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## **Assessing the Competitiveness and Sustainability of Western European Business Sectors in the Context of the COVID-19 Pandemic**

**Abstract.** *The COVID-19 pandemic affected the economy and had a negative impact on the financial performance of all businesses. This paper aims to identify and analyse the short-term impact of the COVID-19 pandemic on the sectoral performance of economic entities listed on regulated stock exchanges across Western Europe. The data were collected from the platform provided by Damodaran Online and S&P 500 and certain eligibility criteria were established based on the decision tree method in order to select the sample of 837 companies. Empirical results suggest that sustainable growth in conditions of economic and health crisis was a leading variable in a statistically significant positive correlation between the net investments in R&D, unadjusted ROE, ROIC, Debts, Equity cost and ROC-WACC in the years of pandemic crisis. The developed models are a support tool that can be used by stakeholders in approaching the competitiveness of the sector, as they are based on objective data, reported by the analysed companies and can serve to avoid unprofitable investments,*

*financing some sectors to the detriment of others, or establishing sustainable business relationships, especially in times of crisis.*

**Keywords:** *sectoral competitiveness, effects of COVID-19, sustainability, financial indicators.*

**JEL Classification:** M21, M41.

## 1. Introduction

The need to focus on the impact of the health crisis on the activity of entities operating in the industrial, financial, or agricultural sectors is determined by the dichotomy between certain sectors of activity, some becoming more competitive, others barely surviving, and others disappearing almost completely from the reference markets. In accounting terms (IASB, 2021), evaluating means “giving value” and not just measuring and judging the economic destination of certain resources or the source of funding. If according to the previous logic it was sufficient to check the transparency of information assumed by companies in various business sectors and to report this information through mandatory financial reporting or other voluntary reports, nowadays a thorough analysis of the background information on the sector of these companies is required and necessary, as it is possible that certain sectors may be clearly signalling impotence in the face of the current health, social, economic and financial or military crisis that we are all witnessing. In this context, we considered it necessary to identify and assess the effects of the COVID-19 crisis on the sectoral performance of economic entities listed on regulated exchanges in Western Europe. In order to achieve the purpose of the paper, we set the following objectives: O1 – Identification of the impact of the pandemic on the economic and financial indicators of listed entities on regulated exchanges in Western Europe, as well as contextual analysis of the variation of the most relevant indicators that reflect the soundness and financial performance of companies selected for analysis; O2 - Assessment of the effects of the COVID-19 crisis on the most relevant indicators of financial performance and sustainability; O3 – Establishing the competitiveness criteria for each sector in which financial reporting requirements apply uniformly in accordance with International Financial Reporting Standards (IFRS); O4 - Determining the character of investment eligibility at the level of the economic sector with the exception of the financial sector (see objective 3 above); O5 - Eligibility testing by analysing changes in correlation coefficients by econometric modelling (see Objective 4). Subsequently, the research methodology included econometric modelling of data from the entire sample and subsample resulting from the application of the three criteria for sharing eligible options for investors.

*The results obtained* are concretised in the conceptualisation of an econometric model to evaluate the competitiveness and performance of the sector in conditions of potential interruption of activity due to the presence of high risks of pandemic and malfunction of the essential service offer found at the level of their providers. *We believe that the results obtained can be useful to many categories of stakeholders,*

but especially to investors, creditors, customers, suppliers, and employees who are directly interested in the resilience of these companies, i.e., their ability to respond to current multiple crises and to resume activity at an acceptable level.

## 2. Literature review and hypothesis development

As could be seen in the last four years, the COVID-19 pandemic was one of the biggest health crises, which also generated a global economic crisis that affected most economic entities, implicitly for all national economies. Measures taken against the spread of the virus have also created many difficulties for the business environment, leading to reduced capital mobility and the generation of global supply chain problems, respectively (Sharma et al., 2020), thus exacerbating the impact of this crisis. In this context, many authors have focused on how economic entities are managed (Duarte et al., 2018; Eggers, 2020) during crises of any kind. Thus, it was observed that the companies most affected by exogenous factors are small and medium-sized ones, which is determined by the few resources they have, as well as the limited liability to stakeholders (Dimson et al., 2020). However, not all economic entities felt the effects of the COVID-19 crisis in a similar way. So, the question is: What kind of companies are more resilient to financial crises, and what indicators should we pay special attention to in order to reduce the risk of exposure during these crises? Some researchers believe that a high value of sustainability indicators (such as ESGs covering environmental, social, and governance factors) has led to higher income for entities, lower risk, and higher resilience in both normal periods, as well as in crisis (Albuquerque et al., 2020; Broadstock et al., 2020; Grosu et al., 2024).

There is also research that has confirmed that certain sectors, although well-known as leaders in sector competitiveness, such as the Hungarian space industry, even though directly contributing to social performance, have become more reluctant about employing a significant number of highly skilled employees under the impact of the health crisis and introduces state-of-the-art technologies (Parragh et al., 2021; Macovei et al., 2024). The negative social and economic impact of the current health crisis is also associated with problems on the competitive environment of Slovak companies, the authors concluding that the exponential growth of communication technologies and artificial intelligence in the context of Industry 4.0, the current COVID-19 pandemic create new problems, still unexploited (Grenčíková et al., 2021). On the other hand, the COVID-19 pandemic has opened up new challenges, but also opportunities for SMEs, such as technological advances that create new products and transform almost every phase of the business, from production to marketing, security, and logistics, making them much more competitive (Gavrić et al., 2021). From the works analysed above, we notice that there is an important link between investments in R&D and the performance of entities; this being accentuated during periods of crisis. At the same time, the results show that during the financial crisis of 2007-2008, but also the crisis we are currently going through, there was a high volatility on the capital markets, affecting all stock market indicators, the change in stock market capitalisation being a strong signal of financial instability.

In this context, the established working hypotheses were the following: *H1* - the increase of investments in R&D activities leads to the increase of the performance and sustainability of the companies (Tubbs, 2007; Chiesa et al., 2009; Banerjee & Gupta, 2019; Boiko, 2021); *H2* - companies with solidity and financial performance manage to recover faster in times of crisis and economic shock (Broadstock et al., 2020; Zahedi et al., 2021; Masserini et al., 2021; Talreja and Guptab, 2021); *H3* - change in market capitalisation (MC) is a strong signal of financial instability for certain sectors (Alarussi and Alhaderi, 2018; Akinsomi, 2020; Gunay et al., 2021); *H4* - sector competitiveness can be boosted in crisis conditions only for areas where there is demand (Allen et al., 2020; Akinsomi, 2020; Belaid et al., 2021; Gunay et al., 2021, Zhang et.al., 2021).

### 3. Materials and Methods

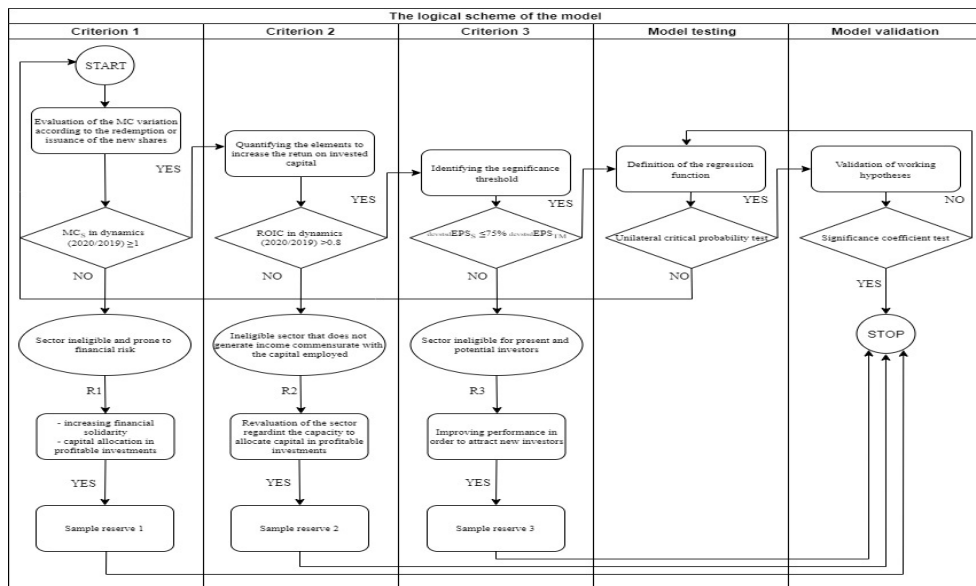
The research methodology consisted of a *first step* in collecting data and building the working sample of all Western European companies listed on a regulated market. We specify that all data were selected from the platform provided by Damodaran Online and S&P 500 index Companies with Financial Information, including inclusion and exclusion criteria. *The criteria for inclusion* in the sample are: companies operating in Western Europe and listed on a regulated stock exchange; all fields of activity; only companies whose information on financial position, performance, cash flow statement, change in equity, and other such additional information has been made public and audited. Regarding the *exclusion criteria*, companies whose financial reports were not disclosed to the external environment and when there is no date to certify the credibility of this information were not taken into account. At the same time, companies for which the financial reporting requirements apply differently from the specific requirements of IFRS, namely financial companies or financial investments, were also excluded from the sample. The second stage of the research methodology consisted in the econometric evaluation of the sector performance using the following indicators: market capitalisation (MC), return on capital invested (ROIC), and earning per share (EPS). In the last stage, a model for assessing the competitiveness and performance of the sector in the period of health crisis and resilience of the analysed companies was conceptualised. To obtain the sector performance and competitiveness model, we used a logical scheme, based on some criteria, as can be seen in *Figure 1.*, in accordance with the research conducted by Yeo, B., & Grant, D. (2018). Along with the structure of the logical scheme, we established three eligibility criteria, namely:

*Criterion 1* - Market Capitalisation (MC) applies to the entire constructed sample and will be analysed as an eligibility threshold only if the dynamic MC (2020 compared to 2019) shows a supra-unit increase ( $MC_s \geq 1$ ). Thus, once obtained, the subsample 2 consisting only of the sectors of activity that have met Criterion 1, Criterion 2 is applied;

*Criterion 2* - applies to verify shareholders' confidence in the efficiency of total invested capital, with the role of identifying eligible sectors in terms of capital

allocation capacity in profitable investments, those sectors in which ROIC in dynamics (2020 compared to 2019) suffers a reduction of more than 20%, not being taken into account in the formation of subsample 2, as they are considered ineligible;

*Criterion 3* - will apply to the last subsample, which will evaluate the profit earned by investors based on EPS, provided that the standard deviation ( $devstdEPSS \leq 75\% devstdEPSS$ ) is less than or equal to 75% of the total EPS standard deviation market. Sectors that achieve an EPS thus determined or approach the proposed optimum become eligible to be selected for model development.



**Figure 1. The logical framework of the model decision according to the competitiveness of the sector**

Source: own elaboration.

From this last subsample that will be used in the development of the econometric model only the sectors that have passed the logical framework tests, i.e. those sectors in which it is considered that the invested capital is protected, income is assured, and other performance indicators such as ROE, ROIC, EBITDA and EPS, reach relevant values for stakeholders. Next, based on the eligibility criteria established and followed in the three stages of the logical framework of the model decision structure (Figure 1), only the branches that managed to exceed the established significance thresholds will be analysed. Thus, of an initial number of 97 branches, only nine remained: Business & Consumer Services; Construction Supplies; Green & Renewable Energy; Healthcare Products; Hospitals / Healthcare Facilities; Information Services; Metals & Mining, Power, Recreation. For their statistical processing, these branches were classified into the following major sectors of activity as follows: sector S1 branches with manufacturing activity; S2 branches with service activity; S3 branches with trade activity; S4 IT and telecommunications industries; S5 branches with transport activity; S6 branches with agricultural activities

(3,533 economic entities totalling the companies operating in S1, S2, S3, S4, S5, S6 and S7 which includes the institutions with financial activity - totalling 799 institutions). Financial institutions were excluded from the statistical analysis (S7), referring only to the economic sectors. The data were interpreted qualitatively according to an algorithm for evaluating the favourable net growth, obtaining scores for each sector of activity, according to Table 1 below.

**Table 1. Distribution of competitiveness and performance variables according to COVID-19 effects**

Competitiveness and performance variables	Effects of COVID-19					
	No. of Companies S <sub>1</sub>	No. of Companies S <sub>2</sub>	No. of Companies S <sub>3</sub>	No. of Companies S <sub>4</sub>	No. of Companies S <sub>5</sub>	No. of Companies S <sub>6</sub>
	3658	1122	81	572	544	50
<i>Market Capitalisation</i>						
MC – non-competitive sector	554	25	45	67	84	0
MC – marginal sector (with sustainable growth but ineligible)	221	129	0	0	13	0
MC – competitive sector	2883	968	36	505	447	50
Total MC	3658	1122	81	572	544	50
<i>ROIC</i>						
ROIC - non-competitive sector	815	32	0	22	0	0
ROIC - marginal sector	376	0	36	117	0	0
ROIC - competitive sector	1692	936	0	366	447	50
Total ROIC	2883	968	36	505	447	50
<i>EPS on sector</i>						
EPS – non-competitive sector	958	535	0	132	84	0
EPS - marginal sector	237	277	0	18	363	50
EPS – competitive sector	497	124	0	216	0	0
EPS – Total	1692	936	0	366	447	50

Source: own elaboration.

The methodological steps described above were applied, respectively: a) consolidating the database according to the financial-accounting information

included in the financial reports of the companies listed on the regulated stock exchanges in Western Europe; b) the application of the logical framework of the model decision and the eligibility criteria regarding the performance and competitiveness of economic entities, as a result of which the eligible subsample under-investment report was reduced, from 6027 to 837 eligible companies, grouped in the 3 respective sectors,  $S_1$  which includes branches with manufacturing activity;  $S_2$  which includes the service industries and  $S_4$  which includes the IT and telecommunications industries. Subsequently, we performed the correlation analysis of the data at the level of the entire sample and of the subsample resulting from the application of the three criteria for separating the options eligible for investors.

The following coding indicators with the afferent codifications were used in the correlation analysis: *NetRD* = *Net R&D = research and development investment*; *ROEu* = *Return on Equity unadjusted*; *ROC – WACC* = *Relationship between Return on Invested Capital and Weighted Average Cost of Capital*; *Weight of Debt* =  $\text{Debts}/(\text{Debts}+\text{Equity})$ ; *TTP* = *Total*; *Yelds* = *Dividends*; *SustGrwInEBIT* = *Expected/sustainable Growth in EBIT*; *CstEquity* = *Cost of Equity*.

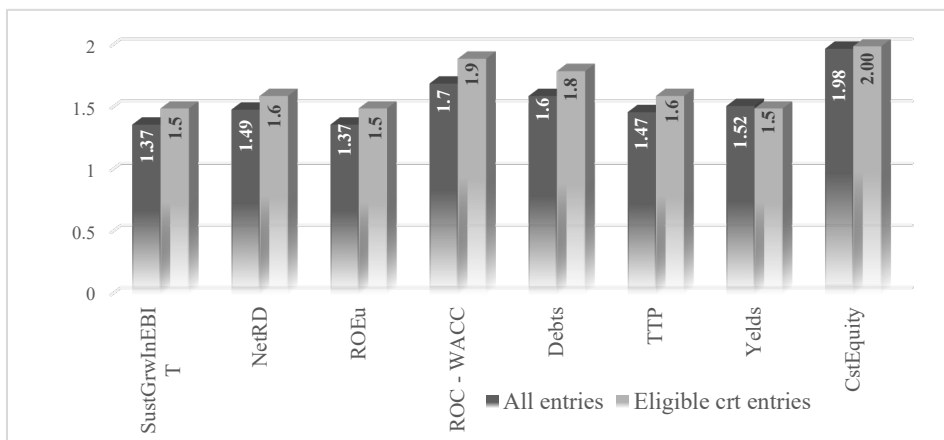
According to the data in *Table 1*, it can be seen that according to the MC indicator, a number of 2883 out of a total of 3658 companies belonging to  $S_1$  fall into the category of competitive sectors, 554 companies are non-competitive and 221 of them show sustainable growth but are ineligible. For the category of companies belonging to  $S_2$ , out of a total of 1122, 968 of them are competitive, 129 are in the marginal sector, and 25 are non-competitive. As for the companies in  $S_3$ , out of a total of 81, 36 of them are competitive and 45 are non-competitive. In the  $S_4$  sector, out of a total of 572 companies, 505 of them are competitive and 67 of them are uncompetitive in this respect. For the  $S_5$  sector, out of a number of 544 companies, 447 fall into the competitive category, 13 belong to the marginal sector, and 84 are non-competitive. For the  $S_6$  sector, all 50 companies fall into the competitive category. From the point of view of the ROIC indicator, in the  $S_1$  sector, out of a total of 2883 companies, 1692 of them are competitive, 376 are in the marginal sector, and 815 are non-competitive. For the  $S_2$  sector, out of a total of 968 companies, 936 were in a competitive category, and 32 are non-competitive. In the case of the  $S_3$  sector, all 36 companies fall into the marginal sector, i.e., they show a sustainable growth, but are ineligible. For the  $S_4$  sector, out of a total of 505 companies, 366 are competitive, 117 belong to the marginal sector, and 22 of them fall into non-competitive sectors. All the 447 companies belonging to the  $S_5$  sector fall into the category of competitive ones, the same being found in the  $S_6$  sector, where all the 50 companies are competitive. Regarding the EPS indicator, for the  $S_1$  sector, out of a total of 1692 companies, 497 companies are competitive, 237 companies are in the marginal sector, and 958 of them are non-competitive. Of the 936 companies in the  $S_2$  sector, only 142 are competitive, 277 are in the marginal sector, and 535 are in the non-competitive sector. It should be noted that no company has been included in the  $S_3$  sector. For the  $S_4$  sector, out of the 366 companies, 266 of them fall into the category of the competitive ones, 18 falls into the marginal sector, and 132 are non-competitive. One aspect that is worth mentioning is the fact

that for the S<sub>5</sub> sector, out of a total of 447 companies, there are no competitive companies, 363 being in the marginal sector, and 84 being non-competitive. For the S<sub>6</sub> sector, of the 50 companies, we specify that all of these fall within the marginal sector. The results of the application of the methodological procedures are described in the results and discussion chapter below.

#### **4. Results and discussion**

It is well known that the current COVID-19 pandemic has affected the functioning of all national economies and implicitly the global one, which is why we considered it appropriate to analyse and quantify these effects, especially on the position and financial performance of Western European companies. In this regard, the reactions of the most relevant performance and competitiveness indicators of the different sectors in which European companies operate to the first waves of the COVID-19 pandemic were examined. The reason why in this analytical part of the paper only the sample formed by the branches that passed the significance test - these being segmented by sectors - was considered is the fact that this division allows the identification of significant heterogeneity of results, especially of performance and implicitly of competitiveness. After applying the three steps presented in the research methodology, the criterion of comparability of the series was applied, grouped by sectors of activity - the criterion of comparability is given by the net increase of the indicator that generates added value (this is evaluated as the difference between favourable net positive growth for indicators reflecting assets or equity and favourable negative net growth for debt-reflecting indicators, including losses). Following the application of the procedure for analysing the frequency series on the dynamics of investment eligibility of companies in the crisis period on the eligibility interval 1-2, where 1 represents the minimum value (maximum ineligibility threshold) and 2 represents the maximum value of the eligibility threshold, it is found that by applying the decision logical framework based on the 3 eligibility criteria mentioned above, there were increases in the eligibility level of the subsample of 837 companies compared to the general sample of 3658 companies, according to the dynamics in *Figure 2*.





**Figure 2. Dynamics of the eligibility coefficients of the economic-financial indicators after the application of the decision logical framework**

Source: own research.

Applying the regression modelling (OLS) of the indicators: SustGrwInEBIT (dependent variable) and regressors (NetRD, ROEu, ROC - WACC, Debts, TTP, Yelds, CstEquity) generated a table of significantly improved Pearson correlation coefficients according to *Table 2* below.

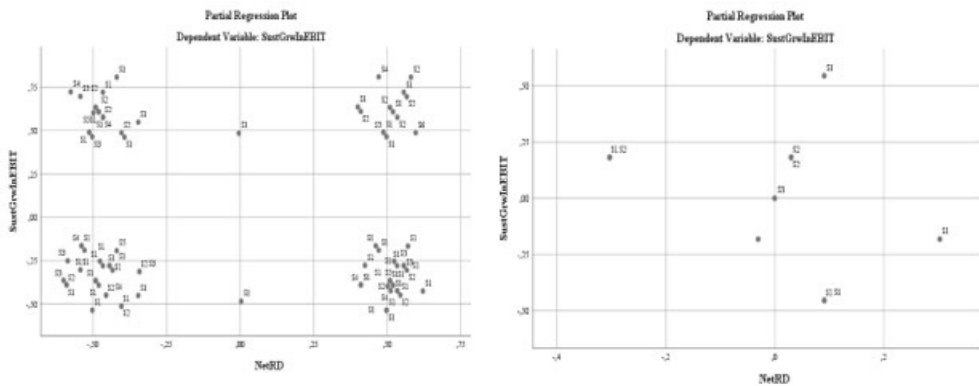
**Table 2. The table of Pearson correlation coefficient**

Pearson Correlation large esantion (OLS)	SustGrwInEBIT (dependent variable)	NetRD	ROEu	ROC - WACC	Debts	TTP	Yelds	CstEquity
SustGrwInEBIT	1	-0.087	0.16	0.133	0.091	0.044	0.021	-0.042
NetRD	-0.087	1	-0.039	-0.008	0.014	0.08	0.035	-0.155
ROEu	0.16	-0.039	1	0.133	-0.006	0.33	-0.074	-0.042
ROC - WACC	0.133	-0.008	0.133	1	0.13	-0.038	-0.028	0.067
Debts	0.091	0.014	-0.006	0.13	1	-0.024	0.005	0.187
TTP	0.044	0.08	0.33	-0.038	-0.024	1	0.129	-0.009
Yelds	0.021	0.035	-0.074	-0.028	0.005	0.129	1	-0.148
CstEquity	-0.042	-0.155	-0.042	0.067	0.187	-0.009	-0.148	1
Pearson Correlation (dependent)	SustGrwInEBIT (dependent variable)	NetRD	ROEu	ROC - WACC	Debts	TTP	Yelds	CstEquity
SustGrwInEBIT	1	0.408	-0.2	0.333	-0.5	0	0.2	0
NetRD	0.408	1	0.408	0.408	-0.408	0.583	0.408	0
ROEu	-0.2	0.408	1	0.333	0	0.408	0.2	0
ROC - WACC	0.333	0.408	0.333	1	-0.167	-0.272	0.333	0
Debts	-0.5	-0.408	0	-0.167	1	0.102	0.5	0
TTP	0	0.583	0.408	-0.272	0.102	1	0.408	0
Yelds	0.2	0.408	0.2	0.333	0.5	0.408	1	0
CstEquity	0	0	0	0	0	0	0	1

Source: own elaboration.

It is noted that by applying the decision logical framework, the correlation level of the selected dependent variable increased, respectively, the sustainable economic

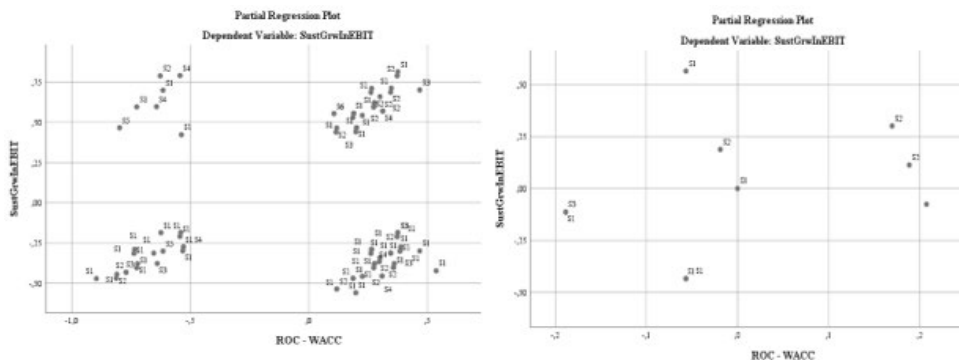
growth and the correlation ratios were normalised directly or inversely proportional to the category of correlated regression indicators. The best correlation of the dependent variable at the subsample level is achieved at the level of the directly proportional relationship of sustainable development in relation to the R&D policy, 0.408 monetary units related to sustainable development occurring with a contribution of one monetary unit invested in R&D. In the case of the general sample, the ratio was inversely proportional, in the sense that the R&D process resulted in a loss of 0.087 monetary units related to sustainable development, which demonstrates the appropriateness of applying eligibility criteria to increase the quality of investment decision-making. These results allow the demonstration of hypothesis *H1* - increasing investment in research - development leads to improving the performance and sustainability of companies, as well as achieving Objective 3 and 5. The graphical method (representation of partial diagrams of the model for correlations between the two indicators) confirms the working hypothesis (*Figure 3*).



**Figure 3. Partial charts of correlation of indicators of sustainable economic growth and net investment in research and development, before and after the application of the decision logical framework**

Source: own research.

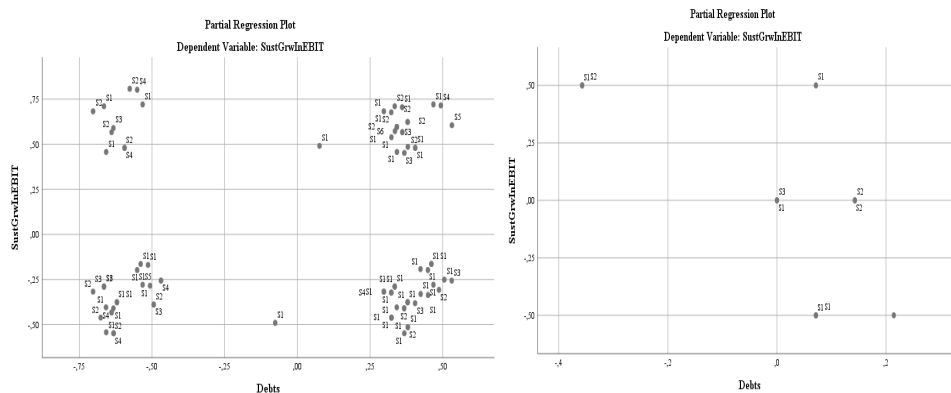
Capital efficiency (ROC-WACC) is another indicator that significantly improves its structure following the application of the method, which is demonstrated by increasing the level of Pearson correlation from 0.133% to 0.333% (thus the investment decision has higher quality support by 250% following the application of the proposed decision tree method). At the level of the eligible subsample there is a net sustainable output through the economic use of capital. These results demonstrate the *H2* hypothesis - companies with financial soundness and performance are able to recover more quickly in times of crisis and economic shock, which also justifies the achievement of *Objectives 1 and 2*. The graphical method (representation of partial charts of the model for the correlations between the 2 indicators) confirms working hypothesis 2 (*Figure 4*).



**Figure 4 a, b. Partial diagrams of correlation of the indicators of sustainable economic growth and capital efficiency before and after the application of the decision logical framework**

Source: own research.

Regarding the indicator of the degree of use of borrowed capital in sustainable growth, there is a quantitative surplus (improving the yield of the indicator by increasing the level of correlation with the dependent variable), but also a qualitative increase by changing the direct proportionality of the overall sample (assimilated to negative sustainable yield), into indirect proportionality, as the reduction by 0.5 units of the degree of indebtedness determines a contribution of one unit to the sustainable growth (see Figure 5).

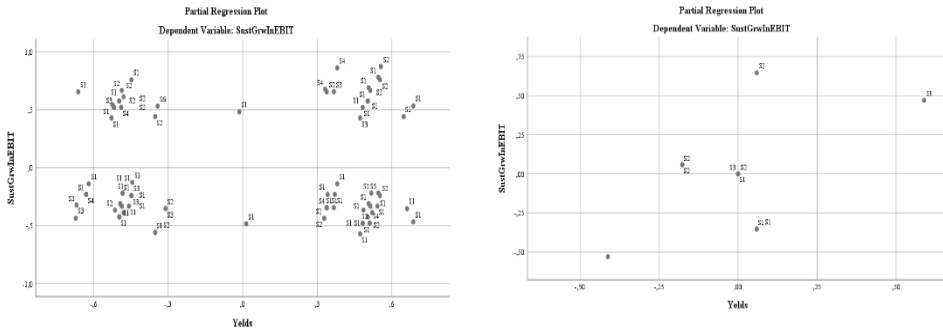


**Figure 5 a, b. Partial correlation plots of sustainable economic growth and indebtedness indicators before and after applying the decision logical framework**

Source: own research.

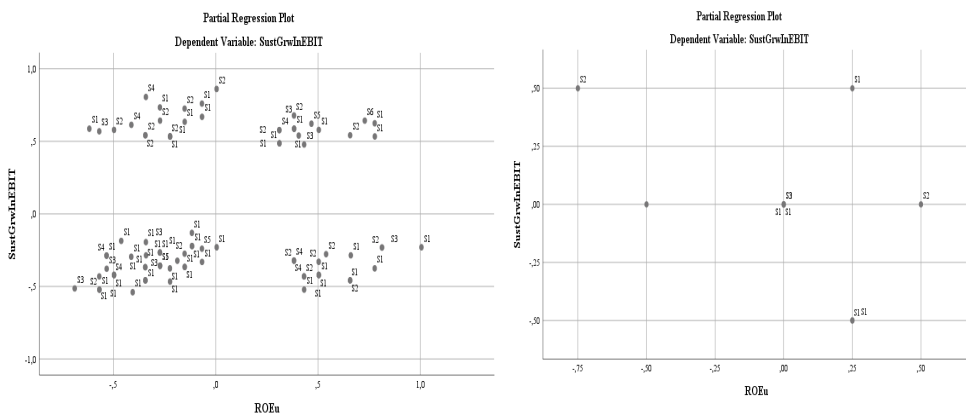
And in terms of *dividend policy*, there is a 10-fold improvement in the level of correlation of the subsample to the overall sample, with the level of correlation measured by calculating Pearson coefficients increasing from 0.021 to 0.2. These

results allow the demonstration of the *H3* hypothesis - the MC variation is a strong signal of financial instability for certain sectors. The graphical method (representation of the partial diagrams of the model for the correlations between the 2 indicators) confirms *working hypothesis 3* (see Figure 6).



**Figure 6 a, b. Partial diagrams of correlation of the indicators of siyeld sustainable economic growth before and after the application of the decision logical framework**  
 Source: own research.

We must emphasise that the level and priority of companies for the return on equity in the face of increasingly pressing challenges from the global market can lead to less optimal decisions and strategies. Under these conditions, situations of economic crisis or pandemic may lead to different results, but not always as expected, in the sense that equity profitability can be seriously affected. In our research, the decision logical framework method allows *H4* validation by comparing Pearson correlation coefficients, as can be seen in Figure 7, so that *H4* - sector competitiveness can be stimulated in crisis conditions only for areas where there is demand that allows and achieve *objective 4*.



**Figure 7 a, b. Partial diagrams of correlation of the indicators of sustainable economic growth and ROE<sub>u</sub> before and after the application of the decision logical framework**  
 Source: own research.

It is well known that business sustainability is assessed in terms of three types of performance: financial, social, and environmental, but in the opinion of some authors, the analysis of the *Structure-Conduct Performance* paradigm is based on the assumption that each sector has its own structure, i.e., factors which are external to companies, such as the nature of competition (Talreja & Guptab, 2021). Obviously, this structure acts on the behaviour of companies operating in those sectors and on the results obtained (especially performance) which are reflected in the values of indicators such as ROE, ROIC, EBIT, EBITDA, under the influence of the five competitive forces (summarised considering that the degree of attractiveness and profitability is different for each sector), because in conducting a strategic business analysis, the sector analysis remains irreplaceable for various reasons (Balan et al., 2021). The characteristics of the sector that affect profitability have a more lasting effect than that generated by differences in strategies adopted by companies in the same sector or by the fact that some sectors have structures that make possible strong deviations of a company's results from the average profitability of the sector. Unlike other studies that aimed to analyse the relationship between corporate profitability and profitability of shares (Deng, 2018) we believe that our work also contributes to improving literature, because relevant profitability indicators that play a decisive role in influencing investors have been analysed in depth in it, including sustainable growth indicators (depending on the cost of equity, ROE, ROIC and the degree of indebtedness), thus the results obtained can be a useful tool for those companies that want to outline a sustainable and competitive profile. Given the mixed and inconsistent nature of the results obtained in previous studies on this topic, we consider it appropriate to examine and analyse the effects of the current COVID-19 crisis on financial rates as measured by profitability (ROE) and leverage effect, with a direct incidence on the competitiveness and sustainability of the business. In this regard, there are studies that have shown that the generation of earnings has a direct and strong influence on stock returns, while Alarussi & Alhaderi (2018) analysed both the return on equity and EPS as indicators of profitability, providing empirical evidence that large firms that effectively manage their assets can improve the net operating income as well as the level of profitability. However, an atypical situation which highlight the role of technology-specific investment shock as a systematic risk factor assessed in cross section, which may help explain the gross profitability premium within the industry, but not the gross cross-sectoral profitability, which in practice strengthens our results. All these controversies from the literature led us to opt for the design of the second filtered logical framework of the decision, based only on the data of the 837 companies from the sectors declared eligible according to the established criteria.

## 5. Conclusions

The logical framework of the model decision proposed in this paper aims to complete the framework for assessing the competitiveness and sustainability of the business according to a number of relevant indicators, but at the same time taking

into account the effects of the COVID-19 crisis, giving all companies the opportunity to assess their vulnerable points and identify impediments that make them less competitive with companies in the same sector or with the level of cross-sector competitiveness. The limitations of the study consist in the small number of indicators included in the analysis, as well as in the limited time horizon analysed and determined by the specific pandemic conditions, an aspect that the authors intend to rectify through further research. As a policy implication, we can say that the companies in the sectors analysed in this paper, more precisely those that met the three eligibility criteria, despite the fact that they were negatively affected by the current health crisis and were exposed to a number of unpredictable constraints, they have managed to remain efficient and sustainable, precisely because they have followed the competitiveness strategies built a long time ago, thus managing to face all the uncertainties offered by the ever-changing markets.

Therefore, we can conclude that those companies that have continued to invest in R&D, that have improved the quality of their products and services, that have operated in countries or regions where taxes are decent and have increased the efficiency of invested capital, have succeeded to maintain the sustainability of the business and to increase its competitive advantage.

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