
Value Creation of European Bank Mergers and Acquisitions in the 1998 – 2007 Period

Petr TEPLÝ – Hana STÁROVÁ* – Jan ČERNOHORSKÝ**

Abstract

The European banking industry has experienced profound change in regulation, technology and market structure over the last two decades. Since the late 1990s, a strong wave of mergers and acquisitions (M&As) and market consolidation process have been induced by changing external environment. The aim of this paper is to find out whether M&A transactions in the European banking sector can be justified by creating value for involved banks' shareholders. For this purpose we conduct an event study examining value implications of 59 M&A transactions of listed European banks carried out between 1998 and 2007. Our findings suggest large value creation for the targets' shareholders. On contrary, significant value destruction is found for shareholders of the bidding banks. The net wealth effect for combined entities of targets and bidders is still significantly positive; therefore, we conclude that banking M&As have been successful in the observed period. Moreover, we present results for several sub-samples analysing differences in terms of value creation between domestic and cross-border deals, cash and equity-financed deals and transactions of different sizes.

Keywords: *mergers and acquisitions, bank, abnormal return, shareholder value*

Abstrakt

* Petr TEPLÝ – Hana STÁROVÁ, Charles University in Prague, Institute of Economic Studies, Faculty of Social Science, Opletalova 26, Prague, Czech Republic; e-mail: te-
ply@fsv.cuni.cz; hana.starova@gmail.com

** Jan ČERNOHORSKÝ, Univerzity of Pardubice, Institute of Economic, Faculty of Economic and Administration, Studentská 95, Pardubice Czech Republic; e-
mail:jan.cernohorsky@upce.cz

Acknowledgements: Financial support from The Research Institutional Framework Task IES (2005 – 2010 – *Integration of The Czech Economy into The European Union and its Development*) and The Grant Agency of Charles University (GAUK 114109/2009 – *Alternative Approaches to Valuation of Credit Debt Obligations*) and The Czech Science Foundation (projects No. GA 403/10/P278 – *The Implications of The Global Crisis on Economic Capital Management of Financial Institutions* and No. GA P403/10/1235 *The Institutional Responses to Financial Market Failures*) is gratefully acknowledged.

Evropský bankovní sektor prošel za poslední dvě desetiletí významnými změnami v oblasti regulace, technologie a tržní struktury. Změny ve vnějším prostředí vyvolaly od konce devadesátých let silnou vlnu fúzí a akvizic a spustily konsolidaci trhu. Cílem tohoto článku je zjistit, zda jsou evropské bankovní fúze a akvizice opodstatněny tvorbou hodnoty pro akcionáře zúčastněných bank. Za tímto účelem nejprve probereme teoretické motivy k fúzím a akvizicím, které naznačují možné zdroje tvorby hodnoty. Dále provedeme tzv. event study zkoumající důsledky 59 fúzí a akvizic listovaných evropských bank z let 1998 až 2007 na hodnotu pro akcionáře. Naše výsledky dokazují, že fúze a akvizice přinesly značnou hodnotu pro akcionáře akvizičních cílů. Akcionáři akvizitérů naopak hodnotu signifikantně ztrácejí. Čistý efekt pro akcionáře obou zúčastněných bank je signifikantně kladný, z čehož usuzujeme, že bankovní fúze a akvizice byly úspěšné. Navíc ukazujeme výsledky pro několik menších vzorků analyzující rozdíly v tvorbě hodnoty mezi domácími a příhraničními transakcemi, transakcemi financovanými penězi a akciemi a transakcemi různých velikostí

Klíčová slova: fúze a akvizice, banka, nadměrný výnos, hodnota pro akcionáře

JEL Classification: G34, G21, C12

1. Introduction

The European banking sector experienced unprecedented levels of mergers and acquisitions (M&A) in the 1998 – 2007 period. The M&A wave contributed to a consolidation process, which has transformed the once fragmented European banking industry into a system of national oligopolies with even a few pan-European players. Further consolidation efforts are expected. The rise of M&A activity was forerun by fundamental changes in external environment, such as deregulation, introduction of euro, technological progress and changing customer demand. These external factors undoubtedly induced the M&A wave, as they increased the potential profitability of merging and acquiring.

In our study, we intend to find out whether the increased M&A activity in the European banking sector was indeed profitable for the banks. Therefore, our main aim is to evaluate the past M&A transactions in terms of value creation for shareholders. For this purpose, we apply the *event study* methodology, which is based on observing the *abnormal returns* to shareholders around the day of an M&A deal announcement. The event study results represent the shareholders' expectations regarding the value creation (or destruction), which we believe are the best and most direct measures of M&A profitability (as supported by e.g. Cybo-Ottone and Murgia, 2000; Beitel and Schiereck, 2001; and Lensink and Maslennikova, 2008).

We formulate six working hypotheses concerning the value effects of M&A announcement based on results of the existing event studies.. First of all, we test the overall average wealth effect of M&A announcement. The value effects are analyzed separately for shareholders of targets, bidders, and (theoretically) combined entities. Moreover, we test whether there is any difference in terms of value creation between deals with different geographic focus, form of financing and size. As far as we know, the broad scope of our analysis is only comparable with two existing event studies focused on European banking. Compared to these studies, we base our analysis on a more recent transaction sample. Therefore, we believe our event study contributes to the existing research on banking M&A in Europe. As a result of the current global financial turmoil, in the year 2008 we saw lots of banking M&As/state bailouts in Europe (e.g. Fortis, Glitnir, Royal Bank of Scotland) and around the world (Bear Stearns, Wachovia, Merrill Lynch). However, an in-depth analysis of these new deals goes beyond the scope of this paper.

There have been plenty of event studies dealing with mergers conducted in past thirty years such as Andrade, Mitchel and Stafford (2001) and Moeller, Schlingemann and Stultz (2003) represent important large sample event studies. Moreover, Bruner (2002) summarizes 130 research papers analyzing whether M&A do pay. The conclusion from these three studies is as follows: (1) M&A create value for acquisition targets, (2) the impact on the bidders is unclear, some acquirers gain and some lose, and (3) M&A are most likely to create value in aggregate for the combined entity. To summarize the conclusions of the Europe-focused event studies: (1) highly significant value creation was observed for the targets banks; (2) value creation for the bidding banks was mostly found not significantly different from zero; and (3) evidence was presented which confirms positive net impact on the aggregate combined entity. While the U.S. research results from the 1980s indicated only a transfer of value from the shareholders of acquirers to the shareholders of the target banks (although the evidence from 1990's was a bit more favourable), the European studies clearly find true net value creation (Tourani-Rad and van Beek (1999), Beitel and Schiereck (2001), Fritsch, Gleisner and Holzhäuser (2007) or Lensink and Maslennikova (2008)).

The paper is structured in the following way. First of all, we review the existing literature with focus on past event studies. The following section provides an overview of European banking M&A activity. In the third section, we provide an empirical analysis of value creation in European banking M&As. In addition, we present six hypotheses, data sample, methodology and results of our own event study. Finally, the fourth section concludes the paper and state final remarks.

2. M&A Activity in European Banking Sector in 1998 – 2007

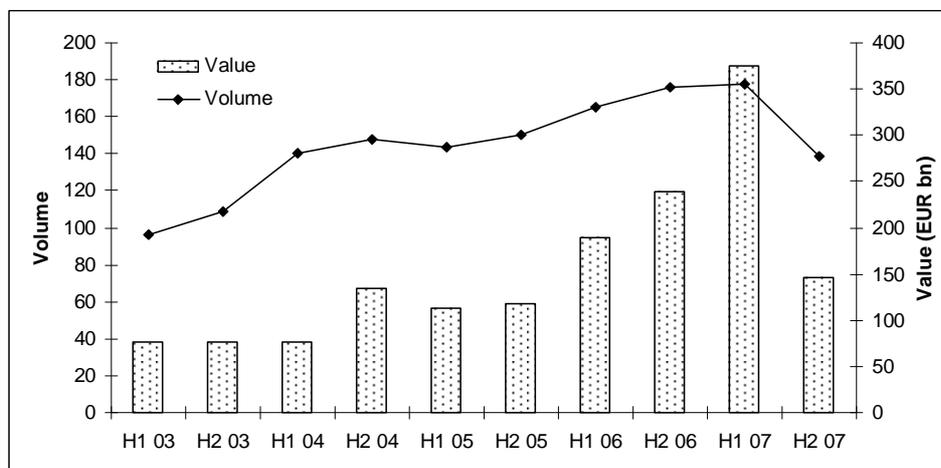
After theoretical background for value creation in M&As, this section looks at the pattern of recent M&A wave in the EU banking sector. The term *mergers and acquisitions*, or simply *M&A*, as we use it in this paper, denotes a broad range of formally distinct transactions. An *acquisition* is defined as a transaction, when a company (*acquirer*) gains ownership control over another company (*target*), but both remain legally independent entities. On contrary, after a *merger*, one or both merging entities legally cease to exist; the shareholders of the merged companies obtain agreed stakes in a single successor entity.

The M&A activity in banking industry followed a similar pattern as the overall M&A development. The M&A deal values, as well as the average deal value, increased sharply since 1997. The wave peaked in 2000 and slowed down since then with deceleration of overall economic activity. There were two key moments in respect of regulation, which gave impetus to M&A activity. Firstly, the single market initiatives in early 1990s and especially the introduction of unified banking licence and completion of the agreement on the free movement of capital in 1993 opened the gate towards a liberalised single banking market. Secondly, the introduction of single European currency and releasing FSAP in 1999 had strong impact on deepening the financial service market integration.

A notable decline in M&A activity since 2001 was in line with an overall economic recession. Since 2004, the number and value of banking transactions has been on rise again. Figure 1 presents half-yearly data concerning the deals in European financial sector recorded by Mergermarket. The recent development in bank M&A activity has not reached the magnitude of the late 1990s; however, several very large deals occurred increasing the average deal value. The prospects of accelerating European cross-border banking, as well as finalizing domestic consolidation, were set back after global banking was severely hit by the U.S. subprime mortgage crisis, which led to the current global financial turmoil. As a result, in 2008 we saw lots of banking M&As and state bailouts in Europe (e.g. Fortis, Glitnir, Royal Bank of Scotland) and around the world (Bear Stearns, Wachovia, Merrill Lynch). However, an in-depth analysis of these new deals goes beyond the scope of this paper.

Figure 1

Half-year Volumes and Values of M&A in Financial Sector in Europe in 2003 – 2007



Note: Data contain all deals announced, excluding those that lapsed or were withdrawn, in the whole financial sector, where the dominant location of the target is in Europe.

Source: Mergermarket (2008).

3. Empirical Analysis

This section aims at answering whether mergers and acquisitions of European banks are justified by value creation. After description of the used data sample, we discuss a methodology, present results of the analysis and conclude the section with a comparison of our findings with other authors.

3.1. Data Sample

To identify the list of M&A transactions of our interest, we utilized the Mergermarket database. We have selected deals meeting the following criteria: i) the transactions have been announced in the period between 1, January 1998 and 31, December 2007; ii) both the bidder and the target are classified by Mergermarket as European banks, belonging in the product category “Banking” and the geographic category “European Union” (EU-27).; iii) both the bidder and the target were listed entities; iv) the deals have been completed; we excluded those that lapsed or were withdrawn after announcement; v) we chose only such deals where change of corporate control occurred; therefore we eliminated minority stakes deals.

Applying these criteria we arrived at a final sample of 59 transactions. The number is comparable with the sample size of past studies (Tourani-Rad and van Beek, 1999; Cybo-Ottone and Murgia, 2000; Fritsch, Gleisner and Holzhäuser, 2007). In order to analyze value effects of key transaction characteristics (to test Hypotheses 4 to 6), we divided our sample into several sub-samples. Table 1

presents distribution of the identified transactions according to target size, geographic location and consideration structure. In order to obtain three sub-groups of similar size, we defined small deals as those with implied target enterprise value (based on purchase price) under EUR 700 million, large deals over EUR 5 bn enterprise value and mid-sized deals with the enterprise value between these two limits. We also separately examined ten largest deals later referred to as “mega” deals with target enterprise value exceeding EUR 10 bn (e.g. ABN AMRO and Capitalia in 2007, Sanpaolo IMI and Natixis in 2006 or HypoVerainsbank in 2005).

Table 1
An Overview of Identified Transactions

Year	Number	Target size			Geographic Focus		Consideration Structure		
		small	mid	large	domestic	cross-border	cash	equity	unknown
2007	5	2	0	3	4	1	1	4	0
2006	4	1	2	1	2	2	2	2	0
2005	5	1	2	2	3	2	3	2	0
2004	1	1	0	0	1	0	0	0	1
2003	6	3	3	0	3	3	2	2	2
2002	4	2	2	0	4	0	1	1	2
2001	6	3	2	1	3	3	1	2	3
2000	15	3	8	4	11	4	2	11	2
1999	10	0	5	5	7	3	2	6	2
1998	3	1	0	2	2	1	1	2	0
Total	59	17	24	18	40	19	15	32	12

Source: Authors.

In the end it was not possible to obtain stock prices for certain targets and bidders, because they had been delisted from the stock exchange already before the transaction. Also financial data, needed in order to set weights for combined entities, were missing for some banks. However, we decided to keep all transactions in our sample, as the missing data do not matter for our purpose. Finally, we based our analysis on a sample of 55 targets, 52 bidders and 41 combined entities.

3.2. Methodology

When doing our research, we followed a standard methodology used for M&A valuation – calculation of abnormal returns in the short-term. In other words, we have applied the approach focused on short term stock movements what is in line with previous research studies focused on the topic value creation for shareholders (see, for instance, Cybo-Ottone and Murgia (2000) or Lensink and Maslennikova (2008)). However, for long-term investors another approach should be applied such as valuation of synergies resulting from the merger after

3 – 5 years. However, this effect cannot be captured from stock prices as many factors influence stock performance in the long-term (e.g. macroeconomic indicators, business cycles, level of competition etc.) and hence value creation for shareholders would be difficult to measure.

In order to estimate parameters, which could be subsequently used for abnormal returns calculations, we applied standard *market model* (Brown and Warner, 1984; Cybo-Ottone and Murgia, 2000; Beitel and Schiereck, 2001; Fritsch, Gleisner and Holzhäuser, 2007). The market model has the following form:

$$R_{jt} = \alpha_j + \beta_j R_{Mt} + \varepsilon_{jt}$$

where R_{jt} is the observed return on security $j = 1, \dots, n$ in trading day $t \in [-270; -21]$ and R_{Mt} is the observed market return (return on the benchmark) in day t . The returns were calculated as follows:

$$R_t = \ln\left(\frac{P_t}{P_{t-1}}\right)$$

where P_t and P_{t-1} are the last prices in day t and $t-1$, respectively, obtained from Bloomberg. We applied the OLS regression to estimate the market model parameters α_j , β_j for each stock j . As a benchmark for the estimation, we used a general local market index different for each country as suggested by Bloomberg.

The abnormal return (AR) on a stock $j = 1, \dots, n$ in day $t \in [-20; +20]$ is calculated as the difference between the observed return R_{jt} and the expected return \hat{R}_{jt} :

$$AR_{jt} = R_{jt} - \hat{R}_{jt} = R_{jt} - \left(\hat{\alpha}_j + \hat{\beta}_j R_{Mt}\right)$$

where $\hat{\alpha}_j$ and $\hat{\beta}_j$ are the estimated parameters. Similarly as Beitel and Schiereck (2001), we did not adjust the estimated parameters to reflect non-synchronous trading as suggested by Scholes and Williams (1977). When the studied securities are sufficiently liquid, the problem of non-synchronous trading does not need to be considered (Cybo-Ottone and Murgia, 2000). Indeed, Brown and Warner (1984) discussed and tested the Scholes-Williams procedure and they found “no clear-cut benefit” of the alternative method in event studies.

After we obtain the daily abnormal returns for both bidders’ and targets’ shareholders based on the above described method, we can calculate the aggregate abnormal returns for a given transaction. The abnormal return on a hypo-

thetical stock of the combined entity in day t is calculated as a weighted sum of abnormal returns of the bidder and the target involved in a given transaction:

$$AR_{t,transaction} = \frac{AR_{tB} \cdot TA_{tB} + AR_{tT} \cdot TA_{tT}}{TA_{tB} + TA_{tT}}$$

where the weights TA_{tB} and TA_{tT} are the total assets of the bidder and the target, respectively, at the end-of-year before the merger announcement date.¹

In order to calculate cumulative abnormal returns over the event windows, first we have to average the daily abnormal returns for all n analyzed stocks:

$$\overline{AR}_t = \frac{1}{n} \sum_{j=1}^n AR_{jt}$$

Then we can aggregate the abnormal returns and finally obtain the cumulative abnormal returns (CAR) for any given event window $[t_1; t_2]$ as follows:

$$CAR_{[t_1; t_2]} = \sum_{[t_1; t_2]} \overline{AR}_t$$

3.3. Empirical Results

In this section we test six hypotheses of value creation of European bank M&A. We have divided these hypotheses into four groups: i) wealth-effect hypotheses (Hypotheses 1, 2 and 3); ii) geographic diversification hypothesis (Hypothesis 4); iii) consideration structure hypothesis (Hypothesis 5); and size hypothesis (Hypothesis 6). However, due to a limited size of this paper, we discuss more-detailed results only for the Hypothesis 1, for the other five hypotheses we present only key findings.

Results with Respect to Wealth-Effect Hypotheses

Hypothesis 1: European bank mergers and acquisitions announced in the period of 1998 – 2007 created value for targets' shareholders on average.

In order to test the Wealth-Effect Hypotheses, we first of all analysed the value effects for the entire sample. Our results for the entire sample are presented in Table 2 and **Figure 2**.

Table 2

¹ Market capitalisation some time prior to the announcement date may be alternatively used as the weights in this calculation (Cybo-Ottone and Murgia, 2000; Beitel and Schiereck, 2001).

CARs of the Entire Data Sample

Event Window	Targets			Bidders			Combined Entities		
	CAR (in %)		t-value	CAR (in %)		t-value	CAR (in %)	equity	t-value
Entire Sample		(N = 55)			(N = 52)			(N = 41)	
[-20; +20]	16.60	***	8.699	-1.79	n.s.	-1.141	1.41	n.s.	0.901
[-10; +10]	14.47	***	10.593	-0.38	n.s.	-0.338	1.73	*	0.539
[-5; +5]	13.59	***	13.747	-0.13	n.s.	-0.164	1.82	**	2.245
[-2; +2]	13.78	***	20.681	-0.67	n.s.	-1.227	0.97	**	1.775
[-1; +1]	12.69	***	24.583	-0.78	**	-1.833	0.63	*	1.492
[0; 0]	10.30	***	34.554	-1.37	***	-5.585	0.14	n.s.	0.584
[-20; 0]	15.50	***	11.350	-0.88	n.s.	-0.788	1.73	*	1.545
[-10; 0]	12.95	***	13.107	-0.69	n.s.	-0.857	1.36	**	1.676
[-5; 0]	12.24	***	18.354	-0.73	*	-1.341	1.09	**	1.995
[-2; 0]	12.06	***	23.365	-1.23	***	-2.899	0.38	n.s.	0.908
[-1; 0]	10.97	***	26.019	-1.14	***	-3.302	0.45	*	1.300

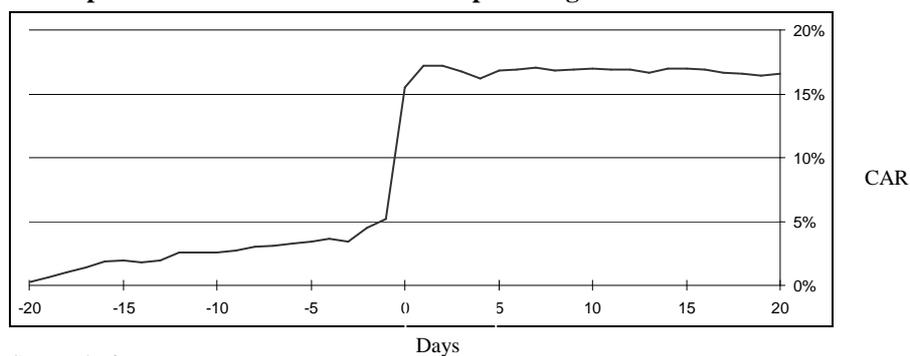
Note: * significant at 10% level, ** significant at 5% level, *** significant at 1% level, n.s. not significant.

Source: Authors.

The results for targets are consistent with majority of past studies. Very similarly to Cybo-Ottone and Murgia (2000) and Beitel and Schiereck (2001), we found statistically significant highly positive cumulative abnormal returns for targets' shareholders in any of the studied event windows. Therefore, we can conclude that M&A deals in European banking sector are a clear success for the targets' shareholders, therefore we cannot reject the Hypothesis 1 expecting positive value creation for targets. Our results correspond to the findings of Tourani-Rad and van Beek (1999), Cybo-Ottone and Murgia (2000), Beitel and Schiereck (2001) and Campa and Hernando (2005).

Figure 2

Development of CARs of the Entire Sample: Targets



Source: Authors.

The targets' shareholders gain 10.3% CAR during the single day of the announcement and 16.6% CAR over the longest 41-day window. Comparing the results for symmetric versus non-symmetric event windows, it is clearly visible that the market reaction comes mostly at the event day and in the preceding days. It suggests the transactions are anticipated before the announcement. No more significant positive abnormal returns are observed in the twenty days following the announcement date. More to the contrary, a slightly downward trend can be observed.

For bidding banks, the reviewed studies found both positive and negative market evaluation, but the results were mostly not significantly different from zero. Contrary to Cybo-Ottone and Murgia (2000) and Lensink and Maslennikova (2008), who found positive abnormal returns statistically significant in certain time intervals, our results suggest negative market evaluation of a merger announcement. Our findings are consistent with many U.S. studies, but not many European-focused studies (e.g. Beitel and Scheireck (2001) found significant value destruction only for deals since 1998).

Hypothesis 2: The shareholders of bidding banks did neither gain nor lose significantly on average.

Negative cumulative abnormal returns were observed in all examined event windows. While the t-test confirmed statistical significance of negative returns in short windows just around the announcement date, no significant value destruction was proved in longer intervals. During the announcement day, bidding banks' stocks lost on average 1.37% of their value. We can conclude that announcements of M&A transactions are on average evaluated as slightly value destroying events from the bidding banks' point of view. Our results hence reject the Hypothesis 2 at 1% significant level, as also concluded by Campa, Hernando (2005), although we found significant negative CARs only for a few time intervals.

Hypothesis 3: In aggregate, the mergers and acquisitions created value for the combined entities' shareholders.

Our results for the combined entities show significant slightly positive returns for most of the event windows. However, CARs are not significant e.g. for the event day [0; 0] and the longest window [-20; +20]; for other intervals the significance is only at the 10% or 5% level. The aggregate CARs were calculated as an average of the targets' and the bidders' CARs weighted by their total assets. As the targets' net book value in our sample is on average eight times lower than the bidders, it explains relatively low aggregate abnormal returns as compared to the substantial value creation observed for the targets' shareholders. Our findings are consistent with Cybo-Ottone and Murgia

(2000) and Beitel and Schiereck (2001), the only papers which dealt with wealth effects for the combined entities in European bank M&A. Our conclusion is that the European bank M&A was value creating on a net basis between 1998 and 2007. Thus we cannot reject the Hypothesis 3 at 1% significant level expecting positive net value creation.

Results with Respect to Geographic Diversification

Hypothesis 4: *Domestic European bank mergers and acquisitions announced in the period of 1998 – 2007 created higher value on average than cross-border transactions.*

Diversification is often stated as one of the motives in banking M&A. Reducing risk and smoothing the volatility of earnings are the desired outcomes. Cross-border banking M&A are motivated by expectations of risk reduction and future growth, while domestic transactions are undertaken in order to increase market share and exploit potentials for economies of scale. In order to find out, how diversification across national borders is evaluated by banks' shareholders as compared with transactions within the borders, we analyzed domestic and cross-border deals separately.²

The difference between the effects of domestic and cross-border transaction announcement is not confirmed either by looking at the aggregate effect on targets' and bidders' stock prices. While we observed significant positive CARs for combined entities for domestic deals in most of the intervals, the CARs of cross-border deals are mostly insignificant and even negative in some intervals. Our sub-sample of domestic transactions seems to outperform the cross-border one in terms of market valuation of hypothetical combined entities only in longer intervals. Contrary, cross-border sub-sample significantly outperforms domestic deals at the announcement day [0; 0]. In other intervals, the difference is not significant. As the results are mixed, we can neither reject nor support the Hypothesis 4 stating that domestic transactions created higher value on average than cross-border deals, what corresponds to the results from Tourani-Rad and van Beek (1999).

Results with Respect to Consideration Structure Hypothesis

Hypothesis 5: *Purely cash-financed European bank mergers and acquisitions announced in the period of 1998 – 2007 created higher value on average than equity-financed transactions.*

² Due to a limited size in this paper we do not present all tables and figures as in our previous research, however.

Our results confirm that announcing a stock-financed deal mixes different information, which may induce totally opposite reaction of the bidders' shareholders. We may conclude that the observed negative evaluation of a new equity issue is likely to worsen the results for the entire sample. Based on the presented results, we cannot reject our Hypothesis 5 at 1% significant level stating that purely cash-financed deals created higher value than those financed with equity in the studied transactions on average. However, it is important to note, that nearly all purely cash-financed deals in our sample were small or mid-sized transactions. Therefore, it is not possible to clearly distinguish between the size effect and consideration structure effect as suggested by Ekkayokkaya, Holmes and Paudyal (2007).

Results with Respect to Size Hypothesis

Hypothesis 6: *Relatively smaller European bank mergers and acquisitions announced in the period of 1998 – 2007 created higher value on average than large transactions.*

We find out that stock market participants expect better future performance of relatively smaller bank deals compared to large or mega deals. Our results show that we cannot reject the Hypothesis 6 at 1% significant level suggesting that smaller transactions imply larger synergy potential and better manageability of their exploitation. Our findings are in line with past empirical evidence such as Cybo-Ottone and Murgia (2000), Beitel and Schiereck (2001) or Ekkayokkaya and Holmes and Paudyal (2007).

Conclusion

The main goal of this paper was to evaluate wealth effects of European bank M&A for the banks' shareholders by conducting an event study. For this purpose, we studied 59 banking transactions in the period between 1998 and 2007. We tested six hypotheses concerning the overall average wealth effects of M&A announcements as well as differences in terms of value creation between domestic and cross-border deals, cash and equity-financed deals and transactions of different sizes. Our findings suggest that targets are clear winners in European bank M&A, whereas bidders lose on average. Unlike the majority of past event studies, we found significant value destruction for bidding banks' shareholders. Therefore, presence of fallacious motives for M&A cannot be denied. Managements' M&A decision making seems to be influenced by their own wealth maximization goals, their hubris or their tendency to "eat rather than being eaten". Alternatively, observed value destruction may be explained by tough competitive pressure making bidding banks overpay.

Despite the observed value destruction from bidders' perspective, we found evidence of a positive net wealth effect. Our findings suggest that European bank M&A lead to net value creation on average. Therefore, we reject a pure transfer of value from bidders' to targets' shareholders. Economic motives for M&A prevail in aggregate. Clearly, there is a potential for synergies in banking M&A and we confirmed that merging banks are able to exploit the synergies. We can conclude that M&A transactions during the banking consolidation wave of the last decade were justified by value creation in aggregate. Studying separately domestic and cross-border deals, we did not find significant difference between the two sub-groups in terms of aggregated value creation. Due to mixed results, we cannot draw any clear conclusion. However, from the perspective of single market efforts, we can point out that no significant value destruction was observed for cross-border deals. Domestic deals were not proved to make shareholders better off than transactions leading to geographical diversification. Therefore, our results do not confirm the existence of any obstacles preventing cross-border banking consolidation.

Furthermore, we have obtained relevant results by analysing the difference between cash and equity-financed deals. Purely cash-financed deals outperform those financed at least partially with stocks. We have confirmed that the announcement of new equity issue related to M&A transaction is negatively evaluated by bidding banks shareholders and worsens the results of the entire sample. It suggests that the significant value destruction observed for bidders may be partly related to new equity issue rather than the M&A announcement.

Last but not least, we found that smaller transactions were better awarded by stock market participants than large ones. We argue that this is because small targets have larger synergy potential on one hand and can be more easily merged on the other. Results of our analysis allow us to conclude that mergers and acquisitions in the European banking industry have created value for shareholders on average in the 1998 – 2007 period. We should note that implications for future banking consolidation have to be drawn with great caution. However, based on our analysis, we believe that nothing, not even recent financial markets turmoil, can hinder further consolidation of the European banking sector including expansion of cross-border banking.

References

- ANDRADE, G. – MITCHELL, M. – STAFFORD, E. (2001): Evidence and Perspectives on Mergers. *The Journal of Economic Perspectives*, 15, No. 2, pp. 103 – 120.

- BEITEL, P. – SCHIERECK, D. (2001): Value Creation at the Ongoing Consolidation of the European Banking Market. [Working Paper, No. 05/01.] Herdecke: Institute for Mergers and Acquisitions.
- BROWN, S. J. – WARNER, J. B. (1984): Using Daily Stock Returns: The Case of Event Studies. *Journal of Financial Economics*, 11, No.14, pp. 3 – 31.
- BRUNER, R. F. (2002): Does M&A Pay?: A Review of the Evidence for the Decision-Maker. *Journal of Applied Finance*, 12, No. 3, pp. 48 – 68.
- CAMPA, J. M. – HERNANDO, I. (2005): M&A Performance in the European Financial Industry. [Documentos de Trabajo, No. 0516.] Madrid: Banco de Espana.
- CYBO-OTTONE, A. – MURGIA, M. (2000): Mergers and Shareholder Wealth in European Banking. *Journal of Banking and Finance*, 24, No. 6, pp. 831 – 859.
- EKKAYKKAYA, M. – HOLMES, P. – PAUDYAL, K. (2007): The Euro and the Changing Face of European Banking: Evidence from Mergers and Acquisitions. *European Financial Management*. Forthcoming.
- FRITSCH, M. – GLEISNER, F. – HOLZHÄUSER, M. (2007): Bank M&A in Central and Eastern Europe. [Working Paper Series.] Available at: <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=966294>.
- LENSINK, R. – MASLENNIKOVA, I. (2008): Value performance of European bank acquisitions. *Applied Financial Economics*, 18, No. 3, pp. 185 – 198.
- Deal Drivers (2008): Mergermarket: The Comprehensive Review of European Mergers and Acquisitions. Full year edition 2007.
- MOELLER, S. B. – SCHLINGENMANN, F. P. – STULTZ, R. M. (2003): Do Shareholders of Acquiring Firms Gain from Acquisition? [NBER Working Paper, No. 9523.] Available at <http://www.cob.ohio-state.edu/fin/dice/papers/2003/2003-4.pdf>
- SCHOLLES, M. – WILLIAMS, J. (1977): Estimating Betas from Non-synchronous Data. *Journal of Financial Economics*, No. 5, pp. 309 – 327.
- TOURANI-RAD, A. – van BEEK, L. (1999): Market Valuation of European Bank Mergers. *European Management Journal*, 17, No. 5, pp. 532 – 540.