

**“COMPARATIVE ANALYSIS OF MERGERS AND ACQUISITIONS WITHIN THE NEW
MEMBER STATES OF THE EU UNION”**

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ABSTRACT

Mergers and acquisitions within the new member states of the EU Union (EU-10) are investigated within the study. The author concentrates on the mergers and acquisitions value creation issue within the region. The event study methodology is used to re-search the scientific problem useful generation as a consequence of analyzed transactions. Findings of the study show that there's a statistically significant positive effect observed when analyzing value variations as a results of mergers and acquisitions happening within the EU-10 region. However, there are great differences observed when different countries or groups of states are analyzed in EU-10. This finding supports the conclusions of previous researches within the field stating that value creation in mergers and acquisitions varies greatly in separate regions or countries. it had been also found during the research that transactions going down within the Baltic states have generated the very best value increase in EU-10 during the amount of 2004–2013.

Keyword: Central and Eastern European, subsequent privatization, academic literature.

1. Introduction

While mergers and acquisitions are a standard a part of economic transactions in North American and Western European markets for over half a century, yet this specific form of transactions has been very rare until the last decade of the 20th century within the 10 countries of Central and Eastern European region, which together today are referred to as EU-10 bloc. The primary wave of mergers and acquisitions within the region passed within the 1990s and was mainly fuelled by the shift from regulated economy models to market-based economic systems and subsequent privatization pro-

cesses. Because the result, the market of mergers and acquisitions is just commencing to count its third decade of activity within the region and, consequently, not only opinion but also academic literature is stuffed with ambiguous assessments of the phenomenon.

Central and Eastern European region, the core of which incorporates EU-10 bloc countries further investigated within the study, in 2013 was the fourth within the world by both the worth and number of executed mergers and acquisitions transactions lagging only from North America, Western Europe and South-East Asia (Zephyr annual, 2014). Although there have been high growth rates of mergers and acquisitions activity recorded and also the market is approaching activity levels which are common for developed countries, the lecturers highlight the very fact that the most features of the market of the mergers and acquisitions within the countries included within the analysis are to a good extent different from patterns observed by earlier researches in North American and Western European markets. Thus, intensive analysis supported mergers and acquisitions market statistical data within the EU-10 region is critical and would significantly contribute to the higher evaluation of the market within the analyzed countries. Such a study would also enable comparison with researches conducted in other regions of the globe.

In the reviewed context the aim of the research presented during this paper is to gauge the worth generated within the mergers and acquisitions transactions within the EU-10 region countries in addition on discover intra-region differences important generation level. The paper relies on long-lasting author's research within the area of mergers and acquisitions and is partially grounded by previous publications of the author within the field of mergers and acquisitions activity within the region of Central and Eastern Europe. Calculations and research results presented within the study are supported the event study methodology.

2. Literature review

The u. s. and Great Britain prevail within the research conducted within the field of mergers and acquisitions as most frequently analyzed countries. The above-mentioned countries have a chic history of mergers and acquisitions studies dating back to the 1960s. Meanwhile, in Continental Europe, academic studies within the field of mergers and acquisitions began to appear more constantly only within the 1990s, as earlier papers like landmark publication by Mueller (1980) are quite rare practice within the European scientific society.

The topics dominating the worldwide mergers and acquisitions research are- na are systemized by Larsson and Finkelstein (1999), who classified ongoing research within the area of mergers and acquisitions in line with the economic discipline thanks to the precise aspect of the matter. Following this logic, mergers and acquisitions are analyzed within the frameworks of the subsequent disciplines:

- 1.Strategic management: addresses the explanations and differing kinds of transactions;
- 2.Economics: main topics include cost optimization, economy of scale and scope, market power issues;
- 3.Finance: representation of shareholders, issues associated with the worth creation of the companies;
- 4.Research of organizations: examines the processes of the implementation of transactions and integration processes, moreover because the problems with corporate culture matching;
- 5.Human resource management: within the context of the transaction, problems with management and staff motivation and communication are addressed.

However, not all research trends of mergers and acquisitions are equally numerous: Golubov, Petmezas, and Travlos (2013) in their publication highlight the most three issues examined by scholars: research of the most motivation for mergers and acquisitions to require place, publications analyzing the history and cycles of mergers and acquisitions and studies addressing the worth creation within the process of mergers and acquisitions.

The status of mergers and acquisitions research in EU-10 is thought to be scarce with academics mainly managing such issues as general trends of market of mergers and acquisitions within the region, transactions going down within the financial sector, and analysis of mergers and acquisitions as an integral a part of foreign direct investment. During the analysis of scientific mergers and acquisitions publications in EU-10, it's been noted that Poland dominates the research flow. However, this observation isn't surprising in the slightest degree having in mind the very fact that Poland is out and away the most important mergers and acquisitions market in EU-10 (as it'll be presented in additional detail later within the next chapter Poland was also dominating the sample of transactions analyzed during this research).

Niemiec and Niemiec (2007) within their publication conclude that in the case of the analyzed region mergers and acquisitions dominate the structure of the foreign direct investment. Nevertheless, Havrylchuk and Jurzyk (2007) document that higher profitability ratios are achieved by greenfield investments instead of mergers and acquisitions.

Analyzing another broader mergers and acquisitions research stream in EU-10 – namely the mergers and acquisitions within the financial sector – it should be noted that authors (Eller et al., 2006, Fritsch et al., 2007, Havrylchuk and Jurzyk, 2008) draw the common conclusion that transactions, which materialized within the banking sector in EU-10, had a positive effect on acquired companies' (e.g. banks) performance. Moreover, it's stressed that there's a positive impact on the full economy of the target country observed. Also, there has been linking found between mergers and acquisitions activi-

ty within the banking sector and further development of the national economy.

A review of papers that house general trends of mergers and acquisitions in EU-10 has revealed the subsequent observations. Sakali (2012) reports the findings that within the case of EU-10 or broader Central and Eastern Europe region the financial crisis of 2008–2009 has fostered significant changes within the mergers and acquisitions market with different motivations for transactions emerging (e.g. targets of transactions being companies hit by the crisis). However, statistical data provided by Zephyr (Zephyr, 2014) shows that even during the crisis the quantity of mergers and acquisitions transactions has remained on the expansion path.

Finally, analysis of EU-10 mergers and acquisitions market-related scientific publications has led to the conclusion that a lot of authors (e.g., Jacoby, 2014, Kazmierska-Jozwiak, 2014) report the observation that trends prevailing within the EU-10 mergers and acquisitions market are different from analogical developments found in other regions. For this reason, a priori application of theories formed supported empirical data obtained from other regions to assess the market of mergers and acquisitions within the new world organization member states (EU-10) will provide non-objective results. This observation moreover because the fact discussed above that the mergers and acquisitions market within the EU-10 region remains a poorly explored phenomenon has motivated the research presented within the following chapters.

3. Methodology and data sample

The design of the study is aimed toward evaluating the worth generated within the mergers and acquisitions transactions within the EU-10 region during the chosen analysis period and to match the worth generated within the mergers and acquisitions within the EU-10 across different countries of the region.

The most common method to research value creation because the results of mergers and acquisitions within the event study method firstly introduced by Dolley in 1933

(MacKinlay, 1997) and further developed and systemized by Fama, Fisher, Jensen, and Roll (1969) into a robust scientific tool allowing a scientist to spot the impact of the chosen event or a particular group of events on the worth of particular security (or their group). The strategy is predicated on the efficient market hypothesis and enables an analysis of only those companies, which are traded on the stock market. The simplified event study methodology algorithm has two main steps. Firstly the return of security during the chosen period of time round the transaction (e.g. event window) is calculated. Then this return is corrected by a comparative index return for the identical period, which finally delivers the abnormal return thanks to the precise event. By calculating the abnormal returns of multiple securities, a cumulative average abnormal return indicator (further abbreviated as CAAR) is found, which is already speculated to be statistics based estimate of the impact which the precise event has on the worth of company shares or other securities. Brown and Warner (1985) improved the event study methodology by providing the scientists with essential observations on the statistical significance of the tactic, thus allowing to effectively test whether the event study methodology derived research results are statistically significant. This improvement made the methodology fully eligible for educational studies.

The further presented study conducted by the author is especially supported methodological instructions provided by aforesaid authors. Additionally to it, MacKinlay's (1997) paper was employed as a comprehensive event study methodology source when performing the research.

The geography of the research encompasses the EU-10 region consisting of the subsequent countries: Lithuania, Latvia, Estonia, Poland, Bulgaria, Czech Republic, Cyprus, Hungary, Malta, Romania, Slovakia, and Slovenia. The analysis of the sample countries includes 10 year period starting on 2004.01.01 and ending on 2013.12.31. The beginning of the time-frame reflects the actual fact that 2004 was the year marking the numerous EU enlargement process when 10 new member states (EU-10) joined the ECU Union.

According to Zephyr (Zephyr, 2014), the full number of announced mergers and acquisitions transactions within the EU-10 bloc over a period of 2004–2013 exceeded 20.404 (including 7747 listed companies). 82% of the announced transactions were completed. a good greater proportion of transactions were successfully conducted when targets were listed companies, i.e., of 7747 transactions 6967 transactions were implemented or 90%. it's noteworthy that only those transactions were studied that involved acquisition of companies registered within the EU-10 countries, while the reverse variety of transactions wasn't addressed within the research. The sample was defined by six key criteria as follows:

1. The company's shares over the acquisition period were listed on a securities market.
2. The exact date of the announcement of the continued transaction is understood.
3. The transaction has been completed.
4. Further analysis included only transactions that were classified as acquisitions, mergers, management, or institutional buy-outs. The initial sample (510 transactions) also included 9 venture establishment deals with the acquisition transaction features, but none of those transactions were included within the final sample (consisting of 154 transactions).
5. Further screening stage involved the choice of only those transactions during which a minimum of 10% of the corporate stake was acquired, while the ultimate investor's stake after the transaction wasn't but 50% of the shares.
6. The final stage involved the choice of only those transactions where the corporate which participated because the “target” of the transaction had a comprehensive history of stock trading necessary for conducting research, i.e. a minimum of 90 trading

days before the transaction and 30 days after the transaction. Besides, from the ultimate sample transactions were rejected that had been distributed between the related parties (the redistribution of shares within the group of companies and between the entities controlled by the identical individual) and supported the experience of the many studies (e.g., Andrade, Mitchell, & Stafford, 2001) duplicate transactions were rejected in addition. That is, if the identical company prior three years ago was the item of the same transaction, the sample included only the primary transaction.

The study was conducted by calculating logarithmic returns for 3 different event windows: starting 30 days before the event and ending 30 days after the chosen event (-30;30), starting five days before the event and ending five days after the event (-5; 5), starting on the event date and ending 1 day after the chosen event (0; 1). The abnormal returns for every security were computed by using national indexes, the variations of which during event windows were subtracted from a nominal security price change. The importance of the results obtained from all event windows included within the study has been verified by applying statistical tests. It should be noted that, in keeping with Corrado (1989) and Cowan (1992) publications, to verify the results obtained by the event study method, non-parametric tests are used along with parametric t-test.

4. Findings of the study

After conducting the study it absolutely was investigated that CAAR indicator within a period of 61 days round the event date (-30;30) is 10.2%, thus a median of additional 10.2% of the worth was created for the acquired companies' shareholders as a results of mergers and acquisitions transactions announced from 2004 through 2013. As presented in Table 1, the statistical significance of the CAAR indicator in both tests (parametric t-test and non-parametric Corrado test) confirmed the importance of results at the amount of even 1% within the case of the littlest event window, which is closest to the date of the event (0; 1). The t-test values suggest that within the case of all the assessed three windows the results are significant at the extent of 1%, while Corrado test

results propose to reject 61 days (-30;30) and 11 days (-5;5) event windows as insignificant.

Table 01. CAARs of the total sample and their significance levels.

Event window	CAAR(%)	Average daily abnormal return (%)	t-test value	Significance level (%)	Corrado test value	Significance level (%)
(-30;30)	10.2	0.1	3.335	1	0.005	n. s.
(-5;5)	5.4	0.5	3.692	1	0.716	n. s.
(0;1)	3.4	1.7	4.326	1	3.118	1

In the total sample of 154 companies included within the sample, separate EU-10 countries are unevenly represented. as an example, there might be found no historic security price data for Slovakian companies on Bloomberg while performing the research. For this reason, none of the Slovakian companies are represented within the sample. In cases of other countries, there have been only some transactions found with security quotes data available (e.g. Malta – 2 transactions, Hungary – 3 transactions, Estonia – 4 transactions). Thus cross-country comparison couldn't be efficiently performed for countries represented with small numbers. For this reason, the whole sample has been split into four groups, only Poland and Cyprus which had the very best numbers of transactions (allowing statistically significant conclusions) were analyzed as separate countries. The split is presented in Table 2.

Split of the sample by target company country.

Country/group of countries	Number of transactions	Share (%)
Poland	84	54.5
Baltic states	22	14.3
Cyprus	20	13.0
Other countries	28	18.2
Total	154	100.0

As it is seen from Table 2, 55% of mergers and acquisitions transactions within the sample fell to Poland followed by the Baltic states and Cyprus, which accordingly account for 14% and 13% of the transactions included within the sample.

Fig. 1 data shows that transactions with Polish targets create less value than the identical transactions happening in Baltic states or Cyprus. as an example, within the case of the longest event window of 61 days (-30;30) transactions within the Baltic states created thrice more value as compared to shine transactions. Although to a lower extent, but when comparing Polish and Baltic mergers and acquisitions because the drivers for value changes of the target companies, the remaining event windows show similar patterns – transactions within the Baltic states generate much higher value increases.

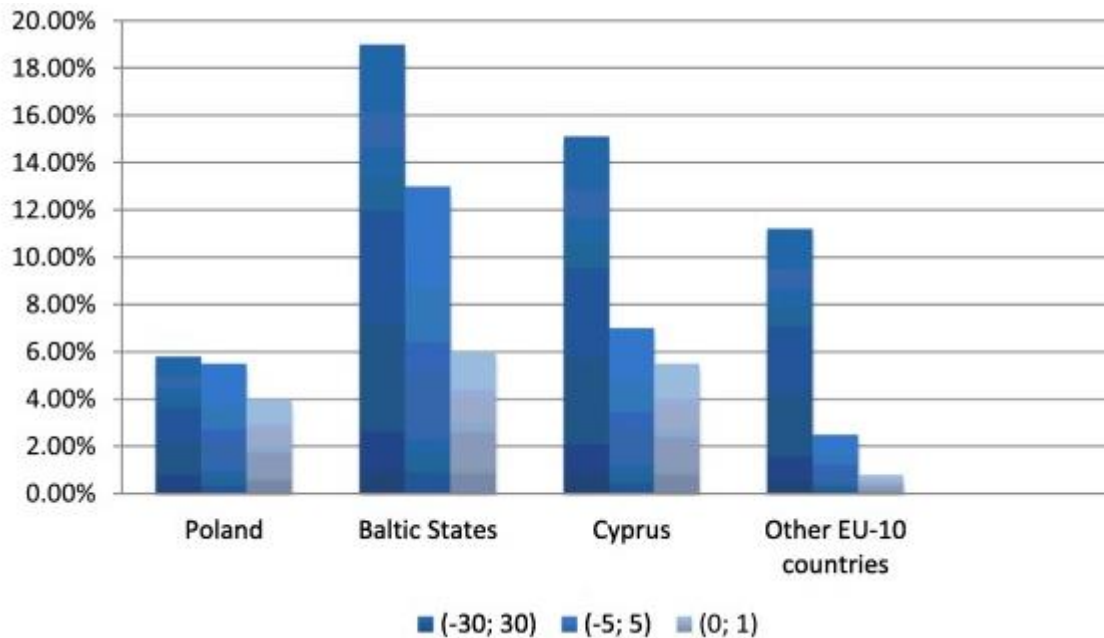


Fig. 1. Abnormal returns (CAARs) in selected countries or country groups during multiple event windows.

Thus a transparent distinction should be made for transactions happening within the Baltic states, as these transactions are far and away creating the very best value growth. Meanwhile, mergers and acquisitions in Cyprus also show high-value creation rates. Transactions going down within the remaining EU-10 countries lead to a high-value creation rate on condition that the longer 61 days $(-30;30)$ window is analyzed: 11.7% value increase recorded. However, other countries' group lags when comparing the smaller event windows.

After analyzing the worth creation rates in several countries of EU-10, it's necessary to gauge them supported statistical tests. the info in Table 3 shows that the CAAR indicators of the Baltic countries and Cyprus are significant all told three windows by the t-test, while within the case of Poland significant results were observed only in shorter windows, but their significance is confirmed by both styles of tests. within the case of the group of other countries, only the long window of 61 days $(-30;30)$ was confirmed to be

significant by the t-test.

Event window	CAAR (%)	t-test (%)	Corrado test (%)
Poland			
(-30;30)	6.0	n.	n.
(-5;5)	5.6	5	10
(0;1)	3.8	1	1
Baltic states			
(-30;30)	19.4	10	n.
(-5;5)	12.9	5	n.
(0;1)	6.6	5	n.
Cyprus			
(-30;30)	15.1	5	n.
(-5;5)	8.5	5	n.
(0;1)	5.7	10	n.
Other ES-10 countries			
(-30;30)	11.7	5	n.
(-5;5)	2.0	n.	n.
(0;1)	0.4	n.	n.

Table 3. Statistical significance of CAARs for various countries or country groups.

5. Conclusions

The analysis presented within the study has proved that within the case of the EU-10

region mergers and acquisitions positively affect the worth of the takeover target. The cumulative average abnormal return resulting from analyzed transactions during the 2004–2013 period has totaled to 10.2%. However, when statistical tests were applied it clad, that only the t-test approves all three event windows results to be significant whereas the Corrado test only supported the littlest 2 days (0;1) window abnormal return to be significant.

Further analysis important creation in mergers and acquisitions transactions across different countries of EU-10 generated the subsequent findings: the best abnormal returns are achieved within the Baltic states (6.6–19.5% reckoning on event window length) followed by Cyprus (5.7–15.1%), while transactions going down in Poland result in much lower returns (3.8–6.0%). However, analysis of Polish mergers and acquisitions has proved to be significant by both statistical tests (in case of smaller event windows), whereas Cypriot and Baltic results are confirmed by only the t-test.

Due to the dearth of securities price data the sample of the study has been limited to a comparatively small number of transactions. For this reason, it's advised for other scholars to create efforts to derive additional data, as a broader base may generate more accurate research results. However, the results of the study already clearly show that the worth creation process influenced by mergers and acquisitions varies greatly across different countries of EU-10 and thus the problem is a crucial scientific issue. On the opposite hand, such results of the research support the findings of earlier publications within the field (Mueller, 1980), which also documented that value creation differs greatly when separate countries are analyzed.

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