# Patterns of value creation in strategic acquisitions for growth

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**Abstract**

This paper extends my previous research on strategic transactions (M&A) and focuses on the analysis of the relationship between the pre-event performance of acquiring companies and value creation in strategic acquisitions for growth. It identifies the prerequisites of successful transactions and tests empirically how the key fundamental determinants of the acquiring companies influence investors' reaction around the announcement and acquirers' financial performance in the years after. Overall, it can be concluded that the intrinsic pre-event performance of the acquiring firm can significantly impact the outcome and profitability of strategic M&A.

*Key words:* corporate growth, M&A, strategic financial decision making, shareholder value, value creation

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## I. Introduction

In both Corporate Finance and Strategic Management research, Mergers and Acquisitions (M&A) are associated with the main strategy for the external growth. The results of academic studies state that corporate acquisitions contribute to one third of average corporate growth rate and enable a company to respond to perceived opportunities in the marketplace more quickly (Baghai et al., 2009). In today's past-changing environment many executives recognize that their companies cannot succeed without making acquisitions. However, not all companies are able to react and seize the market opportunities with such agility. The performance of strategic transactions and value they create for acquiring companies remain rather disputable. The prolific academic research in this field reports the success rate of corporate M&A to be only 30%. Numerous empirical studies as well as newly developed dynamic theoretical models have not found an explanation what factors determine the success of external growth. This paper aims to close this gap. It does not analyze a wide range of different variables, which are usually tested in empirical studies (Martynova/Renneboog (2011), Alexandris et al. (2012)), nor it evaluates the strategic decision of growing externally versus internally (Margsiri et al. (2008)). Based on the principles of valuation theory, it focuses on core determinants for those firms, for which the decision to grow creates the largest value (de Andres et al. (2017), Mass (2005)). The choice of transactions with such fundamental characteristics allows not only to reduce the inconsistences in results addressed by Halpern (1983), but also to minimize the agency problems (Fung et al. (2009), Jensen (2005)), supporting the assumption that managers act completely in interests of shareholders.

The primary motivation for this paper is driven by the statement that the main focus of acquisition is not just to help company to grow fast, but to contribute valuably to its strategy. In financial terms this means the ability of a company to grow externally while creating value for its shareholders. This message is clearly presented by the concept of value-based-management that 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 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, it can be seen 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. If this positive development exists, the market will react positively and the share price for the company will increase.

The concept of relative importance of growth was theoretically introduced by Berk et al. (1999) and developed by other researchers, trying to explain when the growth is optimal for companies and creates the largest value. So, Ramezani et al. (2002) showed that despite a common assumption that growth in sales generally leads to a rise in earnings, an optimal point exists beyond which additional growth effects adversely profitability and destroys shareholder value. For M&A case, Margsiri et al. (2008) analyze dynamically the trade-off between internal growth and acquisition and suggest that the value of growth options is constant up to a certain value of the asset to be reacquired, but declines above that value. De Andres at al. (2017) differentiate, applying real option approach, between the "assets-in-place" and "growth options" diversification and analyze the impact of different strategies in firm market value. The authors conclude that diversification that increases future growth options is more value-enhancing. Holder/Zhao (2015) claim that previous studies on diversification did not take into consideration the impact of diversification on future growth potential of the firm. They find that the diversification discount may be the joint result of the increase in value in below-average performers exploring new growth opportunities through unrelated diversification, and the decrease in value in above-average performers exploiting their current growth opportunities through related diversification. Despite their innovative approaches, most of recent studies investigate general patters in transactions and do not address the issue of strategic growth.

The study contributes to existing research from three main perspectives. First of all, based on the principles of value-based-management it assumes that M&A is an investment decision and is value-enhancing if it increases an overall shareholder value of the acquiring company. Taking into account the studies of relative importance of growth (Berk et al. (1999), Mass (2005)), this means that the long-term

post-acquisition performance is a function of pre-acquisition conditions, including the acquirers' readiness for a strategic transaction, expressed through its financial performance. Compared to existing empirical studies, which are focused on the financial analysis of post-event performance, the study investigates the predictive power of the acquirers' pre-acquisition performance indicators. Second, to address the issue of distortion in the data samples because of different acquisition purposes and as a result, different acquisition strategies, this study focuses exclusively on the analysis of strategic transactions for growth and implies that they will have similar patters in their strategic decision making and their expected performance. Third, the paper appreciates the statement that analysis of value created through a transaction must also include the long-term performance, because capital markets often underestimate the gains from synergy (Barraclough et al., 2013) and as a result, short-term market-based performance can be misleading. For these reasons, the study additionally analyzes the long-term financial performance of acquiring companies in three years following the transaction and how it is influenced by the pre-event results.

The paper is structured as follows. Section 2 presents an overview of recent research findings, discusses the theoretical background and introduces the framework for the analysis of strategic transaction and key hypotheses. Section 3 presents an overview and summary statistics of the data sample as well as employed methodology. Section 4 contains the empirical results, which are followed by a summary and conclusions in Section 5.

## II. Theoretical background & research framework

The valuation of the firm depends on its ability to grow. The "growth" companies enjoy higher multiples and higher market values, which makes many executives desperate to grow (Kim et al. (2011)). Christensen at al. (2011) outline, however, that a decision to boost current short-term company performance, acquire additional resources or sustain the existing market position or financial performance, should not be confused with the aim to grow the company. In the first case, the acquirer will search for a company with the resources needed, usually overpay and integrate the resources into own

business, downsizing the target. In the second case, the acquirer will focus on securing future growth through complementing, extending or even transforming the own business model. An acquisition of a target for its resources will not bring an unexpected growth, while transformation of a business model can lead to the highest pay-offs. The M&A transaction that increase the growth potential of acquirers are usually more valued by market and earn higher returns. However, in order to achieve these positive results and compounding effect of growth, the acquirer must convinced the market that their future growth is reliable and is not associated with high risks (Fama/French (2007), Novy-Marx (2004)).

The latest research in the field of corporate finance and market-based financial accounting (Novy-Marx (2013), Penman/Zhu (2014), Fama/French (2016)) outlines the importance of firm's fundamental characteristics instead of beta analysis to explain stock returns. Following the principles of value-based-management, a strategic move creates value if it increases the total value of a company for its shareholders. In case of M&A this means that an acquisition is value-creating when it increases the market value (MV) of the combined company, or mathematically expressed:

$$MV_{AB} > MV_A + MV_B \tag{1}$$

Whether it happens, depends on the stage of the development of acquiring company (Mass, 2005) and the changes in its overall risk profile (de Andres at al. (2017)). If the diversification reduces risks that shareholders are able to diversify in their individual portfolios at lower costs than acquiring company, M&A will destroy value. However, diversification that, for example, provides firm with growth opportunities that are not easily achievable will result in diversification premium.

Following classical formula for description of market value of a firm, the market value can be described as a sum of market value of a firm as a cash cow and per share value of its growth opportunities, or expressed through the classical valuation formula

$$V_t^{firm} = \left[ \frac{FCF_{t_1}}{(1+r)} + \frac{FCF_{t_2}}{(1+r)^2} + \dots \frac{FCF_{t_n}}{(1+r)^n} \right] + \frac{FCF_{n¥}}{r} \tag{2}$$

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The first part of the equation - ability of the firm to earn cash - depends on firm's investment activity and ability to earn return on those investments, or expressed in terms of operating performance

$$V_t^{firm} = IC_t + \sum_{i=1}^{\infty} \frac{E_t(NOPAT_{t+1})}{(1 + r^{WACC})^i} \tag{3}$$

where $IC_t$ = Capital invested in the period t, $E(NOPAT)_{t+1}$ = expected net operating profit after tax in the next period (as estimated by analysts), $r^{WACC}$ = required rate of return.

Assuming that the expected NOPAT increases with additional invested capital, which is the reinvested retained earnings at a constant reinvested rate (IR), the expected operational profit can be presented as a function of growth in retained earnings in the analyzed period and return on invested capital. Putting it into the formula above,

$$V_t^{firm} = IC_t + \sum_{i=1}^{\infty} \frac{NOPAT_t(1 - \frac{g}{ROIC_t})}{(1 + r^{WACC})^i} \tag{4}$$

which describes the value capture from the existing assets. Only conditioning on the existing ROIC it is possible to draw inferences about the future growth in earnings. In case if there is no future growth in the expected profits, the value equals to the market value of already invested capital. Assuming the constant NOPAT and reinvestment rate, which is a function of NOPAT in the existing period, the increase in expected NOPAT can be understood as the sustainable growth rate. However, the ROIC declines with time, when new competitors enter the market and erode the firm's long-term profitability. This development explains why future growth opportunities often contribute to the largest part of the firm value.

The relationship described in formula (4) presents the value created from the existent assets, does not

however take into consideration the value of future growth opportunities, which can be achieved for example, through additional new projects. Therefore, the valuation formula must be extended in line with the concept suggested by Ross et al. (2003) and proven by recent research (Berk et al., 1999) as following

$$V_t^{firm} = IC_t + \sum_{i=1}^{\yen} \frac{NOPAT_t(1 - \frac{g}{ROIC_t})}{(1 + r^{WACC})^i} + \frac{PV(GO)}{r} \qquad (5)$$

where PV (GO) is present value of growth opportunities. Defining the term as a number of future projects (n) multiplied by the present value of cash earned from these projects, it can be re-written as follows

$$V_t^{firm} = IC_t + \sum_{i=1}^{\yen} \frac{NOPAT_t(1 - \frac{g}{ROIC_t})}{(1 + r^{WACC})^i} + \frac{PV(NOPAT)_i * n}{r} \qquad (6)$$

where n is number of new projects. In fact, the empirical analyses prove that investment in growth generates more shareholder value than cost-cutting. So, Mass (2005) confirms that an increase in profitability has a linear effect on value created, while an increase in growth shows a compounding effect and Anderson/Garcia-Feijoo (2006) prove empirically that market value increases following investment in projects with positive net present value and by more than the book value. The major point remains however, that such "growth strategies" should not destroy the existing profitability or the bottom line of the firm (Novy-Marx, 2013). This means that increasing the growth potential through a number of future positive investment projects without a negative impact on acquirers' profitability should result in the highest value created through the transaction. In other words, a firm's move for a strategic acquisition for growth is value-creating if it helps a strong performing company with financial discipline to enhance its growth, without a decrease in existing financial performance. If the market correctly evaluates the decision about the acquisition, then it should reward the firms with strong pre-acquisition performance and react negatively to the acquisition announcements of the poor-performing firms. Moreover, if correctly chosen, such strategy will help the acquiring company to sustain its financial performance in the years following the transaction and realize the highest net value of the acquisition.

## 2.1. Market-based performance

Based on this logic, in the first step I investigate whether pre-event performance and growth rates are reflected in the market-based performance of acquirers associated with external growth strategy. There are only few studies that tried to analyze the link between pre-event performance and abnormal returns of acquirers. So, Sudarsanam/Mahate, 2003 analyze the relationship between the pre-event financial performance of acquirers expressed in terms of P/E and P/B ratios. Their findings state that "value" acquirers outperform "glamour" acquirers in the three-year post-acquisition period and are more likely to pay with cash. They also report that the investors seem not to distinguish between the pre-event performance of acquirers around the announcement but quickly adjust their reaction in the post-acquisition period. Grant/Trahan, 2009 who analyzed the share returns of acquirers based on their pre-event EVA performance state that the high-performers still destroyed value at a large scale around the day of announcement, although these results improved in the long-term event window. Proponents of behavioral theory in finance outline the role of fix attitudes of investors towards a specific company and its performance. So, Shleifer (2004) claims that investors build their future expectations based on the previous performance of the company. Following the principles described above, I can assume that

> *Hypothesis 1:  The fast-growing companies earn better abnormal returns on their acquisition announcements than slow-growing companies*
>
> *Hypothesis 2: The companies with strong pre-event operating performance earn better returns than those with the weak pre-event operating performance*

## 2.2. Post –event financial performance

The evaluation of short-term market-based abnormal returns may not fully present the true value created in the strategic acquisition for growth. One of possible explanation of this is that information included in the share price is not always sufficient and investors often underestimate potential synergies (Barraclough et al., 2013). Moreover, that a newly formed company requires time to realize them (e.g. Hund et al., 2010). For this reason, I extend my analysis through an investigation of post-event financial performance of acquiring companies for three years following the transaction. In the age of popularity of industrial

organisation economics, researchers mostly relied on the accounting- based profitability ratios, such as ROA, ROE, and ROS. Also nowadays there are a lot of studies that focus on the accounting measures (e.g. Kotter, 2008). At the same time some influential scholars outlined the importance of the use of cash flow returns for assessing firm performance because it reflect the actual economic benefits generated by the firm's assets (e.g. Healy et al., 1992). The large number of alternative performance measures means that many researchers in the field of M&As puzzle which measure should be selected as an appropriate performance variable.

The present study focuses on the effect of fundamental operating performance measures on the transaction outcome and relies on the principles of value-based management. Following this approach, following hypotheses can be developed:

> *Hypothesis 3: The overall performance of strategic acquirers does not deteriorate significantly after the transaction*
> *Hypothesis 4: Acquirers with high pre-event growth rates, focus on their operating performance and improve it*
> *Hypothesis 5: Companies with strong operating performance continue to outperform also after merger*

## III. Data sample and methodology

To test hypotheses, I built a unique data sample that includes 101 public companies, which completed at least one transaction during the fifth and sixth merger waves (from 2000 to 2010), using Thomson One SDC and Lexis/Nexis Databases. The performance of market indices and individual share prices was analyzed using Thomson Reuters Datastream, the investigation of financial performance was performed on the data from Thomson Reuters One Banker Worldscope Database. All transactions included into data sample met following criteria: (1) the acquirer is a publicly traded company; (2) the transaction volume is higher than $500mn; 3) the acquirer owns 100% of the target company after the completion of acquisition, (4) all acquisitions are friendly or neutral and were completed, (5) the acquisition were completed with the intent of strategic growth according to Thomson Reuters SDC database, which is also verified by MergerStat databases. The transactions in the data sample include both national and

international acquisitions from all industries, except from real estate and financial services. Table 1 summarizes the key statistics of final data sample.

Table 3.1

The analysis of initial operating performance of acquiring companies before the transaction shows that in general, companies in the data sample outperformed their industries in all chosen financial ratios. Table 3.2. presents the results.

Table 3.2.

The event-study methodology was used to analyze the short-term market performance of acquiring companies around the transaction announcement. First, the pre-announcement shareholder returns of acquirers were estimated for the pre-event period, which started 180 days and ended 20 days before the transaction announcement. To calculate the expected market returns ($R_{mt,}$), MSCI (Morgan Stanley Capital International) Index was used as the market return proxy for acquirers in the sample. This study takes into consideration the geographical distribution of the analyzed firms and applies the appropriate national index. To adjust for possible cross-sectional dependence, event-clustering as well as a possible increase in the variance over the event period, abnormal returns were standardized and tested using the adjusted z-statistic suggested by Mikkelson/Partch (1988). Tests of statistical significance were calculated following Ismail/Davidson, 2005. To perform a mean-difference test in the univariate analysis, t-statistics following Beitel et al. (2004) was calculated.

To analyze the pre-and post-event operating performance of acquiring companies I built the ratios based on the fundamental data from Thomson Reuters DataStream and Worldscope. To control for impact of industry effects and to make the data comparable through the different industries, the financial ratios were adjusted following Kukalis (2013), Healy et al. (1997). The variables used for the analysis present the performance of acquiring companies compared to their industry average. If analysed company outperforms its industry, it is considered to be a strong performer; if its values are below the industry, it is called a weak performer. Those participants, whose data was not available, are omitted. Therefore, the

number of companies in the subsamples is shown explicitly. For the operating performance the three-year-average pre-event ratio EBITDA/SALES, for growth the ratio SALES growth are applied.

## IV. Discussion of results

4.1 Market-based performance

4.1.1 Overall performance

The overall short-term performance of acquirers around the acquisition announcement is summarized in Table 4.1.

<div align="center">TABLE 4.1.</div>

The results show that the bidders suffer negative abnormal returns, which are statistically significant in all event-windows. On the day of the announcement they earn the strongest negative returns of -0,757%. This value improves slightly in the shortest event window (-1;1) to the fall in share price of -0,515%. The number of acquirers who experience positive abnormal returns increases in the first day after the acquisition announcement to 43 from 38 the day before, even though this number remains still lower compared to those who experience negative performance (58). These results support the findings of the existing literature about the performance of bidding companies (e.g. Kedia et al., 2011).

4.1.2 Pre-event growth rates

The results of the analysis of the effect of pre-event growth rates of the acquirers on their abnormal returns confirm the first hypothesis and state that the pre-event growth rates indeed influence the market reaction. Table 4.2 presents the summary of the results.

<div align="center">TABLE 4.2.</div>

It is striking that especially in the short- event window the abnormal returns of the companies with high pre-event growth rates are twice as better as the abnormal returns of the companies with low pre-event growth rates. On the day of the announcement the CARs are -0,498% and -1,027%, respectively. This

difference in performance is statistically significant at the 10% level. The gap in performance is also observed in the event windows (-1;1) and (0;1) and remains stable in the longer event window after the acquisitions announcement. So, in the event window (-1;10) the high-growth companies perform almost three times better than low-growth companies with -0,125% and -0,425% respectively. These results confirm the assumption about strong focus of investors on growth and their attachment to the recent performance of the acquirers (Shleifer/Vishy, 2003).

4.1.3 Pre-event operating performance

The impact of the pre-event performance of bidders on their abnormal market returns around the announcement date is summarized in Table 4.3.

TABLE 4.3.

The results indicate that indeed, there is a difference in the investors' reaction especially on the day of the announcement and in the short-term event windows. The cumulative abnormal returns on the date of the announcement are –0,676% and -0,911% for strong and weak performers respectively, with even more striking difference for the event window (-1;1). Here the strong performers have almost twice as better returns as the weak performers with -0,377% and -0,753% respectively. However, these differences diminish in the longer event window and almost disappear in the event widow (-10;10). Here both strongly and weakly performing acquirers earn similar abnormal returns with -0,218% and -0,288% respectively. Despite no significance in the mean difference tests, it can be concluded that the pre-event performance of the acquiring company impacts the investors' reaction on the announcement and confirm that investors trail the pre-event performance of acquirers. The investors are more positive about the strategic moves of strong performers rather than weak performers. However, it is striking that the difference in the reaction is not extreme and diminishes with the prolonged event window in the days after the announcement, what suggests that additional information that become available makes the investors to adjust their first reaction on the transaction announcement and re-evaluate its impact on the company's strategy.

4.2. Post-event financial performance

4.2.1 Overall performance

In general, the acquiring companies in data sample outperformed their industries before the acquisition in all analyzed ratios and could continue this trend after the transaction as well. The detailed information about the performance of acquirers is presented in Table 4.4.

TABLE 4.4.

The results show that although on average the financial performance decreased after the transaction, it remained mostly positive. The largest decrease the acquiring firms experienced in the first year after the acquisition in all ratios analyzed, over the following two years these values recovered even though did not reach the pre-event levels. The only ratio that showed negative development in the years following acquisition was SALES/ASSETS, which fell from 6,91% over the industry average to -1,03%. This means that the increase in sales during the first three years was not satisfactory. The value of CAPEX/SALES ratio remains higher in the year 1, with 1,92% over the industry average and decreases slightly till 1,63% in year 2, which can be explained with additional investments needed in the first years of the implementation process and stronger focus on operations in the following years.

To understand this trend better, I investigate the performance of acquirers involved in national and international transactions. The data for both sub-groups in summarized in the second part of the Table 4.4. It is obvious that the negative development of CAPEX/SALES and SALES/ASSETS ratios is driven by international acquirers. While national acquirers experienced positive values in terms of SALES/ASSETS before the acquisition, international acquirers were below the industry average with -2,13%. This ratio deteriorated even further in the years after the transaction, being 10,96% below the industry average. The performance in terms of CAPEX/SALES decreased as well from 4,14% in the years preceding the transaction to 2,10% in the years after the transaction. At the same time, national acquirers experienced the largest decline in their performance in the first year after the acquisition, when

value of SALES/ASSETS dropped from 10,17% before the event to 1,80%, but then started to recover, reaching 4,35% in the year 3. CAPEX/SALES values showed an insignificant decline, but recovered to the pre-event values in year 3. The difference in the performance of national and international acquirers can be explained with the fact that international transactions experience more complex and resources-intensive implementation process and as a result, the need of additional capital in the first year after the transaction can be a good explanation for this trend. National acquirers in the sample, however, do not experience such difficulties, the development of their post-event CAPEX/SALES and SALES/ASSETS ratios are in line with other financial ratios.

4.1.2 Pre-event growth rates

The analysis shows that growth rate was one of the most important determinants in the evaluation of transaction performance. The impact of growth rates on the post-event ratios of acquirers is presented in Table 4.5.

TABLE 4.5

Those companies that had strong growth rates before the acquisition, outperform the industry also after the transaction. Nevertheless, their relative post-event growth rates are twice lower than pre-event ones, with 21,62% and 10,22%, respectively, with the lowest value in the first year after the event (8,48%) and the highest in the third year (12,84%). Similar trend is observed also for other financial ratios.

Those acquirers that experienced week growth performance before the event improve their growth rates significantly and in the first post-event year outperform even the high-performing companies. So, while in the years preceding the transaction, the performance of acquirers was 11,52% below industry average, it reaches 8,27% above industry average in the post-event years, with even 12,48% in year +1. Nevertheless, this trend is rather short-term and the performance diminishes till post-event year 3, reaching 2,63%. EBITDA/SALES of these participants slightly increases from 3,46% to 3,84% after the transaction, which outlines the focus on operating profitability and ability of companies to reach those

results. The highest value of 6,89% was experienced in year 2 after transaction. CAPEX/SALES increases as well from 0,91% to 2,05% after the acquisition, with constantly growing trends towards the post-event year 3, when it reaches 3,58%. The only ratio with a negative trend is SALES/ASSETS, which plummeted from relative 3,01% in the pre-event years to -10,50% in the post-event years and remains negative during all three years after the transaction announcement.

A closer look into the ratios of national and international acquirers shows no significant difference in the performance development of two sub-groups. The post-event financial performance of both national and international acquirers follows the same patterns, which are similar to the trend presented for the entire data sample. The growth rates of strong performers remain positive despite a slight decrease in the post-event period with improving trend toward the third year, while the growth rates of weak performers increase considerably in the first year after the transaction, but decrease towards the third year. Interesting fact here is that the weak performing companies pursuing international transactions have both ratios – EBITDA/SALES and growth rates – below the industry values. After the transaction the growth rates show steep increase in the first year, but the EBITDA/SALES ratio improves at a slower pace in the past event period towards the year 3.

4.1.3 Pre-event operating performance

General post-event performance of acquirers according to their pre-event profitability (EBITDA/SALES) is shown in Table 4.6.

TABLE 4.6.

The high performers experienced a slight decrease in the value of their ratio, from 10,63% in the pre-event years to 6,16% in the years after, even though the results outperformed the industry and improved with time, reaching 7,09% in the year 3. Similar trend is experienced also for other ratios. SALES/ASSETS ratio is negative before transaction that is an obvious sign that these companies were focused on profitability not growth before the acquisition and decreases even further in the years

following the transaction. The values are -8,94% and 16,94%, respectively, with the lowest value in the first post-event year of -18,18%.

The numbers for low performers show that they focused on growth in the years preceding the acquisition, had additional cash resources and decided to spend them on acquisitions. The values for EBITDA/SALES and CAPEX/SALES were negative in the years preceding the transaction, with -4,62% and -1,59%, respectively. They remain negative also in the years following the transaction, reaching -1,59% and -1,94%, respectively. The performance in terms of FCF/SALES decreases as well. While acquiring companies outperformed the industry in the pre-event years by 2,88%, after the completion of transaction their performance is 1,61% below the industry average, with the most significant drop in the first post-event year. Growth rate increases, however, considerably and reaches 10,58% in the post-event years, compared to 3,60% in the pre-event years.

If we look into two different sub-samples, the national high performer showed both strong growth and operating performance, even though they were less efficient that the industry average. In the years following the transaction, their operating performance remained above the industry average, despite being a bit lower than in the pre-event years, while growth rate increased further towards the third post-event year. The weak performer had low EBITDA/SALES, FCF/SALES, and CAPEX/SALES ratios, but high growth rates and SALES/ASSETS ratios in the pre-event years. After the transaction the operating and financial performance of these acquirers remained below average in all years following the event, even though their growth rate increased in the first post-event year with positive but decreasing trend in the years after.

The performance of high performing international acquirers was similar to those of the national acquirers. High performers outperformed the industry average according to all ratios except from SALES/ASSETS before and after the transaction. Low performers outperformed the industry in terms of CAPEX/SALES and SALES/ASSETS, but underperformed in terms of EBITDA/SALES, FCF/SALES and GROWTH

RATES. Even though they could improve significantly their growth rates after the completion the transaction, the operating and financial performance remained low.

V. Conclusion

The aim of the paper was to investigate the impact of pre-event financial performance of acquiring companies that participate in strategic acquisitions for growth on the value-added through transaction. To offer a systematic analysis, I built a unique data sample of solely strategic acquisitions for growth and analyzed both the short-term capital market-based abnormal returns and the long-term financial post-event performance of acquiring companies.

The most important finding of the study is that the pre-event performance of acquiring companies indeed influences strongly the value created through acquisition. A striking result from the market-based analysis is that acquirers that had higher pre-event growth rates experienced significantly higher abnormal returns around the announcement than those acquirers that had lower pre-event growth rates. The difference in the market reaction on the financial performance is not so significant, even though the worse performing companies experienced lower abnormal returns. These results are in line with the academic literature that suggests that investors are mostly conservative, use their previous experience about the acquirers and form their expectation about the future performance of acquirers based on pre-event results (e.g. Shleifer, 2004). Higher pre-event growth rate is associated with higher growth in the future and as a result, more optimistic reaction on the acquisition announcement.

The analysis of long-term financial performance of acquiring companies measured in three years following the acquisition prove that 1) companies that experienced strong pre-event performance continue to outperform also after the M&A; 2) international acquirers create more value in terms of both growth and financial performance, even though the improvements in growth are the highest in the first year following the transaction; 3) post-event financial performance of the acquiring companies remains similar to their pre-event performance. The most important result of the long-term analysis is that pre-event

financial performance of acquirers does not deteriorate/improve significantly. Those companies that outperformed their industries before the acquisition perform well also after the transaction – all their ratios remain above the industry average. Those companies that experienced week performance before the transaction continue to underperform after the event. In terms of growth rates, an obvious result is that international acquirers could improve their performance more that national acquirers. The strong-performing international acquirers showed also better results in terms of post-event financial performance compared to national acquirers. Moreover, they could quickly realize the full potential of the M&A and increase their growth rates significantly in the first and second years after the transaction, without deteriorating their operating performance. Contrary to the international acquirers, companies participating in national transactions could not improve their growth rates and operating performance significantly, even though the M&A did not lead to the significant decrease in their performance. Therefore, the results of Hund et al. (2010) and Barraclough et al. (2013) can be only partially confirmed.

Overall, the post-event financial performance of acquiring companies was closely related to their pre-event results, which leads to the conclusion that M&A do not help companies to improve their financial performance, but rather enhance their ability to grow profitably, especially in case of international diversification. This finding means that value creation process in M&A follows the principles of value-based management presented in this paper and companies can anticipate their future net-value of the transaction and plan their strategies accordingly.

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Table 3.1 Key statistics of data sample

| 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 ($mn) | 625.379,46 | 502.723,90 | 122.655,56 | 542.377,08 | 83.002,37 |
| in % | 100 | 80,39% | 19,61% | 86,73% | 13,27% |
| Mean value ($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. Pre-event operating performance of acquiring companies

| 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. CAR of acquiring companies around the day of announcement

| Event window | CAR (%) | Pos. (N) | Neg. (N) | Z-statistic | p-value |
|---|---|---|---|---|---|
| Panel A: Around the announcement | | | | | |
| (-10;10) | -0,256** | 43 | 58 | -2,573 | 0,01069 |
| (-5;5) | -0,312*** | 41 | 60 | -3,132 | 0,00175 |
| (-3;3) | -0,365*** | 42 | 59 | -3,666 | 0,00024 |
| (-1;1) | -0,515*** | 41 | 60 | -5,179 | < 0,00000 |
| Panel 2: On the day of announcement | | | | | |
| (0;0) | -0,757*** | 36 | 65 | -7,610 | < 0,00000 |
| (0;1) | -0,608*** | 43 | 58 | -6,111 | < 0,00000 |
| Panel 3: After the announcement | | | | | |
| (-1;3) | -0,406*** | 43 | 58 | -4,081 | 0,00005 |
| (-1;5) | -0,310*** | 41 | 60 | -3,114 | 0,00187 |
| (-1;10) | -0,278*** | 43 | 58 | -2,794 | 0,00527 |

The Table shows cumulative abnormal returns (CAR) of acquiring companies participating in the strategic acquisitions for growth in the period from 2000 and 2010. The CAR are calculated based on market-based model and using MSRI Index to measure market returns. *, **, *** denote 10%, 5% and 1% significance respectively.

Table 4.2. CAR of acquiring companies based on their pre-event growth rates

| Event window | High growth (gA>gI) | | | Low growth (gA<gI) | | | Mean-difference test | | |
|---|---|---|---|---|---|---|---|---|---|
| | CAR (%) | Z-statitistic | (p-value) | CAR (%) | Z-statitistic | (p-value) | Difference | t-statistic | (p-value) |
| N | 49 | | | 48 | | | | | |
| Pannel A: Around the announcement | | | | | | | | | |
| (-10;10) | -0,191 | -1,336 | (0,182) | -0,249* | -1,725 | (0,085) | 0,058 | 0,269 | (0,789) |
| (-5;5) | -0,310** | -2,169 | (0,030) | -0,277* | -1,918 | (0,055) | -0,033 | -0,147 | (0,884) |
| (-3;3) | -0,350** | -2,449 | (0,014) | -0,346** | -2,396 | (0,017) | -0,004 | -0,018 | (0,987) |
| (-1;1) | -0,314** | -2,201 | (0,028) | -0,669*** | -4,633 | (0,000) | 0,355 | 1,301 | (0,200) |
| Pannel B: On the day of announcement | | | | | | | | | |
| (0) | -0,435*** | -3,044 | (0,002) | -1,027*** | -7,113 | (0,000) | 0,592 | 2,132** | (0,039) |
| (0;1) | -0,335** | -2,343 | (0,019) | -0,843*** | -5,842 | (0,000) | 0,508 | 1,741* | (0,089) |
| Pannel C: After the announcement | | | | | | | | | |
| (-1;3) | -0,286** | -2,005 | (0,045) | -0,463*** | -3,208 | (0,001) | 0,177 | 0,716 | (0,327) |
| (-1;5) | -0,218 | -1,529 | (0,126) | -0,352** | -2,442 | (0,015) | 0,134 | 0,568 | (0,572) |
| (-1;10) | -0,092 | -0,647 | (0,518) | -0,425*** | -2,943 | (0,003) | 0,333 | 1,536 | (0,132) |

The table presents the relationship between the pre-event growth rates of acqruiring companies participating in national and international strategic acquisitions for growth in the period from 2000 and 2010 and their cumulative abnormal returns (CAR) around the acquisition announcement. The CAR are calculated based on market-based model and using MSRI Index to measure market returns. Financial ratios are calculated relatively to the industry performance one year prior to acquisition announcement, with „high" meaning the firm outperforms its industry and „low" the firm underperforms its industry.
* Significance at 10% level, using two-tailed test
** Significance at 5% level, using two-tailed test
*** Signidicance at 1% level, using two-tailed test

Table 4.3. CAR of acquiring companies based on their pre-event operating performance

| Event window | Strong performers | | | Weak performers | | | Mean-difference test | | |
|---|---|---|---|---|---|---|---|---|---|
| | CAR (%) | Z-statitistic | (p-value) | CAR (%) | Z-statitistic | (p-value) | Difference | t-statistic | (p-value) |
| N | 66 | | | 33 | | | | | |
| Pannel A: Around the announcement | | | | | | | | | |
| (-10;10) | -0,218* | -1,770 | (0,077) | -0,288* | -1,655 | (0,098) | 0,070 | 0,305 | (0,761) |
| (-5;5) | -0,236* | -1,916 | (0,055) | -0,456*** | -2,618 | (0,009) | 0,220 | 0,924 | (0,358) |
| (-3;3) | -0,333*** | -2,709 | (0,007) | -0,413** | -2,373 | (0,018) | 0,080 | 0,317 | (0,752) |
| (-1;1) | -0,377*** | -3,058 | (0,002) | -0,753*** | -4,325 | (0,000) | 0,376 | 1,296 | (0,198) |
| Pannel B: On the day of announcement | | | | | | | | | |
| (0) | -0,676*** | -5,490 | (0,000) | -0,911*** | -5,234 | (0,000) | 0,235 | 0,793 | (0,430) |
| (0;1) | -0,512*** | -4,156 | (0,000) | -0,784*** | -4,502 | (0,000) | 0,272 | 0,872 | (0,385) |
| Pannel C: After the announcement | | | | | | | | | |
| (-1;3) | -0,327*** | -2,654 | (0,008) | -0,523*** | -3,004 | (0,003) | 0,196 | 0,744 | (0,459) |
| (-1;5) | -0,205* | -1,666 | (0,096) | -0,490*** | -2,814 | (0,005) | 0,285 | 1,133 | (0,260) |
| (-1;10) | -0,277** | -2,245 | (0,025) | -0,258 | -1,485 | (0,138) | -0,019 | -0,077 | (0,939) |

The table presents the relationship between the pre-event operating performance of acqruiring companies participating in national and international strategic acquisitions for growth in the period from 2000 and 2010 and their cumulative abnormal returns (CAR) around the acquisition announcement. The CAR are calculated based on market-based model and using MSRI Index to measure market returns. Financial ratios (EBITDA/SALES) are calculated relatively to the industry performance one year prior to acquisition announcement, with „strong performers" meaning the firm outperforms its industry and „weak performers" the firm underperforms its industry.
* Significance at 10% level, using two-tailed test
** Significance at 5% level, using two-tailed test
*** Signidicance at 1% level, using two-tailed test

Table 4.4. Post-event finanical performance of acquiring companies

| Ratios | Average performance | | Mean-difference test | | | Post-event performance improvement | | |
|---|---|---|---|---|---|---|---|---|
| | Pre-event | Post-event | Difference | t-statistic | (p-value) | Year +1 | Year +2 | Year +3 |
| **ALL** (N=101) | | | | | | | | |
| EBITDA/SALES | 4,76% | 2,69% | -2,07% | -1,080 | 0,283 | 1,12% | 3,80% | 3,15% |
| FCF/SALES | 6,06% | 3,13% | -2,93% | -0,996 | 0,322 | 2,42% | 3,91% | 3,08% |
| CAPEX/SALES | 3,79% | 2,12% | -1,67% | -0,806 | 0,422 | 1,92% | 1,63% | 2,80% |
| SALES/ASSETS | 6,91% | -1,03% | -7,94% | -1,176 | 0,242 | -1,69% | -1,27% | -0,11% |
| GROWTH RATE | 7,51% | 9,39% | 1,88% | 0,523 | 0,602 | 2,68% | 1,97% | 0,98% |
| **NATIONAL** (N=72) | | | | | | | | |
| EBITDA/SALES | 5,54% | 2,60% | -2,94% | -1,207 | 0,229 | 1,34% | 3,95% | 2,53% |
| FCF/SALES | 3,62% | 3,10% | -0,52% | -0,266 | 0,791 | 2,51% | 3,61% | 3,18% |
| CAPEX/SALES | 3,43% | 1,99% | -1,44% | -0,565 | 0,573 | 1,03% | 1,80% | 3,34% |
| SALES/ASSETS | 10,17% | 3,24% | -6,93% | -0,788 | 0,432 | 1,80% | 2,99% | 4,35% |
| GROWTH RATE | 9,28% | 8,75% | -0,53% | -0,182 | 0,856 | 8,97% | 8,27% | 9,02% |
| **INTERNATIONAL** (N=29) | | | | | | | | |
| EBITDA/SALES | 2,74% | 2,94% | 0,20% | 0,067 | 0,947 | 0,56% | 3,41% | 4,84% |
| FCF/SALES | 11,98% | 3,29% | -8,69% | -0,936 | 0,353 | 2,18% | 4,63% | 3,05% |
| CAPEX/SALES | 4,14% | 2,10% | -2,04% | -0,558 | 0,579 | 4,00% | 1,10% | 1,21% |
| SALES/ASSETS | -2,13% | -10,96% | -8,83% | -1,476 | 0,145 | -10,25% | -11,76% | -10,87% |
| GROWTH RATE | 3,11% | 11,07% | 7,96% | 0,784 | 0,436 | 13,21% | 12,51% | 7,49% |

The Table shows the change in performance ratios of acquiring companies before and after the completion of acquisition. The average pre-event performance is adjusted by industry and is calculated as an average over 3 years preceeding the transaction. The average post-event performance is an industry-adjusted average over 3 years following the transaction. Post-event performance improvements are industry-adjusted. P-value for the mean-difference test is calculated based on two-tailed test.
\* Significance at 10% level, using two-tailed test
\*\* Significance at 5% level, using two-tailed test
\*\*\* Significance at 1% level, using two-tailed test

Table 4.5. Post-event performance of acquiring companies based on the pre-event growth rates

| Growth Rate | Average performance | | Mean-difference test | | | Post-event performance improvement | | |
|---|---|---|---|---|---|---|---|---|
| | Pre-event | Post-event | Difference | t-statistic | p-value | Year +1 | Year +2 | Year +3 |
| **STRONG PERFORMER ALL** (N=58) | | | | | | | | |
| EBITDA/SALES | 5,68% | 1,81% | -3,87% | -1,552 | 0,123 | 0,83% | 1,51% | 3,09% |
| FCF/SALES | 3,94% | 2,09% | -1,85% | -0,878 | 0,387 | 2,40% | 1,62% | 2,26% |
| CAPEX/SALES | 5,66% | 2,00% | -3,66% | -1,251 | 0,213 | 3,46% | 2,52% | 4,12% |
| SALES/ASSETS | 9,33% | 6,32% | -3,01% | -0,299 | 0,765 | 2,63% | 1,38% | 1,98% |
| GROWTH RATE | 21,62% | 10,22% | -11,40%*** | -2,847 | 0,005 | 8,48% | 9,32% | 12,84% |
| **WEAK PERFORMER ALL** (N= 43) | | | | | | | | |
| EBITDA/SALES | 3,46% | 3,84% | 0,38% | 0,124 | 0,902 | 1,51% | 6,89% | 3,22% |
| FCF/SALES | 8,81% | 4,58% | -4,23%* | -1,828 | 0,071 | 2,44% | 6,99% | 4,19% |
| CAPEX/SALES | 0,91% | 2,05% | 1,14% | 0,393 | 0,696 | 0,87% | 1,89% | 3,58% |
| SALES/ASSETS | 3,01% | -10,50% | -13,51% | -1,615 | 0,110 | -10,94% | -12,06% | -9,66% |
| GROWTH RATE | -11,52% | 8,27% | 19,79%*** | 14,383 | 0,000 | 12,48% | 9,70% | 2,63% |

The Table shows the change in performance ratios of acquiring companies before and after the completion of acquisition according to their pre-event growth rates. The average pre-event performance is adjusted by industry and is calculated as an average over 3 years preceeding the transaction. The average post-event performance is an industry-adjusted average over 3 years following the transaction. Post-event performance improvements are industry-adjusted. The average post-event performance is an difference test is calculated based on two-tailed test.
* Significance at 10% level, using two-tailed test
** Significance at 5% level, using two-tailed test
*** Significance at 1% level, using two-tailed test

Table 4.6. Post-event performance of acquiring companies based on the pre-event operating performance

| EBITDA/SALES | Average performance | | Mean-difference test | | | Post-event performance improvement | | |
|---|---|---|---|---|---|---|---|---|
| | Pre-event | Post-event | Difference | t-statistic | p-value | Year +1 | Year +2 | Year +3 |
| **STRONG PERFORMER ALL** (N=62) | | | | | | | | |
| EBITDA/SALES | 10,63% | 6,16% | -4,47% | -1,648 | 0,102 | 3,78% | 7,63% | 7,09% |
| FCF/SALES | 7,99% | 6,15% | -1,84% | -0,851 | 0,396 | 5,53% | 6,90% | 6,01% |
| CAPEX/SALES | 6,92% | 4,51% | -2,41% | -0,753 | 0,453 | 4,40% | 3,81% | 5,31% |
| SALES/ASSETS | -8,94% | -16,94% | -8,00% | -1,352 | 0,179 | -18,18% | -17,12% | -15,50% |
| GROWTH RATE | 16,04% | 8,78% | -7,26% * | -1,845 | 0,067 | 8,04% | 10,37% | 7,92% |
| **WEAK PERFORMER ALL** (N= 39) | | | | | | | | |
| EBITDA/SALES | -4,62% | -2,88% | 1,74% * | 1,813 | 0,074 | -3,10% | -2,29% | -3,12% |
| FCF/SALES | 2,88% | -1,61% | -4,49% | -0,654 | 0,515 | -2,53% | -0,86% | -1,58% |
| CAPEX/SALES | -1,59% | -1,94% | -0,35% | -0,317 | 0,752 | -2,12% | -1,93% | -1,54% |
| SALES/ASSETS | 31,40% | 24,86% | -6,54% | -0,507 | 0,614 | 24,61% | 23,99% | 24,37% |
| GROWTH RATE | 3,60% | 10,58% | 6,98% | 0,986 | 0,327 | 15,27% | 9,37% | 7,10% |

The Table shows the change in performance ratios of acquiring companies before and after the completion of acquisition according to their pre-event EBITDA/SALES. The average pre-event performance is adjusted by industry and is calculated as an average over 3 years preceeding the transaction. The average post-event performance is an industry-adjusted average over 3 years following the transaction. Post-event performance improvements are industry-adjusted. The average post-event performance is an difference test is calculated based on two-tailed test.
* Significance at 10% level, using two-tailed test
** Significance at 5% level, using two-tailed test
*** Significance at 1% level, using two-tailed test