

THE EFFECT OF VOLUNTARY SUSTAINABILITY INSTRUMENTS ON FINANCIAL PERFORMANCE: EVIDENCE FROM BRAZILIAN COMPANIES

*O EFEITO DE INSTRUMENTOS VOLUNTÁRIOS DE SUSTENTABILIDADE SOBRE AS
PERFORMANCES ESG E FINANCEIRA: EVIDÊNCIAS DE EMPRESAS BRASILEIRAS*

Jorcianne Ferreira
FGV
jorcianne.snf@gmail.com

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Resumo

Objetivo - O estudo visa investigar o efeito de instrumentos voluntários de sustentabilidade, mais especificamente, a presença de um comitê de sustentabilidade e a adesão a um código de autorregulação, o Pacto Global das Nações Unidas (UNGC), nos desempenhos ESG (ambiental, social e governança) e financeiro de empresas brasileiras listadas na Bolsa de Valores Brasileira (B3). Projeto/metodologia/abordagem - Os dados ESG para a amostra de empresas brasileiras foram coletados na base de dados Resultante, apresentando dados ESG completos de 2017 a 2019. Os dados financeiros foram coletados na base de dados Economatica para o mesmo período. Por fim, informações sobre a presença do comitê de sustentabilidade e a adesão ao UNGC foram coletadas por meio da base de dados Bloomberg. Para a análise, a regressão de dados em painel foi o método aplicado no software Stata. Resultados - Os resultados obtidos mostram que a adoção de instrumentos voluntários de sustentabilidade tem impacto significativo sobre a performance ESG das empresas brasileiras, mas ainda não encontra a mesma tendência para os retornos financeiros. Originalidade/valor - Ainda são poucos os estudos que investigam o impacto dos comitês de sustentabilidade e da adesão aos códigos de autorregulação no desempenho financeiro e ESG das empresas, especialmente nos mercados latino-americanos. Este estudo visa preencher essa lacuna e incentivar futuros trabalhos na mesma área.

Palavras-chave - CSR. Desempenho ESG. Desempenho financeiro. Comitê de sustentabilidade. UNGC.

<http://periodicos.unifacef.com.br/index.php/rea>

Abstract

Purpose - The study aims at investigating the effect of voluntary sustainability instruments, more specifically, the presence of a sustainability committee and the adherence to a self-regulatory code, the United Nations Global Compact (UNGC), on ESG (Environmental, Social and Governance) and financial performance of Brazilian companies listed on the Brazilian Stock Exchange (B3). Design/methodology/approach - The ESG data for the sample of Brazilian companies was collected from the Resultante database, presenting complete ESG data from 2017 to 2019. Financial data was collected from the Economatica database for the same period. Finally, information on the presence of the sustainability committee and the adherence to the UNGC was gathered through the Bloomberg database. For the analysis, panel data regression was the method applied in Stata. Findings - The results obtained show that the adoption of voluntary sustainability instruments has a significant impact on the ESG performance of Brazilian companies, but does not meet the same trend regarding financial returns. Originality/value - There are still few studies investigating the impact of sustainability committees and adherence to self-regulation codes on companies' financial and ESG performance, especially in Latin American markets. This study seeks to fill this gap and encourage future work in the same field.

Keywords - CSR. ESG performance. Financial performance. Sustainability committee. UNGC.

1 INTRODUÇÃO

1. INTRODUCTION

Corporate Social Responsibility (CSR) is a topic of increasing importance, occupying a prominent role in the practices of companies, in the decision of investors, and in academic research. Despite the interest in the topic, the term does not yet have a universally accepted definition. Soumodip and Searcy (2016), after analysing 110 definitions of this construct over the period between 1953 and 2014, and verifying that the economic, social, ethical, sustainability, stakeholders and voluntarism dimensions are recurrently present, propose the following explanation:

CSR implies that firms must foremost assume their core economic responsibility and voluntarily go beyond legal minimums so that they are ethical in all of their activities and that they take into account the impact of their actions on stakeholders in society, while simultaneously contributing to global sustainability. (SOUMODIP AND SEARCY, 2016, p. 1433)

According to this definition, Corporate Social Responsibility aims at making businesses accountable. In this process, companies end up identifying risks and opportunities with greater clarity, which, associated with transparency policies, contribute to increase the stakeholder confidence and the company's financial results, as stated by Alareeni and Hamdan (2020).

Cini and Ricci (2018) argue that being CSR oriented is not an option but a trend that has been gaining strength through incorporation in legislations, industry standards, and financial requirements. However, implementing sustainable practices is not enough. Measuring the results is essential in order to identify existing needs and gaps while also offering comparable data, taking into account that practices may vary according to the business and the respective industry. Hence, the environmental, social and governance (ESG) criteria take place, considering the pillars that make up the CSR in the construction of metrics that will support and direct the sustainable goals and strategic plans.

These practices and metrics, on the one hand, bring benefits to companies, such as greater access to capital (Cheng; Ioannou; Serafeim, 2014), increased financial results (Lins, Servaes; Tamayo, 2017), and risk mitigation (Krueger; Sautner; Starks, 2020); on the other hand, they also provide benefits for stakeholders, such as greater certainty for investors (Zadeh; Serafeim, 2018), and positive social and environmental impact (Landier; Lovo, 2020).

Sprinkle and Maines (2010) point out several reasons why companies engage in sustainable practices: altruistic motivations; "window dressing" to attract stakeholders; hiring and retaining talent; encouraging customer loyalty; reduction of some production costs; and inclusion of new strategies for risk management. In addition to the benefits, the authors also address the costs involved in adopting a sustainable strategy. Compared to a traditional posture, there may be differentiated costs of production, distribution, training, among other factors depending on the sector in which the company operates.

As an attempt to balance sustainability and profits, in addition to ensuring the quality of the actions implemented, companies can formalize sustainability committees (or CSR committees) in order to align their business strategies with sustainable strategies. Although the institution of these committees is not mandatory, studies relate its presence to the quality improvement of ESG performance (Fatemi et al., 2017, and Baraibar-Diez; Odriozola, 2019) and transparency (Mahmood et al., 2018; Michelon and Parbonetti, 2012), also showing that diversity within these committees (Velte, 2016; Martínez-Ferrero et al., 2020) is a factor that contributes to better results.

In addition to the internal efforts of companies, local and global initiatives also set the stage for voluntary actions for sustainability, not only encouraging companies to adopt sustainable practices but also stimulating new consumption practices and the inclusion of new decision criteria for investors. Among these initiatives, it is possible to highlight the UNGC (United Nations Global Compact), which aims at mobilizing companies and stakeholders towards aligning their strategies and operations with principles on human

rights, labour, environment and anti-corruption, while also creating incentives for businesses to take action to advance the SDGs (Sustainable Development Goals).

Other studies investigate the determinants for companies to voluntarily make these commitments. Eberhardt-Toth et al. (2019) explore the reasons for the existence of the CSR committees, verifying that larger companies, in the basic materials industry, and whose headquarters are in common law countries, tend to constitute this kind of committee. Knudsen (2011) finds that companies from countries with international economies and where domestic governance institutions are well-functioning are more likely to present a long-lasting adherence to and comply with the UNGC. Taking a different point of view, this research aims at understanding the impacts of these voluntary commitments in ESG and financial performance across industries in the context of Brazilian companies.

The present work is subdivided into four main sections. The Methodology section is dedicated to presenting the data and methods employed. Then, the topic Empirical Results will present and discuss the main findings of this research. The subsequent section, Limitations and Recommendations, will address the limitations of the work and bring suggestions for future research. Finally, the Conclusion aims at summarizing the main points of this paper.

2. METHODOLOGY

In order to compose the sample for this study, financial and ESG data were collected in different sources. The complete ESG data for 101 companies, distributed by ten different sectors, were available for 2017, 2018 and 2019 at the Resultante database. Considering this same period, data were gathered on the presence or absence of sustainability committees, as well as on the adhesion to the UNGC. These data were collected from the Bloomberg platform. The data regarding financial performance were collected from the Economática database.

Table 1 shows a summary of the variables considered in this study in line with the literature. Return on asset (ROA) indicator was used as a proxy for financial performance, presenting the company's profitability in relation to its total assets. Among the variables associated with the sustainability criteria, the ESG index, which consolidates environmental, social and governance measurements, and the dummy variables for the CSR committee and membership to the UNGC, the main focus of the research, were included. It is important to highlight that only those cases in which there was no change in status in these variables over the time of analysis were considered.

In addition to the dependent and independent variables already mentioned, controls were also included in order to avoid the interference from factors linked to the characteristics of industries and companies. Therefore, systematic risks, measuring the stock volatility, and non-systematic risks, measuring assets financed by debt rather than

equity were added to the model. The size and industry to which the company belongs were also added, in order to control for any attributes inherent to sector specificities. While the industry was represented by categorical variables, the size of the company was given as the logarithm of total assets.

The choice of variables for this study was based on the consolidated literature on the subject and on similar research carried out in other countries, as in the works of Baraibar-Diez and Odriozola (2019), which focuses on the context of UK, France, Germany, and Spain, finding a positive relationship between CSR committees and ESG performance in almost all cases; and, in the works of Velte (2017), and Friede, Busch and Bassen (2015), which investigate the relationship between ESG performance and financial returns, finding a positive correlation in most cases.

Table 1. Summary of variables.

Variables	Explanation
<i>Dependent Variables</i>	
$ROA_{i,t}$	Net Income/Total assets
$ESG_{i,t}$	Environmental, social and governance performance index
<i>Independent Variables</i>	
$CSR_{committee}$	Dummy indicating the presence (or absence) of a CSR committee
UNGC	Dummy indicating the adherence (or not) to the UNGC
<i>Control Variables</i>	
$Debt_{i,t}$	Total debt/total assets over time (unsystematic risk of the firm)
$\beta_{i,t}$	Beta factor over time (systematic risk of the firm)
$Size_{i,t}$	Firm size in terms of the natural logarithm of total assets
Industry	Dummies indicating the company's industry

The purpose of the analyzes is to show the impact that presenting a CSR committee or adhering to a self-regulatory code might have on ESG performance and on the company's financial performance. Thus, four hypotheses are raised in this regard, and two models are proposed to test the hypotheses presented as shown below.

Hypothesis 1: The presence of a sustainability committee has a positive effect on the ESG performance of the company.

Hypothesis 2: The adherence to the UNGC has a positive effect on the ESG performance of the company.

Model A: $ESG_{i,t} = \alpha + \beta_1 CSR_{committee} + \beta_2 UNGC + \beta_3 ROA + \beta_4 Debt_{i,t} + \beta_5 Beta_{i,t} + \beta_6 Size_{i,t} + Industry + \varepsilon_{i,t}$

Hypothesis 3: The presence of a sustainability committee has a positive effect on the financial performance of the company.

Hypothesis 4: The adherence to the UNGC has a positive effect on the financial performance

3. EMPIRICAL RESULTS

The descriptive statistics, as well as the results obtained for the correlation of variables and for regressions, are presented in the following tables.

Descriptive Statistics

Table 2. Summary of total companies per sector and number of companies that have a committee or adhere to the UNGC in the sample.

Sector	N _{companies}	N _{committee}	N _{UNGC}
Petroleum & Petrochemicals	5	0	2
Steel & Mining	5	2	2
Pulp & Paper	3	2	3
Industry & Infrastructure	15	0	6
Consumption & Food	13	3	3
Retail	16	3	5
Health & Education	8	1	3
Construction, Malls & Properties	15	0	1
IT & Telecom	3	0	2
Utilities	18	4	10

Note: Data is consistent through the period of analysis: 2017, 2018 and 2019.

Table 3. Descriptive statistics.

Variable	Mean	SD	Minimum	Maximum
<i>Financial Performance</i>				
ROA	4.20	6.59	-29.54	36.19
<i>ESG Performance</i>				
ESG	0.51	0.12	0.24	0.83
<i>Voluntary sustainability instruments</i>				
CSR _{committee}	0.15	0.36	0.00	1.00
UNGC	0.37	0.48	0.00	1.00
<i>Control Variables</i>				
Debt	10.3	35.6	0.00	361.00
Beta	0.85	0.51	-0.48	2.49
Size	16.13	1.33	13.60	20.64

Correlation Results

The correlations displayed in the Pearson matrix show a positive and significant relationship between the variables directly associated with the ESG criteria, including the existence of the committee, and adherence to the UNGC. Risk variables, when significant, are discounted from financial performance and ESG in most cases. The exception is the relationship between indebtedness and the presence of the CSR committee. This relation, despite not being the focus of this research, deserves attention in future studies, as it may indicate governance issues that must be addressed in the Brazilian scenario, considering that similar studies in other contexts do not display this behavior.

Another relevant issue concerns multicollinearity, given the significant correlation between variables. To overcome this problem, the VIF (variance inflation factor) was calculated. As the values did not exceed the recommended limits, multicollinearity should not be a problem in interpretation and inferences.

Table 4. Pearson correlation matrix.

Variables	ROA	CSR _{com.}	UNGC	ESG	Debt	Beta	Size
ROA	1.000						
CSR_{com.}	-0.088	1.000					
UNGC	0.041	0.318*	1.000				
ESG	0.086	0.350*	0.654*	1.000			
Debt	-0.374*	0.189*	0.106	0.107	1.000		
Beta	-0.282*	0.087	-0.143*	-0.203*	0.069	1.000	
Size	-0.063	0.291*	0.465*	0.306*	0.232*	0.062	1.000

Regression Results

Table 5. Model A regression analysis (DV: ESG performance).

Independent Variable	Model A1	Model A2
CSR _{committee}	0.06*** (0.02)	0.06*** (0.02)
UNGC	0.16*** (0.01)	0.14*** (0.01)
ROA	0.001 (0.001)	0.0003 (0.001)
Debt	0.02 (0.03)	0.02 (0.03)
Beta	-0.03 (0.01)	-0.03 (0.01)
Size	-0.01 (0.004)	-0.01 (0.01)
<i>Industry</i>	<i>No</i>	<i>Yes</i>
Constant	0.58*** (0.07)	0.59*** (0.09)
No. of observations	247	247
R ²	0.49	0.57

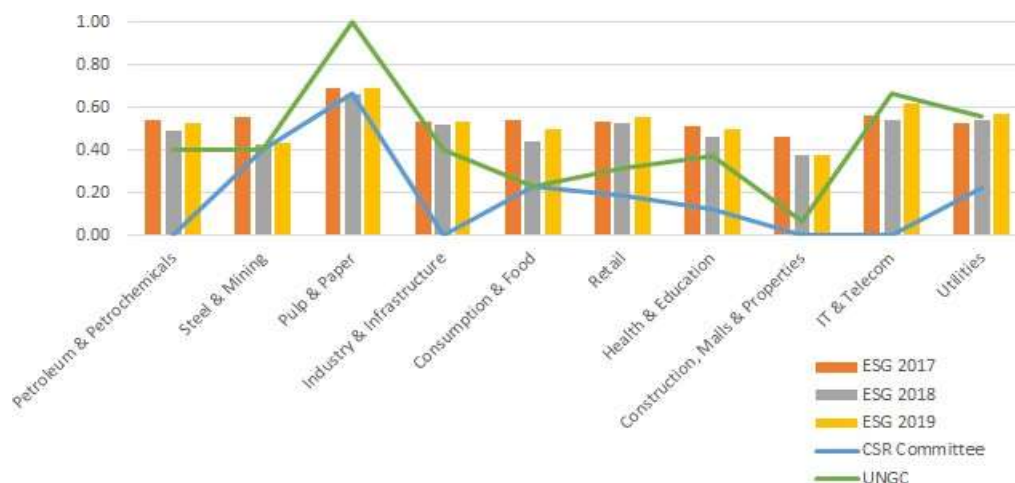
Notes: *p-value*: <0.05*, <0.01**, <0.001***

Standard errors reported in parenthesis. Model M1 does not include industry effects. Industry coefficients in M2 were not significant except for Construction, Malls & Properties (*coefficient*: -0.07; *SE*: 0.03; *p-value* < 0.05).

The results in Table 5 confirm hypotheses 1 and 2 since the presence of the committee (*coefficient*: 0.06; *SE*: 0.02; *p-value* < 0.001, $\omega^2 = 0.05$) and the adherence to UNGC (*coefficient*: 0.14; *SE*: 0.01; *p-value* < 0.001, $\omega^2 = 0.29$) have significant and positive effects on ESG performance. As for the size of the effect produced, adherence to the self-regulation code shows a stronger relationship with better ESG performances,

proving that regulatory mechanisms, even if voluntary, have the potential to impact environmental, social and corporate governance practices. Figure 1 shows the relationship between the variables highlighted in the analysis.

Figure 1. ESG performance, UNGC adhesion and CSR committee on average by sector.



It is interesting to note that the Construction, Malls & Properties sector is the only one to present an effect on ESG performance, and this effect is negative (coefficient: -0.07; SE: 0.03; p-value < 0.05). Therefore, the presence of a committee or adherence to self-regulation codes are viable strategies and should be encouraged for this sector in order to mitigate the inherent negative effect and increase the overall performance of this industry.

The results in Table 6 do not confirm hypotheses 3 and 4. The models show that the ESG, committee and UNGC factors are not significant variables in determining returns on assets. Only the systematic and unsystematic risk variables have a negative effect on ROA, as expected. As for the industries, it was identified that Petroleum & Petrochemicals, Consumption & Food, Retail, Health & Education, and Utilities present groups of companies with the highest return on assets. However, it is not possible to relate these industries to better ESG performance according to the results obtained in Model A.

In comparison with evidence from some studies using companies outside the Brazilian context, which already show a positive relationship between ESG performance and returns, Brazilian companies that have been adopting voluntary sustainability instruments have not yet found an impact on their financial performance neither through these instruments nor through better ESG scores. Figure 1 below shows an

overview of the ESG x ROA relation by sector. It is possible to verify that even sectors with a higher percentage of adherence to the UNGC and with a sustainability committee, such as Pulp & Paper, present less significant returns when compared to other industries, although the ESG performance is higher.

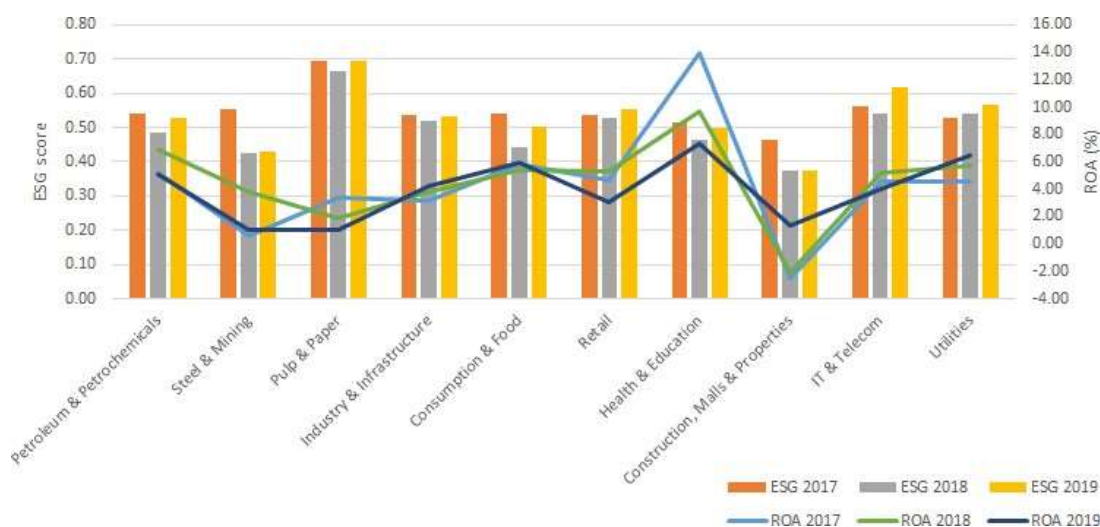
Table 6. Model B regression analysis (DV: Financial performance).

Independent Variable	Model B1	Model B2
ESG	7.20 (4.49)	1.71 (4.53)
CSR _{committee}	-0.70 (1.19)	-1.29 (1.19)
UNGC	0.14 (1.20)	0.50 (1.17)
Debt	-14.99*** (2.25)	-14.58*** (2.22)
Beta	-3.06*** (0.79)	-2.91** (0.87)
Size	0.23 (0.34)	-0.20 (0.41)
<i>Industry</i>	<i>No</i>	<i>Yes</i>
Constant	3.96 (5.94)	9.61 (6.95)
No. of observations	247	247
R ²	0.2356	0.3695

Notes: *p-value*: <0.05*, <0.01**, <0.001***

Standard errors reported in parenthesis. Dependent Variable: ROA. Model M3 does not include industry effects. Industry coefficients in M4 were not significant except for Petroleum & Petrochemicals (*coefficient*: 7.61; *SE*: 2.65; *p-value* < 0.01), Consumption & Food (*coefficient*: 4.62; *SE*: 2.27; *p-value* < 0.05), Retail (*coefficient*: 4.55; *SE*: 2.23; *p-value* < 0.05), Health & Education (*coefficient*: 8.52; *SE*: 2.54; *p-value* < 0.001), and Utilities (*coefficient*: 5.48; *SE*: 2.24; *p-value* < 0.05).

Figure 2. ESG Score x ROA



These results show that companies do not find financial ex post incentives, that is, after the adoption of the instruments; however, as these strategies also relate to reputation and encourage risk mitigation in areas that may be crucial to the business's image, it is possible that the advantage of these voluntary instruments is that they collaborate to reduce correction costs, redirecting resources to preventive actions and favoring, therefore, a more efficient management. Despite being a possible explanation for not having found a positive and significant relationship in the model presented, the assumption would still need to be tested in future research.

Another possibility for not confirming the last two hypotheses is that the market is not yet rewarding and generating the most appropriate incentives for companies that are moving towards a sustainable posture. However, if the global trend is followed, there are chances that companies that already fit the ESG criteria will have financial advantages in the long-term.

4. LIMITATIONS AND RECOMMENDATIONS

First, it is important to consider that the sample size is limited, with an uneven distribution of the number of companies by sector, and a relatively short period available for analysis. This limitation makes it difficult to generalize the findings for each industry, but it also provides an initial overview that stimulates more research to be done and more efforts towards data collection.

One group that was not included in this study was the financial sector due to its specific characteristics that limit the comparability of the information. However, the study of this sector is encouraged, especially considering its recent growth in Latin America due to the emergence of fintechs.

As discussed, the reasons for the lack of effect of voluntary sustainability instruments on financial returns do not necessarily indicate that there are no alternative financial benefits, such as improved risk management through allocation on preventive actions. Therefore, another possible research would be to investigate other mechanisms of impact of these same instruments.

5. CONCLUSIONS

The results obtained show that there is still a gap between ESG performance and financial results in the Brazilian context. The reason for this gap is not yet clear, but it is evident that market trends are renewing, influenced by social demands, by the establishment of new regulations and best practices in each sector, and by climate changes that require new forms of risk management. It is possible that companies are still learning to align ESG strategies to their core market strategies in order to guarantee better returns while managing the impacts of their operations. At the same time, the market must still mature in order to establish better incentives for companies that are investing in sustainable practices.

On the other hand, there is evidence that the presence of a CSR committee and membership of the UNGC favor a better ESG performance, representing an effective parameter for investors looking for sustainable businesses for their portfolio regardless of the sector. Since these strategies improve the company's non-financial results, which are increasingly being considered in decision-making, it is recommended that companies include these instruments in their strategy.

Finally, it is necessary that more data is collected, and more research is done on the Brazilian and Latin American market in general, tracking the trends in order to understand if the regulations, incentives and strategies adopted are producing effective results and consistent ESG practices over time, while also enabling the sustainable growth of companies.

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