STUDIA PRAWNO-EKONOMICZNE. T. CXXV. 2022 PL ISSN 0081-6841; e-ISSN 2450-8179 s. 103-119 https://doi.org/10.26485/SPE/2022/125/6

Adam KUCHARSKI\*

https://orcid.org/0000-0002-1098-1530

Jakub MARSZAŁEK\*\*

https://orcid.org/0000-0002-7665-1497

# THE FINANCIAL STRATEGY OF ACQUIRERS AND M&A SUCCESS IN THE AUTOMOTIVE SECTOR

#### **Abstract**

Background: The article investigates factors that contribute to the success of mergers and acquisitions (M&A). The problem of capital consolidation profitability is still not solved, and the research results so far are inconclusive or even contradictory. The article proposes an analysis of the financial situation of enterprises carrying out mergers or acquisitions before the transaction to define the conditions of their potential success.

Research purpose: The main objective of the article is to assess the relationship between the financial situation of an enterprise implementing an external growth strategy through capital consolidation and a successful merger or acquisition. We hypothesize that one of the factors responsible for a successful merger of enterprises is the entity's possession of specific resources and the possibility of using them. It was proposed that the measuring potential of the acquiring company should be measured by its balance sheet structure, financial liquidity and profitability, which form the framework of the financial strategy.

Methods: The article compares the values of selected financial ratios of companies that carry out mergers or acquisitions in the automotive sector. Pre-transaction values were analyzed and related to the excess rate of return on the shares of the acquiring company after consolidation, which was used to assess the success or failure of the consolidation effect. The study used descriptive statistics, mainly the median and the Mann-Whitney test.

**Conclusions:** The comparative analysis shows that consolidating companies were more likely to be unsuccessful if they followed a stable, balanced, and prudent financing policy. Companies with higher financial liquidity, better return on capital or operating activities, and less indebtedness achieved lower above-average rates of return after consolidation. The research results may indicate insufficient due diligence by companies in better financial standing. Those with more

<sup>\*\*</sup> Associate Professor, University of Lodz, Faculty of Management, Department of Corporate Finance Management; e-mail: jakub.marszalek@uni.lodz.pl



CEO of Premium Foams Sp. z o.o.; e-mail: adam.kucharski@premiumfoams.com

limited resources and financial possibilities choose expansion goals with greater care, which may result in better results after the consolidation.

Keywords: mergers and acquisitions, financial management, enterprise growth.

JEL Classification: G34, F21, F23

## 1. Introduction

Globalization has made the world economy more integrated, and the development trends of enterprises have shifted from traditional, time-consuming, organic investments to rapid expansion through mergers and acquisitions (M&As). In today's market, acquisitions are a valuable tool to gain a competitive advantage and achieve spectacular growth. From both practical and scientific points of view, a multitude of factors determine the success of an acquisition, and each transaction is characterized by unique circumstances. However, it is impossible to exclude general conditions that could determine the success or failure of the intended strategy.

The automotive industry is an example of a sector that perfectly illustrates the conditions for M&As. Its key features are the strong influence on the economy and politics, particular customer requirements, and its transnational character, which dates back to its inception. A competitive, global environment influences the structure of the supply chain to such an extent that some subcontractors bring more value to the resulting vehicle than the actual manufacturer. In such situations, M&As are particularly attractive and should generate positive reactions in capital markets. But is it really so? Research on the effectiveness of cross-border M&As is gradually filling the research gap. However, the current state of knowledge on the effectiveness of car manufacturing company mergers is still limited, and the possibility of implementing research results from other sectors of the economy is debatable. Therefore, there is space to explore the factors that determine the success of a consolidation transaction in the automotive industry. This paper tries to fill this gap by using a wide range of data published between 2000 and 2018.

The main purpose of this article is to identify and analyze the factors responsible for the effectiveness of capital consolidations carried out by entities operating in the automotive sector. Assuming that the motive for the acquisition initiative is primarily to acquire another enterprise, such a decision is accompanied by financial decisions of the acquiring entity. The acquisition or merger can be financed with equity or debt. However, managers often believe that investments made with accumulated equity are cheaper than those financed

with debt, which is conditioned by agency problems, manifested in the tendency to avoid comparing the return on equity with alternative sources of financing. Thus, the article assumes that enterprises with high liquidity strive (in their understanding) to manage cash more efficiently through external investments. These entities try to avoid debt and are, therefore, less exposed to financial risk. On the other hand, when deciding to expand, enterprises without free funds are forced to obtain funds from external sources. It requires greater insight and commitment, and the project itself is subject to additional assessment by the capital donor. Loading a transaction with greater risk determines a higher level of diligence in its preparation, which allows us to formulate the following research hypothesis: The conservative nature of a company's financial management policy is conducive to the failure of M&A transactions.

## 2. Literature review

The M&A literature is dominated by the results of pre- and post-merger research. Although numerous, these studies are inconclusive, and the results are often conflicting. Some studies have shown that M&As are an effective tool for inorganic growth and also lead to an increase in shareholder wealth. Others indicate that they reduce shareholder wealth and lead to a decline in the company's operating results. Not only is the M&A literature full of conflicting results, but the performance measures used also vary widely between the studies.

Capital structure and funding strategy are important disciplining factors in corporate governance; however, little is known about the relationship between an acquiring company's capital structure and post-acquisition performance. According to Jensen's theory of free cash flow, buyers with excess spare cash are more likely to make hasty purchases and thus underperform after a merger compared to those with more limited financial resources. Among the few related studies, Maloney, McCormick, and Mitchell, using data from US-listed companies, found that the relationship between buyers' leverage and abnormal equity returns during the announcement period was significantly positive. However, Loughran and Vijh found no significant link between buyers' leverage

M.C. Jensen, Agency cost of free cash flow, corporate finance, and takeovers, American Economic Review 1986/76 (2), pp. 323–329.

M.T. Maloney, R.E. McCormick, M.L. Mitchell, Managerial decision making and capital structure, Journal of Business 1993, pp. 189–217.

and abnormal returns on equity after the acquisition.<sup>3</sup> On the other hand, Hitt, Harrison, Ireland, and Best indicated that debt was the most important determinant of the success of an acquisition among American companies, as maintaining a low or moderate level of debt reduces the cost of financing the acquisition and the risk of bankruptcy in the future.<sup>4</sup>

However, too much debt may offset these benefits. Most of the failed acquisitions in the sample were related to over-indebtedness. On the other hand, in their study of the relationship between financial leverage, enterprise size, and the effects of acquisitions, Moeller, Schlingemann, and Stulz indicated that financial leverage was not significantly associated with abnormal returns after the acquisition.<sup>5</sup> Other similar studies showed that the influence of leverage on the results after consolidation was negative, but insignificant.<sup>6</sup> Based on a study of a sample of all US mergers between 1998 and 2010, Alhenawi and Stilwell noted that the company's financial leverage was negatively associated with cumulative abnormal returns.<sup>7</sup> Subsequent studies have provided yet more information, whereby returns on shares after consolidation were positively correlated with the buyers' financial leverage.<sup>8</sup> However, returns two years after the acquisition are significantly lower with strong leverage.

A separate category of problems raised in the literature review is the assessment of financial liquidity and profitability before and after consolidation. Those studies focused on comparing selected financial ratios. As with leverage, the results varied greatly and were often contradictory. An analysis of the effects of consolidation of 400 cases from the US market between 1995 and 2000 showed no different results between the operating results of the acquired

<sup>&</sup>lt;sup>3</sup> T. Loughran, A.M. Vijh, *Do long-term shareholders benefit from corporate acquisitions?*, The Journal of Finance 1997/52 (5), pp. 1765–1790.

<sup>&</sup>lt;sup>4</sup> M. Hitt et al., Attributes of successful and unsuccessful acquisitions of US firms, British Journal of Management 1998/9 (2), pp. 91–114.

<sup>5</sup> S.B. Moeller, F.P. Schlingemann, R.M. Stulz, Firm size and the gains from acquisitions, Journal of Financial Economics 2004/73 (2), pp. 201–228.

J. Shim, H. Okamuro, Does ownership matter in mergers? A comparative study of the causes and consequences of mergers by family and non-family firms, Journal of Banking & Finance 2011/35 (1), pp. 193–203; S.K. Bhaumik, E. Selarka, Does ownership concentration improve M&A outcomes in emerging markets? Evidence from India, Journal of Corporate Finance 2012/18 (4), pp. 717–726.

Y. Alhenawi, M. Stilwell, Value creation and the probability of success in merger and acquisition transactions, Review of Quantitative Finance and Accounting 2017/49 (4), pp. 1041–1085.

<sup>&</sup>lt;sup>8</sup> J.S. Harrison, M. Hart, D.K. Oler, Leverage and acquisition performance, Review of Quantitative Finance and Accounting 2014/43 (3), pp. 571–603.

company before or after the merger of the entity. The results also show that, on average, the acquiring company did better than the merged entity, although not in all years and not in all of the operational activities surveyed in the study.

A similar study was conducted for 40 British companies that operated in the field of M&As in 2011.<sup>10</sup> The analysis showed that return on assets (ROA) shows a very weak positive correlation with pre-post connections, return on equity (ROE) had a significantly positive correlation, and net profit margin (NPM) had a very weak positive correlation with pre-post connections. However, other analyses of profitability ratios show that most merged companies show a deterioration in financial results.<sup>11</sup> In another study, the effects of consolidation are time-dependent. The results of the companies after the merger were better only in the second year. Return on capital never improved. However, on average, the return on net value and asset turnover increased in the two years following the merger.<sup>12</sup>

An important development of this line of research is the continuation of Jensen's work, which shows that management avoids paying excess cash and instead uses it to invest in projects with negative net present values (NPV), which proves the validity of agency theory. <sup>13</sup> Subsequent studies of firms' cash reserves and required cash balances found that cash-rich firms are more likely to take over firms and that these acquisitions depreciate value, supporting Jensen's hypothesis. <sup>14</sup> A study of 80 consolidation transactions initiated by companies from emerging markets between 2003 and 2009 leads to similar conclusions.

S. Kukalis, Corporate Strategy and Company Performance: The Case of Post-Merger Performance, International Journal of Finance 2007/19 (3), pp. 4475–4493.

M.S. Jallow, M. Masazing, A. Basit, The effects of mergers & acquisitions on financial performance: Case study of UK companies, International Journal of Accounting & Business Management 2017/5 (1), pp. 74–92.

E. Akben-Selcuk, A. Altiok-Yilmaz, The impact of mergers and acquisitions on acquirer performance: Evidence from Turkey, Business and Economics Journal 2011/22, pp. 1–8; A.M. Kithinji, N.M. Waweru, Merger Restructuring and Financial Performance in Kenya, Journal of Economics, Management and Financial Markets 2007/2 (4), pp. 10–32.

N.M. Leepsa, Merger Motives, Trends and Post Merger Performance: Evidence from Electricity Companies in India, Journal of Business Economics and Finance 2012/1 (2), pp. 59–82.

<sup>&</sup>lt;sup>13</sup> M.C. Jensen, Agency....

S. Owen, A. Yawson, Human development and cross-border acquisitions, Journal of Empirical Finance 2010/17 (4), pp. 689–701; C. Rose, D. Sørheim, M. Lerkerød, In search of value drivers in mergers and acquisitions: The Nordic evidence, International Journal of Business Science & Applied Management (IJBSAM) 2017/12 (1), pp. 1–28.

Long-term analysis shows negative industry-adjusted differences between post-acquisition and pre-acquisition performance measures.<sup>15</sup>

The issues of financial liquidity of entities implementing M&As are considered in the context of financing the transaction. Highly liquid companies finance the acquisition with cash, while those with low liquidity pay with the shares of the newly established company. The research shows that paying for an acquisition in cash compared to shares provides, on average, better rates of return for the shareholders of the consolidated company. Buyer returns from acquisitions of equity-financed public companies are often lower than for cash-financed transactions in the United States, while the opposite is observed in European countries.<sup>16</sup>

The few studies devoted to the relationship between the situation of an enterprise undertaking an acquisition and the rate of return for the shareholders of the consolidated entity indicate that the determinants of the success and failure of M&As are: return on capital employed before the merger and acquisition, the total interest coverage ratio before the M&A, and the quick ratio before the M&A.<sup>17</sup> Other important determinants of M&A success are greater company profitability, a friendly attitude to the offer, and compatibility in industry specialization between bidders and target.<sup>18</sup> The authors of this article aim to expand this thread of research.

The article is another voice in the global discussion on the effects of M&As in the automotive sector.<sup>19</sup> In research on this industry, non-financial factors,

<sup>&</sup>lt;sup>15</sup> **S. Grigorieva**, **T. Petrunina**, *The performance of mergers and acquisitions in emerging capital markets: New angle*, Journal of Management Control 2015/26 (4), pp. 377–403.

S.N. Kaplan, M.S. Weisbach, The Success of Acquisitions: Evidence from Divestitures, The Journal of Finance 2012/47 (1), pp. 107–138; M. Martynova, L. Renneboog, A Century of Corporate Takeovers: What have We Learned and Where do we Stand?, Journal of Banking & Finance 2008/32 (10), pp. 2148–2177.

P. Aggarwal, S. Garg, Impact of mergers and acquisitions on accounting-based performance of acquiring firms in India, Global Business Review 2022/23 (1), pp. 218–236; N.M. Leepsa, C.S. Mishra, An Examination of Success of Mergers and Acquisitions in Manufacturing Sector in India Using Index Score, Annual Symposium on Management and Social Sciences, August 29–31, 2014, Seoul, South Korea, http://dspace.nitrkl.ac.in/dspace/bitstream/2080/2183/1/Full%20Paper NML CSM MA 20062014.pdf; accessed 17.07.2022.

Y. Pan, What determines the success of bidding firms in M&A deals?, Concordia University 2015, Doctoral dissertation, p. 28, https://spectrum.library.concordia.ca/id/eprint/980055/1/Pan MSc S2015.pdf; accessed 17.07.2022.

<sup>&</sup>lt;sup>19</sup> M. Lempp, P. Siegfried, Characterization of the Automotive Industry. In Automotive Disruption and the Urban Mobility Revolution, Springer, Cham 2022, pp. 7–24; L. Warter, I. Warter, The

such as those related to cultural differences, often play an important role.<sup>20</sup> This article adopts the theory that the impact of such factors is irrelevant. It is assumed that the factors that determine the profitability of consolidation transactions are general and independent of cultural conditions.

# 3. Description of the method and research sample

The article covers consolidation transactions carried out exclusively by public companies in the automotive industry between 2000 and 2018, in which the buyer took over more than 50% of the shares of the purchased entity. Ultimately, 764 consolidation transactions obtained from the Thomson Reuters Eikon database were monitored. The effectiveness measurement method was adopted based on the relation of the share price to the stock exchange index.<sup>21</sup>

A significant part of the mergers (26.3%) concerned investments made in the United States, and the buyer's country was also companies from the United States (n = 156). In total, US investors completed 222 mergers (29.1%) during the period under review. China was second in both criteria. It acted as the target country slightly more often than the buyer, with 73 out of 81 routes relating to domestic investments. Japan was third with 81 mergers, 50 of which were domestic. Poland was included in this list with one domestic and one foreign transaction. Most of the M&As were predominantly domestic. This is particularly true of companies from Malaysia (n = 30), Indonesia (n = 3), Denmark (2), Taiwan (2) and Bulgaria, Pakistan, Poland, Tunisia, Ukraine and Vietnam (one merger each). Additionally, Australian (18 out of 19), Chinese (73 out of 81), Russian (7 out of 9) and Turkish companies (2 out of 3) completed the vast majority of mergers in their home country.

The initial moment of consolidation was determined by the date of the public announcement of the intention to merge the companies or the date the purchase offer was accepted. In order to eliminate abnormal returns, which is a side effect of making this information public, the study was carried out at two time intervals:

phenomenon of merger and acquisition within the automotive industry, North Economic Review 2017/1 (1), pp. 208–215.

L. Warter, I. Warter, Mergers and Acquisitions in Eastern Europe: Intercultural Issues in the Automotive Industry. In Understanding National Culture and Ethics in Organizations, Emerald Publishing Limited 2020, pp. 21–32.

The group of automotive companies included the companies listed in the Eikon Thomson Reuters database in the categories "Automobiles & Auto Parts" and "Automobiles & Components".

seven days preceding the announcement of the planned takeover (n-7) and on the last balance sheet date of the year, 365 days from the announcement of the merger or acquisition. Then, the stock exchange indices were selected as a benchmark for changes in the prices of the companies' shares. We decided that the share prices of the acquiring company would be compared with the index of the stock exchange on which it is listed. Of course, the automotive industry index would be the most favorable reference point, but not all stock markets (e.g., Austria, Belgium, Czech Republic, or Indonesia) publish such indicators. Consequently, only one major stock index was classified for analysis for each of the analyzed markets.

In the next stage, the change in the share price of the acquiring company was compared with the changes in the value of the stock exchange index, maintaining the same observation dates. The profitability of consolidation (*POC*) was determined according to the following formula:

$$POC = \frac{RIC365 - RIC7}{RIC7} - \frac{IDX365 - IDX7}{IDX7}$$

where:

*RIC*365 – the acquiring company's share price one year after the announcement of the transaction,

RIC7 – the acquirer's share price seven days prior to the announcement date of the transaction,

*IDX*365 – the value of the main stock market index one year after the announcement of the transaction,

*IDX*7 – the value of the main stock market index seven days prior to the announcement date of the transaction.

A positive *POC* value indicates a successful consolidation. Otherwise, the transaction was classified as unsuccessful. This approach to the problem allowed us not only to assess the result of a merger or takeover, but also to determine its intensity. The results obtained in this way are comparable to the existing M&A literature.

In the next step, based on financial statements from the year preceding the acquisition, the financial ratios of companies involved in the previously selected consolidation transactions were calculated. Based on the literature review, 15 indicators were selected that characterize an enterprise's financial situation and define its financial strategy.

TABLE 1: Explanation of the financial ratios used to research the financial statements of companies performing mergers and acquisitions

Name of the ratio	Ratio formula					
Return on equity ROE (%)	$\frac{\textit{net profit}}{\textit{equity}} \cdot 100\%$					
Return on assets ROA (%)	$\frac{\textit{net profit}}{\textit{total assets}} \cdot 100\%$					
Return on invested capital ROIC (%)	$\frac{\textit{net operating profit after taxes}}{\textit{equity} + long\_\textit{term liabilities} - \textit{cash}} \cdot 100\%$					
Net profitability ratio (%)	net profit net sales					
General debt ratio	total debt total assets					
Equity debt ratio	total debt total equity					
Debt service coverage ratio	$\frac{EBIT}{principal + interest}$					
Asset coverage with equity capital ratio	total assets equity					
Current liquidity ratio	current assets current liabilities					
Quick ratio	current assets – inventories current liabilities					
Working capital to total assets ratio	current assets – short _term liabilities total assets					
Receivables turnover ratio	total sales accounts receivables					
Liabilities turnover ratio	cost of goods sold trade liabilities(average)					
Inventory turnover ratio	cost of goods sold inventories (average)					
Asset turnover ratio	total sales total assets(average)					

Source: own study.

Based on the comparison of the mean and median, as well as the skewness coefficient and kurtosis analysis, it was found that most of the variables (*POC* and financial indices) were characterized by outliers that caused significant deviations in the distribution of variables from the normal distribution. In comparison with the results of the Shapiro-Wilk test, it was decided to use a nonparametric method to compare the population from the point of view of financial indicators, i.e., the Mann-Whitney test. It compares two independent populations and requires at least the ordinal level of measurement of the dependent variable. The null hypothesis takes the form:

$$H_0: F_1 = F_2$$
  
 $H_1: \sim H_0,$ 

where  $F_1$  and  $F_2$  are the probability distributions of the dependent variable in the compared populations.

If there are no associated ranks in the sample, the following statistic is used as the test:<sup>22</sup>

$$Z = \frac{U - \frac{1}{2} \cdot n_1 \cdot n_2}{\sqrt{\frac{1}{12} \cdot n_1 \cdot n_1 \cdot (n_1 + n_2 + 1)}},$$

where: 
$$U = n_1 \cdot n_2 + \frac{n_1 \cdot (n_1 + 1)}{2} - R_1$$
.

On the other hand, if there are tied ranks in the sample, the following statistic is used to test the test:<sup>23</sup>

$$Z = \frac{U - \frac{1}{2} \cdot n_1 \cdot n_2}{\sqrt{\frac{n_1 \cdot n_2}{n \cdot (n - 1)} \left[ \frac{n_3 - n}{12} \sum_{i=1}^{n_3 - t_i} \frac{t_i^3 - t_i}{12} \right]},$$

W. Szymczak, Podstawy statystyki dla psychologów. Podręcznik akademicki, Centrum Doradztwa i Informacji Difin, Warszawa 2018, pp. 198–200.

<sup>&</sup>lt;sup>23</sup> Ibidem.

where:

 $n = n_1 + n_2$ 

t – the number of observations associated with a given rank.

In both cases, the Z statistic is approximately normally distributed with parameters 0 and 1. Since the null hypothesis is that two independent samples come from a population with the same distribution, the differences between the populations are considered statistically significant if the probability in the Mann-Whitney is below the significance level  $\alpha$ . The Mann-Whitney test was used to compare individual financial ratios between companies that were successful in the merger versus those that failed.

### 4. Research results

When analyzing the financial results of companies that consolidated in the observed period (Table 2), all indicators are characterized by significant differentiation (high values of the standard deviation – SD) and skewed distribution. The asymmetry of the distribution is usually right-handed, which indicates the presence of companies with unusually high values of the ratio, in particular, for the debt and financial liquidity ratios. On the other hand, for the profitability ratios (excluding ROIC), a strong left-handed skewness is observed, which proves the existence of enterprises with unusually low values of the ratios (Table 2). For each indicator, the kurtosis is positive and very high, indicating that the distributions have significant slenderness relative to the normal distribution. As a result, the assessment of the level of the variables for the surveyed companies should be based on the median. The values of the determined measures of descriptive statistics are presented in Table 2.

TABLE 2: Values of descriptive statistics of selected financial ratios of the surveyed enterprises that implemented mergers and acquisitions

Variables	n	Median	Q1	Q3	Mean	SD	Skewness	Kurtosis
1	2	3	4	5	6	7	8	9
Return on equity ROE	712	12.22	6.55	20.09	10.71	38.96	-2.33	37.82
Return on assets ROA	736	5.05	2.65	8.23	4.23	23.76	-2.94	96.87

TABLE 2 (cont.)

1	2	3	4	5	6	7	8	9
Return on invested capital ROIC	661	9.86	6.29	15.11	11.68	9.69	2.31	11.21
Net profitability ratio	749	4.22	2.02	6.98	0.77	41.19	-6.08	57.36
General debt ratio	718	22.87	13.33	36.05	25.11	15.88	0.61	0.24
Equity debt ratio	699	53.70	25.00	112.31	88.96	118.13	3.85	19.52
Debt service coverage ratio	638	117.73	48.81	289.78	365.85	964.75	6.64	51.52
Asset coverage with equity capital ratio	719	2.36	1.79	3.23	3.56	7.34	14.07	263.93
Current liquidity ratio	757	1.47	1.11	2.01	1.78	1.27	4.59	35.29
Quick ratio	748	0.98	0.75	1.31	1.20	1.10	6.40	60.87
Working capital to total assets ratio	756	0.16	0.05	0.27	0.11	0.73	-12.05	159.14
Receivables turnover ratio	710	6.33	4.73	9.39	10.58	28.81	13.53	212.32
Liabilities turnover ratio	716	6.67	4.82	10.45	8.65	6.80	3.49	20.27
Inventory turnover ratio	717	6.08	3.67	10.16	8.98	10.67	5.08	37.14
Asset turnover ratio	735	1.20	0.89	1.63	1.37	1.34	12.71	208.27

 $E \times p \mid a \text{ n a t o r y } n \text{ o t e s: } n - \text{sample size, } Q1 - \text{first quartile, } Q3 - \text{third quartile, } SD - \text{standard deviation.}$ 

Source: own study.

Profitability measured by the analyzed variables for successful M&As is significantly lower than for failed consolidations. Significantly lower results were recorded in relation to return on invested capital (p = 0.039), return on assets (p = 0.033), net margin (p = 0.020) and, to a slightly lesser extent, return on equity (p = 0.098). On the other hand, the financial liquidity for the current

liquidity ratios (p = 0.003) and quick liquidity (p = 0.001) is significantly lower for successful M&As. The efficiency ratios were at a more desirable level for companies whose consolidations ended in failure; however, this only applies to the rotation of liabilities and the share of working capital in total assets. The remaining efficiency ratios analyzed in Table 3 were at a similar level for companies whose M&As were successful and those that failed.

TABLE 3: Comparison of the financial situation of companies for which the consolidation was successful vs. failure

Ratio	Fai	lure	Success			
Ratio	n	Me	n	Me	p	
Return on equity ROE	359	13.14	353	10.72	0.098*	
Return on assets ROA	377	5.62	363	4.46	0.033**	
Return on invested capital ROIC	334	10.28	327	9.17	0.039**	
Net profitability ratio	380	4.66	369	4.01	0.020**	
Debt service coverage ratio	325	109.15	315	139.45	0.017**	
Asset coverage with equity capital ratio	362	2.31	357	2.42	0.047**	
Current liquidity ratio	390	1.55	368	1.38	0.003***	
Quick ratio	383	1.01	366	0.93	0.001***	
Working capital to total assets ratio	386	0.19	369	0.13	0.001***	
Liabilities turnover ratio	364	6.34	352	7.06	0.047**	

Explanatory notes: n – sample size, Me – median, p – probability in the Mann-Whitney test; the table includes only those variables for which the differences are statistically significant (\*  $\alpha$  = 0.10, \*\*  $\alpha$  = 0.05, \*\*\*  $\alpha$  = 0.01).

Source: own study.

As far as debt is concerned, significant differences were noted only for two of the analyzed ratios: the debt service coverage ratio and the equity multiplier. In companies whose M&As failed, these measures were significantly lower.

### 5. Conclusions

The results correspond to the previous literature reports. According to Jensen's theory of free cash flow, buyers with excess spare cash are more likely to make hasty purchases and thus underperform after the merger compared to buyers with more limited financial resources. The empirical evidence from Harford,

as well as Moeller and Schlingemann, also supports this.<sup>24</sup> Consolidation, like an organic investment in the development of a company, market, or product, is demanding. Unfortunately, it is very often treated as a tool for achieving medium-term benefits, usually by increasing the share price, avoiding longterm goals, and neglecting strategic planning in technological, marketing, or organizational areas. The tendency to "take advantage of opportunities" and spontaneous purchases are most often accompanied by poor planning quality at the initial stage, which later results in poor economic effects of a merger or acquisition. The research reveals that companies in good financial condition that implement capital consolidation achieve unsatisfactory merger and acquisition results. These entities are characterized by higher profitability and financial liquidity. They are less indebted and have greater debt service efficiency. And yet the lack of such advantages characterizes enterprises that obtain excess rates of return after consolidation. Therefore, there are no reasons to reject the research hypothesis that the conservative nature of a company's financial management policy is conducive to the failure of M&As.

However, this observation and the conclusions drawn from it should be seen in the context of a number of limitations that may impact the study results. First, the analysis only considered the financial situation of the entity carrying out the consolidation. The financial standing of the enterprise being taken over has been omitted. It may affect the financial condition of the merged entities, although it further confirms the hypothesis about the insufficiently careful selection of the enterprise that is the target of the consolidation. Integration costs, which may be underestimated at the acquisition planning stage, may also negatively impact the effects of a merger or acquisition. However, this is also another argument in favor of the concept of improper due diligence. A separate issue is the methodology used in the article. There are two categories of data: accounting and market data. The stock market valuation of the enterprise at the time of consolidation may be significant for the results of the study. If the company was significantly overvalued, its prospects for further market value growth were significantly limited. The authors are aware of this cognitive shortcoming of the study. The article omits the issue of valuation. It is an overly complex and debatable category in the context of the study's objective, which was to assess the relationship between the financial situation of an enterprise implementing an

J. Harford, Corporate Cash Reserves and Acquisitions, The Journal of Finance 1999/54 (6), pp. 1969–1997; S.B. Moeller, F.P. Schlingemann, Are cross-border acquisitions different from domestic acquisitions? Evidence on stock and operating performance for US acquirers, Journal of Banking and Finance 2004, https://ssrn.com/abstract=311543; accessed 17.07.2022.

external growth strategy through capital consolidation and a successful M&A transaction.

The practical implication of the research is the recommendation to use a more aggressive financing policy for capital consolidation. Managers should make greater use of outside financing. The cost of debt is objective, forcing the company to generate regular financial surpluses. The decision to acquire will therefore consider such a necessity and limit hasty investment decisions. At the same time, shareholders may view the increase in debt as an additional risk, thus preventing excessive increases in share prices when the intention to consolidate is announced. This creates better prospects for an increase in the company's valuation in the future and thus favors a good assessment of the effects of the company's operations in the future. These recommendations will not apply to companies that showed better results of mergers or acquisitions in the study. They most often function in such conditions.

## References

- **Aggarwal P., Garg S.,** Impact of mergers and acquisitions on accounting-based performance of acquiring firms in India, Global Business Review 2022/23 (1), pp. 218–236.
- **Akben-Selcuk E., Altiok-Yilmaz A.,** The impact of mergers and acquisitions on acquirer performance: Evidence from Turkey, Business and Economics Journal 2011/22, pp. 1–8.
- Alhenawi Y., Stilwell M., Value creation and the probability of success in merger and acquisition transactions, Review of Quantitative Finance and Accounting 2017/49 (4), pp. 1041–1085.
- Bhaumik S.K., Selarka E., Does ownership concentration improve M&A outcomes in emerging markets? Evidence from India, Journal of Corporate Finance 2012/18 (4), pp. 717–726.
- **Grigorieva S., Petrunina T.,** The performance of mergers and acquisitions in emerging capital markets: New angle, Journal of Management Control 2015/26 (4), pp. 377–403.
- **Harford J.**, Corporate Cash Reserves and Acquisitions, The Journal of Finance 1999/54 (6), pp. 1969–1997.
- Harrison J.S., Hart M., Oler D.K., Leverage and acquisition performance, Review of Quantitative Finance and Accounting 2014/43 (3), pp. 571–603.
- Hitt M., Harrison J., Ireland R.D., Best, A., Attributes of successful and unsuccessful acquisitions of US firms, British Journal of Management 1998/9 (2), pp. 91–114.
- **Jallow M.S.**, **Masazing M.**, **Basit A.**, *The effects of mergers & acquisitions on financial performance: Case study of UK companies*, International Journal of Accounting & Business Management 2017/5 (1), pp. 74–92.
- **Jensen M.C.**, Agency costs of free cash flow, corporate finance, and takeovers, American Economic Review 1986/76 (2), pp. 323–329.
- **Kaplan S.N., Weisbach M.S.**, *The Success of Acquisitions: Evidence from Divestitures*, The Journal of Finance 2012/47 (1), pp. 107–138.

- Kithinji A.M., Waweru N.M., Merger Restructuring and Financial Performance in Kenya, Journal of Economics, Management and Financial Markets 2007/2 (4), pp. 10–32.
- **Kukalis S.**, Corporate Strategy and Company Performance: The Case of Post-Merger Performance, International Journal of Finance 2007/19 (3), pp. 4475–4493.
- **Leepsa N.M.**, Merger Motives, Trends and Post Merger Performance: Evidence from Electricity Companies in India, Journal of Business Economics and Finance 2012/1 (2), pp. 59–82.
- **Leepsa N.M.**, **Mishra C.S.**, An Examination of Success of Mergers and Acquisitions in Manufacturing Sector in India Using Index Score, Annual Symposium on Management and Social Sciences, August 29–31, 2014, Seoul, South Korea, http://dspace.nitrkl.ac.in/dspace/bitstream/2080/2183/1/Full%20Paper\_NML\_CSM\_MA\_20062014.pdf; accessed 17.07.2022.
- **Lempp M.**, **Siegfried P.**, Characterization of the Automotive Industry. In Automotive Disruption and the Urban Mobility Revolution, Springer, Cham 2022, pp. 7–24.
- **Loughran T.**, Vijh A.M., *Do long-term shareholders benefit from corporate acquisitions?*, The Journal of Finance 1997/52 (5), pp. 1765–1790.
- **Maloney M.T., McCormick R.E., Mitchell M.L.,** *Managerial decision making and capital structure*, Journal of Business 1993, pp. 189–217.
- Martynova M., Renneboog L., A Century of Corporate Takeovers: What Have We Learned and Where Do We Stand?, Journal of Banking & Finance 2008/32 (10), pp. 2148–2177.
- Moeller S.B., Schlingemann F.P., Are cross-border acquisitions different from domestic acquisitions? Evidence on stock and operating performance for US acquirers, Journal of Banking and Finance 2004, https://ssrn.com/abstract=311543; accessed 17.07.2022.
- **Moeller S.B., Schlingemann F.P., Stulz R.M.**, *Firm size and the gains from acquisitions*, Journal of Financial Economics 2004/73 (2), pp. 201–228.
- Owen S., Yawson A., *Human development and cross-border acquisitions*, Journal of Empirical Finance 2010/17 (4), pp. 689–701.
- Pan Y., What determines the success of bidding firms in M&A deals?, Concordia University 2015, Doctoral dissertation, p. 28, https://spectrum.library.concordia.ca/id/eprint/980055/1/Pan\_ MSc S2015.pdf; accessed 17.07.2022.
- Rose C., Sørheim D., Lerkerød M., In search of value drivers in mergers and acquisitions: The Nordic evidence, International Journal of Business Science & Applied Management (IJBSAM) 2017/12 (1), pp. 1–28.
- **Shim J.**, **Okamuro H.**, *Does ownership matter in mergers? A comparative study of the causes and consequences of mergers by family and non-family firms*, Journal of Banking & Finance 2011/35 (1), pp. 193–203.
- Szymczak W., *Podstawy statystyki dla psychologów. Podręcznik akademicki*, Centrum Doradztwa i Informacji Difin, Warszawa 2018, pp. 198–200.
- **Warter L., Warter I.,** Mergers and Acquisitions in Eastern Europe: Intercultural Issues in the Automotive Industry. In Understanding National Culture and Ethics in Organizations, Emerald Publishing Limited 2020, pp. 21–32.
- **Warter L.**, **Warter I.**, *The phenomenon of merger and acquisition within the automotive industry*, North Economic Review 2017/1 (1), pp. 208–215.

#### Websites

https://eikon.thomsonreuters.com

Adam KUCHARSKI, Jakub MARSZAŁEK

## STRATEGIA FINANSOWA NABYWCY A SUKCES FUZJI I PRZEJĘĆ W SEKTORZE MOTORYZACYJNYM

#### Abstrakt

**Przedmiot badań:** Przedmiotem badania przeprowadzonego w artykule jest poszukiwanie czynników sprzyjających powodzeniu transakcji fuzji i przejęć przedsiębiorstw. Problem opłacalności konsolidacji kapitałowej wciąż nie jest rozwiązany, dotychczasowe wyniki badań są niejednoznaczne, a nawet sprzeczne. W artykule zaproponowano analizę sytuacji finansowej przedsiębiorstw realizujących fuzje bądź przejęcia przed transakcją, by w ten sposób określić uwarunkowania jej potencjalnego sukcesu.

Cel badawczy: Głównym celem artykułu jest ocena związku pomiędzy sytuacją finansową przedsiębiorstwa realizującego strategię wzrostu zewnętrznego za pomocą konsolidacji kapitałowej a powodzeniem przeprowadzanej transakcji fuzji lub nabycia. Przyjęto hipotezę, zgodnie z którą jednym z czynników odpowiedzialnych na udane połączenie przedsiębiorstw jest posiadanie przez podmiot określonych zasobów i możliwości ich użycia. Zaproponowano, aby miarą potencjału przedsiębiorstwa przejmującego były jego struktura bilansowa, płynność finansowa oraz rentowność, które tworzą ramy strategii finansowej.

**Metoda badawcza:** W artykule porównano wartości wybranych wskaźników finansowych przedsiębiorstw dokonujących fuzji bądź przejęć z sektora motoryzacyjnego. Analizie poddano wartości wskaźników sprzed transakcji i powiązano je z nadwyżkową stopą zwrotu z akcji spółki przejmującej po konsolidacji, którą wykorzystano do oceny efektu konsolidacji – jej sukcesu bądź porażki. Badanie przeprowadzono z wykorzystaniem metod statystyki opisowej, głównie mediany oraz testu Manna-Whitneya.

Wyniki: Analiza porównawcza pozwala zauważyć, że przedsiębiorstwa dokonujące konsolidacji częściej nie odnosiły sukcesu, jeśli realizowały stabilną, zrównoważoną i ostrożną politykę finansowania. Spółki posiadające wyższą płynność finansową, lepszą rentowność kapitałów czy działalności operacyjnej oraz były mniej zadłużone osiągały niższe ponadprzeciętne stopy zwrotu po konsolidacji. Uzyskane rezultaty badań mogą świadczyć o niedostatecznym *due diligence* realizowanym przez przedsiębiorstwa będące w lepszej sytuacji finansowej. Te, dysponujące bardziej ograniczonymi zasobami i możliwościami finansowymi z większą starannością dobierają cele ekspansji, co może skutkować lepszymi rezultatami po przeprowadzonej konsolidacji.

Słowa kluczowe: fuzje i przejęcia, zarządzanie finansami, wzrost przedsiębiorstwa.