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Methods of Payment in M&A Transactions and the Operational Performance of Acquirers

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Abstract: The main purpose of this article is to verify if the economic results of mergers and acquisitions on Polish and Eastern European markets paid with cash outperform those financed with stocks. We applied a long-term event study methodology to identify the impact of M&A transaction on acquirer financial performance and cross-section regressions to test our main hypothesis. The conducted research shows that cash payments lead to statistically significant higher average ROA in the post-transaction period, while shares or mixed payments lead to a lower return on assets. Our findings prove that the financing of M&A transactions on Polish and Eastern European markets impact the operational performance of acquirers in line with the signalling theory.

Keywords: M&A, cash payments, share payments, operational performance

Introduction

Although both the value and the number of mergers and acquisitions increase year after year in Central and Eastern Europe, the research on the issues related to this part of world is still limited. One of the most important aspects of the research is the effectiveness of M&A and determinants which can affect the advantages of the economic results of such transactions. What we wanted to check in this study is the theory that has already been verified (with different results) for the broad variety of countries and in different time spans too, but not for Central and Eastern Europe, and particularly not for Poland. Namely, we decided to see if the theory on cash versus stock payment for acquisitions is relevant for Poland. The theory supported by some empirical results states that the economic effectiveness of mergers and acquisitions measured from the perspective of the acquirer and which were paid with cash outperform in general those financed with a combination of cash and stocks, or stocks only. As the method-of-payment hypothesis specifies, if the acquirer's equity is considered overvalued or when it is cheaper than other methods of financing, the acquiring firm is more likely to pay at least a part of the price with its equity (Pachare 2010). As a result of overvaluation, acquirers are less motivated to carry out a carefully targeted selection, and in consequence they achieve weaker financial results in post-merger periods. It further leads

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to the signalling hypothesis, which says that paying for acquisition with stocks rather than with cash carries a negative message that the acquirer might be overvalued. There are also other theories on the issue of methods of payment, and have been available for researchers for many years. G. Hansen's (1987) paper discusses and develops further the theory for the choice of payment method in mergers and acquisition transactions. The author states that the choice made by the acquirer concerning the exchange medium for a transaction is mostly the result of the information asymmetry between the two companies under consideration – the target and the buyer. This means that when the target company has more information about its value than the acquirer (for instance, some proprietary information), the second one will prefer to offer stock payment. What is more, Hansen notes that the choice of payment method is not as simple and trivial as it might seem if we consider taxation impact or the aforementioned information asymmetry. Based on the available theories' set, Martin (1996) conducted a study including 846 corporate acquisitions from the period of 1978–1988 to answer the question of which factors influence the method of payment choice most and to verify the wide range of theories on that topic. The results indicate that when it comes to cash payment for mergers and acquisitions, tender offers tend to be financed with cash. It also supports the theory that when an acquiring company has high investment opportunities, it is more prone to offer equity as the payment for the target, because the alternative option, according to this theory, would imply debt financing that, in consequence, gives the managers less discretion over the after-transaction operational decisions.

However, the research results on the issue of methods of payment and their connection with acquirers' performance are not unequivocal. They vary across countries and time periods but to the best of our knowledge, no research on this topic is available for Poland and Eastern/Central Europe. To verify if this hypothesis is applicable to the Polish market, we have applied the methodology of a long-term event study proposed by Boubakri et al. (2012) to identify the impact of M&A transaction on acquirer financial performance and cross-section regressions to test our main hypothesis.

1. Literature Review

There is an extensive amount of literature concerning cash versus stock acquisitions. Although a set of the standard theories is available, these theories are not always confirmed by empirical research. To begin with, Rahman's (2002) research on the long term operating after-transaction performance of Malaysian acquirers is very similar to ours. Although he used more acquisitions' characteristics than only the method of payment (as we did in this study), he also used event study methodology to check his hypothesis. What is more, the results that he obtained are analogous to our results, which means that he found that the method of payment is a relevant quality of mergers and acquisitions with the further implication of cash transactions being more effective in the long run than complementary equity-paid acquisitions, taking into consideration the operating performance of the acquirers. In his study, Rahman used the data of 83 bids that took place between 1988 and 1992. Lau, Proimos and Wright (2008) analyzed 72 Australian mergers of publicly listed firms between 1999 and 2004. They defined success as an increase in post-merger operating performance measured by profitability, cash flow, efficiency, leverage, and growth indicators. The authors found out that there was some evidence proving that in general, the operating performance of the examined Australian companies was enhanced compared to the pre-merger periods. What is more, the results of the research show that financing mergers with stock rather than cash leads to either decline or no improvement in post-merger ROE or enhanced ROA. Travlos (1987), based on the sample of 167 acquisitions that took place between 1972 and 1981, proved that cash-paid transactions in general outperform those financed with a combination of cash and stocks. In 1992, Healy, Palepu and Ruback (1992) published some research in which they scrutinized 50 of the biggest mergers that took place between 1979 and 1984. They found out that the acquirers operating performance was enhanced, but they did not answer the question of the reasons behind it. However, in the same year Agrawal and Gershon (1992) conducted a study on an almost exhaustive sample of mergers and acquisitions on the NYSE and AMEX between 1955 and 1987 and they proved that the transactions financed with cash outperformed those financed with equity in the long run (5-year post-merger performance). Linn and Switzer's (2001) research also showed that this improvement in the operating performance was not sensitive to other factors, such as company size or leverage. Their study concluded that bidders who offered cash only performed (in terms of operating performance) almost two times better than those who paid with a combination of cash and stock, and about four times better than stock-only paying bidders. A similar result was obtained by Tichy (2001), who showed that cash-paid transactions outperformed stock-paid mergers and acquisitions. The long-run performance of mergers and acquisitions was also explored on the Canadian market (André, Kooli, and L'Her 2004). The authors examined 267 Canadian acquisitions over a 20-year time horizon in order to find out what factors contributed most to the post-acquisition performance. Their results confirmed the method-of-payment hypothesis.

However, another finding is that the cash financing of mergers does not have a positive impact on profitability. Dube, Glascock (2006) conducted a study consisting of 255 acquirers and merging firms listed on the NYSE, AMEX and NASDAQ in order to check (among others) which method, including: cash, equity and mix of cash and equity brought the relatively best and worst operating results in the period of three years after transaction. Their sample includes transactions which took place between 1975 and 1996. The event study method was applied in the research and cash flow return was used as the operating performance measure. The authors found out that although the operating underperformance of stock-paid mergers was significant, there were no abnormalities observed in the operating performance of acquisitions paid with cash. Lie and Heron's research (Heron, Lie 2002) does not support the theory about the relationship between the post-acquisition acquirers' excessive returns and the method of payment for the target; they found out that the payment method could not be perceived as information about the acquirer's future performance. However, the research supports the hypothesis that announcements of cash acquisitions carry more positive information than notifications of stock acquisitions. To reach those conclusions they used data encompassing 859 acquisitions from the period of 1985 to 1997. Loughran and Vijh (1997) reported in their research concerning long-term shareholders benefits from corporate acquisitions that those who benefit more from transactions paid with cash are either shareholders or acquiring companies through their superior increase in pre-tax operating performance. When it comes to the method of payment for the acquisition in general, we can find some studies explaining the reasons behind bidders' decisions regarding the issue. Faccio and Masulis (2005) studied the method of payment choices for mergers and acquisitions for both private and public European acquirers in the time horizon of 1997–2000. It is said that the choice of the payment method is not discussed sufficiently in the literature on the subject, yet, it is very important because it could lead to long lasting effects not only on the acquirer's finances, but also on their ownership structure. The authors found out that cash payments are preferred in particular when *a bidder's controlling shareholder has an intermediate level of voting power in the range of 20–60%*" and when the "*voting control of their dominant shareholders is threatened*. It is also proved that when acquirers have a special ability to borrow from banks because of connections with their directors, they will probably choose cash. Transactions in the UK were also a subject of a research regarding operational efficiency, but it was investigated only for cash-paid transactions (Gregory, Wang 2013). The measures of performance were different than in our research, so was the hypothesis in question. However, Gregory and Wang's (2013) findings show that the possible reason for cash acquirers' underperformance is that they have a relatively low cash level compared to acquirers with relatively higher cash levels. This finding shows further potential for researchers. To be precise, there is still a question of the reasons why cash-paid transactions perform better in most cases.

2. Hypothesis, data and methodology

As it has been already presented, the literature on the issue of cash- versus stock- financed acquisitions does not point to homogenous results. However, most of the studies found that mergers and acquisitions paid by cash generally outperformed those paid by a mixture of cash and stocks, or stocks solely. The lack of research concerning the influence of cash vs. shares or mixed payments on acquirers' performance in Poland and Eastern Europe gave grounds to formulate the following hypothesis:

> *M&A transactions carried out in Poland and Eastern Europe, and paid by cash outperform those paid by a mix of cash and stock, or stock only.*

The sample which was used to verify our hypothesis consists of 77 companies divided into two groups, the first of which comprises 37 companies which were acquiring companies throughout 2009 and 2010. The sample includes companies from Eastern Europe/Poland, with a primary focus on Polish acquirers. There are 25 transactions from 2009 and 15 from 2010. The sample encompasses a variety of sectors, but does not include any transactions carried out in the financial sector. The deals included in the sample are those for which certain criteria were met. The criteria of selection were the following: a known date of completion, the price, the buyer's and the target's industries being outside the financial industry, and transaction involving a transfer of at least 50.01% of the target's ownership. If the date of completion was officially unknown but the acquirer stated that the target is acquired, the announcement date was considered to be the completion date. The research is based on the consolidated financial statements of companies included in the research. The reference group consists of another 40 companies sharing the same characteristics as their acquiring equivalents (size measured by the revenue, industry and the same country of origin), but those were not involved in any merger or acquisition process during the year of transaction for the company which they mirror. Those companies were chosen and based on their industry and revenue levels in the recent period – if comparable to those of the acquirers. In order to find the relevant reference companies, we used the DealWatch database, and selected companies from the same region, with similar operations, and with the most similar revenues for the last period available. The acquiring companies that form the sample are strategic investors rather than financial ones. The sample was drawn using the DealWatch database. Company-specific data was also acquired using DealWatch, as well as the In Financials database.

The impact of M&A transaction on the financial performance of acquirers was evaluated and based on the framework proposed by Boubakri et al. (2012). The reason why this method is appropriate is clear: the purpose of this study is to find out if the method of payment for acquisition influences the profitability of the acquirer measured by the change in ROA during a certain time span – the event window. We need to look at fluctuations in the profitability ratios over the course of time in order to establish that. To do so, the study has been designed as follows: the period of the event (merger or acquisition transaction's year – 2009 or 2010) is confronted with two periods (years) preceding the event and two periods following the event, with the aim of a comparison of their profitability. We considered the acquisition year as year zero. As a result, we achieved dependent variables calculated as changes between the average ROA ($ROA_A\_ROA_B$) in two years before the acquisition (ROA_B) and two years after it (ROA_A). The results of the long-term event study were supplemented by cross-section regression in which the dependent variables were regressed against the variables representing the payments method (PM), the fact of being involved in the M&A transaction (MA), and a set of control variables (CONTROL).

The general construction of our models is illustrated by Equation (1).

$$ROA_A\_ROA_{Bi} = f\left(PM_i; MA_i; CONTROL_i\right) \tag{1}$$

where: subscript i encodes companies in the research sample, methods of payment (PM) is represented by cash (CASH) and mixed payments (MIX). The set of control variables includes: natural logarithm of asset values of companies in the sample (LN_ASSET), binominal variable describing the affiliation of acquirer to agriculture sector (AGR) and binominal variable marking the vertical type of acquisition (VERT).

3. Results

The results of our study are presented in Table 1. The conducted estimations in model 1 indicate that on average the fact that a company is involved in M&A does not have a statistically significant impact on the average ROA achieved two years after the transaction. Model 2 shows that the cash payments M&A lead to a statistically significant higher average ROA in the post-transaction period, while model 3 indicates that shares or mixed payments lead to a lower return on assets. Both variables denoting the method of payment are statistically significant at the level of 5%. The incorporation of variables representing the method of payment significantly increases the F statistics of model 2 and 3, which proves that the method of payment is an important factor determining the effectiveness of M&A on the Polish and

Tabel 1

Methods of payments in M&A and post-transaction operating results – empirical results

Dependent variable	$ROA_A\_ROA_B$					
Models	1		2		3	
MA	–0.003		–0.091	*	0.036	
	(0.031)		(0.051)		(0.036)	
LN_ASSET	–0.006		–0.005		–0.005	
	(0.011)		(0.009)		(0.009)	
AGR	–0.110		–0.101		–0.101	
	(0.088)		(0.072)		(0.072)	
VERT	–0.069		–0.080		–0.080	
	(0.068)		(0.062)		(0.062)	
CASH			0.126	**		
			(0.059)			
MIX					–0.126	**
					(0.059)	
Constant	0.061		0.053		0.053	
	(0.125)		(0.109)		(0.109)	
No. of observations	77		77		77	
R^2	0.097		0.187		0.187	
F statistic	1.924		3.268***		3.268***	

Notes: The robust standard errors are given in parentheses. ***, **, and * indicate significance on the level of 1%, 5%, and 10% respectively.

Source: own elaboration.

Central European markets in the observed period of time. The obtained results strongly support our research hypothesis and are consistent with the theory that transactions financed with own shares lead to a weaker target analysis and selection, and in effect, companies achieve weaker financial results in post-merger periods.

Conclusions

The literature review proves that the payment methods in M&A transactions can significantly influence the post-merger operational effectiveness of acquirers. The weaker selection of targets resulting from payment with "cheaper money" explains why transactions paid in cash should outperform those paid in shares. The presented study indicates that M&A carried out in Poland and other Eastern European countries behave in line with the theory. Cash payments significantly increase the chances of acquirers to achieve a higher return on assets in the post-transaction period. However, due to the limited sample used in the study, the results should be treated with caution. To verify if the signalling theory applies for Polish and Eastern European markets, further research should concentrate on the market reaction of share prices on the announcement of cash- and stock-paid M&A.

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WPŁYW METOD PŁATNOŚCI W PROCESIE FUZJI I PRZEJĘĆ NA EFEKTYWNOŚĆ FINANSOWĄ TRANSAKCJI Z PUNKTU WIDZENIA FIRM PRZEJMUJĄCYCH

Głównym celem prezentowanego artykuły jest weryfikacja, w jaki sposób dokonywanie płatności w fuzjach i przejęciach przekłada się na efektywność finansową transakcji z punktu widzenia przejmującego. Przeprowadzone badanie obejmuje transakcje fuzji i przejęć na rynku polskim i środkowoeuropejskim w latach 2009–2010. W badaniu wykorzystano długookresowe studium przypadku oraz model regresji wieloczynnikowej. Przeprowadzone badanie wskazuje, że podmioty przejmujące osiągają wyższe wartości wskaźników ROA w okresie po dokonaniu transakcji przypadku, gdy fuzja lub przejęcie jest opłacona gotówką. Otrzymane rezultaty wskazują, że sposób finansowania transakcji w Polsce oraz na rynku wschodnioeuropejskim wpływa istotnie na rezultaty

Słowa kluczowe: M&A, fuzje i przejęcia, płatność gotówką, płatność udziałami, efektywność fuzji i przejęć

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