

THE IMPACT OF FINANCIAL PERFORMANCE IN MERGERS AND ACQUISITIONS. EVIDENCE FROM THE REPUBLIC OF MOLDOVA.

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Margareta LUPAȘCU

Academy of Economic Studies of Moldova

Chișinău, Republic of Moldova

Email: lupascu.margareta@ase.md

ORCID: <https://orcid.org/0009-0002-8375-8855>

Abstract: *The performance of mergers and acquisitions (M&A) has become a frequent topic of academic debate. This research examines how capital structure, company size, and the level of indebtedness impact the performance of such transactions. The main objective is to determine which factors affect the return on assets in merger performance, focusing on the companies from the Republic of Moldova.*

Research methodology: *The quantitative research involves the systematization and grouping of data from financial statements provided by the National Bureau of Statistics for companies implicated in M&A, as well as multiple linear regression analysis to assess how changes in the Return on Assets (ROA) ratio depend on independent variables. Additionally, RStudio, Jasp, and Excel were used for statistical data processing, and the Web of Science database was used to identify relevant literature.*

Our findings *confirm the research objectives and questions using three multiple linear regression models, which validate the significant positive relationship between ROA and capital structure for the sample of acquirers. At the same time, net profit and gross margin are the factors that determine variation in ROA, as well as the pre-merger year for the sample of the acquirees, through an inverse relationship, validated using robustness tests.*

Keywords: *mergers and acquisitions (M&A); business combinations; financial performance.*

JEL: G34, Q56, M41, M48

Introduction

Mergers and acquisitions (M&A) represent a complex, multidimensional, and multidisciplinary field that drives investment and business consolidation on an international scale.

The flow of recent studies on this topic confirms the clear interest of the academic community and the business sector in quantifying the efficiency, quality, and predictability of these processes, thereby influencing managerial decisions and fostering synergies among the parties involved.

Recent publications describe the scope of an in-depth study on the factors influencing the initiation of an M&A process, as outlined by Wan L., Zheng Y., and others (Wan et al., 2026), which compared various regression analyses of Chinese firms as the main purpose. Researchers Loebiantoro I.Y., Dewi H. (Loebiantoro et al., 2025) and others investigate pre- and post – merger performance through the share market price and other similar indicators using a sample of listed companies in Indonesia.

Another line of research examines M&A performance in relation to Environmental, Social, and Governance (ESG) scores and the market value of acquirers (Kamiloğlu & Genç, 2026); (Zabawa et al., 2025) or with the value of the acquisition premiums (Laus et al., 2025).

Financial performances as described by economic and financial indicators, such as return on assets (ROA), firm size, and leverage ratios, can be found in the works of researchers Rufolo A. (Rufolo et al., 2025), Panda M. (Panda et al., 2025), or Podskabka T. (Podskubka et al., 2025).

The Romanian academic community is becoming more competitive thanks to the contribution by Chiriac I. (Chiriac & Rusu, 2025) regarding the business environment and the financial performance of M&A transactions in Europe, which similarly applies economic indicators such as ROA, return on equity (ROE), and net profit margin.

At the same time, the study of Romanian acquisitions that operate with discounts on M&A offers was the focus of authors Dragotă V. și R. Ciobanu (Dragotă & Ciobanu, 2017).

Previously, quantitative and qualitative empirical research has not been conducted in the Republic of Moldova. However, this topic was briefly addressed in the articles by Cojocaru M., Hromei A.S. (Cojocaru & Hromei, 2014), Grigoroii L., and Lazări L., which discuss the accounting treatment of business combinations in accordance with national and international regulations (Lazari & Grigoroii, 2016)

This paper presents a comprehensive analysis of the financial performance of companies involved in M&A transactions in the Republic of Moldova, by identifying the factors that influence managerial decisions leading to corporate mergers. To properly conduct the econometric modeling, the following indicators were tested: company size, capital structure, debt ratio, net profit, and gross profit margin. The purpose of this research is to conduct a descriptive and in-depth analysis of the financial indicators preceding and resulting from the M&A process and to assess their quality for enterprises in the Republic of Moldova

The scientific approach aims to explain the following research questions:

RQ1: How does the capital structure determine post-merger performance?

RQ2: What are the most significant economic and financial factors that determine the decision to merge in the business environment of the Republic of Moldova?

RQ3: How does the Year of the transaction determine the variation in return on assets?

The importance of studying M&A leads to a unique assessment of this process within the Republic of Moldova, as this is among the first studies of its kind in the sector. Moreover, it offers a highly relevant and unique contribution to the M&A process, shaped by the impact of the Covid-19 pandemic, followed by the conflict in the neighboring country and the current international instability resulting from shifts in the global economic landscape.

Basic content

The financial performance of M&A represents a distinct area of research for the academic sector. In recent literature, the selection of control variables plays a critical role in isolating the effects of M&As. Researchers Bai Y., Zhang H. (Bai & Zhang, 2024), Chakraborty I., and Kattuman P. (Chakraborty & Kattuman, 2023) advocate the use of rigorous indicators, including operating profit margin, firm size (logarithmic), Tobin's Q ratio, and market density (number of companies) Regarding the selection of the dependent variable, the use of return on assets (ROA) as a key measure of M&A efficiency is supported by the work of Lachwani V.M., Tiwan S., and Jauhari S. (Lakhwani et al., 2018). This demonstrates that ROA, along with net profit margin and asset turnover, contributes to the assessment of operational success. Results are based on 24 acquiring firms during the 2005-2006 period.

Inspired by the dynamics of the M&A market in Romania between 2010 and 2018, the author Aevoae G., M. (AEVOAE, 2024) designed a multiple linear regression model. The author uses the following variables: the number of shares controlled, the percentage stake acquired, the size of the target entity, and the accounting regulations in effect during that period.

Research methodology

Our study analyzes the effectiveness of M&A processes in the Republic of Moldova during the 2020-2025 period. This time section was marked by a series of external shocks, from the Covid-19 pandemic to the energy and logistics crises triggered by the conflict in Ukraine, which destabilized the domestic business environment. The study aims to assess the relevance of the ROA ratio as a post-merger performance metric, while also investigating the correlation between capital structure, firm size, and the quality of these transactions

The purpose of the exercise is to assess the quality of M&A grouped by company categories: acquirers in the corporate and state sectors, and acquirees. The data collected covers a 375-enterprise sample, structured by 164 acquirers, then 209 acquirees, and only 2 companies were merged by consolidation.

The information was selected from publicly available financial statements from the National Bureau of Statistics for the years preceding and concurrent with the transaction.

Drawing inspiration from the research of Rufolo A. (Rufolo et al., 2025), Panda M. (Panda et al., 2025), Podskabka T. (Podskubka et al., 2025), and Chiriac I. (Chiriac & Rusu, 2025), we define the dependent variable: return on assets (ROA), to observe the performance of M&A.

To measure the pre- and post-merger effects, the independent variable Year was selected as binary (dummy), which means the value 1 represents the merger termination process year, and 0 the preceding year. This variable identifies the pre- and post- mergers effects, as well as the resulting economic indicator arising from the consolidation of assets, liabilities, and equity by the companies.

Table 1 presents all the variables selected in the study

Table 1: Variables used in analysis

Variable type	Symbol	Representation	Explanation
Numeric, dependence	ROA	Net profit ÷ Total assets	> ROA – efficient uses of assets, < ROA – inefficient investment uses of assets
Numeric, independence	PN	Net profit	The final result of the activity
Numeric, controlling	Capital	Ln (Equity)	The structure of capital
Numeric, controlling	Liabilities	Ln (Total liabilities)	Leverage
Numeric, controlling	Active	Ln (Total assets)	Company size
Numeric, independence	Gross marginal	(Sales revenue – Cost of sales) ÷ Sales revenue	Cost coverage ratio form sales
Numeric, independence	Ira	Sales revenue ÷ Total assets	> 1 efficiency in the management of total assets < 1 – inefficiency in the management of total assets
Dummy	Year	Year of M&A	1 – completed M&A 0 – the year before the M&A

Source: The author's own data.

The following multiple linear regression models were selected as mathematical decisive solutions:

The ROA efficiency model applied to the sample of state-owned institutions:

$$ROA_{public} = \alpha + \beta_1 (Capital) + \beta_2 (Ira) + \beta_3 (PN) + \beta_4 Year + \varepsilon$$

The ROA efficiency model employed for the sample of acquirers in the corporate sector:

$$ROA_{corporative\ sector} = \alpha + \beta_1 (Capital) + \beta_2 (Liabilities) + \beta_3 (Gross\ margin) + \beta_4 Year + \varepsilon$$

And, the ROA efficiency model for the acquirees:

$$ROA_{acquirees} = \alpha + \beta_1 (Active) + \beta_2 (Capital) + \beta_3 (Gross\ margin) + \beta_4 Year + \varepsilon$$

The analysis of the research questions and econometric models was conducted in RStudio, Excel, and JASP tools.

Research results

The three multiple linear regression models are successively verified, validated, and tested using model performance analysis, robustness, and tests for multicollinearity, heteroscedasticity, and residual variation. The data and results are compared between them.

On the one hand, given the relationship with the market size, and on the other hand, with the level of profit, return on assets is an indicator that defines an entity's ability to generate profit by investing in its assets. Initially, using Excel functions, the collected data have been tested in multiple linear

regression models. After several adjustments, exclusions, and verifications, the indicators presented in Table 1 are appropriate and suitable.

The analysis of ROA is defined by the gross margin, the capital structure, which, to reduce data dispersion, is mathematically transformed into the natural logarithm of equity, the firm size (logarithm of total assets), the asset turnover ratio, and the binary variable „Year”, representing the current or preceding merger year.

Descriptive statistical data for the variables are presented in Table 2 for the state-owned acquirers, in Table 3 for those in the corporate sector, and in Table 4 for the acquirees, respectively.

Table 2: Descriptive statistics for state-owned acquirers

Variable	Minim	Maxim	Media	Standard error	Median	Kurtosis	Nr. Observ.
ROA	-1,25	0,36	-0,02	0,20	-0,01	16	72
PN	-71654579,0	43629366,0	-4652290,83	19550963,49	-96202,50	3,99	72
Ira	0,0000	12,81	1,81	2,45	0,88	6,85	72
Capital	0,0000	10,13	6,79	2,23	6,99	3,29	72
Year	0,0000	1,0000	0,47	0,50	0,0000	-2,02	72

Source: Author's processing

Table 3: Descriptive statistics for corporate sector acquirers

Variable	Minim	Maxim	Media	Standard. error	Median	Kurtosis	Nr. Observ.
ROA	-3,72	1,98	0,03	0,39	0,04	43,91	252
Gross margin	-2,63	1,00	0,28	0,37	0,20	14,83	252
PN	-167120681,0	1.127483	15158155,45	86211783,93	454842,50	114,25	252
Capital	0,00	9,74	6,17	2,53	6,91	1,65	252
Year	0,00	1,00	0,52	0,50	1,00	-2,00	252

Source: Author's processing

Table 4: Descriptive statistics for acquirees

Variable	Minim	Maxim	Media	Standard. error	Median	Kurtosis	Nr. Observ.
ROA	-1357,09	8173,91	16,38	337,01	0,00	528,43	649
Gross margin	-5794,15	1,38	-8,72	227,45	0,16	642,00	649
Liabilities	0,000	10,84	5,35	2,96	6,38	-0,46	649
Active	0,00	10,47	6,49	2,14	6,85	3,43	649
Year	0,00	1,00	0,46	0,50	0,00	-1,97	649

Source: Author's processing

As we mentioned, the main goal of this study is to evaluate M&A performance by looking at the variables that affect ROA. Consequently, all three models are calculated using the ordinary least squares (OLS) method, which estimates the values of return on assets ROA determined by indicators such as changes in net profit, gross margins, firm size (defined by the logarithm of total assets), equity structure, debt ratio (logarithms of liabilities), and asset turnover, as well as the year.

The results obtained for these three models are presented in Table 5

Table 5: Coefficient values for the ROA models

Variables	ROA state-owned acquirers			ROA corporate sector acquirers			ROA acquirees		
	Coef. β	Standard Error	P> t	Coef. β	Standard Error	P> t	Coef. β	Standard Error	P> t
Intercept ε	-0,1276	8.198	0,12443	-0,282	7.005	0.00128**	30.39		0.035*
Gross margin				0,1521	6.419	0,01861*	-1.41720	-79138	<0.001***
Liabilities							-	3.22295	0.001***
Active							11.03649		
Capital	0,02771	1.052	0,01046*	0,0383	9.599	<0.001***	7.17767	3.34321	0.032171*
PN	0,000032	1.132	0,00508**	0.00034	2.828	0.90439			
Ira	-0,02407	9.491	0,01356*						
Year	-0,03548	4.287	0.41082	-0,03662	4.780	0.44436	-	8.24231	0.068638
Nr. observations		72			252		15.03278		
R ² and R ² adjust	0,269		0,226	0,0875		0,0727	0.9078		0.9072
F statistic	6.174				5.921				1585
p-value	0.0002728				0.001448				0.0000022

Note: Significant codes: 0 '***', 0.001 '**', 0.01 '*', 0.05 '.', 0.1 ' ', 1

Source: calculations performed using RStudio.

The econometric model estimates for the state-owned institutions sample involved in Merger processes demonstrate a statistically significant ability to explain the variance in ROA. The model's validity is confirmed by the F-test ($p < 0,001$), while the coefficient of determination ($R^2 = 0,26$) indicates that approximately 26% of the variation in ROA is explained by the selected predictors. The intercept is -0,13, falling within the 95% confidence interval [-0,29; 0,04]. Analysis of the individual parameters reveals the following:

Asset turnover efficiency: The asset turnover ratio has a negative and statistically significant impact on performance ($\beta = -0,02$; $p = 0,014$). This inverse correlation suggests that an increase in asset turnover within state-owned institutions is associated with a marginal decline in profitability.

Capital structure: Equity (log-transformed) has a positive impact on ROA ($\beta = 0,03$; $p = 0,010$). Although the coefficient's slope is small, this is due to the logarithmic transformation of the variable, which smooths out the variation and scales the marginal impact of equity on return.

Net Profitability: the variation in net profit is a direct and positive determinant of ROA ($\beta < 0,001$ and $p = 0,005$). The result confirms that the profitability ratio is structurally dependent on the amount of profit generated.

Time variable: The year of the merger does not have a statistically significant influence on ROA performance ($\beta = -0,04$; $p = 0,411$), suggesting the absence of a trend effect or immediate periodicity in the analyzed data.

Statistical significance was assessed via the t-distribution approximation (Walt test), using the RStudio statistical programming environment.

For the corporate sector, the regression model was estimated similarly, using the ordinary least squares (OLS) method, with gross margin, capital structure, net profit, and the time variable (Year) as independent variables. Although the model has a modest coefficient of determination ($R^2 = 0,0875$), it remains statistically significant ($p < 0,001$). The low value of R^2 suggests that ROA in the private sector is influenced by a wide range of exogenous factors not included in the current

specification; however, the selected variables remain relevant predictors. The model's constant is -0,23 ($p = 0,0001$), indicating a baseline level of negative profitability in the absence of the predictors' influence.

The components of the model highlight the following trends:

Gross margin: There is a positive and significant impact on ROA, with an elasticity of 0,15 ($p = 0,019$). The result confirms that optimizing production costs and increasing the gross margin are the key drivers of ROA.

Capital structure: Capital structure has a significant positive effect ($\beta = -0,04$; $p = 0,001$). From an economic perspective, the coefficient indicates that a one-unit increase in capital (as measured by the financial proxy used) results in a quantitative improvement in ROA.

Insignificant factors: Unlike in the previous model, net profit and the year of the merger do not result in statistically significant ROA changes in this sample; the p -values exceed the critical level of 0,05. These findings highlight greater heterogeneity in corporate sector performance with regard to these indicators.

In conclusion, both models support the hypothesis that market capitalization and profit margin are the main contributors to ROA following a merger, while time-dependent variables remain neutral during the intermediate stages of the reorganization process.

Next, we will test the ROA model for acquirees that publish their final financial statements before the merger.

In terms of predictive power, the last model is the most robust in this research, exhibiting a substantial coefficient of determination ($R^2 = 0,907$) and a high overall statistical significance ($p < 0,001$). This R^2 value indicates that approximately 90,7% of the variation in ROA is explained by the variables included in the study. The intercept has a value of 30,38 and is statistically significant ($p = 0,00026$). A detailed analysis of the coefficients reveals the following correlations:

Firm size (log-transformed): The size of acquirees has a positive and statistically significant influence on ROA. The β coefficient of 3,34, at a significance level of $p = 0,032$, confirms that larger firms (in terms of total assets), achieve higher returns on assets in the pre-merger period or are attractive to acquirers.

Liabilities level (expressed logarithmically): similar to firm size, the level of liabilities has a significant positive impact on performance ($\beta = 3,22$; $p = 0,001$). This result suggests that acquirees make effective financial use of leverage, where the raising of external funds has contributed to optimizing capital efficiency.

Gross margin: The gross profit margin has a statistically significant effect, but one that is inversely proportional to the dependent variable ($\beta = -7,9138$; $p < 0,0001$). The extremely steep negative slope indicates a high sensitivity of ROA to fluctuations in gross margin in this specific sample, suggesting possible inefficiencies in the management of direct operating costs.

Temporal variation (Year): Consistent with previous models, the time factor does not exert a statistically significant influence on ROA variance, confirming the structural stability of the model over the analyzed period.

In order to ensure the robustness of the results and to stabilize the variation, the variables related to size, liabilities, and capital structure were subjected to logarithmic transformation, a procedure essential in modeling heterogeneous financial data. The findings obtained through the RStudio tool validate the hypothesis that the performance of acquirers and acquirees was governed by their ability to scale and by their capital structure management strategies prior to consolidation.

However, the final validation of the econometric models involves a comprehensive analysis, including the application and verification of tests for normality, heteroscedasticity, multicollinearity, and variable robustness, as presented in Table 6.

Table 6: Results of econometric tests on the ROA models

Model type	ROA owned-state acquirers	ROA corporate sector acquirers	ROA acquirees
P-value	0,0002728	0,0001448	<0,0001
F-statistic	6.174	5.921	1585,381
R ²	0,2693	0,0875	0,908
R ² adjust	0,2257	0,07272	0,907
Shapiro – Wilk Test (residuals)	Partially uniform, W= 0,8983282 p-value = 0.0026246	Non-uniform W= 0,4997955 p-value < 0.0001	Non-uniform, W= 0,1331846 p-value < 0.0001
Dublin – Watson Test	Yes DW = 1,3842, p-value = 0,002811	Yes DW = 1.8587 p-value = 0,1292	Yes DW = 1,9929, p-value = 0,4653
Breusch-Pagan Test Homoscedasticity	Non BP=37.795 $\chi^2 = 81.59728$ DF=1	Non, BP=17.842 $\chi^2 = 318.7137$ DF = 1	Non, BP= 18.735 $\chi^2 = 1.93774$ DF = 1
Multicollinearity	Weak for all predictors (1.01-1.20) <5	Weak for all predictors (1.003-1.045) <5	Weak for all predictors (1.02-3.14) <5

Source: calculations performed using RStudio.

The ROA models analyzed for the three categories of companies verify the heteroscedasticity, multicollinearity, and autocorrelation tests. The only test that yields different results is the Shapiro-Wilk test regarding the normal distribution of the residuals. The residual normality can be achieved for a sample of up to 100 observations. In this case, the sample of own-state institutions alone consists of 72 observations. However, the test results confirm a partial uniformity of results.

Discussion

This research acknowledges the typological and methodological diversity of the regression models employed in the economic literature. However, the models underlying this scientific endeavor were specifically designed to assess the dynamics of the ROA in the context of mergers in the Republic of Moldova, representing an original and unique empirical contribution to the local academic literature. The validation of these results is corroborated by reference studies demonstrating that, in the analysis of real financial data, deviations from standard assumptions of normality or homoscedasticity do not necessarily validate the robustness of estimates. According to research conducted by Gu Y. and others (Gu et al., 2025), the effect of independent variables in complex models can be significant even in the absence of a normal distribution of residual values, suggesting the presence of specific determining factors that may require alternative forms of statistical data treatment.

A key robustness indicator of the analyzed models is the p-value, which, for all three estimated equations, falls below the critical level 0,001. This value indicates a very high probability of a significant relationship between the dependent variable ROA and the set of selected independent variables. The significance of the research reported by Fuad J. (Fuad & Jatmiko, 2022) and Agyei-Boapeah (Agyei-Boapeah et al., 2019), reinforces confidence in the predictive power of the analysis. The exploratory performance of the models varies depending on the specific characteristics of the samples analyzed, offering different perspectives:

- Acquires Model: demonstrates exceptional predictive power, with a coefficient of almost complete determination of approximately 90%, reflecting an almost complete determination of performance based on the selected pre-merger factors.
- Owned-state Acquirers: have an R^2 of 27%, a value considered robust in applied econometric studies for the public sector.
- The corporate sector ROA model: although it shows a coefficient of 8,7%, it remains statistically significant, indicating that, while performance in the private sector is influenced by a multitude of exogenous factors, the variables included in the model retain a relevant explanatory role

In conclusion, from an econometric standpoint, for all the models analyzed, the probability that the relationship between the selected financial indicators is purely coincidental is less than 0,1%, which demonstrates the scientific value of the research.

At the same time, for the corporate sector acquirers, the factors that directly influence the decision to merge are much more sophisticated, which suggests that we should broaden our scope to include organizational culture, technological integration, post-merger management, and merger premiums. Confirming homogeneity (or appropriately handling heteroscedasticity, where applicable) ensures that error variance does not distort the results. The graphical representation of the results of the residual and model variation, illustrated in Figure 2, provides a visual validation of the stability of the identified relationships, demonstrating that the models are capable of capturing the economic regularities of M&A in the Republic of Moldova.

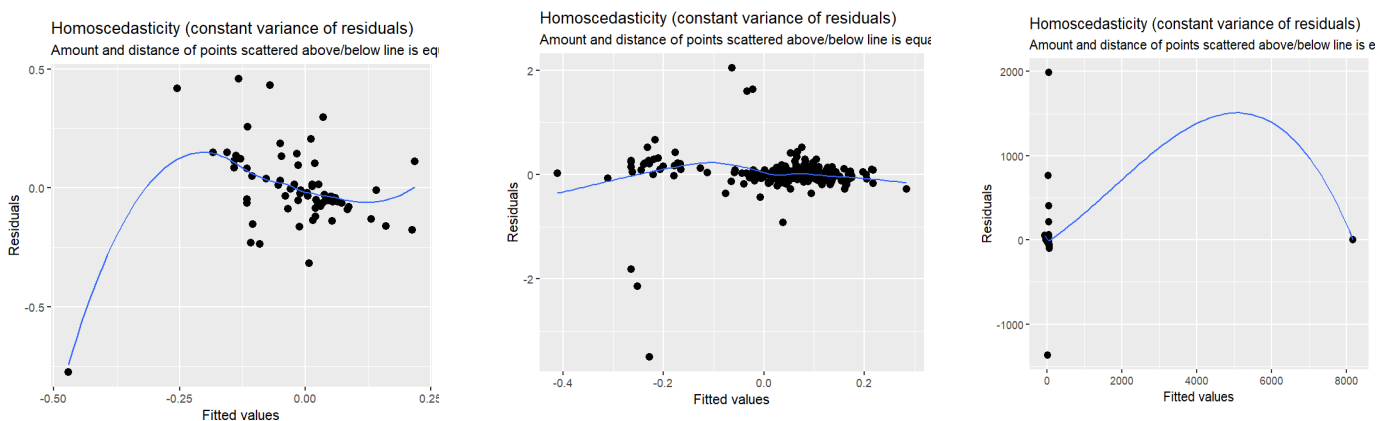


Figure 2: heteroscedasticity of the ROA models
Source: Author's own creation using the RStudio tool.

Consequently, the variance of the residuals remains constant across the values of the independent variables, and the absence of the „funnel” in the residual plot for all three models confirms homoscedasticity, as further supported by the residual of the Breusch-Pagan test. Although the residual distribution plot for the sample of corporate sector acquirers displays slight forms of heteroscedasticity, the formal Breusch-Pagan test confirms the stability of the variance, which validates the application of the OLS method.

Furthermore, collinearity verifies the degree of correlation or influence of the independent variables on ROA. The results of the test confirm the effectiveness of the predictor selection, as illustrated in Figure3.

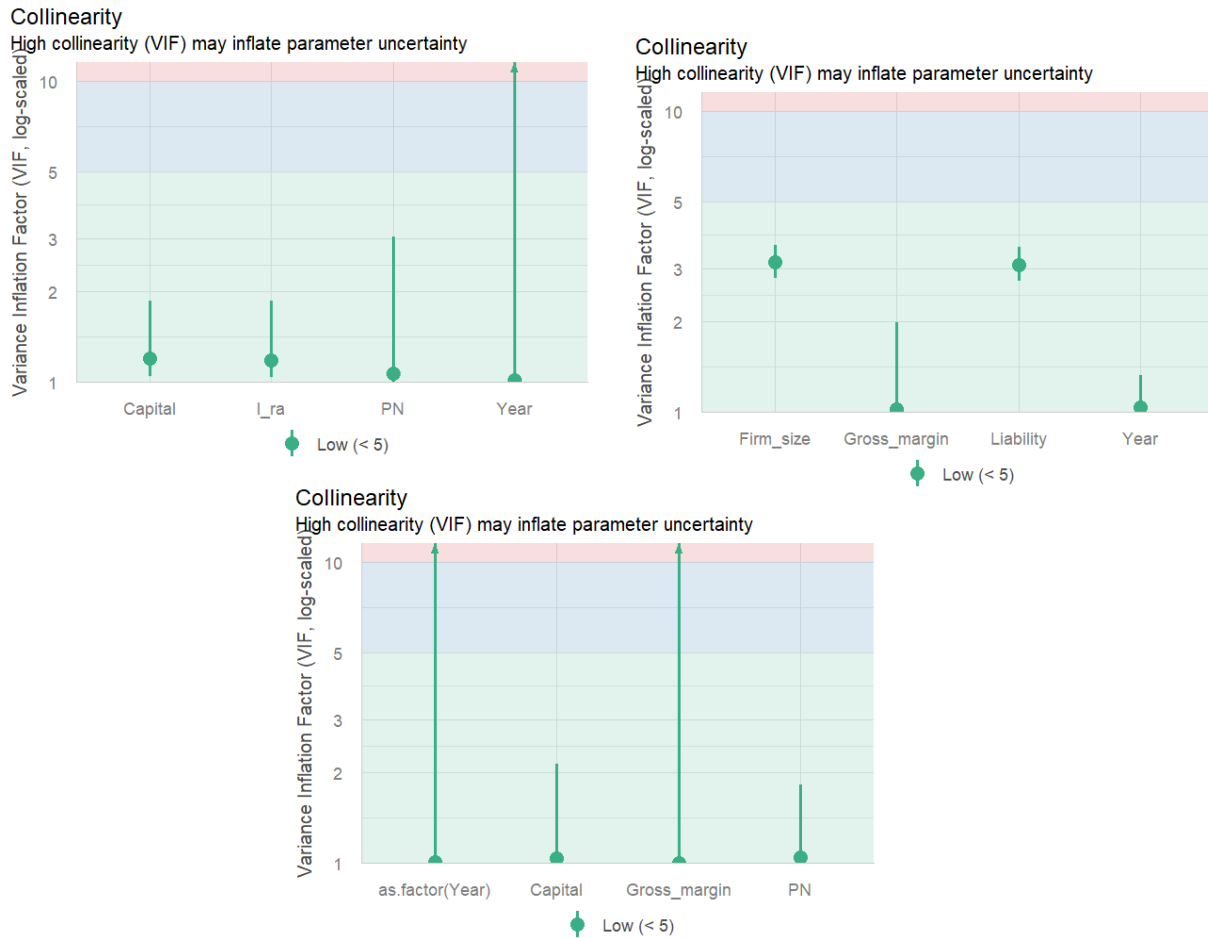


Figure 3: Multicollinearity test ROA models
 Source: Author's own creation using the RStudio tool

Thus, factor loadings below 5 indicate that the variables selected in the respective models measure distinct aspects of the activity, thereby providing a coherent representation of reality. An additional step in verifying the degree of factor influence consists of applying variable robustness tests, which validate the research RQ2 question through Table 7.

Table 7: Variable robustness test for ROA models

Variables	ROA own-state acquirers	ROA corporate sector acquirers	ROA acquirees
	Coef. β HCI	Coef. β HCI	Coef. β HCI
Gross margin		0,152***	-1,417***
Capital	0.028**	0,038**	
PN	< 0,001***		
Year			-15,033*
Intercept ε	-0,128*		

Note: significant code: 0 '***', 0.001 '**', 0.01*', 0.05 '.' , 0.1 ' ', 1

Source: calculations performed using RStudio

Therefore, the return on assets analyzed based on the sample of state-owned institutions is determined by the positive variance of capital (estimated using logarithms) and net profit, while the assets

turnover ratio becomes secondary and insignificant. For private acquirers, the same results hold; gross margin and capital continue to determine ROA. For acquirees, firm size (estimated in logarithms of total assets) and liabilities ratio (log-transformed) become irrelevant, but the decline in gross margin and pre-merger performance significantly determine M&A performance.

Thus, the factors that determine managerial decisions regarding business mergers in the Republic of Moldova are: capital, gross margin, net profit, and the pre-mergers year, which provides the answer to research question RQ2. Finally, the normality test – the Shapiro-Wilk test- verifies the uniform distribution of errors or residuals. For all models examined, due to the extremely low p-values, the null hypothesis is rejected, as presented in Figure 4.

Although classical least squares theory assumes the normality of validation errors, the F and t tests, in economic practice, particularly for the samples analyzed, the number of observations is quite large, justified by the presence of extreme values specific to the emerging market in the Republic of Moldova. However, the considerable sample size endures the asymptotic robustness of the OLS estimator, allowing for a valid interpretation of the results obtained.

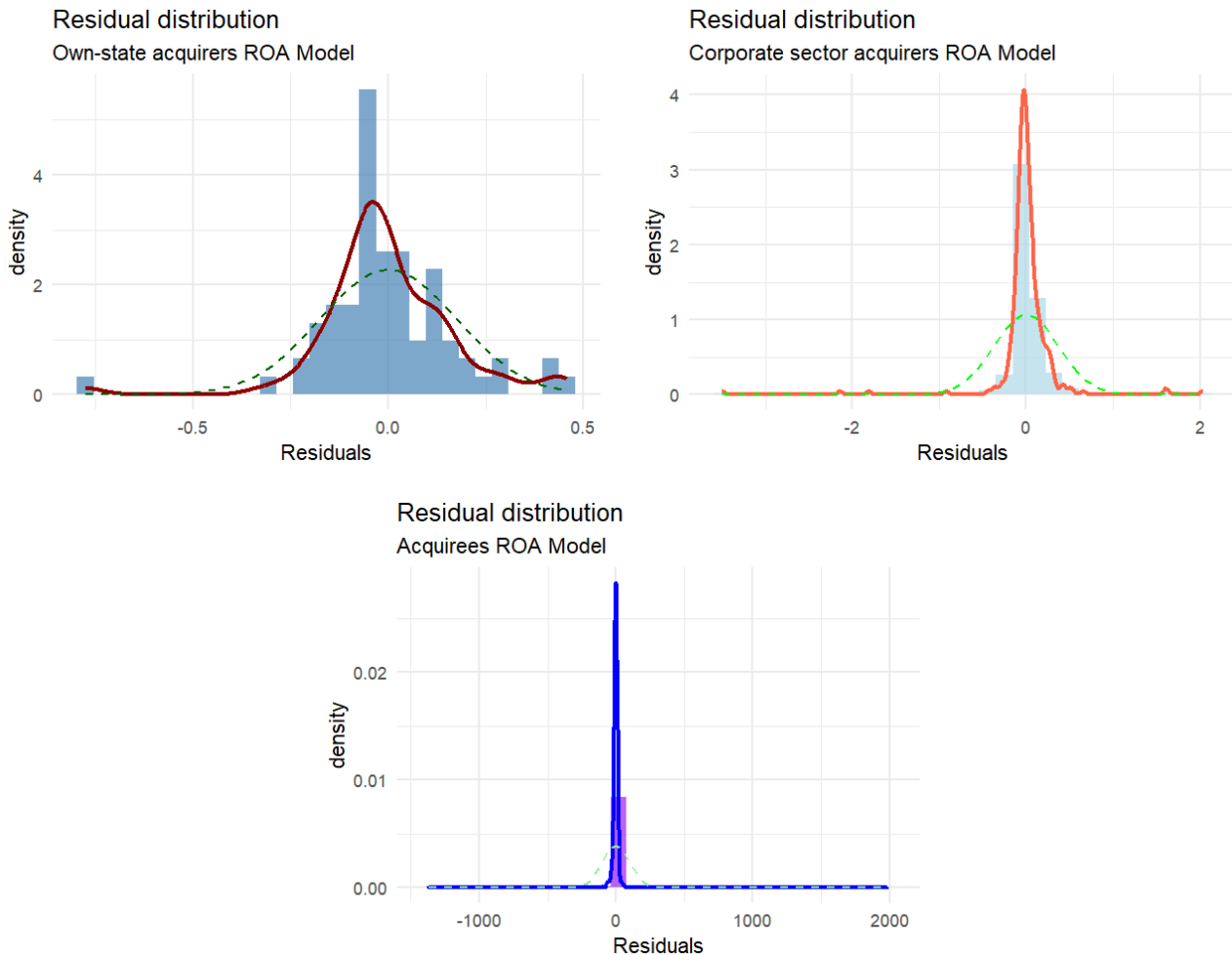


Figure 4: Residual distribution of the ROA models

Source: Author's own creation using the RStudio tool.

Consequently, the purpose of this study is to address the research questions outlined in the introduction. Thus, the capital of acquirers in both samples significantly influences decisions to initiate and carry out mergers, as evidenced by the positive coefficients in the respective models (0,028 and 0,038). Applying a logarithm transformation to equity facilitated the attainment of realistic

results reflecting the situation in the emerging economy of the Republic of Moldova, while also mitigating the non-normality of the row data, reducing its skewness, and demonstrating the scientific validity of the results. Therefore, RQ1 is present in the sample of acquirers and validates the importance of this indicator for the analysis.

Similarly, research questions RQ1 and RQ2, regarding the year of the merger, present, based on both model results and robustness analyses, that they do not have a direct influence on ROA variation, although for acquirees, the pre-merger year significantly contributes to the quality of information contained in the financial statements and to pre-and post – merger years do not produce significant changes in short-term ROA variation, given the results obtained from the models.

In conclusion, the objective of the research was fully achieved, and the findings are satisfactory.

Conclusions

This paper provided a comprehensive econometric analysis of the performance of M&A processes in the Republic of Moldova, using three distinct regression models. The results support a series of valuable conclusions for both academic and policy communities.

First, the validity of the estimated models is supported by rigorous diagnostic tests. The absence of multicollinearity and the confirmation of homoscedasticity of the results for most samples guarantee the stability of the OLS estimators. Although the Shapiro-Wilk test indicated deviation from normality of the errors, the sample size and asymptotic robustness allow to validate interpretation of the identified relationships.

Second, the analysis of determinants highlights the vital role of capital structure and gross margin. Equity for acquirers becomes a pillar of asset profitability stability. The identified positive correlation suggests the success of the local market merger depends on adequate capitalization, capable of absorbing the shocks of the process.

A notable aspect is the role of the time variable. Although most of these models did not present a statistically significant influence on ROA, robustness tests reveal a negative dependence, explained by the likelihood of asset profitability erosion in the pre-merger year.

Finally, the paper demonstrates that, in the context of the Moldovan economy, ROA is not a random phenomenon but is determined by financial fundamentals. The proposed models, validated by robustness tests and supported by remarkable predictive power (especially for state-owned institutions and acquirees), constitute a useful analytical tool.

Reference

1. AEVOAE, G.-M. (2024). Analiza dinamicii pieței fuziunilor și achizițiilor din România. Evidențe empirice privind primele plăți în tranzacții. *Audit Financiar*, 22(174).
2. Agyei-Boapeah, H., Osei, D., & Franco, M. (2019). Leverage Deviations and Acquisition Probability in the UK: The Moderating Effect of Firms' Internal Capabilities and Deal Diversification Potential. *EUROPEAN MANAGEMENT REVIEW*, 16(4), 1059-1077. (WOS:000505279200014). <https://doi.org/10.1111/emre.12307>
3. Bai, Y., & Zhang, H. (2024). Research on the impact of enterprise mergers and acquisitions on technological innovation: An empirical analysis based on listed Chinese enterprises. *PLOS ONE*, 19(11). (WOS:001410505300001). <https://doi.org/10.1371/journal.pone.0309569>
4. Chakraborty, I., & Kattuman, P. (2023). The impact of mergers and acquisitions on performance of firms: A pre-and post-TRIPS analysis of India's pharmaceutical industry. În *ASIA AND THE GLOBAL ECONOMY* (Vol. 3, Numărul 2). ELSEVIER. <https://doi.org/10.1016/j.aglobe.2023.100059>
5. Chiriac, I., & Rusu, V. D. (2025). The Institutional Roots of M&A Success: Evidence from European Business Environments. *Administrative Sciences*, 15(7), 244. <https://doi.org/10.3390/admsci15070244>
6. Cojocaru, M., & Hromei, A.-S. (2014). *ASPECTE PRIVIND OPERAȚIUNILE DE FUZIUNE REALIZATE LA NIVELUL REPUBLICII MOLDOVA ȘI IMPACTUL ACESTORA ASUPRA COMPANIILOR PARTICIPANTE*.
7. Dragotă, V., & Ciobanu, R. (2017). The Unusual Case of the Discount Offers for Taking the Control: Evidence from Romania. *Prague Economic Papers*, 26(1), 36-54. <https://doi.org/10.18267/j.pep.592>
8. Fuad, & Jatmiko, A. (2022). EARNINGS MANAGEMENT AND POST-MERGERS AND ACQUISITIONS? PERFORMANCE: EVIDENCE FROM AN EMERGING MARKET. *POLISH JOURNAL OF MANAGEMENT STUDIES*, 26(2), 130-143. (WOS:000954696800008). <https://doi.org/10.17512/pjms.2022.26.2.08>

9. Gu, Y., Xie, W., Qian, X., & Lv, J. (2025). Peer effect in mergers and acquisitions for green innovation. *Journal of Innovation & Knowledge*, 10(3), 100734. <https://doi.org/10.1016/j.jik.2025.100734>
10. Lakhwani, V. M., Tiwari, S., & Jauhari, S. (2018). Mergers and acquisitions's impact on financial performance: An evaluation with perspective of time. *Journal of Fundamental and Applied Sciences*, 9(5S), 945. <https://doi.org/10.4314/jfas.v9i5s.67>
11. Laus, V., Nirino, N., Shini, M., & Salvi, A. (2025). Are deal premiums affected by ESG and financial distress? *International Review of Economics & Finance*, 102, 104401. <https://doi.org/10.1016/j.iref.2025.104401>
12. Lazari, L., & Grigoroï, L. (2016). Tratatamentul contabil al combinărilor de entități. *Paradigma contabilității și auditului: realități naționale, tendințe regionale și internaționale*, 32-44.
13. Podskubka, T., Jahodova, L., & Arlt, J. (2025). DO MERGERS ENHANCE FINANCIAL PERFORMANCE? EMPIRICAL EVIDENCE FROM THE CZECH REPUBLIC. *Financial Internet Quarterly*, 21(3), 10-27. <https://doi.org/10.2478/fiqf-2025-0016>
14. Wan, L., Zheng, Y., Xu, X., & Wang, R. (2026). Merger and acquisition prediction based on deep learning with attention mechanism. *China Journal of Accounting Research*, 19(1), 100459. <https://doi.org/10.1016/j.cjar.2025.100459>
15. Zabawa, J., Łosiewicz-Dniestrzańska, E., Radło, M.-J., & Napiórkowski, T. (2025). Motivations and Effects of Mergers and Acquisitions on the Warsaw Stock Exchange, Considering ESG Factors. *Comparative Economic Research. Central and Eastern Europe*, 28(4), 159-182. <https://doi.org/10.18778/1508-2008.28.32>