

Value creation in strategic M&A. How to make your growth strategy value-creating?

Veronika Vinogradova
PhD student
University of Kassel, Germany
Nora-Platiel-Str.4
34109 Kassel
e-mail: nika.vinogradova@googlemail.com

Abstract

Strategic M&As mean focus on growth (e.g. revenue growth) and aim to enhance the firm's competitive position. The academic literature reports, however, an extremely high failure rate of strategic M&As – their outcomes are very difficult to forecast and they are extremely risky. Complexity increases even further, if we add the international perspective. At the same time, the empirical evidence states that M&As contribute to one third of average corporate growth rate. So, how can we make them value-creating? Combining market abnormal returns and fundamental company analysis, this study explains which factors and features of firms are relevant for the evaluation of acquirers' performance and how they are linked together. Furthermore, compared to the simple market-based studies and single accounting measures analysis, it includes additional – strategic - perspective and provides real examples of the value-creating and value-destroying transactions, explaining the strategy behind its success or failure. Therefore, it suggests a new approach for planning an acquisition and makes forecasting of the future payoffs by decision-makers possible from the early stage.

Key words: Mergers&Acquisitions, Shareholder Value, Acquirers' performance, Value Creation

JEL classification: G14, G32, G34

Acknowledgements: I would like to thank my Doktorvater, Herr Prof. Stöttner, University of Kassel, for his guidance and support, and Herr Prof. Penman, Columbia Business School, for his helpful comments and insightful feedback during the process. My thanks go also to the participants of the M&A Conference 2013 in Düsseldorf, Germany, Institut for Finance and Banking at Ludwig-Maximilian-Universität Munich (Herr Prof. Ralf Elsas) for the support with databases and Columbia Business School. All errors are mine.

Introduction

For centuries M&As have been considered an essential part of strategy for the external growth. With most industries growing at a low pace today and high expectations of investors at the same time, it became almost impossible to create a world-class company only through organic growth. As a way in which a company can grow at an accelerate rate, not only do M&As allow to achieve the corporate goals more quickly than develop the skills in-house, but they also bring competitive edge in entering new markets, or extending the existing product portfolio. Empirical evidence states that corporate acquisitions contribute to the one third of average corporate growth rate, compared to other options such as growth in the market segments of firm's portfolio or market share performance with 60% and 4% respectively (Baghai et al. (2009)). At the same time, the “growth” companies enjoy higher multiples and higher market value. That pushes additional pressure on Executives, making them desperate to grow and even become willing to undertake high-risk strategies to accelerate growth (Kim et al. (2011)). This trend becomes even more noticeable among the CEOs hired with a mandate for change, who perform deals to change the strategic direction of a firm, especially during their first year.¹ Therefore, it is not surprising that M&As represent by far the largest use of capital in the corporate world. In the last survey spending cash on funding acquisition is confirmed as a main goal of capital allocation by 53% of surved executives. This is best expressed in the increasing deal activity, which is on the rise again after a long period of economic depression. In most cases, however, a “desperate” strive for growth does not bring expected results. Limited capital and higher expectations from shareholders cause to take a closer look at how capital allocation decisions are made. To solve the growth problem, the acquisitions should be built, according to Harding/Rovit (2004) on sound understanding how the company creates value and what its competitive environment is. In other words, the main

¹ More on the CEOs' M&A strategies during their first year after the succession can be found in Cass Business School (2009)

focus of acquisition should be not just to help the company to grow fast, but to contribute valuably to its strategy facilitating sustainable excess returns.

The present study focuses on the analysis of the determinants of success in strategic acquisitions performed throughout the last decade. Looking for the key drivers of success it takes into consideration both the market returns around the announcement and operating performance of the acquiring companies. Combining both market abnormal returns and fundamental company analysis, it helps to understand which features of firms are relevant for the evaluation of acquirers' performance and how they are linked together. Furthermore, compared to the simple market-based studies and single accounting measures analysis, it includes additional perspective and provides real examples of the value-creating and value-destroying transactions, explaining the strategy behind its success or failure. Therefore, it brings in a new perspective and approach to be considered while planning the acquisition and makes forecasting of the future payoffs as well as strategic and financial planning for a successful acquisition possible from the early stage. As a result, it increases the efficiency of acquisition strategy and considers changing dynamics of capital allocation.

Strategic Framework

What should the Executives, engaging in M&As, consider to make the acquisition value-creating? What should guide them in their capital allocation decisions? The concept of the Value-based-Management states that a strategic move is value-enhancing if it increases the overall value of a company for its shareholders. The increase in value can be expressed in terms of additional economic value added or better performance of shares of a company in the capital market. Both developments are linked and influence each other. Breaking down the concept of value further, we will see that it strongly depends on the operating performance and future growth potential of a firm as well as its ability to earn returns on capital invested

(Damodaran (2005), Brealey/Meyers (2003), Koller/Goedhart/Wessels (2010)). If this positive development exists, the market will react positively and the share price for the company will increase. In terms of M&As, that means that a transaction that allows a company to increase its operating performance and its growth rates can be considered to be successful. However, an increase in operating performance alone is not enough, as there is a future growth potential which is most valuable for the investors. In the first case, striving for improvement in the operating performance, the CEO will be interested in the acquiring a company with resources needed, usually overpay, put those resources into own business and let the target die. In the second case, aiming to grow the company, CEO will focus on the achieving future growth through complementing, extending or even transforming the own business model. The point the CEO should keep in mind while making the decision, however, is that the acquisition of a company for its resources will not bring an unexpected growth (Christensen et al. (2011)). The acquisitions that are completed to improve the financial or operational performance of the acquirers are of little interest for the investors. Indeed, they rarely reward managers for them, fairly thinking that their opportunity costs are too high and they punish stock values ruthlessly if management misses the promised results. For the CEO, who is looking for an increase in company's performance that means that an unexpected jump in the shares will never come. As good operational performance is a key pre-determinant for future growth, the main goal of this acquisition strategy may be achieved, however will not have any impact on the growth potential of a company.

This point can be easily explained from the economics' side. A shareholder invests into the company with the intent to earn returns for the risk s/he undertakes, expecting a return rate that is higher than his/her opportunity costs. While sustaining high growth can be extremely challenging and may depend, especially for large companies, on industry structure and other exogenous factors, which can not be influenced by CEO, the company's operational

performance is the direct responsibility of management and is mostly influenced by its CEO. The decision to pay a high premium just to acquire a firm's assets to improve the operational performance may be luring for a CEO of poorly performing company, but creates no value for its shareholders. In terms of economics, the CEO exposes in this case large negative financial externalities on the shareholders, shifting risk and responsibility and simultaneously paying high transactions costs to intermediaries in the acquisition process. Taking into consideration the integration process, the overall costs created through decision may increase further. The negative reaction of shareholders and the fall in shares around the acquisition's announcement is a disciplining measure showing the vulnerability of management performance. Summing up all the costs, described above it may be more attractive for an investor to invest into another opportunity promising growth, instead of an investment into correction of the "CEO failure".

Following this reasoning, a strategic acquisition means focus on growth. It does not aim to improve the company's operating performance in the short-term focusing on the returns, but rather has as a goal to secure competitive edge and enhance the company's competitive position. However, the required growth should be value-enhancing. That means that growth alone does not imply value creation. A value-enhancing capital allocation requires a sharp analytical framework and independence of decisions for each investment opportunity in order to make the best choices. Following, we can assume that acquirers with a strong pre-event record of creating shareholder wealth are more likely to pursue value-creating to value-neutral acquisitions and to achieve higher returns than acquirers that show a record of destroying shareholder value. In other words, the potential for generating value in strategic acquisitions is linked to the pre-event ability of a firm to create shareholder wealth.

Based on their pre-event performance, I differentiate between the strategic and financial acquisitions (more in Vinogradova, 2014). The companies having strong positive NOPAT

performance will focus on pursuing the *strategic acquisitions* for growth in order to be able to sustain their high profit margins and their competitive advantage over time. The companies with negative NOPAT performance will focus on improving it. Their decision to pursue an acquisition in order to reduce costs or add additional assets is of purely short-term pecuniary interest. Therefore, I call these acquisitions *financial acquisitions* as their primary goal is resource re-allocation and they don't create additional sustainable value for the shareholders.

(FIGURE 1)

The implication for management based on this classification is that a strategic acquisition for growth is only reasonable if a firm showed a strong pre-event performance, expressed through ROIC and NOPAT and is able to pursue strategic acquisition for growth without sacrificing this performance.

Returning back to the empirical studies in the field of M&As, their results show that the most acquirers focus on improvements in the resource allocation, rather than increase in growth rates and enhancement of their competitive position. According to Devos et al. (2009), who analyzed 264 large mergers between 1998 and 2004 based on Value Line forecast, the average synergy gains for the combined company were 10,03%. Tax savings contributed to 1.64% in additional value, operating synergies accounted for 8.38%. They were primarily achieved by reduced investment expenditures rather than by increased operating profits. Are these results really valued by investors?

We know that the resource allocation alone does not create additional growth and rather lead to “conservation of value”,² even though this strategic move seems to be lucrative. A strategic

² Brealey/Meyers (2003), pp.468ff

move for growth, however, can bring additional long-term value. At the same time, to create additional value even the management of the strong-performing firms should understand when the value comes from, make it measurable, set the right goals and navigate the acquisition in the way it strengthens the company's competitive position, as it is exactly the ability of the firm to grow without destroying its existing strong performance what brings outstanding results. Indeed, the results of my previous research (Vinogradova, 2014) confirm that the pre-event performance of acquiring companies impacts the market reaction on the announcement of the strategic acquisition. Based on their knowledge of the pre-event performance of acquiring company, the investors value the strategic moves for growth of the strong-performers with higher growth rates, assuming correctly that this move will allow acquiring firms with the good performance to continue growth while sustaining good financial record and therefore creating value for the shareholders. At the same time, they ruthlessly punish the acquirers with weak pre-event performance and low growth rates, being rather cautiously about their future growth. The strong financial discipline before the transaction allows the acquiring company to grow further, creating value for its shareholders. As a result, I can state that a strategic acquisition for growth implies a strong pre-event performance of the acquiring company and ability to allocate its capital wisely, taking into consideration risk-adjusted returns and possible long-term value created.

Analysis of market-based performance

The market-based analyses point out the key determinants, influencing the share price of the acquiring companies around the announcement of the transaction.

Data Sample and Methodology

The research sample comprises 101 international public companies, involved in at least one

transaction through the time period from 2000 to 2010. The transactions were identified using data from Thomson's SDC International M&A Database, Bloomberg and Lexis/Nexis Database and 102 were randomly chosen to be included in the sample. The data sample was further reduced by those transactions, the financial data for which were not available in the Worldscope and DataStream Databases. Returns on individual shares as well as market indices were obtained from Thomson Reuters Datastream Database. Acquirer- and target-specific financial data are obtained from Thomson Reuters One Banker Worldscope Database.

To be included in the sample, the transactions satisfied all of the following selection criteria:

- the acquirer is a publicly traded company at least 200 trading days prior and 20 trading days after the initial public announcement of the transaction
- the transaction volume exceeds \$500mn
- the acquirer has after purchase 100% of the voting power of the target company
- the transaction was announced between 1 January 2000 and 31 December 2010
- the acquisitions are friendly or neutral
- the acquisition has a strategic intent
- the transaction was completed.

The acquisitions in the data sample were completed both nationally and internationally and included all the business sectors, excluding financial services and real estate. Table 3.1 summarizes the key statistics of the data sample.

(Table 3.1)

The sample includes 101 transactions, which were pursued by 92 companies. 14% of them were listed in the NASDAQ, 58% in the NYSE and 28% at the exchanges outside of the USA at the time of the announcement. One third of the sample is represented by the international

transactions, where an acquirer bought the target outside its home country. None of the targets was acquired in a hostile transaction. More than half of the transactions were announced in the period from 2004 to 2008, while with 23 announced deals the highest transaction activity in the sample was observed for the year 2000. Table 3.2 shows the number of acquisitions by the year of announcement.

(Table 3.2)

The largest part of the sample (71%) is the national transactions mainly pursued in the US capital market. In their international acquisitions, US acquirers focused mainly on the English speaking countries with 7 transactions pursued in Canada, Great Britain and Australia. The rest of their international acquisitions were fulfilled in Europe. The European acquirers diversified mainly to the US and Great Britain, or completed national acquisitions. The Japanese firms remain geographically focused and are presented in the sample only with national transactions. Table 3.3 summarizes the geographical distribution of transactions.

(Table 3.3)

The majority of the transactions involved an acquirer and target company in related industries, measured by an identity of at least the first two digits of the respective Standard Industry Classification (SIC) codes. The number of horizontal acquisitions, i.e. transactions with an identical four-digit SIC code for the acquirer and target, is almost equal to the number of conglomerate acquisitions; accordingly, nearly a third of the transactions in the sample were pursued to diversify not only geographically, but also industrially.

If we look at the operating performance of the acquiring companies, we can see that the data sample outperform the industry in all chosen financial ratios. Profitability is expressed through the ratio of Earnings before interest, depreciation and amortization through sales

(EBITDA/Sales), Return of Equity (ROE) and Free Cash Flow through sales (FCF/Sales), operating efficiency is measured by sales through assets (Sales/Assets) and Return on Invested Capital (ROIC). Table 3.4 represents the data and ratios to the profitability and operating efficiency of the participating companies.

(Table 3.4)

Methodology

To measure market reaction on the announcement, a standard event-study methodology was applied. Following the market-adjusted approach for daily returns, the pre-announcement shareholder returns were calculated for the estimation period starting 181 trading days and ending 20 days before the announcement. The analyses of Brown/Warner (1980) show that this approach is one of the most reliable and widely used. It can be expressed mathematically as

$$R_{jt} = \alpha_j + \beta_j R_{mt} + \varepsilon_t$$

As market model assumes a stable linear relation between the market return and the security return, the model parameters α and β for each security j were calculated using the OLS-regression model, so that the expected returns are computed as follows:

$$R_{jt} = \alpha_j + \beta_j R_{mt}$$

where

R_{jt} = expected return for the security j

R_{mt} = actual market return

α_j, β_j = market model parameters

All OLS-regression models were controlled for autocorrelation using the Durbin-Watson statistic and multi-collinearity using tolerances intervals for individual variables.

The expected returns were approximated by the use of returns of the proxy market portfolio (R_{mt}) on each event day t . The market portfolio selection took into account the geographical distribution of the firms: In this analysis, the individual stock price performance was measured in comparison to the most appropriate principal local index. For calculation of R_{mt} , national Morgan Stanley Capital International (“MSCI”) Standard Market Index for each security was applied and used as the market return proxy for acquirers in the sample. For the acquirers from the energy sector the DataStream Regional Industrial Index was chosen. Following the study of Cybo-Ottone/Murgia (2000) also the DataStream Regional Industrial Index was applied, however the results didn’t show any significant differences in calculated returns, except of companies from energy sector. The event date is the day the public is first informed of the transaction, according to Thomson One SDC. These dates were also crosschecked using the MergerStat database.

The abnormal returns of stock around the announcement are calculated as a difference between the expected stock return R_{jt} and actual stock return R_{it} in each day in the event window as shown in the following formula:

$$AR_{jt} = R_{jt} - R_{it}$$

where

AR_{jt} = abnormal return of security j on the day t

R_{jt} = expected return, calculated using OLS regression

R_{it} = actual returns

To take into consideration the cross-sectional dependence as well as event clustering and an

increase in variance over the event period in the next step, excess returns were standardized and afterwards tested by means of an adjusted z-statistic according to the method introduced by Mikkelson/Partch (1988). The actual standardized abnormal returns were calculated for each of the firms in the sample for every day during the event window.

To make results comparable to other event studies the cumulative abnormal returns were computed for different event-windows within (-10;10) interval. The first sub-group includes the event-windows that are centered around the announcement day ([-1,1], [-3,3], [-5,5], [-10,10]). The second group presents the results exactly on the announcement day and a day following it ({0}, [0,1]). The third sub-group is defined to assess the post-announcement performance of the acquirers' shares ([-1,5], [-1,10]). The longer post-event windows are used to adjust the results for possible time lags in the capital markets and delayed market reaction to the transaction announcement.

The average abnormal return for event day t and cumulative abnormal returns for event window T were calculated as follows:

$$AR_t = \frac{1}{N} \sum_{i=1}^N AR_{it}$$

where

AR_t = average abnormal returns on the day t (t is a day in the event window)

N = number of analyzed securities

t = point of time to analyse, t T

AR_{it} = abnormal returns of a security i on the day t (t is a day in the event window)

Cumulative abnormal returns (CAR) for any interval ($t_1;t_2$) during the event window T were calculated as follows:

$$CAR_{[t_1, t_2]} = \sum_{t=t_1}^{t_2} AR_t$$

where

$CAR_{(t_1, t_2)}$ = cumulative average abnormal returns in the period (t_1, t_2)

t = point of time to analyse, $t \in T$

AR_{jt} = average abnormal returns on the day t (t is a day in the event window)

As this study is focused on the evaluation of the performance of acquiring companies, no abnormal returns for the shareholders of the target companies were calculated and no conclusion was drawn on the combined creation and distribution of shareholder value in the transactions.

Tests of statistical significance are based on standardized prediction errors, similar to the method applied by Ismail/Davidson (2005). In order to assess whether the means of two paired subsamples X and Y within the univariate analysis of various determinants of transaction success are statistically different from each other, t -statistics following Beitel et al. (2004) were used. Under the null hypothesis that there are no differences in the abnormal returns between the analyzed subsamples, the t -statistics follow a Student- t distribution.

Results of the analysis

Results of the capital market based event study

The cumulative abnormal returns for the acquiring companies in the data sample are presented in the Table 4.1.

(Table 4.1)

The results show that throughout analyzed event windows the acquirers suffer statistically significant negative abnormal returns. On the day of the announcement the acquirers earn negative returns of about -0,76%. In the shortest event window surrounding the announcement (-1;1) acquirers experience the decrease in their share price of -0,52%. These results support the existing evidence on bidders performance in the academic literature (e.g. Diepold et al. (2008), Mogla/Sign (2010), Kedia et al. (2011)). Although there are some acquirers who experienced positive market reaction, the number of those with negative share price development is relatively higher for all event windows and especially for the day of announcement. The CARs for the event period (-1;1) are largely scattered, varying in a range from -22,82% to +19,72%.

The negative abnormal returns are the highest for the day of the event (0) and the days around the event (-1;1). Extending the length of the pre- and post-announcement periods yields less negative returns. These findings may reflect the time lags in the capital markets and confirm that additional information may have become available after the day of announcement. Comparing the developments of the abnormal returns of European and American acquirers, it can be stated that European acquirers achieve better returns in the short-event windows with -0,42% and -0,45% for the event windows (0;0) and (-1;1) respectively, and these results do not differ very strong from the other event windows. Contrary to that the returns of American acquirers are the lowest during the short-event window with -0,88% and -0,56% for (0;0) and (-1;1) respectively, but gradually improve with the length of the window, and are -0,36% and -0,30% for the event window (-3;3) and (-5;5) respectively. That indicates the difference in both the efficiency of capital markets and investors sentiments.

Analysis of different sub-samples

To understand better the impact of specific factors on the market reaction and therefore the performance of the acquiring company, univariate analysis for chosen determinants were performed. For this reason the entire data sample was divided into several sub-samples according to the key factors, which were analyzed individually and then compared to each other. This approach helps to identify the key drivers of acquirers' share performance and gives more detailed insights into their determinants.

Geographical focus. An acquisition of an international target is often understood as an opportunity to diversify business and grow internationally. There are a lot of studies, describing the strong differences in the performance of national and international acquisitions. (e.g. Diepold et al. (2008)). Most authors state that the performance of the international acquisitions is difficult to access, because of cultural and language differences and as result, difficulty to achieve planned synergies and transaction's goal. (e.g. Beitel et al. (2004), Weber et al. (2011)). However, other studies deliver rather contradictionary results. So some studies show that international acquirers earn much better returns around the day of announcement than national acquirers. (Hasan et al. (2012), Eun et al. (1996), Seth et al. (2002)). To analyze the performance of the firms in our data sample, the sample was divided into two parts according to their internationality and a binary variable was used to reflect whether a transaction was national or international. Using this classification, 72 national and 29 international transactions were identified and examined. Table 4.2. reports the results for both individual samples and their mean difference as well as their statistics for significance.

(Table 4.2)

It is striking that the acquirers pursuing national acquisitions underperform the acquirers pursuing the international acquisitions in the short period of time around the announcement day. For the event windows (-1;1) and (0;0) in the sample this difference in performance is

almost three times as large with CARs of -0,65%/-0,18% and -0,90%/-0,39% respectively. While the t-statistic is significant for the results in all event windows for the national acquirers, it is significant only for the event windows (0;0), (-3;3) and (-1;10) for the international acquirers. The t-statistic for mean difference test shows statistically significant results for the event windows (0;0) and (0;1) at the 10% and 5% level respectively. Following these findings we can conclude that in the time period analysed the investors react more positively on the international acquisitions rather than acquisitions in the domestic market. This might be explained with the key development of the 5th-6th merger wave with its focus on geographical diversification based on the fact that diversification deals basically represent an opportunity for business risk reduction and future growth, the strategies which can be considered the best during the financial crisis of 2008. These findings are in line with Alexandris et al. (2011), Méon/Weill (2005)).

Business Diversification. Contradictorily to the known statement that the investors do not value conglomerate acquisitions, the results of the analysis of the strategic direction of the acquirers show that for the whole sample the transaction between the non-related companies destroy less value than the acquisitions of related targets. Most authors believe that a conglomerate means an increased complexity of an organization and as result less synergy potential. Therefore, many studies confirm that an increased product/activity focus has a significantly positive effect on M&A success. (e.g. DeLong(2001), Lang/Schulz (1994)). However these results seems to be completely different for the national and international acquisitions. While the acquirers of the national non-related targets underperform strongly in the event windows (-1;1) those of related targets with -0,957% and -0,597% respectively, the acquirers of international non-related targets show positive share returns in the event window (-1;1) with +1,463% and therefore strongly overperform those acquirers who purchase international targets in the related industries. Here the abnormal returns are negative with -

0,446% for the event window (-1;1). These results suggest the conclusion that the future benefits from simultaneous geographic and industrial diversification outweigh those proposed only by single synergy hypotheses. The results for both individual sub-samples as well as the mean difference test are introduced in the Table 4.3.

(Table 4.3)

However, if we look more closely at the related acquisitions splitting them according to their 2, 3-, and 4-digit SIC-code relatedness, we will see slightly different results, which are summarized in the Table 4.2.3. The entities that are fully related (4-digit SIC-code relatedness) show the worst performance with CAR of -0,907% and -0,817% for both event windows respectively. The results are negative for both the acquirers of national and international targets. That means that in general, horizontal transactions were not appreciated by the investors and rather destroyed the shareholder value. The less both companies were related the better results they showed.

All panels show the worst results for the acquisition of close related targets (4-SIC). These results are significant in the event window (-1;1) at 1% and 10% level for national and international acquirers respectively. The best results achieve the acquirers of 3-SIC-related targets with -0,10% and -0,23% in the event window (-1;5) for national and international acquirers respectively. Although the mean-difference test does not show significant results, we can conclude that the most successful acquirers tried to achieve both synergy potential and diversification benefits. The ability to diversify internationally and still achieve synergies creates value and is valued by investors most.

(Table 4.4)

Method of payment. Method of payment is one of the most widely analysed determinants of the acquirers' performance in the academic literature. The results of prior research show that acquirers paying with cash perform much better than those who choose to pay with stock or use a mixed method of payment (Travlos (1987), Heron/Lie (2002), Sudarsanam/Mahate (2003)). While targets prefer mostly payment in cash, bidders prefer cash payment if they believe that their shares are undervalued. Therefore, the decision about a method of payment gives investors private information about the acquirer's performance and as a result influences the investors' reaction and share prices at the day of announcement. To analyze the impact of method of payment on the share returns of acquirers in the chosen data sample, it was divided into three groups according to its chosen form of payment. The results show that 55% of transactions in the sample were paid for with cash. Among them, about a half were international deals. The lowest number of transactions in data sample was financed with stock (19%). The remaining acquirers (25%) decided in favor of the combined method of payment. Almost all of them were firms pursuing national acquisitions. Table 4.5. provides the cumulative abnormal returns for the subsamples split based on the chosen method of payment.

(Table 4.5)

From the results received we can conclude that the acquirers who paid for their transactions with cash strongly overperformed those who paid with stock. Their CAR in the event window (-1;1) were about five times higher than those of the firms which paid with stock. The acquirers of the international targets experienced event slight positive returns. For the event window (-1;5) the results are even better. Here the cash-payer show the performance which is thirty-seven times better than those of stock-payer with CARs of 0,023% and -0,857% respectively. At the same time the acquirers of national companies show much worse performance compared to the acquirers of international targets. The investors seem to

appreciate the combined method of payment least. The firms, which decided in favour of this method of payment experience the highest losses in their share returns through the both event windows analyzed. Their CARs are about six times lower than the CARs of cash-payer and slightly lower than those of combo-payers in the event window (-1;1). For the event window (-1;5) the results slightly improve but still underperform the CARs of those who paid with cash. The acquirers of the international companies showed also in this case better results. The mean-difference test is significant for the national acquirers in the event window (-1;5) at the 1% and 10% level for the difference between cash and stock payers and cash and combo payers. Also the mean-difference for these sub-groups in all transaction pannel are significant at the 1% or 10% level. These results strongly support existing research and confirm that decision to pay in cash influences positively the reaction of investors for both national and international deals.

Size (deal value). The larger the acquisition is, the worse is reaction of the investors on the deal announcement. The existing academic studies confirm that mega-deals are seldom easy to manage and therefore have less value creation potential (Bayazitova et al. (2012)). Additionally, high premiums and high prices paid impact the business of acquiring company, reducing its opportunity to achieve the synergies quickly and exploit the growth potential fully. To analyse the difference in the abnormal returns of mega-deals and average deals according to their transaction volume in more details, the whole data sample was divided into four groups. The summary of analysis is presented in the Table 4.6.

(Table 4.6)

The results show that the acquisition of small targets creates better excess returns for the shareholders of acquiring companies, although these results are not statistically significant. The largest 25 transactions, however, create the least value, showing the worst results with

abnormal returns of -1,36% for the event window (-1;5) that are statistically significant at the 1% level. The results for the largest 33 transactions are slightly different, even though are still significantly negative with -0,86% for the event window (-1;5). The best performers at the short run (-1;1) are middle-sized transaction, while extending the event window leads to the best results for the smallest transactions with positive abnormal returns of 0,01%, although not statistically significant. These results support statement that the investors react cautiously at the large deals, which are mostly paid with stock and are often too large to manage them properly and realize the synergy planned. At the same time, the smaller deals, which are cheaper, allow their acquirers react more quickly and fulfill the changes needed. As result they are appreciated more by investors. Being a subject for overpayment, the mega-deals are often understood by the investors as too risky to be successful, reaction that is reflected in the share price development on the day of announcement.

Economic Situation. Often the economic situation itself influences the outcome of M&As and value creation for the shareholders of acquiring companies. So, analysing the acquisitions in the UK, Tse/Soufari (2001) found out that the outcome effects are in line with the existing GDP development in the country. Taking into consideration the strong economic changes during the analysed period, the entire data sample was divided into three time periods, which represent different economic circumstances and therefore expectations of investors. While the first period from 2000 till 2004 is the time of the fifth merger wave and the beginning of the sixth merger wave with its peak in the mid 2000s, the second sub-period of our analysis (from 2005 till 2007) represents the peak of the sixth merger wave and belong to the time when deals had rather modest positive effect for their shareholders, with the dramatically higher P/E ratios of this period. However, both the fifth and the sixth merger waves are considered to be the „global merger waves“, when the key strategic reason for transactions was external growth. This development was interrupted by the global economic crisis, starting in 2008,

which has completely changed the existing M&A landscape. Due to the weak global economic situation, profitability challenges and lack of financing the M&A activity during this time decreased strongly. Only those companies, which had large amounts of cash available were able to pursue further acquisitions. They were the winners of crisis as managed to grow under the tough economic conditions and expand their business on favourable terms. The period from 2008 till 2010 is the third sub-sample in this analysis. The results are summarized in the Table 4.7.

(Table 4.7)

Examining the share returns of acquirers in different sub-samples, reveals that the transactions announced in the fifth merger wave destroys more value than transactions in the time of recession. Here the acquiring companies suffered the worst results with significant -0,59% in the short event period (-1;1). Particularly international transactions underperformed. For both event windows examined, their results were worse than those of acquirers of national companies with -0,70% vs. -0,54% and -0,51% vs. -0,20% respectively. These findings are in line with Alexandris et al. (2011) who report that despite the good economic conditions and decisive approach of CEOs the acquisitions of the 6th merger wave largely destroyed value. The situation is completely different for the transactions during the both recession periods. The end of the 5th and the beginning of the 6th wave was the period when the acquiring companies performed best. Even though the overall sample experiences slightly negative returns, international acquisitions could achieve the highest results with even slightly positive returns of 0,035% in the event window (-1;5), although statistically not significant. This trend is even more striking for acquisitions during the economic crisis of 2008. While acquirers of national targets during this period suffered the worst results with -1,24% and -1,12% for the event windows (-1;1) and (-1;5) respectively, the acquirers of international targets were the

best performers. In the both event windows they showed positive statistically significant abnormal returns of 2,79% and 1,63%. It seems that the bad economic situation in the USA and Europe, forced the companies to look for the business opportunities abroad, a strategy which was highly appreciated by investors.

Examples of value-creating and value destroying transactions

Case 1: A successful growth - KLA-Tencor & ICOS Systems (*strong financial performance before the acquisition, international target from less related industry, revenue enhancement*)

On February, 21st 2008 KLA-Tencor Corporation (NASDAQ: KLAC) announced an acquisition of ICOS Vision Systems Corporation NV (Euronext: IVIS) in a cash transaction valued at €36.50 per share. The net transaction value (excluding treasury shares and net of cash) was €316.9 million (approximately \$465.8 million). It represented a 35% premium to the average closing price of ICOS's shares over the preceding 90-days. KLA-Tencor expected for the transaction to be enhancing to earnings per share in the first year.

The management of KLA-Tencor, the leading supplier of inspection and metrology systems to the global semiconductor industry explained this move as an outstanding opportunity for growth, allowing two companies to combine their complementary businesses, expand the products and services offered and position themselves as a leader in the industry and the „world's best process control company.“ Therefore, the acquisition offered an „exceptional synergy“ in both markets and technologies, with additional opportunities for growth and diversification. Before the acquisition announcement, both companies had complementary market positions, with no overlap in product lines. In the weak market conditions of the industry KLA-Tencor had a good opportunity to take advantage of this situation on account of its position in yield management products.

Investors reacted on the decision of KLA-Tencor management positively with an increase in share price of +1,77% in the event window (-1;1) and +1,04% in the event window (-1;10). ICOS shares, whose trading was temporarily suspended, soared 60 percent at 35.52 euros, returning to a level last seen in July 2007. Shares of KLA-Tencor rose \$1.34, or 3.2 percent, to \$43.50 on Nasdaq.

Also based on the operating performance, the KLA-Tencor belonged to a strategic „Star“ acquirer (Vinogradova (2014)). In the year before the acquisition, the firm outperformed its industry in EBITDA, FCF/SALES, and growth rate ratios and therefore was best prepared for the next strategic growth move. Besides, ICOS Systems announced a high expected growth in revenues within the PV market for 2008 and received its largest single order for solar cell inspection equipment valued at €2.3 million with a Taiwanese PV cell manufacturer in December 2007.

Case 2: A value-destroying growth - TUI AG & CP Ships (*weak pre-event performance, acquisition of assets in the hope to grow, strive to improve financial performance*)

On August 19th 2005, TUI AG announced its acquisition of CP Ships containers for \$21.50 per share of CP Ships, a premium of 9.7% over CP Ships' closing share price on Aug. 19. CP Ships' board has unanimously recommended that shareholders accept the offer.

Based on the press release of management, the acquisition was a strategic move for growth and allowed TUI AG to build the second leg for its business, that previously was concentrated completely on tourism. The combined company should become one of the world's largest in terms of capacity in the container-shipping market, with a fleet of 139 ships and raise Hapag-Lloyd from its current No.13 position in terms of world freight volume to fifth largest. The

combined company would be able to deliver a total capacity of 400,000 containers on more than 100 routes around the world.

The operating performance of both candidates wasn't outstanding, however. Both companies underperformed their industries one year before the acquisition in terms of EBITDA/SALES, FCF/SALES, and growth rates. The CEO of TUI AG however, expected to be able to cut more than 100mn euros costs. The management announced a restructuring program and promised to be able to increase the profitability of the CP Ships and to make the new entity even more profitable. The key program drivers were optimization of the routes and usage of the larger fleet with the strong assumption of the market boom in China. In other words, TUI AG was a „Restructurer“ acquirer (Vinogradova (2014)) and the acquisition could not be considered as a strategic acquisition for growth, rather a financial one for restructuring purposes. As a result, it didn't promise any future growth, especially in the stagnating markets.

Market reacted negatively to the poor growth prospects. Shares of TUI fell for -3,83% in the event window (-1;1) and -1,90% in the event window (-1;10), the biggest decline since March 11, 2004. CP Ships was up 1.4 percent to C\$23.50 in Toronto, the highest in almost 14 months, valuing the company at C\$2.13 billion (\$1.75 billion.)

Conclusion

The goal of this paper is to identify the key factors that influence announcement effects of M&As and evaluate the key value drivers that impact performance of the acquiring companies and their value creation for the shareholders in the strategic acquisitions completed between 2000 and 2010. The results should guide the Executives in their growth strategy decisions and make the value-creating transactions possible. Using event-study method and comparative statistics with mean-difference tests, seven variables were identified and tested on their influence on transaction outcome. Besides purely empirical results, the paper takes into consideration the pre-event operating performance of the acquirers and their strategic rationale for the acquisition, analysing how it impacts the outcome. The examples of a value-creating and a value-destroying acquisitions help to understand the strategy behind their success/failure.

In line with existing academic research, the acquiring companies earn negative abnormal returns around the day of the announcement of the transaction. The results are statistically significant for all event windows analysed, but are the lowest at the day of announcement and three days event windows with -0.76% and -0.52% respectively. However, the univariate analysis showed that there are some variables that significantly influence the outcome of the transaction and the performance of acquiring companies. The method of payment stays one of most important variables influencing the share performance of acquirers. Those acquirers who paid for their acquisitions in cash performed significantly better than those which paid with stock. Contrary to the existing results, the study shows that the investors reacted more positively on the international acquisitions rather than national transactions. This certainly can be explained with the focus of the 5th merger wave on the geographical expansion as well as the fact that the weak economic situation in the USA and Europe during the financial crises in

2008-2010 pushed the acquirers to look for the business opportunities abroad to diversify their risks. Indeed, if we look at the abnormal returns of acquirers throughout different time periods, those acquirers who performed international acquisitions between 2008 and 2010 performed best, having earned significantly positive returns. Another factor, which has impact on the investor reaction, is relatedness of acquirers and targets. The results of this study show that the best performer were those companies, which acquired the related companies in the national market or the non-related in the international acquisitions. Therefore, we can state that investors valued the international expansion into in unrelated businesses most. However, analysing the national acquirers it turned out that those which had chosen 2- and 3-SIC related targets performed much better compared to those which had chosen 4-SIC related targets. The last strategic determinant – the size, expressed in the value of transaction, had similar impact to those found in the previous academic studies. The acquirers of the smaller transaction could achieve better results compared to the participants of the mega-deals.

However, the results prove that the pre-event operating performance of the acquirers, their financial discipline and ability to make sound value-based decisions impacts significantly the transaction outcome. The acquirers with strong pre-event operating performance whose strategic aim for an acquisition is growth, experience better investors' reaction than those whose reason for the transaction is the current performance improvement. Knowledge of sources for value creation, long-term value perspective rather than focus on short-term returns bring outstanding results. The case studies for the best- and worst performers support these results. Therefore, it can be concluded that the market reaction to M&A announcements can be at least partially forecasted, what can be helpful for both Executives performing M&As for growth as well as investors looking for the increase in value.

References

- Alexandris, G./Mavrovitis, Ch.F./Travlos, N.* (2012) „How have M&As changed? Evidence from the sixth merger wave,“ *The European Journal of Finance*, Vol.18, Issue 8, p.663-688
- Baghai, M./Smit, S./Viguerie, P.* (2009): Is your growth strategy flying blind?, *Harvard Business Review*, 87(5), pp.86-96
- Bayazitova, D./Kahl, M./Valkanov, R.* (2012), „Value creation estimates beyond announcement returns: Mega-mergers versus other merger,“ Working paper, Said Business School, University of Oxford
- Beitel, P./Schierreck, D./Wahrenburg, M.* (2004): Explaining M&A success in European banks, *European Financial Management*, 10(1), pp.109-139
- Brealey, R.A./Meyer, S.C.* (2003): Principles of corporate finance, 3rd edition, The McGraw-Hill, New York
- Brown, S./Warner, J.B.* (1980): Measuring security price performance, *Journal of Financial Economics*, 8(3), pp.205-258
- Cass School of Business* (2009): What should I do next? CEO succession, M&A deals and company performance, M&A research center MARC
- Christensen, C.M./Alton, R./Rising, C./Waldeck, A.* (2011): The new M&A Playbook, *Harvard Business Review*, 89(3), pp.48-57
- Cybo-Ottone, A./Murgia, M.* (2000): Mergers and shareholder wealth in European banking, *Journal of Banking&Finance*, 24(6), pp.831-859
- Damodaran, A.* (2005): Valuation approaches and metrics: A survey of the theory and evidence, *Foundations and Trends® in Finance*, 1(8), pp.693–784
- DeLong, Gayle L.* (2001), „Stockholder gains from focusing versus diversifying bank mergers,“ *Journal of Financial Economics*, Vol.59, Issue 2, p.221-252
- Devos, E./Kadapakkam, P./Krishnamurthy, S.* (2009): How do mergers create value? A comparison of taxes, market power and efficiency improvements as explanation for synergies, *Review of Financial Studies*, 22(3), pp.1179-1211
- Diepold, B./Feinberg, R./Round, D.K./Tustin, J.* (2008): Merger impacts on investor expectations: An event study for Australia, *International Journal of the Economics of Business*, 15(1), pp.45-62
- Eun, C. S./Kolodny, R./Scheraga, C.* (1996), „Cross-border acquisitions and shareholder wealth: Tests of the synergy and internalization hypotheses,“ *Journal of Banking & Finance*, Vol.20, Issue 9, p. 1559-1582

Harding, D./Rovit, S. (2004): Building deals on bedrock, Harvard Business Review, 82(9), pp.121-128

Hasan, I./Schmiedel, H./Song, L. (2012), „Growth Strategies and Value Creation: What works best for stock exchanges?“, Financial Review, Vol.47, Issue 3, p. 469-499

Heron, R./Lie, E. (2002): Operating performance and the method of payment in takeovers, Journal of Financial and Quantitative Analysis, 37(1), pp.137-155

Ismail, A./Davidson, I. (2005): Further analysis of mergers and shareholder wealth effects in European banking, Applied Financial Economics, 15(1), pp.13-30

Kedia, S./Ravid, S.A./Pons, V. (2011): Do vertical mergers create value?, Financial Management (Wiley-Blackwell), 40(4), pp.845-877

Kim, J./Haleblian, J./Finkelstein, S. (2011): When firms are desperate to grow via acquisitions: the effect of growth patterns and acquisition experience on acquisition premiums, Administrative Science Quarterly, 56(1), pp.26-60

Koller, T./Goedhart, M./Wessels, D. (2010): Valuation. Measuring and Managing the Value of Companies, 5th edition, University Edition, Wiley&Sons, New York

Méon, P.-G./Weill, L.(2005) „Can mergers in Europe help banks hedge against macroeconomic risk?“, Applied Financial Economics, Vol.15, Issue 5, p. 315-326

Mikkelsen, W.H./Partch, M.M. (1986): Valuation effects of security offerings and the issuance process, Journal of Financial Economics, 1(1/2), pp.31-60

Mogla, M./Singh, F. (2010): Market performance of acquiring companies, Paradigm (Institute of Management Technology), 14(1), pp.72-84

Sudarsanam, S./Mahate, A.A. (2003): Glamour acquirers, method of payment and post-acquisition performance: the UK Evidence, Journal of Business Finance & Accounting, 30(1/2), pp.229-341

Travlos, N.G./Papaioannou, G.J. (1991), „Corporate acquisitions: method of payment effects, capital structure effects and bidding firms stock returns“, Quarterly Journal of Business & Economics, Vol.30, Issue 4, p. 3-24

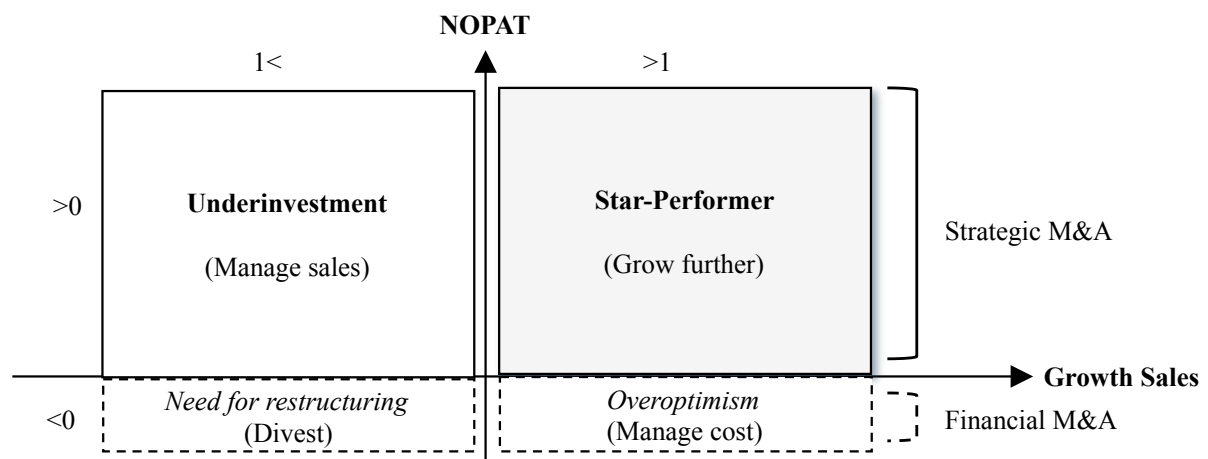
Tse, T./Soufani, K. (2001), „Wealth Effects of Takeovers in Merger Activity Eras: Empirical Evidence from the UK“, International Journal of the Economics of Business, Vol.8, Issue 3, p. 365-377

Vinogradova, V. (2014), „Grow externaly, but do your homework. The impact of pre-event operating performance on the transaction outcome“, in Forum M&As, Jahrbuch 2014, Technical University of Munich/University of Muenster, Springer/Gabler, pp.219-241, (forthcoming)

Weber, Y./ Shlomo, Y.T./Arie, R. (2011), „A Model of the Influence of Culture on Integration Approaches and International Mergers and Acquisitions Performance,“ International Studies of Management and Organisation, Vol. 41, Issue 3, p. 9-24

Figures

Figure 1: Identifying strategic M&A based on the acquirers' pre-event performance



Tables

Table 3.1: Description of DataSample

Descriptive properties	All	Internationality		Industry	
		National	International	Same Industry	Different Industries
Number of transaction	101	72	29	87	14
in %	100%	71,29%	28,71%	86,14%	13,86%
Total value (\$mn)	625.379,46	502.723,90	122.655,55	542.377,08	83.002,37
in %	100%	80,39%	19,61%	86,73%	13,27%
Mean value (\$mn)	6.191,88	6.982,28	4.229,50	6.234,22	5.928,74
Median value (\$mn)	2.294,52	2.173,64	2.294,52	2.495,68	1.731,46

Table 3.2: Number of acquisitions by the year of announcement

Year	Total Value (in \$US)	Value per firm (in \$US)	Number	Internationality		Strategic Intent	
				National	International	Focused	Diversified
2000	87.484,19	5.832,28	15	10	5	12	3
2001	56.513,80	5.651,38	10	6	4	9	1
2002	20.198,97	2.885,57	7	4	3	7	0
2003	8.163,01	2.040,75	4	3	1	3	1
2004	7.108,96	1.777,24	4	3	1	3	1
2005	170.424,94	10.651,56	16	12	4	13	3
2006	100.588,90	5.294,15	18	13	5	17	1
2007	52.454,94	3.278,43	16	12	4	15	1
2008	9.946,22	1.989,24	5	3	2	5	0
2009	111.771,08	22.354,22	5	5	0	3	2
2010	725,15	725,15	1	1	0	1	0

Table 3.3: Geographical distribution of transactions

Targets	Bidders													Total
	US	DE	CH	IT	ES	FR	NL	FN	SE	DK	AT	GB	JP	
US	63	1	2	1	1									68
GB	1	4	1	2		1	1			1				11
JP													4	4
AU	1											1		2
NL							1							1
CA	5													5
FR						3								3
AT											1			1
NW	1													1
IT			1											1
DK	1								1					2
SE								1						1
BE	1													1
Total	73	5	4	3	1	4	2	1	1	1	1	1	4	101

Table 3.4: Pre-event operating performance of acquirers

Ratios	EBITDA/SALES	FCF/SALES	CAPEX/SALES	SALES/ASSETS
N	101	101	101	101
Average	25,59%	19,31%	10,60%	0,93
Standard Deviation	16,52%	14,58%	17,78%	0,67
Minimum	1,44%	-9,04%	0,33%	0,16
Maximum	76,61%	65,83%	131,69%	4,20
vs. Industry	+6,55%	+4,26%	+11,87%	+6,03%

Table 4.1: Results of the event-study

Event-Window	CAR (%)	Pos. (N)	Neg. (N)	Z-statistic	p-value
Around the announcement					
(-10;10)	-0,26***	43	58	-2,57	0,01069
(-5;5)	-0,31***	41	60	-3,13	0,00175
(-3;3)	-0,36***	42	59	-3,67	0,00024
(-1;1)	-0,52***	41	60	-5,18	< 0,00000
On the day of announcement					
(0;0)	-0,76***	36	65	-7,61	< 0,00000
(0;1)	-0,61***	43	58	-6,11	< 0,00000
After the announcement					
(-1;3)	-0,41***	43	58	-4,08	0,00005
(-1;5)	-0,31***	41	60	-3,11	0,00187
(-1;10)	-0,28***	43	58	-2,79	0,00527

This table shows the cumulative abnormal returns for 101 acquirers during the period from 2000 till 2010. Cumulative abnormal returns are calculated employing the standard market model, using an estimation period of 180 trading days prior to the event window [-20,20] and the Morgan Stanley Regional Industrial Index to measure market returns. Reported t-statistic is based on the two-tailed t-test. *, **, *** denote significance at the 10%, 5% , and 1% level, respectively.

Table 4.2: International vs. National transactions

Event window	National (%) N=72	Z-statistic	International (%) N=29	Z-statistic	Difference (1)-(2)	t-statistic	p-value
Around the announcement							
(-10;10)	-0,244 **	-2,071	-0,286	-1,538	0,042	0,175	0,861
(-5;5)	-0,329 ***	-2,792	-0,268	-1,445	-0,061	-0,247	0,805
(-3;3)	-0,395 ***	-3,353	-0,289 *	-1,557	-0,106	-0,409	0,683
(-1;1)	-0,650 ***	-5,512	-0,182	-0,982	-0,468	-1,579	0,118
On the day of announcement							
(0;0)	-0,904 ***	-7,670	-0,393 **	-2,117	-0,511 *	-1,677	0,097
(0;1)	-0,796 ***	-6,750	-0,143	-0,769	-0,653 **	-2,050	0,043
After the announcement							
(-1;3)	-0,493 ***	-4,183	-0,190	-1,025	-0,303	-1,121	0,265
(-1;5)	-0,388 ***	-3,289	-0,117	-0,629	-0,271	-1,047	0,298
(-1;10)	-0,275 **	-2,350	-0,267 *	-1,544	-0,008	0,051	0,959

The table compares the cumulative abnormal returns of 101 acquirers pursuing national and international acquisitions during the period from 2000 till 2010. Cumulative abnormal returns are calculated employing the standard market model, using an estimation period of 180 trading days prior to the event window [-20,20] and the Morgan Stanley Regional Industrial Index to measure market returns. Reported t-statistic is based on the two-tailed t-test. *, **, *** denote significance at the 10%, 5% , and 1% level, respectively.

¹⁾ 1-National, 2- International

Table 4.3: Related vs. Non-related transactions

Event window	Related (1)		Non-related (2)		Mean-Difference		
	CAR (%)	z-statistic	CAR (%)	z-statistic	(1)-(2)	t-test	p-value
Panel A: All Transactions							
(-1;1)	-0,553***	-2,771	-0,279	-1,042	-0,274	-0,689	0,492
(-1;5)	-0,366***	-3,41	0,040	0,151	-0,406	-1,196	0,235
(N)	87		14				
Panel B: National							
(-1;1)	-0,597***	-4,700	-0,975***	-3,085	0,378	0,884	0,379
(-1;5)	-0,401***	-3,159	-0,303	-0,957	-0,098	-0,253	0,801
(N)	62		10				
Panel C: International							
(-1;1)	-0,446**	-2,228	1,463***	2,933	-1,909*	-2,277	0,067
(-1;5)	-0,279	-1,394	0,896*	1,791	-1,175*	-1,717	0,097
(N)	25		4				

The table compares the cumulative abnormal returns of 101 acquirers, showing the impact of relatedness of transactions participants, including mean-difference test. A transaction is included in the sub-group (2) if the acquirer's and target's first digit of 4-SIC codes are not identical. Cumulative abnormal returns are calculated employing the standard market model, using an estimation period of 180 trading days prior to the event window [-20,20] and the Morgan Stanley Regional Industrial Index to measure market returns. Tests of statistical significance followed Brown/Warner(1983) and are based on the two-tailed t-test. *, **, *** denote significance at the 10%, 5% , and 1% level, respectively.

Table 4.4: CARs according to SIC-code

Event window	4-SIC (1)		3-SIC (2)		2-SIC (3)		Mean-difference		
	CAR (%)	z-stat.	CAR (%)	z-stat.	CAR (%)	z-stat.	(1)-(2)	(1)-(3)	(2)-(3)
Panel A: All Transactions									
(-1;1)	-0,809***	-5,179	-0,556**	-2,082	-0,330	-1,440	-0,253	-0,479	-0,226
(-1;5)	-0,583***	-3,733	-0,145	-0,544	-0,258	-1,123	-0,438	-0,325	0,113
(N)	41		14		19				
Panel B: National									
(-1;1)	-0,955***	-5,318	-0,649**	-1,950	-0,514*	-1,705	-0,306	-0,441	-0,135
(-1;5)	-0,784***	-4,367	-0,101	-0,302	-0,168	-0,559	-0,683	-0,616	0,067
(N)	31		9		11				
Panel C: International									
(-1;1)	-0,356	-1,124	-0,389	0,870	-0,076	-0,215	0,033	-0,280	-0,313
(-1;5)	0,041	0,128	-0,226	-0,506	-0,380	-1,076	0,267	0,421	0,154
(N)	10		5		8				

The table compares the cumulative abnormal returns of 101 acquirers and presents the impact of relatedness of transactions participants according to their SIC-Codes, including mean-difference test. Cumulative abnormal returns are calculated employing the standard market model, using an estimation period of 180 trading days prior to the event window [-20,20] and the Morgan Stanley Regional Industrial Index to measure market returns. Tests of statistical significance followed Brown/Warner(1983) and are based on the two-tailed t-test. *, **, *** denote significance at the 10%, 5% , and 1% level, respectively.

Table 4.5: CARs according to method of payment

Event window	Cash (1)		Stock (2)		Combo (3)		Mean-difference		
	CAR (%)	z-stat.	CAR (%)	z-stat.	CAR (%)	z-stat.	(1)-(2)	(1)-(3)	(2)-(3)
Panel A: All Transactions									
(-1;1)	-0,207	-1,563	-0,845***	-3,681	-0,959***	-4,801	0,638*	0,752**	0,114
(-1;5)	-0,022	-0,171	-0,857***	-3,742	-0,549***	-2,740	0,835***	0,527*	-0,308
(N)	57		19		25				
Panel B: National									
(-1;1)	-0,320*	-1,841	-0,875***	-3,502	-0,965***	-4,633	0,555	0,645*	0,090
(-1;5)	0,009	0,053	-0,936***	-3,754	-0,575***	-2,752	0,945***	0,584*	-0,361
(N)	33		16		23				
Panel C: International									
(-1;1)	-0,051	-0,251	-0,680	-1,181	-0,898	-1,272	0,629	0,847	0,218
(-1;5)	-0,066	-0,325	-0,432	-0,753	-0,250	-0,350	0,366	0,184	-0,182
(N)	24		3		2				

The table compares the cumulative abnormal returns of 101 acquirers and presents the impact of relatedness of transactions participants according to their method of payment including mean-difference test. Cumulative abnormal returns are calculated employing the standard market model, using an estimation period of 180 trading days prior to the event window [-20,20] and the Morgan Stanley Regional Industrial Index to measure market returns. Tests of statistical significance followed Brown/Warner(1983) and are based on the two-tailed t-test. *, **, *** denote significance at the 10%, 5% , and 1% level, respectively.

Table 4.6: CARs according to the transaction volume

Event Window	CAR (%)	Pos.	Neg.	Z-test	p-value
The largest 25 Transactions					
(-1;1)	-1,357***	5	20	-6,783	0,001
(-1;5)	-1,149***	4	21	-5,747	0,000
The largest 33 Transactions					
(-1;1)	-1,248***	8	25	-7,169	0,000
(-1;5)	-0,863***	8	25	-4,958	0,002
Middle 35 Transactions					
(-1;1)	-0,097	22	12	-0,573	0,796
(-1;5)	-0,136	16	19	-0,802	0,579
The smallest 25 Transactions					
(-1;1)	-0,307	7	22	-1,537	0,205
(-1;5)	0,011	12	13	0,058	0,949

The table compares the cumulative abnormal returns of 101 acquirers according to the transaction value, including the mean-difference test. Cumulative abnormal returns are calculated employing the standard market model, using an estimation period of 180 trading days prior to the event window [-20,20] and the Morgan Stanley Regional Industrial Index to measure market returns. Tests of statistical significance followed Brown/Warner(1983). *, **, *** denote significance at the 10%, 5% , and 1% level, respectively (and are based on the two-tailed t-test).

Table 4.7: CARs according to the economic situation

Event window	2000-2004 (1)		2005-2007 (2)		2008-2010 (3)		Mean-difference		
	CAR (%)	z-stat.	CAR (%)	z-stat.	CAR (%)	z-stat.	(1)-(2)	(1)-(3)	(2)-(3)
Panel A: All Transactions									
(-1;1)	-0,358**	-2,262	-0,583***	-4,120	-0,504*	-1,671	0,225	0,146	-0,079
(-1;5)	-0,226	-1,431	-0,280***	-3,022	-0,623**	-2,065	0,054	0,397	0,343
(N)	40		50		11				
Panel B: National									
(-1;1)	-0,393**	-2,004	-0,540***	-3,287	-1,236***	3,707	0,147	0,843*	0,696
(-1;5)	-0,329*	-1,679	-0,198	-1,204	-1,122***	-3,367	-0,131	0,793	0,924
(N)	26		37		9				
Panel C: International									
(-1;1)	-0,292	-1,092	-0,703***	-2,824	2,789***	3,944	0,411	-3,081	-3,492
(-1;5)	0,035	-0,130	-0,512*	-1,849	1,625**	2,298	0,547	-1,590	-2,137
(N)	14		13		2				

The table compares the cumulative abnormal returns of 101 acquirers according to the year of transaction, including the mean-difference test. Cumulative abnormal returns are calculated employing the standard market model, using an estimation period of 180 trading days prior to the event window [-20,20] and the Morgan Stanley Regional Industrial Index to measure market returns. Tests of statistical significance followed Brown/Warner(1983). *, **, *** denote significance at the 10%, 5% , and 1% level, respectively (and are based on the two-tailed t-test).