123	1,70na	-	123	3,10na	-	1972-1987	0/+5	USA
Black et al. (2005)	-	-	10,16***	-	-	-0,26ns	-	-	-	-	1986-1998	0/+5	USA
Caruso and Palmucci (2008)	-	28	1,01ns	-	28	0,06ns	-	28	2,01ns	-	1994-2003	0/+15	Italy
Caruso and Palmucci (2008)	-	28	0,01ns	-	28	-0,52ns	-	-	0,56ns	-	1994-2003	0/+30	Italy
Valkanov and Kleimeier (2007)	-	-	11,76***	-	-	-4,47***	-	-	-	-	1997-2003	0/+20	Europe
Valkanov and Kleimeier (2007)	-	-	18,92***	-	-	-1,37ns	-	-	-	-	1997-2003	0/+20	Mix
Valkanov and Kleimeier (2007)	-	-	20,71***	-	-	-0,59ns	-	-	-	-	1997-2003	0/+20	USA
Madura and Wiant (1994) (A)	-		-	-	152	-27,1na	-	-	-	-	1983-1987	0/36m	USA
Rad and Van Beek (1999)	-	17	-1,14na	-	56	0,57na	-	-	-	-	1989-1996	+1/+5	Europe
Rad and Van Beek (1999)	-	17	-2,01na	-	56	0,92na	-	-	-	-	1989-1996	+1/+10	Europe
Whalen (1997)	-	-	-	-	39	-1,87na	-	-	-	-	n/a	+1/+30	USA
Rad and Van Beek (1999)	-	17	-3,99na	-	56	1,03na	-	-	-	-	1989-1996	+1/+40	Europe
Djankov, Jindra and Klapper (2005)	domestic	-	-	-	-	-	-	9	-4,32ns	-	1998-1999	+1/+50	Asia
Whalen (1997)	-	-	-	-	39	-0,93na	-	-	-	-	n/a	+1/+90	USA
Aggarwal, Akhigbe, McNulty (2006)	-	271	-0,85ns	38	271	-0,07ns	43	271	-0,49ns	42	1986-2001	+2/+11	USA

(A) denotes that the result was obtained from Beitel and Schiereck (2001) and (B) from Hagendorff, Collins, Keasey (2007). W=TA, and W=EV denote total assets and equity value used as weights for the merged entity, Gen. Ind. And Bank Ind. Denote that the bidder and target return benchmarks were based on general market index and bank industry index. (*,**,***) denote significance at 10%, 5% and 1% level when provided. (ns) denotes insignificance, (nr) irrelevance and (na) that observation for significance is missing.

The results in this table are chosen from the main samples or subsamples that best represent the findings.