

# THE ANALYSIS OF THE STRUCTURE INFLUENCE AND THE FINANCIAL BALANCE OF ECONOMIC RENEWABILITY IN THE HOTEL-RESTAURANT SECTOR IN DOLJ REGION

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**Abstract:** Research work starts, in its study, from the analysis of the correlation between economic profitability indicators of capital structure and financial stability. After checking the correlations, based on the form of the expression rate economic profitability of capital, we have created a model of factorial analysis. Thus, using the French model DuPont, we obtained a model as the product of the factors that is made up of both financial and structural indicators of financial stability. The level and dynamics of the economic rate of return under the influence of these factors was followed by the calculation of the 15 companies in the hotels-restaurants in Dolj County, the analyzed period 2013 - 2014. The method of the financial analysis is the method applied in the paper chain substitution.

**JEL classification: C15, C58**

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## 1. INTRODUCTION

The research paper has as its main objective to pursue the link between the return on capital and how business management is reflected by indicators of financial structure and financial stability.

Return on economic indicator that is of particular importance for both managers and shareholders and third parties with which the company enters into collaboration reflects the efficiency with which the company's permanent capital was used in the business as a whole. Thus, the manager being constantly concerned with finding an optimum in terms of financing at company level, his decisions may alter the patrimonial structure of the company. Along with changing the structure of property the company produced a series of changes both in terms of the indicators of financial structure such as leverage, financial autonomy rate structure of financing, but also a series of indicators reflecting the financial balance of the undertaking: liquidity, solvency, working capital, working capital requirements, treasury, asset management.

Starting from this idea or simply the principle of operation of a company we wanted to track how the return on that level may be affected by these changes heritage.

To demonstrate these points we made at the end of the work a case study on the sector hotels and restaurants in Dolj County. Analysis was carried out as a result of a partnership between the County Office of Trade Registry and college partnership involving economic and financial analysis of the economic sectors in Dolj

County. Since the latest data provided are 2014 took into account the period 2013 - 2014, during which we substituted using the method demonstrated how the return on capital is influenced by indicators of financial structure, financial balance but and indicators reflecting the efficiency of the sales.

We switched to calculate the influence of structure and financial balance indicators on the rate of economic return as soon as I checked using SPSS correlation between them.

In total 29 companies have selected 15 selection making it by turnover, thus taking into account the most representative sector but also in terms of the analysis that we wanted to achieve.

## 2. CONCEPTS AND TERMS USED

An important step towards elucidating the results obtained as a result of the research is knowing the elements presented in the research and understanding how they are reflected in the economic entity. To conduct this research work we used a number of terms and specific economic and financial analysis methods.

Starting from one of the possibilities of determining the rate of return on economic capital model we developed the permanent factorial analysis<sup>1</sup>:

$$Re = Pe/Kper * 100$$

Thus using the DuPont system, we obtained the following model of factor analysis as the product of several factors with direct action:

$$\begin{aligned} Re &= Pe/Kper * 100 \\ &= Dtml/Kper * Kper/Dtml * Dts/Kper * Ac/Dts * Pe/Ac \\ &= Gi * Auf * Str * Lg * EAc \end{aligned}$$

in which: Gi – indebtedness

Auf – financial autonomy

Str – rate financing structure

Lg – general liquidity

EAc – efficiency of current assets.

Based on the relationship calculation, we note that according to this model of factor analysis, there are indicators of financial structure: indebtedness, financial autonomy and rate structure of financing, and financial balance: general liquidity and efficiency of current assets.

Successful activity of an enterprise is based on a number of principles related to the financial management, or if we refer to the Anglo-Saxon system of financial management. Thus optimal financial management is based on fair use in both the asset side and the equity and debt.

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<sup>1</sup> Erich Helfferth, Financial Analysis Tools and Techniques: A Guide for Managers 1st Edition, 2001, pag. 114

One of the concerns of business managers is to establish an optimum in terms of capital structure, the optimum leading to lower costs for the enterprise. Therefore, any change in the structure of the heritage leads the organization to achieve certain results, favorable or less favorable.

The first one is to use specific change the leverage of capital structure. Author Siminica M., defining the debt as "a general indicator shows the share of debt that they hold medium and long-term debt of a corporation as the permanent capital thereof"<sup>2</sup>.

This indicates the degree to which society can oblige and whether there is a warning. The 15 companies on this we will calculate the ratio of medium- and long-term debt and the permanent capital.

Financial autonomy is the second indicator present in the analysis model, and according to the authors Achim M., S. Borlea it "expresses the company's financial independence, where our analysis will be computed as the ratio between equity and debt company's permanent medium and long term."<sup>3</sup> This rate varies depending on the company's financial policy, the efficiency of its work reflected by the profit.

Another rate used is related to capital structure structurii rate financing. A definition of rate financing structure we find authors Bătrâncea LM Moscviciov A., I. Bătrâncea, which is defined as "an indicator reflecting short-term debt ratio company's permanent capital. This indicator compares the character needs to finance that depends on the specific business activity "<sup>4</sup>. This rate calculated at the 15 companies is calculated as the ratio of short-term debt and the permanent capital.

The following indicators meet the financial analysis model are employed as indicators of financial stability. Economic-financial equilibrium at company level is achieved when fully recovered resources consumed or when revenues reach the same level of costs.

Analysis of financial balance can be followed long term and short term, and achieve and maintain it manifests itself as a trend showing some moments of imbalance or mismatch between financial resources and resource needs of the company.

Economic-financial equilibrium of the company should be understood as a set of correlations which are formed in the rotation of capital.

Maintaining financial stability is a permanent objective of financial policy objective can be considered achieved relevant when the financial year ends with a positive cash. Financiar a balance is a prerequisite for the deployment of profitable and achieving the financial balance can be achieved by adjusting the imbalances that manifest themselves in the current activity of the company.

The first one is specific financial balance overall liquidity. S. Petrescu author defines liquidity as "an indicator that characterizes the ability of firms to honor forward with funds at its disposal, predominantly short-term obligations, it is obtained by comparing current assets to short-term debt "<sup>5</sup>. This is most commonly used indicator to

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<sup>2</sup> Siminică Marian, Diagnosticul financiar al firmei, editura Universitaria, Craiova, 2008

<sup>3</sup> Achim Monica, Borlea Sorin, Analiza financiară a entității economice, Ed. Risoprint, Cluj-Napoca, 2012, pag. 94

<sup>4</sup> Bătrâncea Larissa-Margareta, Moscviciov Andrei, Bătrâncea Ioan, Analiza financiară a întreprinderilor românești, Ed. Risoprint, Cluj-Napoca, 2012, pag. 115

<sup>5</sup> Petrescu Silvia, Diagnosticul performanței întreprinderii cotate pe piața de capital, articol preluat din lucrarea Analiză și evaluare economico-financiară, Anghel I, Robu V., coordonatori, Ed. ASE, București, 2014

assess the company's exposure to short-term maturities. Is the ratio between current assets and current liabilities.

Last indicator used in financial analysis model reflects the efficiency with which current assets used to obtain operating profit. This indicator I thought from the idea of economic efficiency. Efficiency, in general, is the ratio between an element and an element of the effect of exercise.

If the efficiency of current assets, this indicator applied to the 15 companies selected, we calculate the ratio of operating profit and current assets.

### 3. RESEARCH METHODOLOGY

To achieve this analysis, the research team had a pressing need for the actual data contained in the annual financial reporting documents filed by economic entities carrying out specific activities sector hotels and restaurants in Dolj County. In this sense, the University of Craiova, through the Faculty of Economics and Business Administration was able to partner with the County Office of Trade Registry Dolj by which the institution has provided representatives Faculty databases required by them, form which we've got economic data underlying this study, for the years 2013 and 2014.

For reasons of accuracy and adequacy of the elements that will be presented after performing analysis of influence of structure and financial stability on the rate of economic return in the activities of hotels and restaurants in the county of Dolj, a total of 29 business entities engaged in the reference were selected taking into account the turnover as a criterion for determining the most representative organizations 15. They meet the conditions which will lead the study in one direction distorted reflected and the significance of their locally.

Given the theoretical knowledge of students on economic and financial analysis, and practical experience of project coordinators, has designed a factor analysis model that will enable the generation of relevant conclusions and interpretations considered valuable on the activity. Simultaneously they were established and indicators to be taken into account in order to identify economic and financial equilibrium profile in the area of research drawn.

After completing the steps of preparing the basic data necessary to initiate the process of calculation and collection of economic data due to their processing based on the model of factor analysis were calculated following financial indicators: indebtedness, financial autonomy rate, financing structure rate, general liquidity and efficiency of current assets.

Before proceeding to calculate structural indicators influence and financial balance we conducted a verification of the correlation between the return on assets and indicators of structure and financial stability. The correlation was verified by statistical program SPSS index used is the index Pearson correlation. Year in which we have referred to the analysis of the correlation is 2014.

Immediately after performing the method of calculating the influence factor determined by substituting in the chain. Thus were obtained: the influence of leverage, influence the rate of financial autonomy, influence the rate funding structure, the influence of general liquidity and efficiency influence current assets, however an economic organizations that are the subject of this paper. On that basis it has been

determined and the amount of influence, but also the absolute change for each company separately.

Chain substitutions method (successive) consists in the "successive determination of the influence of each factor examined the phenomenon of the change, by changing to other factors being equal. By this, the influence due to the interaction between the factors common to the makers assign further substituted. In this case, the order of importance to calculate factors influences "<sup>6</sup>.

So, we know that most economic phenomena are influenced by two types of factors: quantitative and qualitative factors. So we have two options in choosing the order determining influences. For a more important economic phenomenon presents qualitative factors and quantitative factors that are adopted version - qualitative factors, thereby increasing the importance of already important factors.

After applying correlation analysis and chain substitutions method based on economic theories and those related to economic and financial analysis, they formulated a number of conclusions that the research team has come from the study undertaken. These findings reflect the true structure and financial stability influence on the rate of return in the hotels-restaurants in Dolj County.

#### 4. CASE STUDY, INTERPRETATION RESULTS

Based on the database provided by OJRC Dolj we extract the elements needed to determine the indicators present in the factor analysis model. Thus, after their processing in Excel we calculate the indicators reflected in the following table:

Table 1 - Presentation of the indicators used in factor analysis for the hotels and restaurants in Dolj County, 2013-2014

Re 2013	Re 2014	Gi 2013	Gi 2014	RAUF 2013	RAUF 2014	RStr 2013	RStr 2014	Lg 2013	Lg 2014	Eac 2013	Eac 2014
0.1239	0.1094	0.1765	0.1210	5.6658	8.2642	0.3253	0.1723	0.6700	0.3471	0.5684	1.8289
0.0186	0.0214	0.6382	0.5195	1.5669	1.9251	3.0953	0.4826	1.1657	2.7131	0.0052	0.0164
0.2552	0.1374	0.1124	0.6211	8.8963	1.6101	2.2022	0.8736	0.2065	0.2168	0.5611	0.7252
0.4287	0.1895	0.2947	0.5037	3.3931	1.9852	0.4170	0.1700	0.9732	1.0567	1.0563	1.0548
0.1523	0.0662	0.3356	0.7970	2.9797	1.2547	2.7837	1.8290	0.3557	0.3203	0.1538	0.1131
0.5774	0.1678	1.1005	0.7207	0.9087	1.3875	9.5603	1.2414	0.1795	0.3128	0.3365	0.4321

<sup>6</sup> Bușe L, Siminică M, Cîrciumaru D., Simion D, Ganea M, Analiză economico-financiară, Ed. Sitech, Craiova, 2012, pag. 15

Re 2013	Re 2014	Gi 2013	Gi 2014	RAUF 2013	RAUF 2014	RStr 2013	RStr 2014	Lg 2013	Lg 2014	Eac 2013	Eac 2014
0.1545	0.0337	0.2457	0.4085	4.0697	2.4477	5.6062	0.8331	0.1943	0.3410	0.1419	0.1185
0.1466	0.0875	0.4133	0.6525	2.4196	1.5326	1.7139	0.3545	0.2509	0.5527	0.3409	0.4468
2.4108	0.1696	2.6410	0.9354	0.3786	1.0691	25.7078	0.5863	0.5372	1.5902	0.1746	0.1819
0.0266	0.0168	0.1492	0.1645	6.7023	6.0778	0.1264	0.2760	1.8587	1.1799	0.1130	0.0516
0.2398	0.1405	0.1621	0.3402	6.1704	2.9392	0.3459	0.1301	0.8353	1.6518	0.8301	0.6535
0.0527	0.3434	0.8446	0.3378	1.1840	2.9599	0.1609	0.1416	3.5814	4.7962	0.0914	0.5058
0.7022	0.1130	3.8745	0.9966	0.2581	1.0034	8.2441	0.1059	1.0701	10.0770	0.0796	0.1059
0.1699	0.0790	0.1669	0.7178	5.9927	1.3931	2.3729	0.0918	0.9347	7.9906	0.0766	0.1076
0.6230	0.1759	0.4814	0.5758	2.0774	1.7366	0.9868	1.3976	1.1896	1.2231	0.5307	0.1029
Medium level		0.7758	0.5608	3.5109	2.5058	4.2432	0.5790	0.9335	2.2913	0.3373	0.4297

Source: taken from the excel table

Indebtedness to the average level of the 15 companies decreased during the period under review from 77.58% in 2013 to 56,08% in 2014. This decrease is due to reduced medium and long term debt of the company and return to a optimal level of indebtedness.

Financial autonomy rate on the 15 companies fell during the two years of analysis from 351.09% to 250.58% in 2013 and 2014. This was due to calling companies to bank loans and long-term average in 2014 compared to 2013.

The rate financing structure of the 15 companies registered a decrease of 424.32% in 2013 to 57.90% in 2014. This decrease is due to reduced assive of short-term debt ratio of permanent capital company in 2014.

The overall liquidity in the average level of the 15 companies increased from 93.35% in 2013 to 229.13% in 2014. This increase can have several causes, namely:

- increased stock which resulted in a higher share of current assets in short-term debt;
- increased debt;
- increase in current accounts and cash and cash equivalents on hand;
- decrease of short-term debts to suppliers.

These types of companies that offer stock goods is quite low, therefore the overall liquidity and the current reach a level close to each other because the difference between the current and overall liquidity is even stock merchandise.

Effectiveness of current assets measured as an element of effect (operating profit) and a stress (current assets) increased the 15 companies from 33.73% to 42.97% in 2013 in 2014. This increase in efficiency is due to either an increase in profit activity exploitations or reduce the level of circulating assets.

Before we checked there factorial analysis of correlation between the return on indicators of financial structure and financial stability. Thus the result is reflected in the following table:

Table 2 - The level of correlation between the index

		Re 2014	Gi 2014	RAUF 2014	RStr 2014	Lg 2014	EAc 2014
Re 2014	Pearson Correlation	1	,576	-,642	,482	,817**	,481
	Sig. (2-tailed)		,026	,015	,025	,576	,070
	N	15	15	15	15	15	15
Gi 2014	Pearson Correlation	,576	1	-,557*	,721**	,019	,226
	Sig. (2-tailed)	,026		,031	,002	,947	,418
	N	15	15	15	15	15	15
RAUF 2014	Pearson Correlation	-,642	-,557*	1	-,499	-,304	-,302
	Sig. (2-tailed)	,015	,031		,058	,271	,273
	N	15	15	15	15	15	15
RStr 2014	Pearson Correlation	,482	,721**	-,499	1	-,204	-,084
	Sig. (2-tailed)	,025	,002	,058		,466	,765
	N	15	15	15	15	15	15
Lg 2014	Pearson Correlation	,817**	,019	-,304	-,204	1	,669**
	Sig. (2-tailed)	,576	,947	,271	,466		,006
	N	15	15	15	15	15	15
EAc 2014	Pearson Correlation	,481	,226	-,302	-,084	,669**	1
	Sig. (2-tailed)	,070	,418	,273	,765	,006	
	N	15	15	15	15	15	15

Source: taken from the excel table

Analyzing the results using SPSS there is a direct correlation to most indicators, significant between indicators that reflect the company's financial structure and illustrates the financial balance.

An exception to the type of correlation has financial autonomy rate showing a significant correlation but reverse. As financial autonomy rate increases according to Pearson economic rate of return index decreases.

Applying the chain substitution method we determined the influence of each factor on the rate of economic return, the values are reflected in the following table results:

Table 3 - The level set method factor influences chain substitution

Re 2014	Influența Gi	Influența RAUF	Influența Str	Influența Lg	Influența EAc	Suma influențe	Modificarea absolută
0.1094	-0.0389	0.0389	-0.0583	-0.0316	0.0754	-0.0145	-0.0145
0.0214	-0.0035	0.0035	-0.0157	0.0039	0.0147	0.0028	0.0028
0.1374	1.1547	-1.1547	-0.1539	0.0051	0.0311	-0.1178	-0.1178
0.1895	0.3040	-0.3040	-0.2540	0.0150	-0.0003	-0.2392	-0.2392
0.0662	0.2094	-0.2094	-0.0522	-0.0099	-0.0239	-0.0861	-0.0861
0.1678	-0.1993	0.1993	-0.5025	0.0557	0.0371	-0.4097	-0.4097
0.0337	0.1024	-0.1024	-0.1316	0.0173	-0.0066	-0.1209	-0.1209
0.0875	0.0849	-0.0849	-0.1163	0.0365	0.0207	-0.0591	-0.0591
0.1696	-1.5569	1.5569	-2.3558	0.1078	0.0068	-2.2412	-2.2412
0.0168	0.0027	-0.0027	0.0314	-0.0212	-0.0200	-0.0097	-0.0097
0.1405	0.2637	-0.2637	-0.1496	0.0882	-0.0380	-0.0994	-0.0994
0.3434	-0.0316	0.0316	-0.0063	0.0157	0.2814	0.2908	0.2908
0.1130	-0.5216	0.5216	-0.6932	0.0759	0.0281	-0.5892	-0.5892
0.0790	0.5608	-0.5608	-0.1633	0.0496	0.0228	-0.0909	-0.0909
0.1759	0.1222	-0.1222	0.2593	0.0248	-0.7312	-0.4471	-0.4471

Source: taken from the excel table

From the values reflected in the table above we can say that indicators of financial structure and the financial balance have considerable influence on the rate of economic return.

It follows from the terms of the influence of indebtedness that only 6 companies in 15 have an unfavorable influence resulting in decreased efficiency on capital.

Under the influence of financial autornomiei most companies have achieved bad reason consider financial autonomy rate to have fallen most, automatically lowering its leading and low rate of return.

Of particular importance has the support structure. Thus due to lower short-term debt in total capital there is a decrease in the efficiency of permanent capital in 2014 compared to 2013.



Only three companies in 15 overall liquidity declining, so that this sector registered a growth rate economically viable under the influence liquidity.

Last indicator presented namely efficiency of current assets has a disadvantage in 6 companies overall efficiency increase of current assets automatically leading to greater efficiency and global activity.

The last two columns in the table above represents an application of the method verification key chain substitution. So factor influences the amount corresponding absolute change indicator economic rate of return, which is why we consider how to apply the correct chain substitution method.

## 5. CONCLUSIONS

The research paper concludes with some lessons learned as a result of the study conducted in the sector of hotels, restaurants Dolj County during 2013 - 2014.

The presentation methodology and model of factorial analysis of the economic rate of return we can draw a some advantages and disadvantages regarding their applicability.

Among the advantages presented, we can mention the following:

- better monitoring of the management structure and property while ensuring economic and financial balance;
- performing simulations on the effect on the efficiency of management decision consisting of various forms of financing;
- creating the possibility of achieving the predicted efficiency indicators in the entity's operations.

The main disadvantage of the application of this analysis model is represented by the lack of medium and long-term debt to equity values. There are companies that do not use the lack of investment in the form of medium and long-term debt and as a result, the analysis model is not applicable.

Based on the results using SPSS, the index which was used was the index Pearson, through which a considerable correlation between the return on capital permanent and indicators of structure and financial balance was shown, we went on to the actual calculation of the influence factor.

In our model of financial analysis, the economic profitability was affected as follows:

- under the influence of indebtedness of the most companies selected, the economic profitability increased, indebtedness having an influence with an economic plus sign;
- under the influence of financial autonomy rate, the economic profitability decreased due to the influence of most companies with negative financial autonomy;
- under the influence of an economic rate financing structure, it decreased due to negative influence of the 15 companies;
- under the influence of general liquidity, the economic profitability increased due to the influence of the most companies with liquidity increasing;
- under the influence of efficiency of current assets of most companies selected, the economic profitability increased, the efficiency of the current assets having an influence with an economic plus sign.

We can say therefore that not only the financial structure of the company, but also the financial stability and the management of assets are factors in terms of the profitability of the enterprise.

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