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# The Impact of Acquisitions on Corporate Performance Results during the Period of Economic Slowdown: Case of Lithuania

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### Abstract

An extensive scientific debate in various countries is inspired over the economic consequences of corporate acquisitions which are executed using different strategies and under different economic conditions. However there is a lack of researches that evaluate corporate acquisitions using different valuation techniques in Lithuania. Therefore in this paper, the impact of corporate acquisitions on profitability ratios and economic value added of the Lithuanian companies during the period of economic slowdown is evaluated. The research sample includes Lithuanian companies, listed at the NASDAQ OMX Vilnius Stock Exchange, which acquired at least one company during the period of 2008 – 2010. The impact of acquisitions is estimated by profitability ratios and economic value added. The research results evidence that both profitability ratios and economic value added decrease during short-term after an acquisition in majority cases. However the recovery can be observed during the last quarter, indicating that acquisitions are beneficial during the economic slowdown.

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# Introduction

Value created by an acquisition and the impact of this process on performance results of a company is one of the topics that are widely discussed in the scientific literature since an acquisition of a company is one of the strategic development decisions and is ambiguously seen as a mean of company's growth. The relevance of the problem is

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proved by the number of complementary researches both around the world (Kanahalli & Jayaram, 2014, Inoti, Onyuma, & Muiru, 2014, Ebneth & Theuvsen, 2007, Ooghe, Van Laere, & De Langhe, 2006, Bhalla &Wealth, 2004, Ghauri & Buckley, 2003, Dickerson, Gibson, & Tsakalotos, 1997) and in Lithuania (Stukas & Miečinskienė, 2010, Dzikevičius, Michnevic, & Zevzikova, 2008, Kazlauskienė & Christauskas, 2008, Žaptorius, 2006). Changing economic environment forces to change a corporate governance strategy as well, so the decisions made in fast changing environment may have a crucial influence on the further development of a company and its value.

Wan & Yiu (2009) indicate that acquisitions are especially beneficial during the economic slowdown as likelihood to overpay for the assets reduces. Moreover, an acquisition enables elimination of the competitive threats and allows adapting of company's resources and capacities to rapidly changing environment what is especially important when economy goes down.

According to the data of the Institute of Mergers, Acquisitions and Alliances (2015), the largest number of mergers in the world was recorded in 2007 (46 thousands), value of the transactions amounted to 5900 billion US dollars. The largest number of acquisitions in Europe was recorded in 2000 (18.5 thousands). The number of acquisitions in Europe and throughout the world has changed insignificantly with the start of the economic recession; however the value of transactions fell sharply. Since corporate acquisitions in Lithuania are not as frequent and accustomed as in other countries, there is a lack of scientific researches evaluating the impact of this process on corporate performance results using different evaluation methodologies. Therefore, the purpose of this paper is to evaluate the impact of an acquisition on the company's profitability and economic value added during the period of economic slowdown.

### 1. Method

We apply the methodology which is based on the data from corporate financial statements. In order to evaluate the impact of acquisitions on corporate performance results, the financial data of Lithuanian companies listed in the NASDAQ OMX Vilnius Stock Exchange (see Table 1) were used on following conditions: a company made at least one acquisition during the period of 2008 – 2010 and used a consolidation strategy. As identified by Scherer & Ross (1990), Dutz (1989) and other authors, this strategy is more successful during a recession if compared to diversification strategy whereas consolidation of similar businesses increases the importance of a company in the market, its competitiveness and profit.

Pursuant to Neelam, Yadav, & Jain (2013), Wan & Yiu (2009), Grant & Trahan (2007), Bruner (2002), Chatterjee & Meeks (1996) and other authors, the profitability ratios and economic value added (EVA) were used in our research. The indicators were calculated quarterly and we evaluated their changes in the short term, i.e., one year before and one year after the acquisition. The calculations of profitability ratios and EVA in this case are based on past data of companies; the forecast is not needed, so the results of the financial and economic benefits generated by a company in each period can be considered as accurate.

The acquiring company	The acquired company	Date		
AB "Grigiškės"	UAB "AGR Prekyba"	March, 2010		
AB "City Service"	UAB "Fervėja"	February, 2009		
AB "City Service"	6 companies in St. Petersburg	March, 2009		
AB "TEO"	UAB "Interdata"	December, 2009		
AB "Lietuvos energija"	UAB "InterLinks"	December, 2009		
AB "Vilkyškių pieninė"	AB "Kelmės pieninė"	February, 2008		
AB "Agrowill Group"	UAB "Grūduva"	September, 2008		
AB "Agrowill Group"	UAB "Tetervinai"	July, 2008		
AB "Agrowill Group"	UAB "Polva Agro"	July, 2008		

Table 1. Data of corporate acquisitions.

The impact of acquisitions on corporate financial results is estimated by return on assets, return on equity, net profit margin and economic value added. Return on assets (ROA) was calculated by following formula:

$$ROA = \frac{NP}{TA} \tag{1}$$

Where NP – Net profit

TA - Total assets

Return on equity (ROE) was calculated by following formula:

$$ROE = \frac{NP}{E}$$
 (2)

Where E – Equity

Net profit margin (NPM) was calculated by following formula:

$$NPM = \frac{NP}{S} \tag{3}$$

Where S – Sales

Economic value added (EVA) was calculated by following formula:

$$EVA = NOPAT - C \times WACC \tag{4}$$

Where *NOPAT* – Net operating profit after taxes

C – Capital

WACC - Weighted average cost of capital

The capital of a company included equity and long-term as well as short-term financial debt at the beginning of the quarter (Bild, Guest, & Runsten, 2005). It also should be noted that the most important criterion in the evaluation of EVA is not value itself but its change over the time.

### 2. Results

The results of our research evidenced that the majority of corporate performance indicators decreased after an acquisition. Estimating the <u>return on assets</u>, we found that on the quarter of acquisition (t = 0), ROA increased only in case of AB "City Service" (see Table 2).

Table 2. Return on assets (percent).

Company \ Period	-4	-3	-2	-1	0	1	2	3	4
AB "Grigiškės"	0.44	0.43	0.49	1.11	0.02	0.75	0.14	0.17	
AB "City Service"	2.38	3.62	4.23	3.17	3.52	5.44	10.15	1.65	2.93
AB "Vilkyškių pieninė"	0.02	1.53	11.55	12.83	-1.72	-3.98	-1.95	-2.71	0.65
AB "Agrowill Group"	15.27	17.50	-1.48	1.03	-0.57	-1.35	-2.59	-4.50	-1.86
AB "TEO"	2.57	3.73	4.68	3.90	3.03	3.71	3.87	3.81	3.21
AB "Lietuvos energija"	1.25	-0.78	0.13	0.22	-0.37	0.73	1.12	0.26	2.93

The increase amounted to 11 percent and was determined by growth of net profit and decrease of total assets. The increase in case of this company was observed two quarters after the acquisition as well. Respectively in the first quarter (t = 1), the increase of ROA was influenced by the increased net profit and reduced total assets, and in the second quarter (t = 2) – by the faster growth rate of net profit if compared to the total assets' growth rate. ROA of AB "City Service" in the second quarter after the acquisition was 10.15 percent (see Table 2). In case of other companies, the decrease of this indicator was observed during the acquisition quarter and random increases during the first to third quarters. Also, it should be mentioned that ROA increased during the fourth quarter after the acquisition in case of all companies except AB Teo this time.

The results of the <u>return on equity</u> were similar to those of ROA: decrease during the quarter of acquisition with an exception of AB "City Service", random increases during the first to third quarters and increase during the fourth quarter in case of all companies except AB "Teo" (see Table 3).

Company \ Period	-4	-3	-2	-1	0	1	2	3	4
AB "Grigiškės"	0.85	0.83	0.88	1.87	0.04	1.30	0.26	0.30	
AB "City Service"	3.90	5.62	6.81	6.09	6.21	8.90	16.49	3.20	4.03
AB "Vilkyškių pieninė"	0.05	4.24	26.86	31.50	-4.70	-14.74	-8.20	-12.11	2.61
AB "Agrowill Group"	41.76	48.65	-4.25	2.56	-2.02	-4.56	-9.87	-18.55	-8.09
AB "TEO"	2.94	4.03	5.10	4.27	3.39	4.02	4.28	4.21	3.68
AB "Lietuvos energija"	1.60	-1.02	0.17	2.42	-0.36	0.85	1.30	0.29	3.19

Table 3. Return on equity (percent).

The greatest impact of the acquisitions was observed in case of AB "City Service" during the second quarter (16.49 percent), due to a faster growth rate of net profit if compared to equity.

Similar results were observed in case of <u>net profit margin</u> as well. NPM of all companies except AB "City Service", decreased or increased only slightly (see Table 4). This allows proposing that the main factor influencing results of all profitability ratios was net profit. Especially as we can observe that three out of six companies experienced losses during the quarter of an acquisition, one of them (AB "Vilkyškių pieninė") remaining unprofitable three quarters and one (AB "Agrowill group") remaining unprofitable all four quarters after an acquisition. It should be mentioned that only two companies experienced loss (one quarter each) before the acquisition.

Company \ Period	-4	-3	-2	-1	0	1	2	3	4
AB "Grigiškės"	1.88	2.31	2.31	4.33	0.09	3.06	0.56	0.64	
AB "City Service"	5.98	4.92	4.20	6.92	10.51	24.33	13.38	5.57	15.95
AB "Vilkyškių pieninė"	0.04	1.73	8.15	7.48	-5.94	-12.94	-5.57	-9.91	2.49
AB "Agrowill Group"	97.48	77.23	-29.00	36.24	-12.52	-13.53	-47.72	-55.03	-33.61
AB "TEO"	14.28	21.18	23.78	20.29	17.60	22.42	20.77	21.46	19.62
AB "Lietuvos energija"	2.90	-6.50	1.07	19.20	-2.99	8.84	6.69	3.28	4.68

Table 4. Net profit margin (percent).

Analysis of separate companies evidenced that in case of AB "Grigiškės", the maximum impact of the acquisition (the highest ratios) was estimated during the first quarter after the acquisition. AB "Vilkyškių pieninė", as well as AB "Agrowill Group" experienced loss during the acquisition quarter and three quarters after the acquisition (AB "Agrowill Group" four quarters after the acquisition). In case of AB "Vilkyškių pieninė", the largest impact of the acquisition was observed during the last quarter, when the company received profits. Meanwhile profitability ratios of AB "Agrowill Group" decreased up to the third quarter after the acquisition and only the last quarter has shown the growth trend. In case of AB "Teo", the highest values of ROA and ROE were estimated during the second quarter after the acquisition, and NPM – during the first quarter after the acquisition. AB "Lietuvos energija"

experienced loss during the quarter of acquisition; the highest ROA and ROE values were observed during the fourth quarter (t = 4), so it can be said that during this period was experienced the greatest impact of the acquisition.

Economic value added more accurately measures performance of a company, as this indicator evaluates costs of funding not only for borrowed, but also for equity capital. The calculation results evidenced that this indicator increased during the quarter of the acquisition in case of only two companies (AB "Grigiškės" and AB "City Service") which means that these companies generated greater economic benefits (in case of AB "Grigiškės" – lower losses) if compared to previous quarter (see Table 5). It should be emphasized that only in case of AB "City Service" (an exception again) EVA remained positive.

Company \ Period	-4	-3	-2	-1	0	1	2	3	4
AB "Grigiškės"	-1,696	-2,216	-2,268	-2,105	-1,974	-1,817	-2,104	-2,272	
AB "City Service"	-436	-454	-350	109	229	-1,012	469	-706	52
AB "Vilkyškių pieninė"	-529	-253	1,832	2,393	-1,039	-1,932	-1,785	-2,193	-623
AB "Agrowill Group"	6,559	6,583	-1,622	-754	-2,211	-4,624	-2,868	-3,547	-2,828
AB "TEO"	-8,587	-4,834	-4,640	-3,747	-12,057	-6,640	-8,122	-5,582	-8,701
AB "Lietuvos energija"	21,076	-9,082	1,292	18,751	-5,539	5,733	9,480	874	23,092

Table 5. Economic value added (thousand Euros).

It was also found that EVA decreased during the first quarter after the acquisition in case of AB "City Service", AB "Vilkyškių Pieninė" and AB "Agrowill Group" and increased in case of the rest three companies. In case of four companies (AB "Agrowill Group", AB "Vilkyškių pieninė", AB "Grigiškės" and AB "Teo"), EVA was negative at the time of acquisition and during all the rest of the analyzed quarters after it, thus during this period the companies did not create value, as capital cost excessed profit. It should be noted that none of the companies had a positive EVA during all nine analyzed quarters and only AB "Lietuvos energija" had positive EVA during all four quarters after an acquisition. It also should be mentioned that EVA improves during the fourth quarter after an acquisition (with an exception of one company – AB "Teo").

In summary, the estimated performance indicators of Lithuanian companies evidenced that the results of our research correspond to the research results of foreign authors (see Table 6).

The result	ROA decreases or	ROE decreases or	NPM decreases or	EVA decreases or	
	slightly increases	slightly increases	slightly increases	slightly increases	
	AB "Grigiškės"	AB "Grigiškės"	AB "Grigiškės"	AB "Grigiškės"	
Confirm statements of	AB "Vilkyškių pieninė"	AB "Vilkyškių pieninė"	AB "Vilkyškių pieninė"	AB "City Service"	
other scientists	AB "Agrowill Group"	AB "Agrowill Group"	AB "Agrowill Group"	AB "Vilkyškių pieninė"	
other scientists	AB "TEO"	AB "TEO"	AB "TEO"	AB "Agrowill Group"	
	AB "Lietuvos energija"	AB "Lietuvos energija"	AB "Lietuvos energija"	AB "TEO"	
Negate statements of other scientists	AB "City Service"	AB "City Service"	AB "City Service"	AB "Lietuvos energija"	

Table 6. Summary of the research results.

Thus, the profitability ratios worsen after an acquisition in all companies but one, therefore, we agree with the authors, who found that an acquisition is followed by the decrease or slight increase of corporate profitability. Similarly, the results of EVA evidenced that companies do not create economic value added in the short term, but the positive changes are observed in the most cases during the last analyzed quarter.

## **Conclusions**

As there is a lack of scientific researches evaluating the impact of corporate acquisitions on performance results of a company, the research results presented in this paper, contributes to partially filling of this gap.

The estimation of the impact of acquisitions on corporate performance results during the economic slowdown showed that the results in all companies, except AB "City Service" (case of profitability ratios) and AB "Lietuvos energija" confirmed statements of other authors as ROA, ROE and NPM decreased during the period of acquisition

with the exception mentioned above. Decrease of ROA and ROE was determined by the faster decrease (slower increase) of net profit if compared to that of total assets (equity). Profitability ratios improved during the first quarter (t=1) after the acquisitions in case of AB "Grigiškės", AB "City Service", AB "Teo" and AB "Lietuvos energija" and further declined in case of other two companies.

According to the estimated EVA values, it can be stated that this indicator increases during the acquisition period only in cases of AB "Grigiškės" and AB "City Service" if compared to the prior quarter, and in case of AB "City Service", it remains positive. So it can be said that the acquisitions did not create value in majority cases at the moment of the deal. It was also found that EVA decreases during the third quarter after the acquisition (except AB "Teo"). Thus, the analysis of EVA results (except those of AB "Lithuanian energy") also confirmed findings of other scientists that EVA worsens or improves only slightly after the acquisitions.

In conclusion, the research of impact of acquisitions on the corporate performance results in the short term evidenced that although the calculated profitability ratios and EVA decreased after the acquisition, the visible recovery trend may be observed during the last quarter which means that acquisitions may be beneficial during the economic slowdown. The obtained results evidence that the acquisitions impact performance of the companies; however since this effect is negative rather than positive in the short term, the practical implication of this paper is that a company should assess a longer period of time and apply more evaluation methods before taking such a decision.

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