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Cross-border mergers and acquisitions in the context of key determinants of their implementation in the pre-merger-and-acquisition process

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Abstract

Cross-border mergers and acquisitions enable creation of business synergies, gain economies of scale, reduce costs, increase market power and create competitive superiority. The aim of this contribution is therefore to identify and specify the key determinants of implementation of the pre-merger-and-acquisition process (based on analyses of the views of managers from 120 companies) and to verify the new original methodology – ante-Determinants of Mergers and Acquisitions (aDM&A). A factor analysis of the data collected (by means of principal component analysis and varimax rotation) allowed extraction of four key determinants of implementation of the pre-merger-and-acquisition process. The paper also presents the basic parameters of the methodology aDM&A (eigenvalues, percentage of variance explained, Cronbach's alpha, inter-correlations of the extracted factors), and the results of the analysis of differences in assessment of the extracted factors by managers.

Keywords: Cross-border mergers, cross-border acquistions, pre-merger management, pre-acqusition management, methodology aDM&A.

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1. Introduction

Cross-border mergers and acquisitions are one of the basic tools for gaining greater market share and increasing the competitiveness of enterprises, a major indicator of economic activity, and one of the key factors in the development of capital markets. The issues of mergers and acquisitions in terms of exploring their motifs and the associated formulation of strategies are an inherent part of economic and management theories (theory of industrial organization, game theory, corporate governance, theory of efficiency, theory of values, empire building theory, process theory, transmission theory). More of these are found in Heckova, Chapcakova and Litavcova (2016). Mergers and acquisitions are a common label for transactions relating to the purchase and sale of businesses, parts of businesses, assets, shares and business units.

Acquisition means acquiring the ownership and management control of one enterprise over another. Theories distinguish between property acquisitions that are about acquiring an enterprise’s assets, and capital acquisitions which are about acquiring a decisive share in the voting rights of an enterprise. Through acquisition, individual businesses legally unite into a higher economic entity. Once the acquisition has taken place, both the companies continue their business, their legal relations are not changed and none of them are extinguished.

The term merger is used as a collective name for individual cases of voluntary mergers of two or more independent enterprises into one entity. The prerequisite of its implementation is adoption of the entrepreneurial decision itself by the management (owners) of all the participating undertakings about the fact that such a transaction is to take place. This is a complex transaction outside of normal business management over a longer period of time, covered by an agreement based on relevant the financial and factual information (see Heckova, Chapcakova & Litavcova, 2016).

Implementation and effectiveness of the merger and acquisition processes are multi-factorially conditioned. These processes are supplemented by factors of various macro- and micro-economic nature (Heckova, Chapcakova & Badida, 2014; Heckova, Chapcakova, Litavcova & Tarca, 2016). One of the crucial aspects is also their subjective perception.

2. Methodology

In order to study the key determinants of the pre-merger-and-acquisition process, a questionnaire research aimed at identification of the essential factors related to decision-making and the subsequent preparation of the merger and acquisition process before its actual implementation was carried out.

The research objective was, on the basis of the theoretical elaboration of the issue, to verify the factor structure of the original methodology aDM&A – ante-Determinants of Mergers and Acquisitions. The task for managers was to assess the individual items on a 4-point Likert scale, where 1 – unimportant, 2 – slightly important, 3 – important and 4 – very important.

Identification and specification of the key determinants of the pre-merger-and-acquisition process took place in accordance with an analysis of the views of managers from 120 companies, which had been the subject of mergers or acquisitions.

The research sample consisted of 108 men and 12 women aged from 21 to 65 years (mean age: 42.90 years, standard deviation: 11.270), who worked in the given company from 1 to 25 years (mean: 11.50 years, standard deviation: 6.118).

Acquired data were processed by means of mathematical and statistical analyses of descriptive statistics, the method of principal component analysis with varimax rotation, Pearson’s correlation coefficient and Friedman test.

3. Results

By means of the factor analysis (principal component analysis with varimax rotation), four key determinants of pre-merger-and-acquisition process implementation – Synergy potential, Business environment, Investment benefits, and Financial management (Figure 1, Table 1) – were extracted.

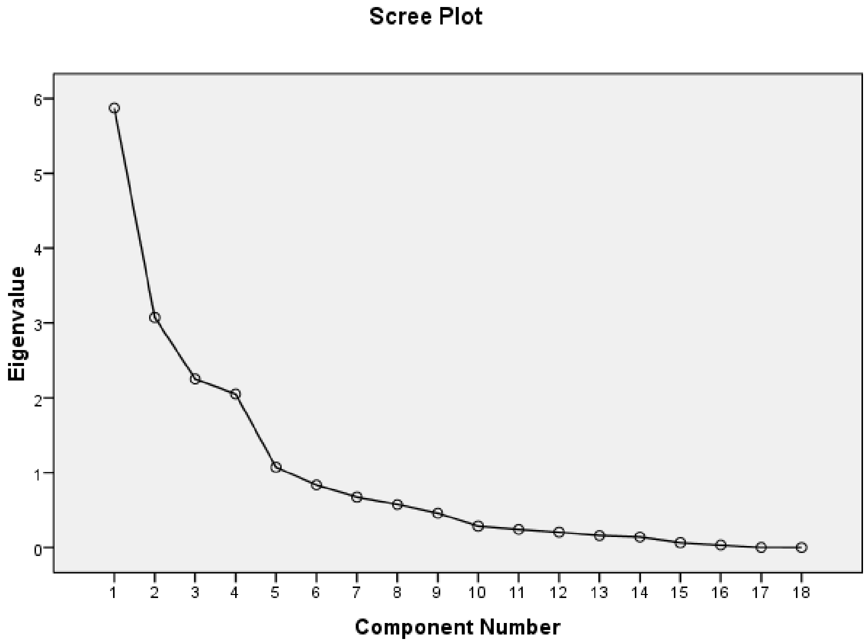

Figure 1. Scree plot of the factor extraction of aDM&A

Table 1. Factor structure of aDM&A

Questionnaire items	Factors: Synergy potential	Business environment	Investment benefits	Financial management
Identify strategic relatedness between the acquirer and the target		0.760		
Identify the target's distinctive cultural aspects compared to the acquiring company Identify the trend of target's cash flow from operations		0.815		
Identify the target's property locations of market served		0.785		
Identify the trend of target's overall performance (i.e. free cash flow)	0.567			
Identify the target's connectivity and compatibility with the acquirer's information systems infrastructure		0.751		
Identify the target's capital structure and cost of capital				0.872
Identify the target's capital expenditure requirements	0.707			
Identify potential financial synergy (i.e., lower cost of capital, lower tax rate)	0.636			
Identify potential operating synergy (i.e., improved operating efficiency)	0.797			

Identify potential demand for products/services of combined firm over the next five years	0.798			
Identify potential improvements in brand &reputation				0.862
Amount of acquisition Premium			0.776	
Identify the fact that the present value of anticipated synergies will be greater than the premium paid.	0.635			
Bidding price is based upon the target's competitive position			0.834	
Method of payment (i.e., cash, stock, etc.)				0.757
Multiple bidders			0.732	
Due diligence			0.556	
Getting advice from best investment bankers			0.808	

In order to investigate the key determinants of the pre-merger-and-acquisition process, a questionnaire research was carried out, taking into account four factors related to the importance of the decision and the subsequent preparation of the merger or acquisition process before its actual implementation.

Table 2. Extraction method: principal component analysis

	Eigenvalues	% of variance	Cumulative %
Synergy potential	3.753	20.852	20.852
Business environment	3.283	18.237	39.089
Investment benefits	3.265	18.139	57.228
Financial management	2.953	16.406	73.633

Extracted factors explain 73.633% of the variance (Table 2) and it was possible to specify them clearly by content. This is supported by the satisfactory values of Cronbach's alpha reliability of the items within the individual factors. These factors express in their complexity the need to take into account the information on synergy potential (Cronbach's alpha: 0.816), business environment (Cronbach's alpha: 0.826), investment benefits (Cronbach's alpha: 0.857) and financial management (Cronbach's alpha: 0.859).

3.1. Synergy Potential

Synergy potential, in terms of effectiveness of merger or acquisition implementation, represents reaching the synergistic effects in the following aspects: performance synergy, financial synergy, and operational synergy. The issue of synergies in merger and acquisition processes is addressed by several authors – particularly Sirower (1997), Larsson and Finkelstein (1999), Sirower and Sahni (2006), and Ficery, Herd and Pursche (2007). Performance synergy is in direct interaction with potential financial synergies, integrating the growth trend of the overall performance of the target company. Operational synergy results from the combination and improvement of the operational efficiency of the individual areas of affiliated enterprise activities, particularly in the area of production and service delivery, knowledge capital and know-how within the new venture. Synergy effect (potential) ultimately means that the newly created/merged entity has a higher value than the sum of the values of each individual enterprise, which is one of the basic conditions of a successful merger or acquisition (see Heckova, Chapcakova & Litavcova, 2016).

3.2. Business Environment

In the pre-merger (or pre-acquisition) phase it is further important to take into account the information on the selected aspects of the business environment, such as the strategic relationship between the acquirer and the target, regarding the cultural aspects and the originality of the related differences, the geographical location of the investment, the access and compatibility of the target enterprise with the enterprise information system infrastructure of the acquirer (see Heckova, Birknerova & Chapcakova, 2015; Kiseľakova, Zavarska, Heckova & Chapcakova, 2011).

According to Barney (1988), when there is no strategic relatedness between the acquirer and the target, the value of any one of these bidding firms when combined with the target firm exactly equals the sum of the value of these firms as separate entities. Bidding firms will be willing to pay a price for a target up to the value that the target adds to the bidder; a bidding war will start, the price will rise to the value of the target firm, and the merger will be source of zero economic profits for both firms.

Cross-border mergers or acquisitions also entail risks arising from cultural differences, both at national and corporate level. Cultural differences and the inability to create a new cultural identity may be the cause of the failure of the entire merger or acquisition process without achieving the strategic and financial goals (see Bjorkman, Stahl, & Vaara, 2007; Gertsen, Søderberg & Torp, 1998; Stahl & Voigt, 2008).

Integration of information systems and network infrastructure is one of the important areas to which acquirers should pay particular attention in terms of the compatibility and connectivity between the acquirer and the target companies. Information systems can play a proactive role in the acquisition process by creating opportunities for achieving a competitive edge (Loverde, 1990). According to McKiernan and Merali (1995), IS infrastructure is a facilitator of operational and organizational integration.

Ernst & Young (1994) presented list of categories that should be helpful in developing the necessary information about a target company for the evaluation process. The list includes: target's market served, types of products, customer characteristics, suppliers, operational characteristics, target's market position, competitive behavior, market boundaries, and target's financial performance measures. Further, Ernst & Young (1994) stated that the required actual information may vary, depending on individual circumstances.

3.3. Investment Benefits

The success of merger or acquisition is based largely on disposing as far as possible of the most objective information about the business to be merged or acquired. In making the investment benefit from a merger or acquisition transaction, the following indicators need to be taken into account: acquisition premiums, multiple bidders, due diligence, getting advice from the best bankers.

Acquisition premium is the amount (absolute or relative) determined subjectively on the basis of an accurate and expert analysis, taking into account the risks and benefits of the shareholder, companion, member, investor or other valuation user, caused by the facts that were not, or were only insufficiently, considered when calculating the final target value of the rated undertaking or other investment to which the premium applies (see Heckova et al., 2014; Mercer, 2002; Mercer & Harms, 2008).

According to Kim and Olsen (1999), when there is more than one acquisition bidder for one target firm, there is an increase in the level of competition, resulting in a negative impact on the winning firm's post-acquisition performance. On the other hand, acquired firms' shareholders are likely to gain additional value when there are multiple bids. Multiple bids for a target will reflect less uniqueness in the market for merger benefits and, as a result, smaller gains for bidders and larger gains for target (see Asquith, Bruner & Mullins, 1983; Fuller, Netter & Stegemoller, 2002; Goergen & Renneboog, 2004).

Due diligence is a basic requirement of any transaction activity and the minimum prerequisite for eliminating the negative consequences of incorrect decisions. The outcome of due diligence should be the final report, highlighting the weak (risky), but also the strong aspects of the business in relation to the intended sale or takeover of this business. The final due diligence report is one of the most important documents for determining the price of an enterprise and defining contractual guarantees or contractual terms.

Companies were allowed to use a number of underwriters, which in turn increased competition, hence reducing the profit margin of investment banks regarding capital raising services. Investment bankers were then forced to discover new forms of business, which was later translated into their increasingly significant role in corporate mergers and acquisitions. Among different types of M&A advisory firms, investment bankers have evolved into dominant independent agents in the marketplace. They are taking a more aggressive role often as the 'principle architects of business combinations'.

3.4. Financial Management

Financial management of a merger and acquisition transaction decomposes investment risk in a new business area, resulting in the effect of a financial synergy umbrella. Merger or acquisition may result in a larger, financially more stable venture with better capital structure, and better access to lower-cost credit facilities (lower cost of foreign capital; see Heckova, 2007).

Suitability of the presented factor structure of the aDM&A methodology is also supported by the calculated inter-correlation coefficient values between the individual extracted factors (Table 3).

Table 3. Inter-correlation coefficients between the individual extracted factors of aDM&A

		Business environment	Investment benefits	Financial management
Synergy potential	Pearson Correlation	0.326**	0.236**	0.144
	Sig. (2-tailed)	0.000	0.009	0.115
Business environment	Pearson Correlation		0.405**	0.352**
	Sig. (2-tailed)		0.000	0.000
Investment benefits	Pearson Correlation			0.423**
	Sig. (2-tailed)			0.000

**statistical significance at 0.01 significance level

The presented results of the correlation analyses show that the majority of the factors of the aDM&A methodology are statistically significantly positively related. This means that the higher the managers score in the factor of Synergy potential, the higher they score in Business environment and Investment benefits. This characterization of correlations is also true for the factor of Business environment and the factors of Investment benefits and Financial management, as well as for the correlation between Investment Benefits and Financial management. No statistically significant correlation was found only in the case of the analysis of links between Synergy potential and Financial management.

The correlation coefficient values point to the fact that the extracted factors form a homogeneous whole, but at the same time they identify and specify, as mentioned above, the various areas related to the pre-merger-and-acquisition process.

The presented results were supplemented by the calculation of the average values obtained by the respondents in the individual factors of the aDM&A methodology and the comparison of the statistical significance of the differences between the assessment of these factors (Table 4). This comparison was carried out by means of the Friedman test. The result of this test was statistically significant at the 0.000 significance level.

Table 4. Differences in assessment of the individual factors of aDM&A

Factors	Mean values
Synergy potential	3.1833
Business environment	3.2833
Investment benefits	3.0067
Financial management	3.0667

The obtained results of the mathematical and statistical analysis confirmed existence of the statistically significant differences in the assessment of the various factors of the aDM&A methodology. Respondents scored the highest in the Business environment factor, then Synergy potential and Financial management. The lowest score was found when assessing the Investment benefits factor.

The highest importance according to the managers of these companies was related to the strategic relationship between the acquirer and the target, taking into account the cultural aspects and the associated differences, geographical location of investments, access and compatibility of the target enterprise with the information system infrastructure of the acquirer. However, the observed differences need to be interpreted in the context of a positive assessment of all the extracted factors in the pre-merger-and-acquisition process.

4. Conclusion

Decisions leading to implementation a merger or acquisition as one of the alternatives for achieving the strategic objectives of an enterprise are based particularly on a general effort to increase efficiency, financial and capital motifs, and market motifs. Based on the results of the factor analysis, Cronbach's alpha calculations, and inter-correlation analysis, it can be concluded that the most important factors in the pre-merger-and-acquisition phase include the business environment, synergy potential, financial management, and investment benefits. The acquisition strategy can then be considered as a path to the growth of enterprise value, a restructuring tool, or a tool for rebuilding the corporate structure and a risk diversification tool.

Enhancing knowledge in the area of mergers and acquisitions based on the results presented can be specified in two areas. From the methodological point of view, the contribution to this area of knowledge is represented by the proposal and verification of the aDM&A methodology, the use of which can contribute to the efficiency increase in decision-making and implementation of mergers and acquisitions. From a theoretical point of view, benefits can be found in identification and the subsequent specification of the essential attributes of the merger and acquisition process. Extracting these attributes enables to perform a theoretical definition of this process based on these specified structural aspects. The presented results testify to the existence of structural factors in the merger and acquisition processes. In this context, attention should be drawn to the question of the meaningful extent of the general definition of these factors, i.e., the degree of abstraction required by this definition. At the same time, it is necessary to consider the issue of the transmissibility of these factors, i.e. to what extent are these factors applied and weighting in a particular merger or acquisition process. The report presents one of the possible views on this issue.

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References

Asquith, P., Bruner, R. F. & Mullins, D. W., Jr. (1983). The gains to bidding firms from merger. *Journal of Financial Economics, 11*, 121–139.

Barney, J. (1988). Returns to bidding firms in mergers and acquisitions: reconsidering the relatedness hypothesis. *Strategic Management Journal, 9*, 71–78.

Bjorkman, I., Stahl, G. K. & Vaara, E. (2007). Cultural differences and capability transfer in cross-border acquisitions: the mediating roles of capability complementarity, absorptive capacity, and social integration. *Journal of International Business Studies, 38*, 658–672.

Ernst & Young. (1994). *Mergers & acquisitions* (2nd ed.). New York, NY: John Wiley & Sons.

Ficery, K., Herd, T. & Pursche, B. (2007). Where has all the synergy gone? the M&A puzzle. *Journal of Business Strategy, 28*(5), 29–35.

Fuller, K., Netter, J. & Stegemoller, M. (2002). What do returns to acquiring firms tell us? evidence from firms that make many acquisitions. *Journal of Finance, 57*, 1763–1793.

Gertsen, M. C., Soderberg, A. M. & Torp, J. E. (1998). *Cultural dimensions of international mergers and acquisitions* (Vol. 85). Walter de Gruyter.

Goergen, M. & Renneboog, L. (2004). Shareholder wealth effects of European domestic and cross-border takeover bids. *European Financial Management, 10*, 9–45.

Heckova, J. (2007). *Podnikove financie* [Corporate finance]. Presov, Slovakia: University of Presov, Faculty of Management.

Heckova, J., Birknerova, Z. & Chapcakova, A. (2015). Zarzadzanie zasobami ludzkimi kluczowym narzedziem w przejeciach i fuzjach. *Gospodarka i finanse: wspoleczne wyzwania rozwoju spoleczno-ekonomicznego Polski i Europy, 6*, 227–232.

Heckova, J., Chapcakova, A. & Badida, P. (2014). Aktuálne problémy ohodnocovania podnikov pri fúziách a akvizíciách a ich riešenie [Current issues of merger and acquisition enterprise valuation and their solutions]. *Ekonomický časopis/Journal of Economics, 62*, 743–766.

Heckova, J., Chapcakova, A. & Litavcova, E. (2016). *Analyticky pohad na aspekty determinujúce vyvoj cezhranicnych fuzii a akvizicii v europskom priestore* [Analytical view of aspects determining the development of cross-border mergers and acquisitions in the European area]. Praha: Radix.

Heckova, J., Chapcakova, A., Litavcova, E. & Tarca, A. (2016). Cross-border M&A in services and manufacturing sector within European area. In *Production management and engineering sciences: scientific publication of the international conference on Engineering science and production management* (pp. 377–381). Leiden, The Netherlands: CRC Press.

Kim, K. H. & Olsen, M. D. (1999). Determinants of successful acquisition processes in the US lodging industry. *International Journal of Hospitality Management, 18*, 285–307.

Kiseľakova, D., Zavarska, Z., Heckova, J. & Chapcakova, A. (2011). *Manazment bankovych uverovych obchodov a jeho efekty na ekonomiku, uverove financovanie a konkurencieschopnosť podnikateľskych subjektov v SR a eurozone v kontexte globalnej krizy a nasledneho rozvoja* [Bank credit management and its effects on the economy, credit financing and competitiveness of business entities in the Slovak Republic and the Eurozone in the context of global crisis and subsequent development]. Presov, Slovakia: University of Presov, Faculty of Management.

Larsson, R. & Finkelstein, S. (1999). Integrating strategic, organizational, and human resource perspectives on mergers and acquisitions: a case survey of synergy realization. *Organization Science, 10*(1), 1–26.

Loverde, L. (1990, April). *Technology driven deals in mergers and acquisitions: how are they different?* (The Corporate Growth Report).

McKiernan, P. & Merali, Y. (1995). Integrating information systems after a merger. *Long Range Planning, 28*, 454–562.

Mercer, Z. C. (2002). *An integrated theory of business valuation*. ASA/CICBC 5th Joint Advanced Business Valuation Conference, Orlando, FL.

Mercer, Z. C. & Harms, T. W. (2008). *Business valuation: an integrated theory* (2nd ed.). New York, NY: Wiley Finance.

Sirower, M. L. (1997). *The synergy trap: how companies lose the acquisition game*. New York, NY: The Free Press.

Sirower, M. L. & Sahni, S. (2006). Avoiding the synergy trap: practical guidance on M&A decisions for CEOs and boards. *Journal of Applied Corporate Finance, 18*, 83–95.

Stahl, G. K. & Voigt, A. (2008). Do cultural differences matter in mergers and acquisitions? a tentative model and examination. *Organization Science, 19*(1), 160–176.