The Determinants of Cross-Border Acquisitions: Evidence from Romania

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Abstract

The cross-border mergers and acquisitions (M&As) are powerful strategies, used by companies, usually with financial resources, to search and acquire target companies that fulfill specific needs of the acquirers. The characteristics of the target companies and of the environment where they activate compose the determinants that lead to either a domestic or a cross-border M&A, suitable to generate synergy success and efficiency gains for the shareholders of the involved companies. Considering a sample of 60 acquisitions which involved at least one Romanian company in the position of the acquirer or the target, the authors considered the financial information of both companies as predictors for the stake that the acquiring company will buy in the target. Also, they considered the level of relatedness between the activities of the companies and the accounting practice of the target as factors with significant influence in this choice. The research results will show that the deal value paid, the productivity and the relatedness of the two companies significantly influence the stake purchased in the target company, but the accounting practice lead to a significant increase in the capacity of the proposed model to predict the variance of the final stake.

Keywords*: cross-border acquisitions, deal value, relatedness, target company, productivity*

JEL Classification*: F63, G34, M16*

1. Introduction

Despite the risk and the possibility of failure, the prospect of increasing profitability and market share by business strategies, like an acquisition or a merger, continues to exercise a more immediate and seductive appeal to business leaders than a reliance on growth alone (Cartwright and Cooper, 1993). Generally, the business concentrations and, more precisely, the selection of the target company, look successful and promise financial and strategic gains, but fail to meet their purpose because the culture of partners are incompatible. The most common situation when this happen is in the case of cross-border mergers and acquisitions (M&As). In this specific case, when the acquirers cross the borders of their residence country, looking for target companies, the motives of choosing one specific company are multiple, but so are the reasons for failing.

When searching for a company to be acquired, any managers should take into account two different perspectives on the target company: one related to the financial information of the desired company and one that considers the culture of the two companies and the compatibility of the human capital. As a result, the synergy success and the efficiency gains from M&As (Rozen-Bakher, 2018) are correlated to the psychological synergies. In the case of cross-border M&As, the choice for a particular target company must also take into account the macroeconomic conditions of the residence country, like inflation (Evenett, 2003), gross domestic product (Uddin and Boateng, 2011; Ali-Yrkkö, 2002), financial, fiscal and economic stability (Aevoae *et al.*, 2018; Kiymaz, 2004), as much as the mid-level factors, like the cost of capital, local legislation and the market for a specific product. Other authors, like Boateng *et al.* (2014), consider that the macroeconomic conditions of the acquirer's country of residence have a strong impact in the decision to invest in a cross-border M&A.

2. Literature review

The main reasons that determine two companies to participate in strategic transactions, like M&As, is the fact that, in pre-concentration faze, the acquirer and the target are analyzing their financial, production, environmental and employee-related aspects and draw the conclusion that together are more efficient than if they would work alone. These positive estimations take the form of synergistic gains. For instance, contracting costs can be lower within than across firms, creating production efficiencies in combining firms. M&As can further lower the combined tax liability of the two firms if they allow one firm to use tax shields that another firm possesses but cannot use. Finally, agency considerations can lead managers to make value-decreasing acquisitions that nonetheless increase managers' individual utilities.

2.1. Acquirer vs target: macroeconomic determinants of M&As at both national and international level

The liberalization of national financial and capital markets, coupled with the rapid advancements in information technology and the increasing integration of national economies have spurred the growth of cross-border M&As (Uddin and Boateng, 2011). Given the fact that they involve at least two companies, located in different economies, leads to the assumption that both home country and host country, through their specific economic conditions, influence this type of international transactions. Thus, the choice for a specific target company is the result of a number of factors, considered at macroeconomic level (the host countries conditions) and at microeconomic level (the financial and non-financial information which characterize the target company).

According to the Institute of Mergers, Acquisitions and Alliances (IMAA, 2019), the number and value of the M&As at international level has increased exponentially since 1988 (**Table no. 1**).

Table no. 1. Number and value of cross-border and worldwide M&As					
	U.M.	**1988**	**1998**	**2008**	**2018**
No. of cross-border M&As	Number	1,955	8,750	13,808	13,606
Value of cross-border M&As	Bil. EUR	178.24	731.84	1,268.89	1,561.53
No. of worldwide M&As	Number	7,440	30,218	45,173	50,052
Value of worldwide M&As	Bil. EUR	777	2,678	3,075	3,896
% (no. CBM&As/no. WWM&As)	**%**	**26.28%**	**28.96%**	**30.67%**	**27.18%**
% (val. CBM&As/val. WWM&As)	**%**	**22.94%**	**27.33%**	**41.26%**	**40.08%**

Source: Authors' own processing after IMAA (2019)

The graphical representation on the information presented in **Table no. 1** is presented in **Figure no. 1**.

Figure no. 1. Number and value of cross-border and worldwide M&As
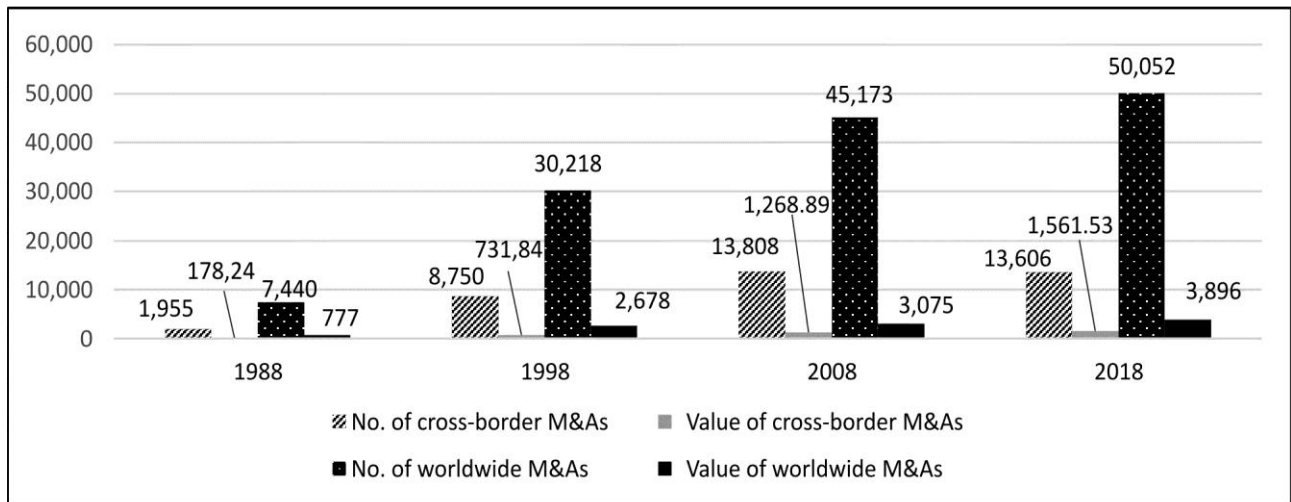
Source: Authors' own processing after IMAA (2019)

This can be attributed to the dynamic nature of international trade. The consolidations of industries and regions have also contributed to the overall number and value of M&As worldwide to continuously increase.

When analyzing the macroeconomic determinants of M&As, three perspectives should be taken into account: the macroeconomic conditions of the acquirer and those of the target (for cross-border M&As) and the economic climate that conducts to an increase or a decrease in the volume and value of domestic M&As, as a result of a specific economic context.

According to Boateng *et al*. (2014), home country macroeconomic factors, namely interest rates and inflation rates, have an important role, both with negative influence on the number and value of the cross-border M&As. On the other hand, GDP, broad money supply, stock prices and real effective exchange rate exert a positive and significant influence in explaining the cross-border M&A outflows, by creating competitive advantages for the acquirers. Kalotay and Sulstarova (2010) analyze the macroeconomic conditions of the home country in a M&A (acquirer's country), by considering the example of Russian Federation. As a result, they draw the conclusion that GDP and the political climate have a positive influence on the volume

of foreign direct investments and, implicitly, in cross-border M&As (as the main component of FDI) (UNCTAD, 2000). If the macroeconomic conditions of the home countries look like prerequisites for entering M&As, the conditions in the host countries are more related to the productivity of the newly form entity and how the target company's country could positively influence the business concentration: the market size in host countries, their natural resources and technological assets, all of them tempered with geographical distance between the involved companies.

Vasconcellos and Kish (1998) divide the home country macroeconomic conditions in favorable and adverse. Favorable cyclical conditions in the home country facilitate cross-border M&As as a means for increasing demand and levels of diversification. On the other hand, adverse economic conditions, such as a slump, recession, or capital market constraints, may cause prospective acquiring firms to concentrate on domestic M&As, while postponing any international strategic moves. Regarding domestic M&As, Kiymaz (2004) discuss the influence of macroeconomic conditions on these national transactions, like changes in government policy and specific regulations. To these, we add the existence of economic rationales for restructuring, the

increase in the general level of economic integration, and the existence of strong financial markets where these M&As activities can be financed. We have to keep in mind that the companies which enter strategic transactions like M&As have to choose between domestic and cross-border M&As, each with its own advantages, disadvantages and determinants.

2.2. The cross-border M&As and the factors that influence them

The international perspectives on M&As are multiple. Starting from the opinions of Simizu *et al.* (2004), who divide the motives of the companies to involve in such transactions as being related to market, culture and value creation, the main determinants of cross-border M&As can be identified, as follows:

a) Cross-border M&As - a mode of entry in a foreign market. Technological development and globalization have vastly contributed to the popularity of domestic and cross-border M&As. Mergers can create market power since it is legal for post-merger combined firms to charge profit-maximizing prices, but not for the premerger separate firms to collude to do so collectively (Simizu *et al.*, 2004). On the same note, Kalotay and Sulstarova (2010) appreciate that the size of the host country market is a very important factor in choosing a target company. As market size increases, so do opportunities for the efficient utilization of resources and the exploitation of economies of scale and scope via FDI (UNCTAD, 1998). A parallel literature to that on cross-border M&As concerns the flows known as FDI. According to Erel *et al.* (2012), FDI includes cross-border M&As plus other investments in a particular country (including "green field" investments), as well as retained earnings by foreign subsidiaries and loans from parent companies to their foreign subsidiaries.

b) Cross-border M&As - a dynamic learning process from a foreign culture. Pelto (2017) puts an unprecedented problem in the process of value creation to stockholders in M&As: the one of **trust**. In the process of announcing a merger or acquisition, the ad creates a wave of mistrust, rumors and unpredictability for members of indirectly involved organizations (Stahl *et al.*, 2012, Hurley, 2006). These include cultural differences, which can be both international (in the case

of cross-border mergers) and national (where people are from different areas). In the second case, even the simple integration of human capital from two or more companies with different entropy before merger / acquisition can create a sense of mistrust. Practically, a climate characterized by differences in values, objectives or beliefs in good practice leads to an implicit diminution of the synergistic potential that the combination might have generated (Dauber, 2012; Stahl and Voigt, 2005).

According to Kavanagh and Ashkanasy (2006), the success of any business concentration lies on individual perceptions about the manner in which the process is handled and the direction in which the culture is moved, especially in the case of the human capital from the target company. Communication and a transparent change process are important, in order to the psychological synergies to appear between the employees between the two companies.

c) Cross-border M&As - a value-creating strategy.

How do we measure the success of a merger? There are two distinct approaches in the literature:

- *the classical approach from a financial perspective*: the post-merger value of the post M&As entity exceeds the amount between the amount paid to the target company and the value of the acquirer before the merger / acquisition;

- *financial market approach*: the value of the firm resulting from the concentration exceeds the sum of the values of the two entities before the merger.

The difference between the two approaches may be considerable, because in many cases the price paid by an acquirer to the target company exceeds its value (whether it is the net book value or the market value, depending on the method of valuation chosen). The difference is the premium paid to the shareholders of the acquired company, and its size is a first representation of the expected synergies, being directly proportional to them. The higher the premium paid, the more significant operating and financial synergies, as a result of the M&A, the acquiring entity expects to obtain. Moeller *et al.* (2004) conducted a study of 12,023 acquisitions, which showed that purchasing entities are willing to pay for each share a 40-60% higher price than the exchange rate. Thus, if we redefine the price paid to the target entity as the sum of the company's value and the

premium paid, then a successful merger or acquisition is reflected in the net proceeds of the acquiring company, representing the positive difference between the net present value of the synergy and the value of the premium originally paid to shareholders of the target company (Canina *et al.*, 2010).

Managers of the acquiring company use synergy as rational motivation to justify the transaction and the merger premium paid for it (Ficery *et al.*, 2007). In fact, they often refer to the expected future cash-flows. In other cases, the expected synergies are not reflected in monetary form, but are described as intangible benefits such as access to new markets, skills of human capital, or even the construction of an organizational culture that allows the integration and motivation of all employees (Vasilaki *et al.*, 2016; Aguilera and Dencker, 2007; Kiessling and Harvey, 2007), especially in the case of cross-border M&As. In this case, although the managers of the involved companies must be motivated by such benefits, it is important that they understand that these intangible benefits cannot be included in the calculation of synergy unless they are measurable.

3. Hypotheses development

We propose to test and validate the following hypotheses:

H_1: *The investment decision of an acquirer to purchase a certain amount of stake in a target company is influenced by the industry relatedness, productivity ratio, and deal value ratio.*

The concept of relatedness is very discussed in the M&A literature, being associated to both the assets involved and the core activities of the companies. Hagerdoorn and Duysters (2010) classify M&As in terms of relationship: they believe that horizontal / vertical M&As are made between related companies, while conglomerate M&As are between unrelated companies. Considering a more analytical perspective, the concept of industry relatedness, as Cefis and Rigamonti (2013) argue, does not occur randomly, it is, in fact, one of the main aspects that an acquirer must take into consideration before pursuing an M&A. According to Fan and Lang (2000), two business can be classified as unrelated if they do not share the same two-, three-, or four-digit code of the national classification of economic activities, and vice-versa. Starting from the last

approach, the acquisitions from our sample will be classified in related/unrelated M&As. The productivity is also a preoccupation of both practitioners and researchers, given the fact that one of the ways in which the success of a M&A is calculated is by using efficiency gains, as increases in revenues or economies of costs (Devos *et al.*, 2009, Rozen-Bakher, 2018).

H_2: *The acquirer's decision to invest into a certain amount of stake in a target company is influenced by the industry relatedness, productivity ratio, deal value ratio and accounting practices of the target.*

We hypothesis that in M&As, another aspect of major importance, when analyzing the acquirer's choice for a company, the amount of stake purchased into a target is strongly influenced by the accounting practices of the target. Acquirers are interested if a target reports according to IFRS or Local GAAP. Nelson-Espeland and Hirsch (1990) justify, in their research, the fact that, since the 1960s, the accounting system of the involved companies is the one that legitimates the new company's forms and practices. Moreover, the proliferation of conglomerate/unrelated M&As brought into attention the fact that, in many cases, the acquirers are considering a target company based on its financial rather than its productive capacities. Based on this idea, the paper analyses the influence of the accounting practice, as a control variable, on cross-border M&As, grouped as related and unrelated.

4. Research methodology and design

To test and to validate the proposed research hypotheses, the study analyses the empirical data related to 60 related/unrelated cross-border M&As, for the 2010-2017 period of time, considering that the study includes only the transaction which refer to only one target and one acquirer in which a Romanian company is participant. To reach the proposed research hypotheses, we use linear regression, ANOVA and crosstabulation.

4.1. Target population and analyzed sample

To confirm the research hypotheses, the data regarding cross-border M&As were gathered from two databases, for the 2010-2017 period of time. The

information regarding the deals representing M&As was collected from the Zephyr database (target country, acquirer country, deal value, primary NACE Rev.2 code for both target and acquiring companies); financial information was collected from Orbis database (shareholders' funds, operating revenues, number of employees, accounting practices of the target).

4.2. Models proposed for analysis and data source

This paper examines a series of factors influencing the stake purchased in a target, considering the acquisitions made by Romanian companies, either in the position of acquirer or target, for the 2010-2017 period of time.

The proposed variables are presented in **Table no. 2**.

Table no. 2. The variables proposed for the analysis

Symbol	Representation	Description	Explanation
Stake (S)	%	Dependent variable	Stake is the percentage purchased in the target companies.
Productivity ratio (Prod_r)	$\dfrac{\dfrac{Revenues\_acq_{t-1}}{Employees\_acq_{t-1}}}{\dfrac{Revenues\_target_{t-1}}{Employees\_target_{t-1}}}$	Independent variable/ numeric	Productivity ratio is calculated considering the operating revenues per employee for the acquirer and for the target company, reported for the year before the M&A.
Deal value (Dv)	$Deal\ value$	Independent variable/ numeric	The price paid for the target company.
Relatedness (R_unr)	1. Related M&As 2. Unrelated M&As	Independent variable/ categorical	Relatedness considers the first two digits of the NACE Rev. 2, primary codes for the target and for the acquirer.
Accounting practices (AccP)	1. Local GAAP 2. IFRS	Independent variable/categorical	The accounting practices of the target company for the year of the M&A.

Source: Authors' own processing

"Stake" (S) is the *dependent variable* of our linear regression model and represents the stake purchased by the acquirer in the target company. Thus, this variable is a percentage of the shares acquired and its range varies between 0.001% (shares in jointly controlled entities) and 100% (acquisition of a controlling interest).

The *independent variable* "Deal value" (Dv) reflects the price paid by the acquirer to the shareholders of the target company.

For the first hypothesis, the model takes into consideration Productivity ratio (Prod_r), Deal value (Dv) and Relatedness (R_unr) as *predictors*. Because we intend to see if the relatedness of the core activities of the two companies has a significant influence in predicting the stake purchased in target company, we consider the model in two steps, as it can be seen in Eq. (1).

$$\ln(S_t) = \alpha + \beta_1 \cdot \ln\left(Prod_{r_{t-1}}\right) + \beta_2 \cdot \ln(Dv_t) + \ (1)$$
$$+\beta_3 \cdot R\_unr + \varepsilon$$

S_t – stake purchased in year t (year of the acquisition);

$Prod\_r_{t-1}$ – productivity ratio in year t-1 (pre-acquisitions);

Dv_t – deal value paid in year t;

β_1, β_2 and β_3 – represent the parameters model, and the estimated values show the existence of a significant influence of the financial information and the relatedness between the two companies on the purchased stake in the target, in a positive or a negative direction, depending on the sign of the estimation of the three parameters in the regression model.

As well, in order to estimate the influence of the relatedness between the two companies (acquirer and target), as well as the interactions between these and

the financial information (Deal value and Productivity ratio), the study proposes the following model for analysis:

$$\ln(S_t) = \alpha + \beta_1 \cdot \ln(Prod_{r_{t-1}}) + \quad (2)$$
$$+ \beta_2 \cdot \ln(Dv_t) + \beta_3 \cdot R_{unr} +$$
$$+ \beta_4 \cdot \ln(Prod_{r_{t-1}}) \cdot R_{unr} +$$
$$+ \beta_5 \cdot \ln(Dv_t) \cdot R\_unr + \varepsilon$$

For our next hypothesis, we consider the accounting practices of the target a *control variable* (the target firm applies local GAAP and IFRS) which will help us test and validate the hypothesis according to which accounting practice of the target is strongly influencing the decision of the acquirer to purchase a certain amount of stake, as it can be seen in Eq. (3):

$$\ln(S_t) = \alpha + \beta_1 \cdot \ln(Prod_{r_{t-1}}) + \quad (3)$$
$$+ \beta_2 \cdot \ln(Dv_t) + \beta_3 \cdot R_{unr} +$$
$$+ \beta_4 \cdot \ln(Prod_{r_{t-1}}) \cdot R_{unr} +$$
$$+ \beta_5 \cdot \ln(Dv_t) \cdot R_{unr} +$$
$$+ \beta_6 \cdot AccP + \varepsilon$$

The used method is hierarchical linear regression (HLR) because it is a way to show if variables of our interest explain a statistically significant amount of variance in our DV (after accounting for all other variables). Also, our study includes variance inflation factor (VIF), to identify multicollinearity problems. The VIF and tolerance are both widely used measures of the degree of multi-collinearity of the ith independent variable with the other independent variables in a regression model (O'Brien, 2007) and it has three accepted thresholds: if VIF is higher than 3, than the probability for multicollinearity increases; when VIF is higher than 5, there is very likely to have collinearity and; in case VIF is higher than 10, the collinearity exists for sure.

5. Results and discussions on the influence of specific determinants on the purchased stake in a target company

The study will present a series of descriptive statistics for the analyzed variables (per total and on categories considered in the analysis), including the ANOVA for the stake, considering the accounting practice of the target and the relatedness between the companies, of the values of the Pearson correlation coefficients, of the values of one-sample Kolmogorov-Smirnov test and the estimations of the parameters of the proposed regression models.

The ANOVA results, presented in **Table no. 3**, show significant difference between the means of the purchased stakes in the target companies, considering two groups of transactions: transactions which involved related/unrelated companies and transactions in which the target company applied local GAAP or IFRS.

Table no. 3. The ANOVA presentation for the purchased stake (%)					
Group	**Stake (%)**	**df**	**Mean Square**	**F**	**Sig.**
Related/unrelated M&As	Between Groups	1	9200.623	8.455	.005
	Within Groups	58	1088.251		
Accounting practice of the target	Between Groups	1	29061.728	38.966	.000
	Within Groups	58	745.819		
Total		59			

Source: Authors' own processing using SPSS 25.0.

For the relatedness between the core activities of the involved companies (related/unrelated M&As), the significance is underlined by the F-test (F (1,58) = 8.455) and the significance coefficient of 0.005 (p<0.01). Also in **Table no. 3**, we present the ANOVA results for the means of the purchased stake, grouped by the accounting practice of the target (local GAAP and IFRS), which are also significant (F (1,58) = 38.966, p<0.01).

General	Variables	N	Mean	Std. Deviation	Robust Tests of Equality of Means		
					Welch & Brown-Forsythe		
Relatedness	*Unrelated*	27	65.46	41.877	F-ratio = 7.598, df2 = 38.918, sig. = 0.009		
	Related	33	90.35	23.401			
Accounting practice	*Local GAAP*	46	91.29	21.496	F-ratio = 20.286, df2 = 15.173, sig. = 0.000		
	IFRS	14	39.26	41.569			
Total		60	79.15	35.011			

Table no. 4. The results of ANOVA analysis for relatedness and accounting practice
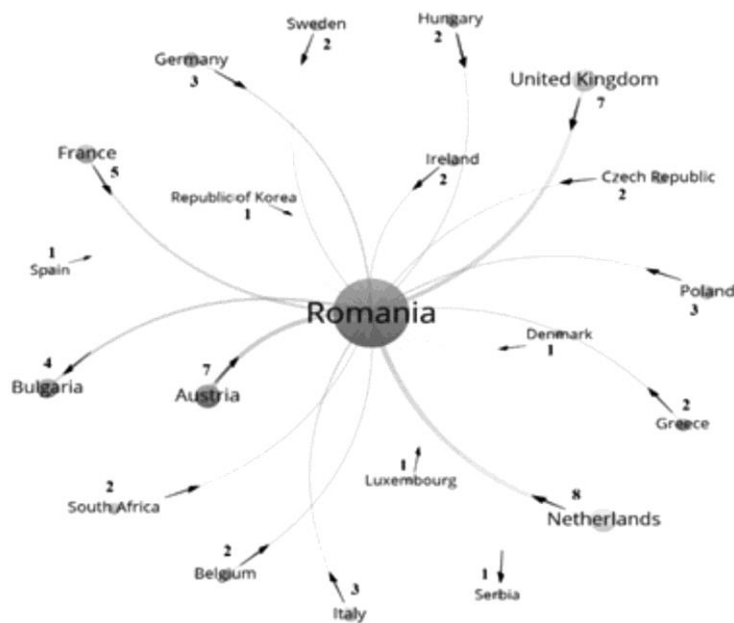
Source: Authors' own processing using SPSS 25.0.

As one can notice in **Table no. 4**, although the number of transactions between unrelated companies is close to the one between related (27 and 33 transactions, respectively), the purchased stake in related companies is way higher than the one purchased in conglomerate M&As. Given the opinion according to which the financial reasons conduct to conglomerate M&As, rather than the productivity ones (Nelson-Espeland and Hirsch, 1990), the acquirers purchase a stake which could bring economic benefits, but they don't consider acquiring a company as a whole. Also, the mean of the stake purchased in target companies which apply local GAAP (91.29%) is considerably larger than the stake purchased in companies that apply IFRS (39.26%). This means that acquirers are purchasing local companies in which they are interested and not stakes in listed companies. The Welch and Brown-Forsythe tests are used to test for a significant difference across the means, when the equal variances test results in the rejection of the null hypothesis. In our case, the two tests are significant for both ANOVAs (p<0.01).

The geographical representation of the 60 cross-border M&As is presented in **Figure no. 2**.

Figure no. 2. Cross-border M&A in which a Romanian company is involved, 2010-2017

Source: Authors' own processing using VOS Viewer 1.6.9

As seen in **Figure no. 2**, the most transactions took place between companies from Romania (as targets) and acquirers located in Netherlands (8 companies), Austria and United Kingdom (7 companies) and France (5 companies). It is very noticeable the fact that Romanian companies acquire very few companies from abroad (4 in Bulgaria and 1 in Serbia) which gives us a proportion of transactions as cross-border M&As, in which Romanian companies were involved: 55 transactions in which a Romanian company was target vs 5 Romanian acquiring companies (with a total deal value of 11,445.46 th. euro).

Correlation coefficients, estimated for the numeric variables included in the estimation of the acquired stake, are presented in **Table no. 5**.

Table no. 5. Estimated values for the Pearson correlation coefficients

Variables	Final stake (%)	Productivity ratio	Deal value
Final stake (%)	1	.081	.156
		(.541)	(.233)
Productivity ratio (Prod_r)		1	-.040
			(.759)
Deal value (Dv)			1

Source: Authors' own processing using SPSS 25.0.

Pearson correlation shows us that, between the selected numeric predictors, no correlation has been found. Further testing is necessary, so we use one-sample Kolmogorov-Smirnov test, in order to verify the differences in the general shapes of the distributions in our sample (Massey Jr., 1951). The result of the K-S test showed a small p-value (p = .000), which means that there are substantial differences in shape, spread or median of our numeric variables (deal value, productivity ratio and stake). This could be the result of small sample of transactions. As a result, we decide to use natural logarithm (ln). We use logarithmic transformation of the Deal value, Final stake and Productivity ratio in order to pull outlying data from a positively skewed distribution closer one to another, in order to have the variables normally distributed. According to second Kolmogorov-Smirnov Test, the natural logarithm improved the p-value (for deal value, p = .200; for productivity ratio, p = .005; for stake, p = .000).

Once the values of the correlation coefficients have been estimated, to study the causality, **Table no. 6** displays the estimations of the parameters of the three regression models proposed for testing and validation.

Table no. 6. Estimations of the parameters of the regression models proposed for analysis

Variables	Model (1)		Model (2)		Model (3)	
	Coeff .	t	Coeff .	t	Coeff .	t
Intercept	**2.577*****	3.669	.653	.593	**3.378*****	3.162
Ln(Dv)	.112	1.512	**.303****	2.472	**.219****	2.122
Ln(Prod_r)	.097	1.550	**.281*****	2.998	**.250*****	3.202
R_unr	**.878****	2.390	**3.579*****	2.673	**2.676****	2.378
Ln(Dv)·R_unr	-	-	**-.288***	-1.951	-.181	-1.456
Ln(Prod_r)·R_unr	-	-	**-.308****	-2.571	**-.269*****	-2.706
AccP	-	-	**-**	-	**-1.666*****	-4.914
Observations	60		60		60	
R-square	.143		.293		.523	
F-value	$F_{(3,56)} = 2.945$		$F_{(5,54)} = 4.230$		$F_{(6,53)} = 9.149$	
p-value	.041		.003		.000	
Multicollinearity tests	τ_i = .857, VIF = 1.132				τ_i = .477, VIF = 1.005	

Source: Authors' own processing using SPSS 25.0. Dependent variable *In (St)*. Significance levels: *p < 0.1, **p < 0.05, ***p < 0.01.

Based on the data in **Table no. 6**, the fact that the two companies are related, positively and significantly influence the stake purchased in the target company, compared to the situation when the acquisition is between companies that are not related (conglomerate). Considering the model presented in Eq. (2), we also studied the interaction between the deal value and the fact that the two companies are related and, also, between the productivity ratio and the relatedness between the companies involved (horizontal or vertical acquisition). In this case, both the deal value and the productivity ratio have a positive and significant influence on the stake purchased in the target company, next to the fact that the companies are related, fact that is consistent with the previous model. At the same time, the productivity ratio of a related target company has a

negative influence on the stake, to which we add the deal value paid, and the productivity of the companies, which have a negative significant influence on the dependent variable. Moreover, the combined variables raised the R^2, which is the capacity of the model to predict the variance in the dependent variable (stake), from 14.3% to 29.3%. The addition in the model of the accounting practice of the acquired company increased the predictability of the model with 23%, and the fact that the target company applies IFRS, as reporting system, increases the stake purchased by the acquirer.

To continue to study the causality between our variables, **Table no. 7** displays the estimations of the parameters for the third proposed regression model, considering the accounting practice of the target a control variable (local GAAP and IFRS).

Table no. 7. Estimations of the parameters of the second regression model, when accounting practice is considered to be a control variable

Variables	Model 2 – Local GAAP		Model 2 - IFRS	
	Coeff .	t	Coeff .	t
Intercept	**2.875*****	7.010	.343	1.047
Ln(Dv)	**.131*****	2.963	.345	-1.042
Ln(Prod_r)	**.126*****	3.679	**.058***	2.443
R_unr	**1.499*****	2.943	.357	-.992
Ln(Dv)·R_unr	**-.111*****	-2.019	.329	1.082
Ln(Prod_r)·R_unr	**-.128****	-2.916	**.047****	-2.616
Observations	46		14	
R-square	.420		.800	
F-value	F(5,40) = 5.791		F(5,8) = 4.010	
p-value	.000		.077	

Source: Authors' own processing using SPSS 25.0. Dependent variable *In (St).* Significance levels: *p < 0.1, **p < 0.05, ***p < 0.01.

Based on the information presented in **Table no. 7**, we can estimate the influence of the accounting practice of the target company in the year of the acquisition, considering it a control variable. For the target companies that are applying local GAAP, all the predictors have a significant influence on the dependent variable, the purchased stake. In case of the companies that are applying IFRS as a reporting system, the productivity ratio and the fact that the companies have related activities have a positive and significant influence on the stake purchased by the acquirer.

Conclusions

When entering in a transaction so transforming, like M&As, there are some determinants in choosing a target company that fits the needs of the acquirer: the economic resources of the acquiree, tangible or intangible, its employees, its market share, its geographical position, and examples can continue. In this paper, we analyze the acquisitions in which a Romanian company was involves, either in the position of the acquirer or as a target. Given our descriptive analysis, from our sample of 60 transactions (60 bidders and 60 targets), only in five cases the Romanian companies were acquirers, for the rest of 55 transactions, the Romanian companies were targets.

Thus, the remarks that we make as conclusions are applying to this particular situation.

Starting from the idea that, in case of conglomerate/unrelated M&As, the acquirers are considering a target company based on its financial rather than its productive capacities, and the opposite in the case of related M&As, we tested and validated three hypotheses which stated that the stake purchased by the acquirers in the target companies is influenced by the relatedness of their activities, the deal value and the productivity of the involved companies. As a result of the analysis, we conclude that, when the predictors are taken separately, only the relatedness of the activities is significantly and positively influencing the purchased stake. But, when analyzing the combined influence of the aforementioned factors, we noticed that, in the case of related activities, both deal value and the productivity ratio have a negative influence on the purchased stake. The accounting practice of the target in the year of the M&A, taken as a predictor in our HLR, has a negative influence on the purchased stake, which means that the purchased stake is higher in the case of the companies that are applying local GAAP, fact that is confirmed also by the descriptive statistics of our sample. When considering the accounting practice, a control variable,

we notice that, when applying local GAAP, the predictability of the model is lower than in the case of IFRS. On the other hand, in the case of the target companies that are applying local GAAP as reporting system, all our predictors have a significant influence, while, in the case of applying IFRS as reporting system, the relatedness of the activities and the productivity ratio of the companies are significant, which means that the acquirers are searching for related companies, that are reporting a good productivity of their employees (revenues per employee).

One of the limits of the study is the small number of transactions in our sample. The fact that many involved companies (acquirers and targets) reported zero employees in the year prior to the M&A made the calculation of the productivity ratio impossible. Second, many companies involved in M&As, according to Zephyr database, were missing the financial data in Orbis database.

For future research, we intend to use the information regarding Romanian acquisitions, taken from Zephyr database, and analyze the influence of macroeconomic conditions of the involved companies' residence countries, in the year of the M&A.

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