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ESG Controversies and Financial Performance: An explorative study on the energy sector

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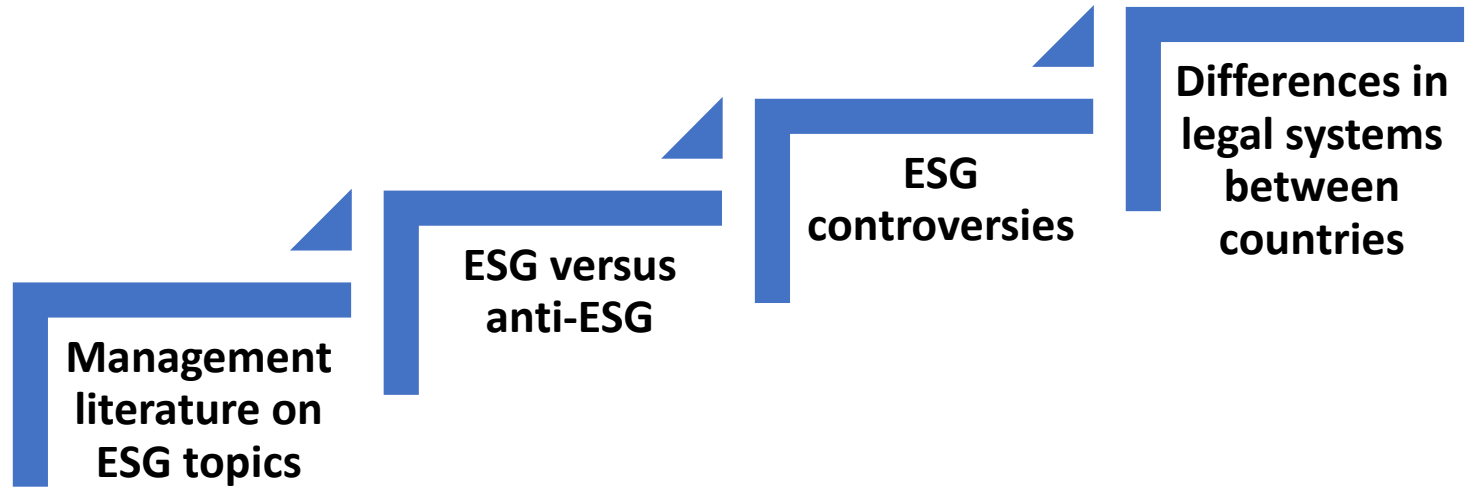
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Preliminary Considerations



Same preliminary considerations



Preliminary Considerations

Focus of management literature

Recently, the topic of ESG has been attracting the attention of scholars and opinion leaders, but also of policymakers.....

ESG versus anti ESG

- *European Union has taken a strong position by publishing many directives, such as the Corporate Sustainability Reporting Directive – CSRD.*
- *In the US, for example, there are various anti-ESG positions: for example the Republicans imposing restrictions on pension funds: you can't sacrifice profit for sustainability.*

Controversies

The trend of ESG controversies is unrelated to ESG: for example, when the company's brand value is high, consumers and the market tend to engage in higher levels of ESG controversies. The Refinitiv database provides controversies data in a different way than ESG

The regulatory system

- *We believe that regulatory systems could influence the trend of ESG controversies.*
- *For this reason, our analysis also considers the relationship between Common Law and Civil Law countries.*

Research Question



- *What impact do ESG controversies have on corporate financial performance?*
- *Could the presence of ESG factors reduce ESG controversies?*
- *Can regulatory diversity influence the ESG trend?*

Conceptual model

Starting from an in-depth analysis of the literature we developed our hypotheses and conceptual model

Hypothesis 1:

ESG controversies negatively influence a company's financial performance.

Hypothesis 2:

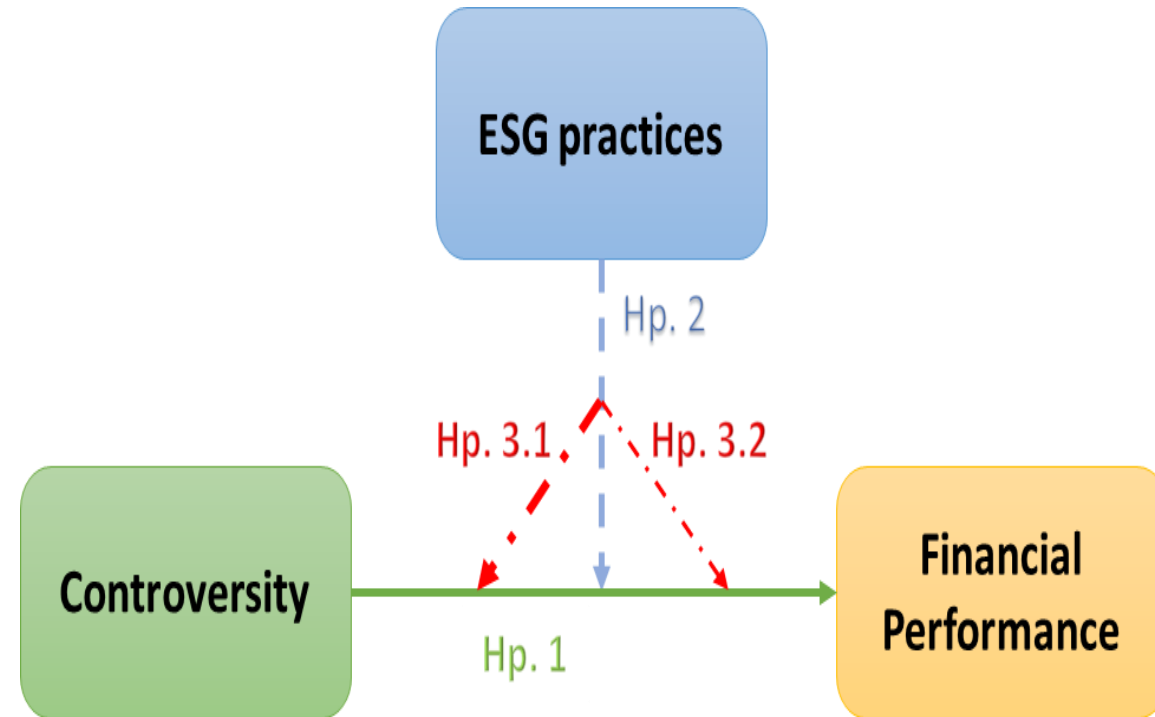
High ESG scores can moderate the negative effect of ESG controversies on performance

Hypothesis 3:

The relationship between controversies, performance and ESG is influenced by countries' regulatory environments

Hypothesis 3.1: In **Common Law** systems, the correlation between controversies and financial performance is **significantly negative**, and the moderating effect of ESG factors is very strong.

Hypothesis 3.2: In **Civil Law systems**, the correlation between controversies and financial performance is **mildly negative**, and the moderating effect of ESG factors is less strong than in Common Law systems.



Methodology

- We have held the hypothesis's test on energy sector. This sector is in fact particularly exposed to ESG controversies.
- Our sample is composed of 125 companies operating in the energy sector.

The sample was extracted from the **Refinitiv Database (LSEG)**.

The sample consists of **125** listed companies: **82** are American companies from the Common Law cluster, and **43** are from the Civil Law cluster. The Civil Law cluster includes **13** Italian companies, **2** Austrian companies, **10** French companies, **11** Spanish companies, and **7** German companies.

Variables

<i>Dependent variables</i>	Tobins's Q	$(QTLE+LTCL)/ATCA$
	Roa	$QTLE/AEQI$
	Roe	$QTLE/ATOT$
<i>Moderator variable</i>	ESG score	ESG Score
<i>Independent variable</i>	Controversy score	ESG_CONT
<i>Environmental variable</i>	Type	Binary variable $\begin{cases} 0 \text{ Civil Law} \\ 1 \text{ Common Law} \end{cases}$
<i>Control Variables</i>	ATCA/LTCL	Liquidity
	ATOT	Total Assets

Dependent variables: we used **Tobin's Q ratio** (Tobin, 1969), which is a measure largely applied in the management and financial fields of research when assessing the impact of sustainable practices within businesses (Kim et al., 2019); firm's **Return on Equity (ROE)** and **firm's Return on Assets (ROA)**.

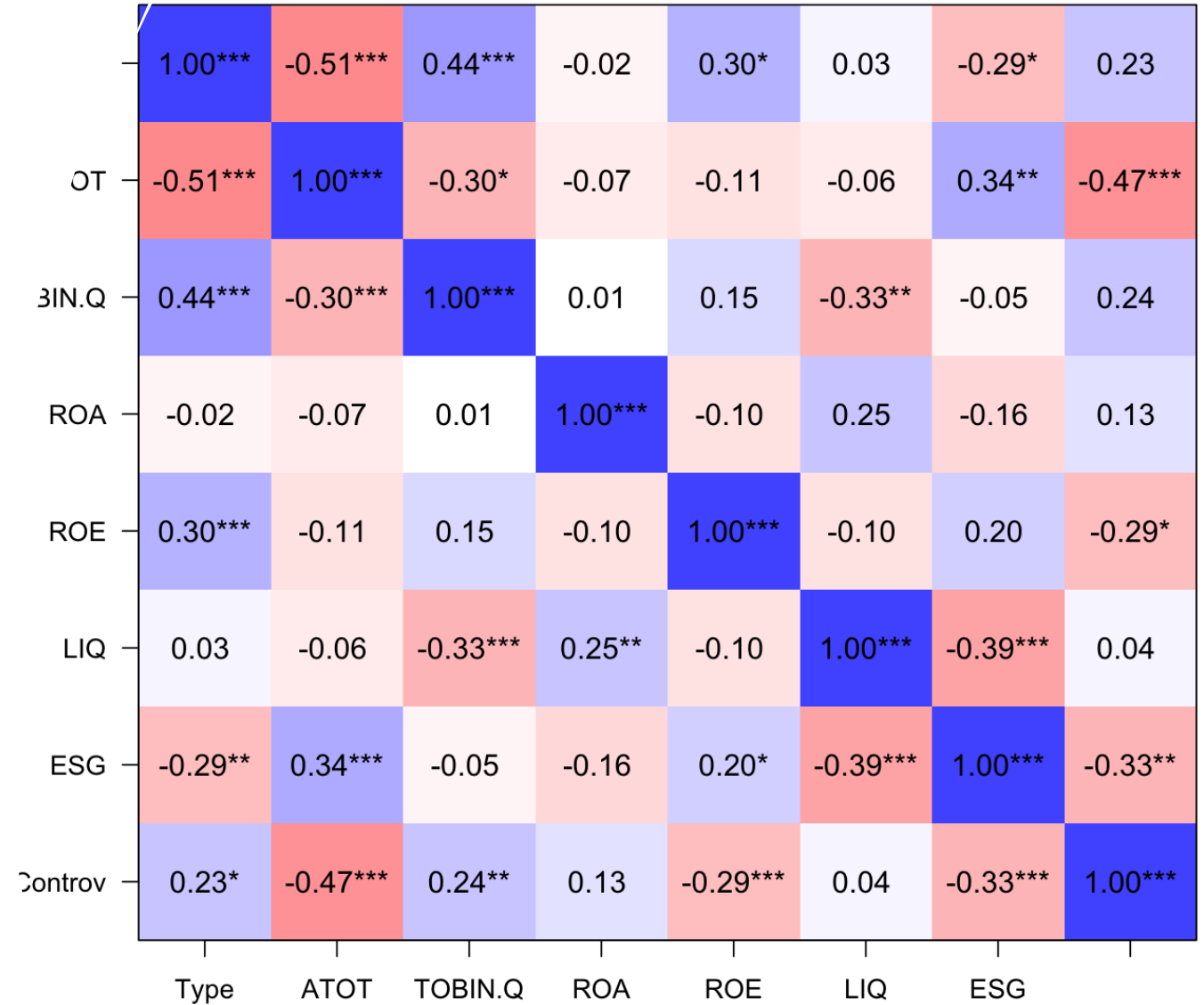
Independent variables: we used the **Controversies score** (Aouadi and Marsat, 2018; Li et al., 2019). This is measured by considering the number of controversies for ESG issues. This score has been extracted by the Refinitiv database, which synthesizes the ESG controversy topics in a single score: controversies E/S/G

Control variables: **First**, firm size. To measure this, we considered the total assets and total employees. **Secondly**, we used the **leverage ratio between financial debts and the firm's equity** (Opler and Titman, 1994; Surroca et al., 2010). **Finally**, we controlled for the level of liquidity, which can influence strategic decisions on sustainable practices (Li et al., 2012). A firm's liquidity is measured based on the current ratio, which is determined by current assets and liabilities.

Descriptive statistics

The variables exhibit a low level of correlation, indicating the absence of multicollinearity issues. Additionally, we computed the variance inflation factors (VIF) to mitigate potential multicollinearity concerns (Hastie et al., 2016).

Correlation plot from data



Findings

Coefficients:	Estimate	Std. Error	t value	Pr(> t)	Sig.
Intercept	- 3.608e+03	4.191e+03	-0.861	0.39105	
ESG_Controv	- 4.601e+01	2.420e+01	-1.901	0.04973-05	*
ESG	1.534e+02	3.877e+01	3.956	0.00013	***
ATOT	-2.838e-02	1.691e-02	-1.679	0.09587	.
LIQ	- 4.901e+02	9.821e+02	-0.499	0.61868	
Type	1.163e+04	2.467e+03	4.714	6.7e-06	***
ESG_Controv:ESG :	- 1.412e+00	4.706e-01	-3.000	0.00330	**
--- Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1					
Residual standard error: 5841 on 118 degrees of freedom Multiple R-squared: 0.3442, Adjusted R-squared: 0.3108 F-statistic: 10.32 on 6 and 118 DF, p-value: 3.581e-09					

As indicated in the following Table, ESG positively influenced financial performance.

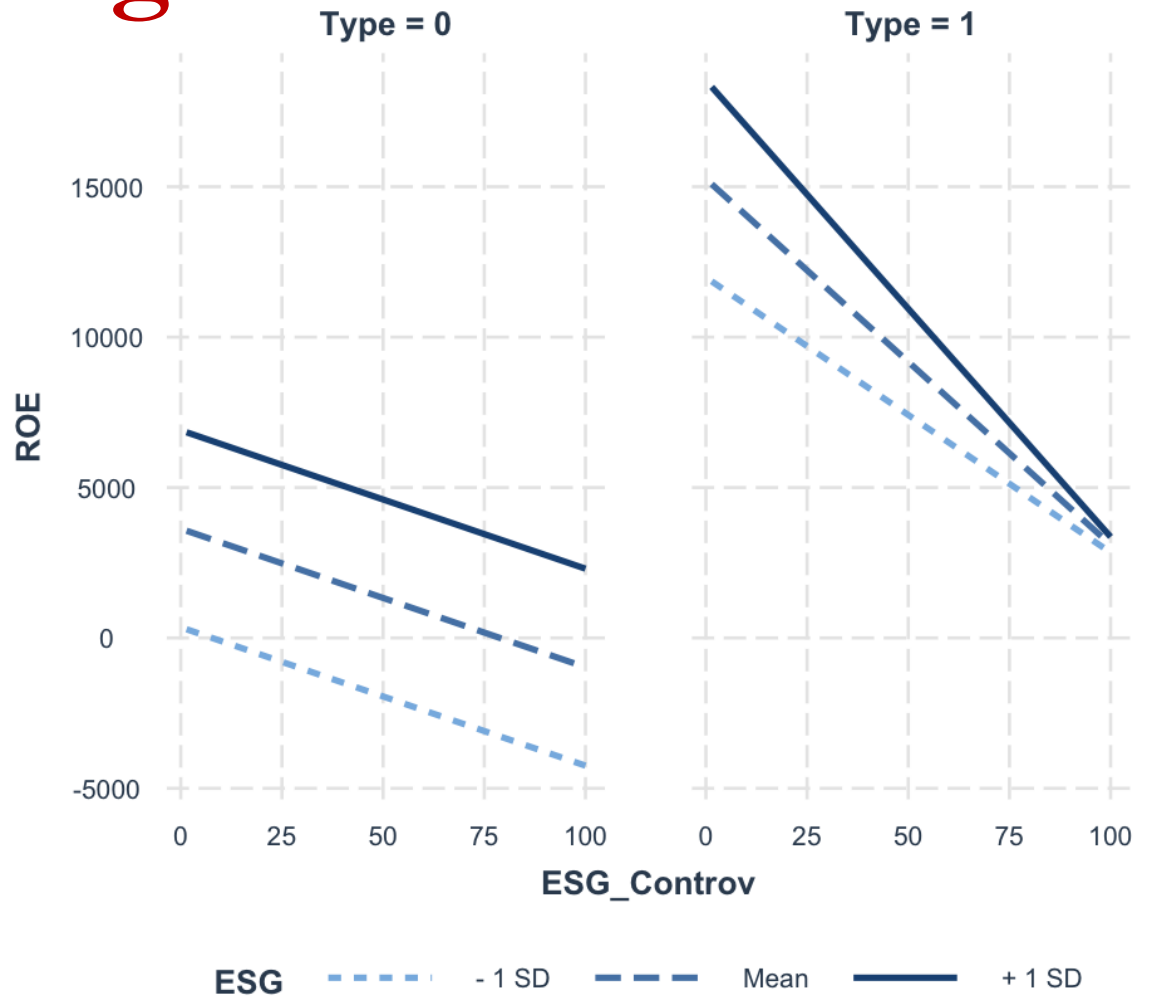
The ESG_Controversies exhibited a negative and significant correlation with performance: **in this way we confirm the Hp 1**

The ESG moderate the negative effect of ESG controversies on performance, but it is insufficient to increase performance: **Hp 2**

The interaction term between ESG Controv and ESG has different trends in Common Law and Civil Law countries: **in this way we confirm the Hp 3**

Findings

The Figure shows how the positive effect of the ESG variable **mitigating the negative relationship** between controversy and financial performance differs between civil and common law countries. Both graphs show that as controversy decreases, ROE increases for the positive effect of the ESG moderating variable. The moderating effect of ESG on controversies is more pronounced for common law countries (Type 1) than for civil law countries (Type 0).



Conclusions

- On one hand, the literature ‘gap is strong, particularly on ESG controversies in Common Law and Civil Law countries.
- The study also helps us understand how sustainability policies should be designed considering specific regulations and contexts.
- The trade-off between stakeholders perspectives versus stakeholder perspectives: ESG versus anti ESG





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