IMPACT OF COMPANY'S SIZE ON TAKEOVER SUCCESS

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ABSTRACT

Respecting the fact that vast number of M&As do not achieve planed synergies and results and that M&A success is affected by different organizational variables like management, strategy, structure, corporate culture, company size etc., the main aim of this paper is to analyze the impact of company's size on takeover success. Successful takeover is defined as takeover in which target company performs better in the period after the takeover than in the period before the takeover. Hypothesis according to which the smaller the relative ratio of the size of target company compared to the acquirer, the more successful is target company's performance after the takeover was tested and confirmed on the 43 companies that were acquired in the Republic of Croatia.

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I. INTRODUCTION

In turbulent business environment of 21st century companies are forced to use different growth strategies in order to successfully position with respect to competition and to preserve and increase their profit margins. Growth strategy is part of the corporate strategy which emphasizes corporation as a whole and provides answers regarding business scope of the corporation and recourse allocation (Tipurić, 2005). Growth strategies are concerned with increasing the size and viability of the business over time. A successful growth strategy will allow companies to increase its customer base, market segments, geographical scope, and/or product lines, which should lead to revenue growth. Permanent growth enables them to build and sustain their competitive market position (Harrison and St. John, 2008).

Modern business world is cognizant with three ways of implementing growth strategies including: internal or organic growth, growth through mergers and acquisitions, and growth through strategic alliances. Company pursues internal growth by relying on its resources, and also through increase of products and services sold on existing markets, independent development of new products and penetration to new markets (Cingula et al., 2010). Considering the fact that internal growth represents the slowest way to grow and considering that companies cannot accomplish planned growth only by relying on its own resources, companies often expand business through mergers and acquisitions or through strategic alliances (Tipurić and Markulin, 2002).

There is no book, journal or scientific paper in academic literature regarding mergers and acquisitions that does not analyze the impact of M&A's on shareholders wealth and company's performance, motives for M&A's or variables that influence the success of mergers and acquisitions as well as the impact of M&A's on society and economy (DePamphilis, 2008). M&A success can be observed from different perspectives. With the regard to the fact that mergers and acquisitions influence a wide spectrum of stakeholders (e. g. shareholders, managers, employees, clients, suppliers, etc.) and that interests of those stakeholders diverge, M&A transactions can, at the same time, positively influence one part, and negatively influence the other part of stakeholders. Financial theory usually focuses on the shareholders wealth as major criteria for M&A success (Tirole, 2006) but there is no homogeneous opinion in academic community regarding M&A success related to the aim of research (shareholders wealth of company performance) and used methodology.

Respecting the fact that vast number of M&As do not achieve planed synergies and results and that M&A success is affected by different organizational variables like management, strategy, structure, corporate culture, company size etc., the main aim of this paper is to analyze the impact of company size on takeover success. Successful takeover is defined as takeover in which target company performs better in the period after the takeover than in the period before the takeover. Hypothesis according to which the smaller the relative ratio of the size of target company compared to the acquirer, the target company's performance after the takeover is more successful was tested on the 43 companies that were acquired in the Republic of Croatia.

II. LITERATURE REVIEW

Company size is one of the organizational variables whose impact on the success of mergers and acquisitions was studied by numerous scientists. When determining the size of the company in the Republic of Croatia as the criterion for size the value of company's assets, revenue and number of employees is often used. Thus, according to the Croatia's Accounting Law companies are classified as small, medium and large enterprises.

Small enterprises are those that do not exceed two of the following three conditions: the total assets of HRK 32,500,000.00, the revenue of HRK 65,000,000.00, an average number of employees during the financial year 50. Medium-sized enterprises are those which exceed the two previously mentioned conditions but do not exceed two of the following three conditions: the total assets of HRK 130,000,000.00, revenue of HRK 260,000,000.00, the average number of employees during the financial year 250. Large enterprises are those which exceed two of previously mentioned criteria above.

Regardless of the conditions prescribed for large enterprises in terms of the Accounting Law, large enterprises include banks, savings banks, building societies, electronic money institutions, insurance companies, leasing companies, investment fund management and separate assets without legal personality which they manage, management companies of investment funds and property funds with legal personality, management companies mandatory and voluntary pension funds and separate assets under their management, and pension insurance (Narodne novine, 2007).

The results of studies that focus on the impact of company's size on M&A success diverge. Some authors assume that the success of a merger or acquisition is higher if the target and the acquiring company are similar in size (Ahuja, Katila, 2001). In a situation where the acquirer and target company are similar in size or even the same size, it is easier for the acquirer to recognize the value of knowledge and skills obtained by taking over target company and it is easier to assimilate these same skills and apply them within its business system (Choen, Levinthal, 1990). Moreover, it is easier to identify potential redundancies when both companies are of similar size (Krishanan et al., 2007). Other authors believe that the difference in the size is one of the main reasons for the realization of synergies and successful company performance following merger or acquisition. In the situation when the acquirer is smaller than the target-company, by purchasing a target company acquirer increases its market power and the ability to exploit economies of scale and scope (Seth, 1990). Bruton et al. in their research note that there is a higher probability of a successful takeover if the target company is smaller than the acquirer (Bruton et al., 1994). Homberg et al. in the recent study came to the conclusion that it is necessary for the realization of planned synergies, from merger and acquisitions, that the acquirer is bigger than the target company Homberg et al., 2009).

In the survey on the sample of 12,023 M&As in the period from 1980. to 2001. Moeller et al. concluded that the size of acquirers and financial returns in the process of mergers and acquisitions are inversely related. Relatively smaller acquirers often generate higher returns than larger acquirers. Authors explain the research results through the fact that managers in large companies are often overconfident and that they stream to empire building. In addition, authors point out that smaller companies focus and are more prone to takeovers of target companies which have a similar range of products or similar markets (Moeller et al., 2004).

Demsetz and Lehn suggest that the interests of managers in small companies are better aligned with the interests of owners than in the large companies. In that sense, the results of their research show that managers in small companies have a greater shareholding than managers in large companies which can be observed in the context of the size effect on the success of mergers and acquisitions (Demsetz, Lehn, 1985).

Moeller et al. also conducted a survey in 2005. The results indicate that large acquirers do not create value for their shareholders but they ruin it, while smaller acquirers create value for their shareholders (Moeller et al. 2005). According to Frick and Torres the average size of target company has a strong influence on financial returns for acquirer shareholders. In the period from 1990. to 2000. high-tech companies that have exercised an average annual return to shareholders of 39%, acquired target companies with an average size of less than $ 400 million or about 1% of the market value of acquirers (Frick, Torres, 2002). Research of Hackbarth and Morellec showed that large transactions are much riskier for the acquirers. Large transactions typically result in poor company's performance following the merger or acquisition mainly due to problems with integrating a large target company into acquirer's business system (Hackbarth, Morellec, 2008).

In recent research Gorton et al. suggest that smaller acquirers generate higher returns for their shareholders than larger acquirers. Company size in this study is defined relative to other companies within the industry. According to these authors, larger acquirers often overpay the target companies in order to increase its size and to defend themselves in this way from being taken over. Smaller acquirers are more profitable than larger ones because they usually acquire other companies in order to better position themselves in the industry and to become an attractive target for a takeover bid (Gorton et al., 2009).

The larger the target company is the more complex is its organizational structure. After the takeover New management of the target company can find themselves in the situation of losing control over the organization or they are going to need a longer period of time for adjustment because of the complex organizational structure of acquired company (Ravenscraft and Scherer, 1989). Size as a variable that affects the success of mergers and acquisitions is also analyzed when acquiring companies are in financial difficulties. Young startup companies are often in financial difficulties and the assumption is that only a much larger acquirer may provide financial and managerial resources needed for successful business operating (Fluck and Lynch, 1999).

Research by Fuller et al. in 2002. showed that the business success of the company after the takeover is better if the target company is smaller than acquirer (Fuller et al., 2002). Taking into consideration previous research, the impact of company size on the performance of a target company after the takeover will be tested in this paper. The premise on which this research is based is coherent with previous studies that support the thesis that a target company should be smaller than the acquirer in order to achieve better business success of the target company after the takeover.

III. METODOLOGY AND RESEARCH RESULTS

Measuring instrument (questionnaire) for testing the hypotheses of this research consisted of a set of questions that the respondents (board members and company managers) answered and expressed their agreement/disagreement with proposed statements whereat a Likert measurement scale of five degrees was used. Propositions used in different measurement scales are either originally developed for research purposes, or processed and adapted from existing measurement scales that can be found in the relevant scientific literature.

Empirical research was conducted in Croatian companies, which have been taken over or acquired. In Bloomberg and Mergermarket databases 233 transactions in the period 1998. - 2010. were recorded. With the detailed investigation of the information library of the Croatian Agency for Supervision of Financial Services another 401 transaction during this period was recorded, which combined with the transactions from Bloomberg and Mergermarket databases comes to a total of 634 transactions. Since this paper analyses transactions in non-financial sector, the sample on which the empirical research was conducted comprised of 598 companies. In order to analyze the impact of the company size on takeover success, it was important that at least three years have passed since the takeover. For this reason, the acquired companies were analyzed in the period from 1998. – 2006 (Filipović, 2011).

In the period of sixty days after the beginning of the primary research 43 completed questionnaires were returned representing a return rate of 7.19%. Considering the sensitivity of the analyzed phenomena and complexity of analysis, the rate of return of questionnaires was acceptable. The complexity of the analysis is reflected in the fact that the study included only companies in which at last three years passed after the takeover. Additional criteria were related to the fact that the respondent (the president or board member or senior manager) should be included in the acquisition process and familiar with the acquisition activities, and also working in the company that was acquired at least 5 years in order to identify and assess the changes that have occurred after acquisition. Out of the total number of received questionnaires, 30 companies that performed better after the takeover were identified (69.8%) and 13 that performed worse after the transaction (30.2%).

In the analysis of empirical data collected in this study large number of statistical techniques was used. Overall data analysis was conducted using statistical software package SPSS 17.0. Empirical research begins by testing the hypothesis:

The smaller the relative size ratio of the target company compared to the acquirer, the more successful is target company's performance after the takeover.

In order to test the proposed hypothesis research participants were asked about the size of acquired company (size was measured by total revenues, total assets and number of employees) at the time of acquisition compared to the size of the acquirer (measured by total revenues, total assets and number of employees). Results of descriptive statistics are presented in Table 1.

TABLE 1— Analysis of the relative size ratio of the target company and the acquirer

Size of the target compared to the acquirer		Performance after the takeover		Total
		Worse	*Better*	
Very small (< 25%)	Number of companies	4	16	20
	%	20,0%	80,0%	100,0%
Small (26% - 49%)	Number of companies	4	10	14
	%	28,6%	71,4%	100,0%
Large (50% - 67%)	Number of companies	0	2	2
	%	,0%	100,0%	100,0%
Very large (68% - 99%)	Number of companies	0	1	1
	%	,0%	100,0%	100,0%
Equal (100%)	Number of companies	5	0	5
	%	100,0%	,0%	100,0%
Total	Number of companies	13	29	42
	%	31,0%	69,0%	100,0%

SOURCE: Author's research

Among the analyzed companies, 20 of them were very small, and 14 of them were small in relation to the acquirer. Only 5 of the analyzed companies were the same size as the acquirer while two acquired companies were larger than acquirer. One acquired company was very large compared to the acquirer. In order to determine the statistical correlation between the relative size of the target company and the acquirer with the successful target company's performance after the takeover a Chi-square test with the symmetric measures was used.

TABLE 2— Chi-square test

Chi-Square Test	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)
Pearson Chi-Square	13,658	4	,008	,004
Likelihood Ratio	15,205	4	,004	,004
Fisher's Exact Test	11,758			,006

SOURCE: Author's research

TABLE 3— Chi-square symmetric measures

Symmetric Measures	Value	Approx. Sig.	Exact Sig.
Phi	,570	,008	,004
Cramer's V	,570	,008	,004
Contingency Coefficient	,495	,008	,004

SOURCE: Author's research

Results of Chi-square test and the corresponding symmetric measures show that there is a statistically significant correlation between the relative size of the target company compared to the acquirer and target company's performance after the takeover (p = 0.008).

Within the testing of hypothesis research participants, whose companies were very small or small, compared to acquirer, were asked to assess the impact of the size of the acquirers on the target company's performance after the acquisition.[2] Results of descriptive statistics are presented in Table 4.

TABLE 4 — Analysis of the acquirer's size impact on the target company's performance after takeover

Target company's performance after takeover	N	Mean	Std. Deviation	Std. Error Mean
Worse	8	2,50	,535	,189
Better	26	3,21	1,031	,195

SOURCE: Author's research

For the research participants from the companies that were small or very small compared to the acquirer, which had better company performance after the takeover, the average impact of the size effect on the target company's performance was moderate (3.21). Participants from companies that had worse performance after the takeover stressed that the average impact of the size effect on the target company's performance was weak (2.50). In order to examine whether there is a statistically significant difference between the mean scores of the participants opinions the T-test was used.

TABLE 5 — Levene's Test for Equality of Variances

	Levene's Test for Equality of Variances		T-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
Equal variances assumed	1,783	,191	-1,875E+00	34	,069
Equal variances not assumed			-2,631E+00	23,048	,015

SOURCE: Author's research

It is evident from Table 5 that the results of T-tests show statistically significant difference (p = 0.0345 for one-tailed test) between the mean scores of research participants whose companies operated worse and better after the takeover about the impact of the size of the acquirer on their companies performance after the takeover.

Taking into account that the Chi-square test proved that there is a statistically significant correlation between the size of the target company compared to the acquirer and the performance of the target company after the takeover (p = 0.008) and considering the fact that of the total number of analyzed companies which had better performance after the takeover,

[2] The impact was assessed using Likert's scale: 1 – no impact, 2 – weak impact, 3 – moderate impact, 4 – strong impact, 5 – very strong impact).

89,66% of them were small or very small compared to the acquirer, **hypothesis according to which the smaller the relative size ratio of the target company compared to the acquirer, the more successful is target company performance after the takeover can be accepted.**

IV. CONCLUDING REMARKS

Mergers and acquisitions represent an inherent part of growth strategy that enables companies to strengthen their market position much faster than is possible when they decide to grow internally. Growth of the company trough M&A provides access to new markets and resources, and success or failure of M&A is of great importance not only for companies included that in that process, but also for all participants of that process, and for the whole economy. Respecting the fact that vast number of M&As do not achieve planed synergies and results and that M&A success is affected by different organizational variables this paper analyzed the impact of company size on takeover success. Therefore, empirical research was conducted among Croatian companies that were acquired or taken over and a hypothesis according to which the smaller the relative size ratio of the target company compared to the acquirer, the more successful is target company performance after the takeover was tested and accepted. Results of Chi-square test and the corresponding symmetric measures showed that there is a statistically significant correlation between the relative size of the target company compared to the acquirer and target company's performance after the takeover ($p = 0.008$). Additionally, the results of T-test showed statistically significant difference ($p = 0.0345$ for one-tailed test) between the mean scores of research participants whose companies operated worse and better after the takeover about the impact of the relative size of the target company compared to the acquirer on their companies' performance after the takeover.

Considering the results of the conducted empirical research and results of the previous studies about the company size impact on successful takeover it can be concluded that it is important for the success of the takeover that the target company is smaller than the acquirer. Finally, the results of this research can contribute to the increase of the number of successful takeover not only in Republic of Croatia, but also in other counties with active M&A arena.

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UTJECAJ VELIČINE PODUZEĆA NA USPJEH PREUZIMANJA

SAŽETAK

Respektirajući činjenicu kako brojna spajanja i preuzimanja nisu ostvarila planirane sinergije i rezultate te uzimajući u obzir da na uspjeh preuzimanja utječu brojne organizacijske varijable poput menadžmenta, strategije, strukture, korporativne kulture, veličine poduzeća i dr., glavni cilj ovoga rada je analizirati utjecaj veličine poduzeća na uspjeh preuzimanja. Uspješno preuzimanje je definirano kao preuzimanje u kojem poduzeće-meta u razdoblju nakon preuzimanja posluje uspješnije nego što je poslovalo u razdoblju prije preuzimanja. Na uzorku od 43 preuzeta poduzeća u okviru empirijskog istraživanja testirana je i dokazana hipoteza koja glasi: što je manji relativni odnos veličine preuzetog poduzeća, u odnosu na preuzimatelja, to je uspješnost poslovanja preuzetog poduzeća bolja.

Ključne riječi: *spajanja, preuzimanja, uspjeh preuzimanja, veličina poduzeća, Republika Hrvatska.*