The impact of M&As on the Romanian Banking System – an Event Study Approach

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Abstract

The study aims to identify the relationship between the merger announcement, the stock prices and the market efficiency. Given the limited data, the analysis has been applied to only one financial institution which merged recently, Banca Transilvania. The results have shown that in the window period, abnormal returns have been identified as the news of the mergers was linked to the press. It can be concluded that the market reaction was positive not till after the official announcement was made. Overall, the acquisitions can be considered as a value added determinant, creating wealth.

Keywords: Bank mergers, event study analysis, market efficiency, stock prices

1.Introduction

Under the impact of globalization, financial deregulation and technological progress, the banking system has suffered significant transformation. In order to increase their market share, the banks have been in a continuing process of consolidation and privatization. In the last years it can be seen a merger and an acquisition trend. More and more financial institutions are willingly, or not in a process of restructuration. There are many reasons why the managers are taking into consideration the possibility of a merger: economies of scale, financial stability, maximization of shareholders' winnings, products more effective and differenced, higher market share, minimizing the risk, etc.

Over the years, the value involved in the mergers and acquisitions process has risen significantly. The results these restructuring operations have on the national economy are still unclear. We have to consider many factors like the structure of the banking system and its functionality, the country's development, the economic environment and last but not least the financial stability at micro and macro level. The study will analyse the influence of a merger announcement to the stock prices fluctuations of the bidder bank. In this way, we will determine the market efficiency using an event study metrics approach. The analyses will be applied to the listed banks which have merged with another financial institution in the last years. Taking into consideration that a small percentage of the existing banks are listed, the study will focus on the merger between Banca Transilvania and Volksbank.

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Almost 90% of the banking segment is owned by foreign capital, the largest financial groups' holdings being registered in Austria, France and Greece. Given the fact that last year Banca Transilvania returned in the category of the banks with foreign shareholders, the Romanian share capital banks are representing only 10% of the system. Regarding the Romanian M&A banking segment, it's still an on-going process. In the last few years there have been some movements, the banking segment becoming more effective, improving the systems functionality and stability, the products and the services. However, the analysts are not so optimistic in respect of the M&A activity, at least in the next three years, the banks focusing more on cost reduction and profit maximization.

2. Literature review

Over the last decade, the M&A segment have received a great deal of attention. Given the fact that the number and the volume of the transactions involved in these kinds of operations have grown significantly, many authors have focused their studies on this area. Even if the majority of the articles are analysing the UK and USA mergers, lately more and more researchers are trying to cover the European countries. Regarding the Romania literature the studies are limited, the majority of them focusing on the structure or latest trends of the M&A market. This is one of the main reasons why this study is needed, so we can create an overview of the banking M&A segment functionality and efficiency.

Our study will determine the impact of merger announcement on the stock prices and the profitability of the new created entity. The majority of the papers are using two methods: the stock market and the accounting approach. We will focus on the first one, trying to see whether will result a financial gain or loss following the merger. If the stock market has a high level of efficiency, a merger announcement or any other important event will reflect some abnormal returns for the companies involved. (Dickerson et. al, 1997) Basically, the impact of an event will determine some market reactions which can be measured by the stock returns in the window estimation period. One of the oldest articles in this field uses an event study approach to see the overall performance of the biggest 19 mega mergers, the findings indicating negative abnormal returns for the bidder banks and positive abnormal returns for the target banks. (Siems, 1996) A possible explanation could be the management involvement in order to increase its own winnings rather than shareholders'. If the USA studies concluded that no market value is created after a merger or acquisition, in 2000 Cybo-Ottone and Murgia have discovered the contrary. Using an event study metrics on 54 mergers from thirteen European countries, they showed that there is a significant positive increase in the stock market value, especially in the event window.

When it comes to forced M&A, the findings shows that the economic value is destroyed, the bidder banks gaining at the expense of the acquired ones. Chong (2006) concludes that the total value resulting after a forced merger or acquisition is strongly negative.

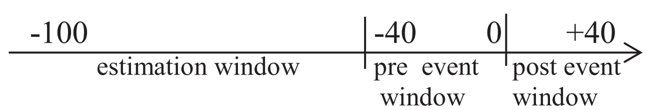
The latest researches that use the event study methodology have proved that on the acquisition day the banks have presented cumulative abnormal returns; in some cases the stock prices of the acquiring banks have grown but on long term, the performance hasn't improve significantly. (Dilshad, 2013) There are researches where the acquisition disclosure had a mixed impact on the returns, for some banks the returns being significant negative, for other banks positive or none. (Kumar, 2011) For all the studies we have to consider that there may be other factors which can influence the stock prices and the success of a merger like the economic environment, the financial stability of the involved banks, the development of the economy, the characteristics of the market, etc.

3. Data, sample and method of analysis

The event study approach is considerate a very common and widely used method to investigate the effects of an event. It is well known that unexpected events can change the stock prices trend. However, is difficult to anticipate the timing and the magnitude of these changes.

The event study approach has been used by many researchers based on its minimum data required and its easiness. Still, the method has its shortcomings: if the event day is not identified correctly, the authors could be analysing the wrong pattern of abnormal returns; the panel data could be influenced by other events which occurred in the same period of time; the values of the normal returns in the absence of the event are difficult to determine. Even so, if in the past years this kind of analysis was used on stock prices lately, the researchers have extended its applicability on the stock trading volume or return volatility.

In order to see whether a merger announcement has influenced the stock prices of the bidder bank, some steps need to be followed. First of all, we have to establish the event – in our case, the acquisition announcement, and the period of time in question. This step is quite difficult because is hard to determine when the information has been leaked to the press. Various published reports, interviews and press releases have been used so the date of the announcement could be precise. The pre event window includes 40 days before, the post event window 40 days after the announcement date and the estimation window 100 days.



For the purpose of the study, the announcement day is day 0, when the acquisition is made public and the information reaches the market. If this particular day is not established accordingly, the abnormal returns can be observed before or after it. We've chosen the announcement date and not the effective merger date as day 0 because in the conditions of an efficient market, the stock prices are very sensitive at any kind of information, especially an important event like the merger of the bank. The determination of the event window it's a very important step, given the fact that the abnormal returns are measured for that period. If the event window is too short, we might not ascertain the announcements effects. On the other hand, if the event window is too long the findings might be diluted. In our study we kept the date of the merger in the event window as well, just to be sure we will observe any spikes in the stock prices or the abnormal returns. Taking all this factors into consideration, the event window has been established to 81 days.

As the estimation window is used to determine the parameters of the market model, it has been set to 100 days. In Table 1 it can be seen the date of announcement, the date of the actual merger and the type of the acquisition. The merger was not forced or facilitated, being driven by the market.

In theory, the merger announcement should influence both of the acquirer and the target bank. The reaction can be positive or negative, depending the management and shareholders behaviour. In our study, we analysed the reaction of the bidder bank, as only this is listed on the Bucharest Stock Exchange. For a better understanding of the context it should be noted that the Romanian banking system is a well-capitalized one, with a good level of solvency and liquidity, stable and effective. There are 40 credit institutions of which only three are listed. From these three, one has merged recently and another one had some attempts but neither finalised though.

Table 1. The selected mergers in the sample

Bidder bank	Target bank	Date of the announcement (day 0)	Date of the merger	Type of merger
Banca Transilvania	Volksbank	16.10.2014	10.12.2014	Market driven
Banca Comerciala Carpatica	Nextebank	07.05.2015	18.06.2015	Market driven

Source: own computations

The merger of Banca Transilvania with Volksbank

Banca Transilvania was founded in 1994, becoming a very powerful and appreciated financial institution, being the third after their assets size with more than 55 million euro profits. At the beginning of October 2014, rumours appeared, according to which the institution was ready to expand and grow by making some mergers proposals. A few days later, Horia Ciorcila, the president of the BT Board, makes the official statement of the acquisition of the Volksbank. There are three main reasons why they've chosen this particular bank: is a great opportunity for them to raise and consolidate, the acquired bank has over 180.000 clients and a large portfolio of retail loans and last but not least the business model is similar. After many financial consultants and analysts, this was a very bold decision, given the fact that Volksbank had 2 billion euro of loans in Swiss francs. This was the biggest merger from Romania as the banks were on the third and ninth places in top ten financial institutions. It is expected that the full integration of Volksbank will be completed in March 2016. After the merger, Banca Transilvania is on the second place after Banca Comerciala Romana with a market share of 13%.

The merger of Banca Comerciala Carpatica with Nextebank

Banca Carpatica is a financial institution with a majority Romanian share capital, founded in 1999. The bank is known for its economic and funding problems, The National Bank giving them significant financial support in the last years. The bank had two attempts to merge with Nextebank. The first one was rejected in December 2014 due to some law issues of the main shareholder. The second one was scheduled for June 2015, the binding offer being five shares of Banca Comerciala Carpatica for four shares of Nextebank. The banks' assets are very close, 223.6 billion ron BCC and 229.5 billion ron Nextebank. Unfortunately, the shareholders of BCC have rejected the proposal, accepting instead a capital reduction of 65%, the equivalent of 204 million ron. Moreover, there is another merger proposal from an American investment fund, J.C. Flowers. As it can be seen, Banca Comerciala Carpatica is trying very hard to solve their financial problems, without being necessary a merger.

Given the fact that the merger was not finalised on 18.06.2015 like it was scheduled, the banks were rejected from our sample data. However, on the 16th of July, the shareholders have recommenced the negotiations regarding a possible merger but no conclusion has been reached so far.

The daily prices have been collected from the Bucharest Stock Exchange website. Besides the banks' closing stock prices, we took into consideration the daily returns of the BET index. This is the first index that Bucharest Stock Exchange has developed which tracks the first ten most traded companies. In this way, the analysis will take the macroeconomic changes into account as well. The Romanian markets are not 100% efficient so it's important to have a benchmark. Moreover, in the index composition can be found the stock prices of Banca Transilvania as well.

After the daily data has been collected, the third step in the event study analysis is to estimate the parameters based on the estimation window and to measure the abnormal returns based on the event window. In order to measure the abnormal returns, for each stock price i, the market model is as follows:

$$AR_{it} = R_{it} - \hat{\alpha}_i - \hat{\beta}_i R_{mt} \tag{1.1}$$

$AR_{it} \rightarrow is\ the\ abnormal\ returns\ for\ the\ stock\ price\ i, at\ time\ t$
$R_{it} \rightarrow is\ the\ actual\ returns\ of\ the\ stock\ price\ i, at\ time\ t$
$\hat{\alpha}_i \rightarrow is\ the\ ordinary\ least\ square\ of\ the\ intercept$
$\hat{\beta}_i \rightarrow is\ the\ ordinary\ least\ square\ of\ the\ slope\ of\ the\ coefficient$
$R_{mt} \rightarrow is\ the\ market\ return\ at\ time\ t$

For the calculation of the daily returns it has been used the following formula:

$$R_{t+1} = \frac{P_{t+1} - P_t}{P_t} \tag{1.2}$$

$R_{t+1} \rightarrow is\ the\ daily\ returns$
$P_t \rightarrow is\ the\ closing\ price\ of\ the\ day\ before$
$P_{t+1} \rightarrow is\ the\ closing\ price\ of\ the\ current\ day$

The daily returns have been calculated for Banca Transilvania and Bet index as well. After the daily and the abnormal returns have been calculated, the value of the cumulative abnormal returns needs to be established. This has been calculated by adding the previous abnormal returns each day.

$$CAR_t = \sum_{t=1}^{t} AR_t \tag{1.3}$$

$CAR_t \rightarrow is\ the\ cumulative\ abnormal\ returns$
$AR_t \rightarrow is\ the\ abnormal\ return$

In the end, we realized a t-Test in order to see whether the abnormal returns values are different from zero. In this respect we issued two hypotheses:

H_0 : The merger announcement had no implications over the stock prices. The merger did not influence the market.

[α (CAR)] / [β (CAR)] = 0

H_1 : The merger announcement had some implications over the stock prices. The merger can influence the market.

[α (CAR)] / [β (CAR)] ≠ 0

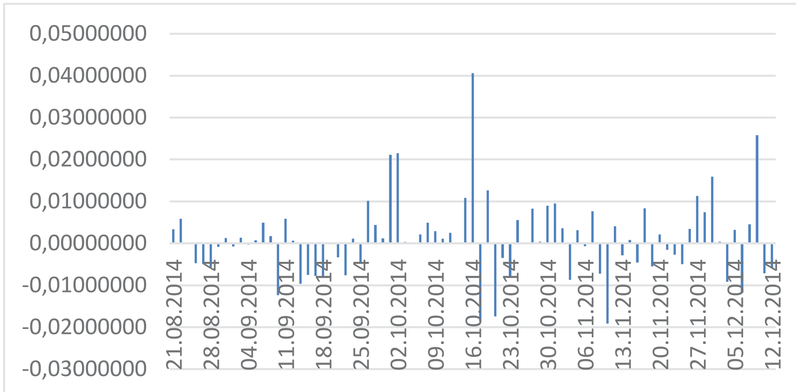
Based on the results, we can state whether the merger announcement has influenced in a positive or negative way the stock prices. Even if the analysis has been applied to only one merger, the findings can be generalised. Moreover, beside the event study approach it can be made a financial ratio analysis. In this way, the situation is approached from different perspectives, creating an overview to the whole process and its efficiency.

4. Empirical results

A merger or an acquisition announcement is a very important piece of information which may influence the market actors' behaviour, the stock prices could fluctuate during this period. If the market reaction is positive, the resulted abnormal returns should be greater than zero. The tricky part is to determine the day when the news has been leaked to the press. For this paper purposes, day zero has been chosen on the 16th of October, approximately a month and a half before the bidder offer has been signed. In the first graph, it can be observed the trend of the abnormal returns within the event window.

On October 16, the value of the abnormal return has reached 0.04062028, with more than 26% from the previous day. In the 40-day event window, the average of the stock prices has decreased from 1.7564 ron/share to 1.7366 ron/share which means that the market reaction was not positive to the public rumours. Moreover, after the official announcement day, the abnormal returns from the following period were negative. At three days after the official announcement, the abnormal returns have been positive, meaning that the market needed time to absorb the news.

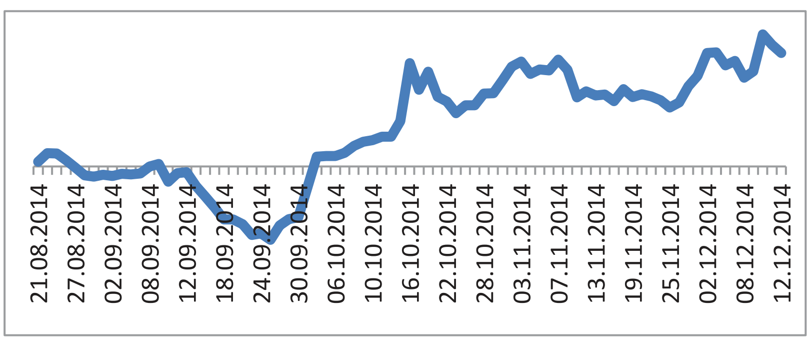
Figure 1. The abnormal returns within pre and post event window



Source: own computations

The cumulative abnormal returns are all positive after the announcement day, moreover on the 10th of December, when the bidder offer was accepted, the value of the CAR reaches 0.0925. This upward trend implies that the merger between Banca Transilvania and Volksbank had a significant impact on the market. Even if until the official announcement the stock prices decreased, after the offer was accepted by Volksbank, the prices began to rise. We took the investigation further and made an analysis of the average AR, CAR and stock prices on a 20 days event from the official announcement day.

Figure 2. The CAR value within pre and post event window



Source: own computations

As it can be seen in Table 2, the merger had a positive effect on the banks stock prices, the market reaction being optimistic. The findings show that when a merger or an acquisition is to be made, there are some movements on the market. Even if the fluctuations can be seen a few weeks before the official announcement as a result of the leaked information, the event brings value to the market. In Romania, due to a complicated legislations process, the information regarding a merger or acquisition is often leaked to the press before the official announcement and implementation. This may be a little confusing for the investors and the market itself but overall it gives them time to assimilate the information and to predict the next actions.

Table 2. The sample data on a 20 days event window

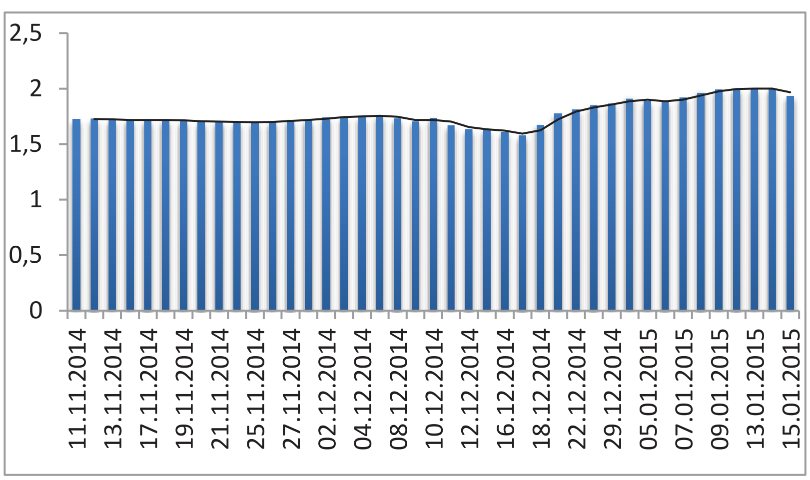
	Average of the AR	Average of the CAR	Average of the stock prices
Pre event window (-20 days)	-0.00004703	0.05671982	1.7200 ron
Post event window (+20 days)	0.00609450	0.15632402	1.8289 ron

Source: own computations

In the third graph we illustrated the fluctuations of the stock market prices. These have started to grow only after the official announcement day, meaning that the market react significantly only when the rumours have been confirmed. The maximum price has been identified after seventeen days, reaching 2 lei/share. Compared to the 10th of December, the prices have increase with almost 10% meaning the merger had brought value to the market and influenced in a positive way the shareholders of the bidder bank.

In order to validate the hypothesis, a t-test has been made. The results concluded that the abnormal returns and the cumulative abnormal returns are statistically significant, as the value of the t-test is differed than zero. In this way, the H_0 hypothesis has not been validated, the second one being accepted - H_1 : the merger announcement had some implications over the stock prices; the merger could influence the market. Furthermore, the CAR values are statistically significant (>5%) for the post-event window of the official announcement day. The stock market prices have increase with approximately 10%.

Figure 3. The stock prices within pre and post 20 days event window



Source: own computations

Overall, the analysis has confirmed our beliefs, a merger announcement being significant for the fluctuations of the stock prices of the bidder bank. Given the Romanian market conditions, the merger is leaked to the press long before the event itself. However, the market reactions can be observed especially after the official confirmation.

5. Conclusion

The role of the M&A segment has become a very important one. Despite the fact that on the Romanian market this is still in progress, in the foreseeable future the analysts expect slowly movements on the financial sectors. The main objective of this paper was to establish whether on the Romanian markets a merger announcement can influence the stock prices of the involved banks in a positive way. Taking into consideration the percentage of the listed banks - only 7%, the analyses focused on the merger of Banca Transilvania with Volksbank. Over and above, only the acquiring bank is listed so the implications of the announcement on the target bank have not been analysed.

Even if the indications of our study are a mix of positive and negative influences over the shareholders wealth, we can state that overall a merger or an acquisition could bring value to the market. There are many factors that need to be considered in the process, although. The economic environment, the financial stability, the positions and particularities of the implicated companies, all of these can influence the stock prices as well.

Abnormal returns have been identified when the news was leaked to the press. However, the CAR value has increased only before this has been confirmed by the implicated banks. When it comes to stock prices, the findings are similar as the average from the 40 days pre event window is greater than the average from the 40 days post event window.

As well as the European researchers, the results show that overall it can be seen an increase of the stock prices, but only after the official announcement as the market reaction to the rumours has been negative. We can state that the merger announcement has brought additional winnings to the shareholders of Banca Transilvania.

Regarding the limitations issues, these can be considered future studies directions. Even if the analysis has been conducted on a single merger, the results can be generalised for the whole system. Furthermore, the paper is a first attempt on this field, no other studies of this kind being conducted on the Romanian banking system.

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