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Institutional Context and ESG Disclosure: A Comparison Between EU and US Listed Firms

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1. INTRODUCTION

Over the last three decades, the research on Corporate Social Responsibility (CSR) reporting has been receiving growing attention by accounting literature. Starting from the definition by Carroll (1979), CSR can be seen as a cross linkage between firm and society or collectivity. The focus of traditional CSR literature is mainly on the characteristics or the content or the extension of CSR disclosure. More recently, literature has been deepening the determinants of CSR disclosure and the theoretical background lying on the back of CSR practices (Gray et al., 2009). The greatest part of literature has focused mainly on the links between CSR and financial performance (Anderson and Frankle, 1980; Ingram and Frazier, 1983; McGuire et al., 1988; Starik and Carroll, 1990) as well as the relationship between a firm's internal characteristics (size, profitability) and its external social disclosure (Bhambri and Sonnenfeld, 1988; Graves and Waddock, 1994).

1. INTRODUCTION

But, nowadays, the complex environment in which firms operate, which is defined by legal systems, country risks, norms, and different social groups who have various expectations, produces different pressures that belong all to institutional quality and governance (according to the World Bank Worldwide Governance Indicators, 2010). In fact, other motives may be more normative or moral in nature. Here, companies may develop CSR as a response to wider social and institutional pressures (Aguilera et al., 2007).

This paper aims to examine and quantify the impact of specific country-level governance factors on the voluntary disclosure of corporate environmental, social, and governance (ESG) information by companies.

2. THORETICAL BACKGROUND(a)

This topic has been receiving great interest for more than 30 years among scholars from multiple management perspectives, including cost perspective, agency theory, instrumental stakeholder theory, resource-based view (RBV), and reputation theory (Muller and Kraussl, 2011).

According to Fernando and Lawrence, 2014, the different perspectives belong substantially to "Economic Theories" (such as the agency theory, cost perspective, and positive accounting theory) and "Social Theories" (such as the legitimacy theory, and the stakeholder theory). Even if these theories have different interlinkages, the first ones look at the economic performance and outcome of CSR practices. The latter pay more attention to the wide plethora of stakeholders and to social outcomes of CSR behavior.

2. THORETICAL BACKGROUND(a)

In fact, more recently, institutional theory (IT) suggests to reconsider CSR explicitly within different economic fields (Brammer et al., 2012). The interest in CSR has widened to several disciplines, such as politics (Moon, 2002; Crouch, 2009), economics (van Oosterhout and Heugens, 2008), law (Mullerat, 2005) and sociology (Brooks, 2010)….

The EU initiated sustainability-related recommendations for European entities in the early 1990s. Signed in 1992, against the backdrop of the *United Nations' Rio Declaration*, the "Towards Sustainability" treaty aimed at promoting sustainable development with a focus on environmental issues (EU, 1992). EU started discussing how traditional reporting could better reflect the environmental impacts and non-financial performance in general. As a result, in 2001, the European Commission (EC) issued recommendations on the recognition, measurement, and disclosure of environmental issues in the annual accounts and annual reports of companies (EC, 2001). Moreover, in 2003, the EC extended the focus to social-related disclosure as well. Directive 2003/51/EC highlighted that when appropriate, companies should include environmental and employee information in their annual reports for stakeholders to understand companies' respective performance. This directive was labelled as the "Accounts Modernization Directive" and has paved the way for future more stringent regulations. 2014 saw a milestone on the EU's corporate reporting journey, with the adoption of the *Non-Financial Reporting Directive (NFRD)*.

The Securities and Exchange Commission (SEC) has authority over the type and content of reporting required for US listed companies through Regulation S-K, part of the Securities Act of 1933. Regulation S-K covers qualitative disclosures and is mandatory for all companies registered with the SEC. Per SEC guidance in 2010, principles-based (e.g., qualitative) climate change disclosure (and other material environmental considerations) could be covered in one or more of Item 101, Description of Business; Item 103, Legal Proceedings; Item 503I, Risk Factors; and Item 303, Management's Discussion and Analysis (SEC, 2010). Environmental litigation and compliance are well-established components of these disclosures and climate change-related risks may be included if financially material to the business (Cleary Gottlieb, 2020). *However, reporting on climate change and other ESG factors without clear material risks to the company are not legally required and even material disclosure is insufficiently enforced (Gelles, 2016). As a result, these are still inconsistently incorporated in SEC reporting, even as voluntary but non-standardized non-financial disclosure is increasingly common (Lee, 2020).* The Sustainability Accounting Standards Board (SASB), a nonprofit organization, has developed a set of standards outlining financial materiality for sustainability issues in different industries tailored to SEC reporting requirements. However, in 2020 less than 350 U.S. companies reported using SASB, almost all in sustainability reports separate from their regulatory filings (SASB, 2021).

3. SAMPLE SELECTION

From Bloomberg database, we have selected European and American companies belonging to the OECD 1500 index that we analyzed for the period 2008-2018.

We excluded companies with at least one set of data not present in any year over the reference period.

After this filter, we obtained a balanced sample with 370 companies in Europe and 629 in America, respectively.

For each company, we have collected institutional and accounting variables relating to the period 2008-2018.

Overall, we have a panel with 8.735 observations (3377 for European companies and 5348 for American firms).
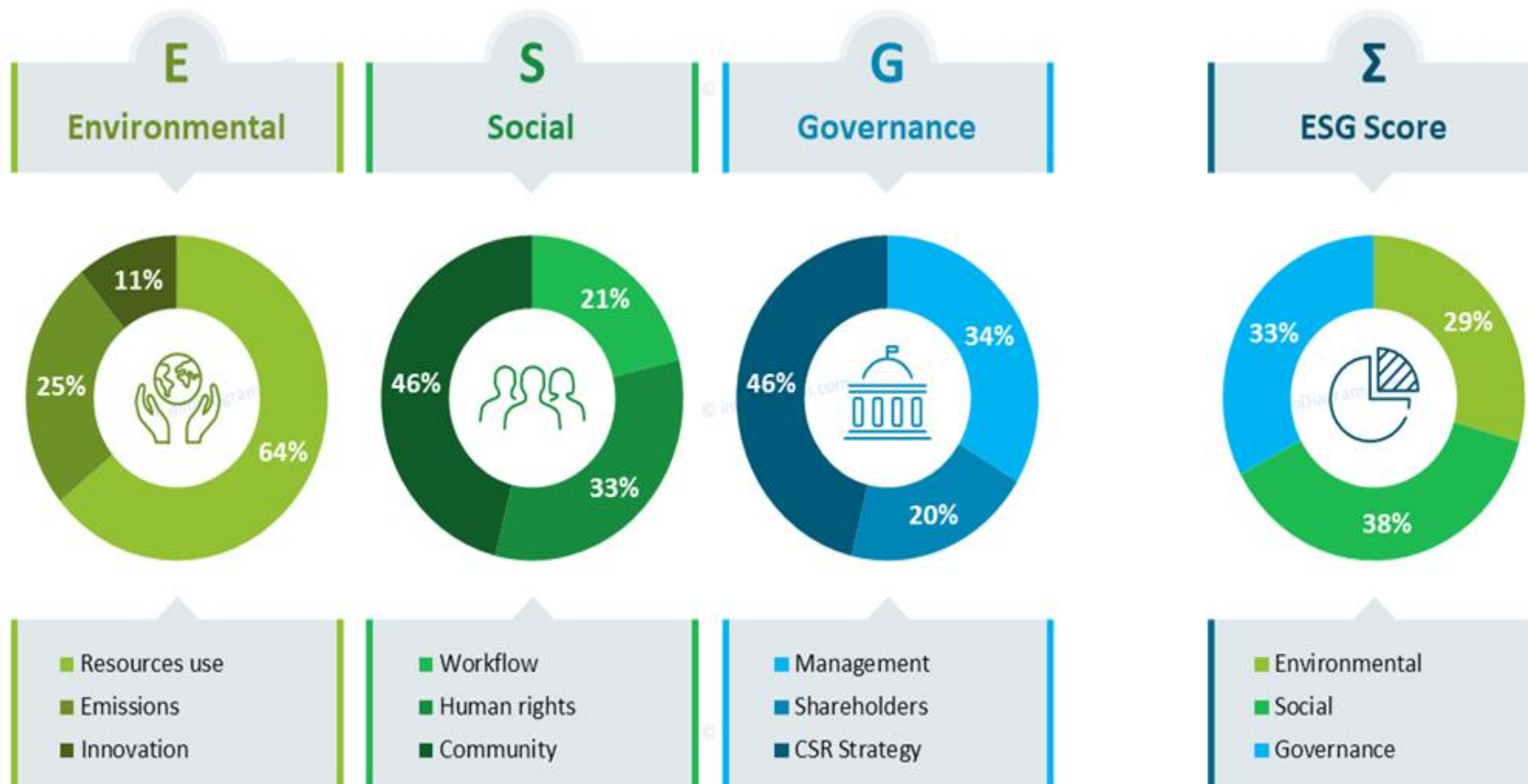
3. SAMPLE SELECTION

EU Firms	Freq.	Percent
Ireland	2	0.54
Portugal	3	0.81
Austria	6	1.62
Norway	9	2.43
Belgium	10	2.70
Finland	10	2.70
Denmark	15	4.05
Netherlands	18	4.86
Italy	19	5.14
Spain	19	5.14
Sweden	29	7.84
Switzerland	33	8.92
Germany	51	13.78
France	67	18.11
United Kingdom	79	21.35
Total	370	100.00

Dependent variable

To measure CSR disclosure, we selected the **ESG score**. The ESG score represents the judgement about environmental, social and governance disclosure of the company. We collected this indicator from Bloomberg database that covers 120 environmental, social and governance indicators including a big variety of items. Bloomberg evaluates companies on an annual basis, collecting public ESG information disclosed by companies through corporate social responsibility (CSR) or sustainability reports, annual reports and websites, and other public sources, as well as through company direct contact.

E Environmental	S Social	G Governance	Σ ESG Score
11% 25% 64%	21% 46% 33%	34% 46% 20%	33% 29% 38%
■ Resources use ■ Emissions ■ Innovation	■ Workflow ■ Human rights ■ Community	■ Management ■ Shareholders ■ CSR Strategy	■ Environmental ■ Social ■ Governance

Explicative variables

We selected the explicative variables from the World Bank Development Research Group among the Worldwide Governance Indicators (WGI) project. These variables ranging from -2.5 to 2.5.

As regard the explicative variables, among the different institutional factors studied by literature, we focused our attention on the following:

a) The process by which governments are selected, monitored, and replaced:

• **Voice and Accountability (VA)**: perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.

• **Political Stability and Absence of Violence/Terrorism (PS)**: perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.

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4. RESEARCH DESIGN (Explicative variables)

b) The capacity of the government to effectively formulate and implement sound policies

- **Government Effectiveness (GE)**: perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

- **Regulatory Quality (RQ)**: perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

c) The respect of citizens and the state for the institutions that govern economic and social interactions among them:

- **Rule of Law (RL):** perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence;

4. RESEARCH DESIGN (Control variables)

In the model, we also included a set of control variables identified in the prior literature as related to companies' CSR disclosure.

Financial situation and performance

In general, it can be assumed that, especially during period of economic and financial crisis, it is very likely that companies with a high level of financial debt disseminate more voluntary information in order to 'settle' all stakeholders.

With reference to the financial situation, we selected the leverage measured the ratio between the total financial debt and equity (Cormier et al., 2005; Déjean and Martinez, 2009; Malone et al., 1993) and 5y Probability of Default, for financial perfomance we selected the Return on equity ratio (ROE)

Firm size

large companies can produce additional information that is required by the mandatory accounting procedures at lower costs than small- and medium-sized enterprises. In addition, large companies that aspire to improve their 'social appreciation' should meet the expectations of a wide range of stakeholders and, therefore, should produce more information.

4. RESEARCH DESIGN (Control variables)

Age

In general, it can be said that a company that has been on the market for longer has a better and more consolidated control and reporting structure and can devote more time to refining other information systems. Listed companies, in fact, are those that have a higher profile than other firms and are constantly brought to the attention of the media, investors etc.

6. DESCRIPTIVE STATISTICS (EU)

This table reports the mean, median, standard deviation, maximum, minimum, skewness, kurtosis and the number of observations for each of the variables.

Variable	Obs	Mean	Std.Dev.	Min	Max
Dependent Variable					
ESG disclosure	3377	42.332	14.372	4.545	80.578
Explicative Variables					
Firm's age	3377	75.603	62.758	0	365
Leverage	3377	6.154	11.162	1.009	241.222
LN total assets	3377	10.031	1.85	5.031	15.081
ROE	3377	15.916	28.243	-135.994	1059.74
Default probability	3377	.014	.014	0	.224
Voice&Accountability	3377	1.358	.179	.912	1.738
Political stability	3377	.68	.416	-.474	1.46
Government effectivness	3377	1.578	.354	.28	2.251
Regulatory quality	3377	1.521	.33	.626	2.047
Rule of law	3377	1.625	.358	.247	2.1

Table 1.1 Descriptive statistics American firms.

Variable	Obs	Mean	Std. Dev.	Min	Max
Dependent Variable					
ESG disclosure	5358	28.412	14.828	2.066	78.512
Explicative Variables					
Firm's age	5358	61.857	47.808	0	226
Leverage	5358	4.393	7.009	1.018	320.726
LN total assets	5358	9.538	1.558	3.838	14.78
ROE	5358	16.506	46.962	-2304.61	701.215
Default probability	5358	.013	.016	0	.253
Voice&Accountability	5358	1.145	.111	1.039	1.521
Political stability	5358	.6	.22	.336	1.275
Government effectiveness	5358	1.553	.094	1.46	1.854
Regulatory quality	5358	1.454	.161	1.256	1.89
Rule of law	5358	1.631	.076	1.45	1.891

ESG score EU and USA

ESG_EU   ESG_USA
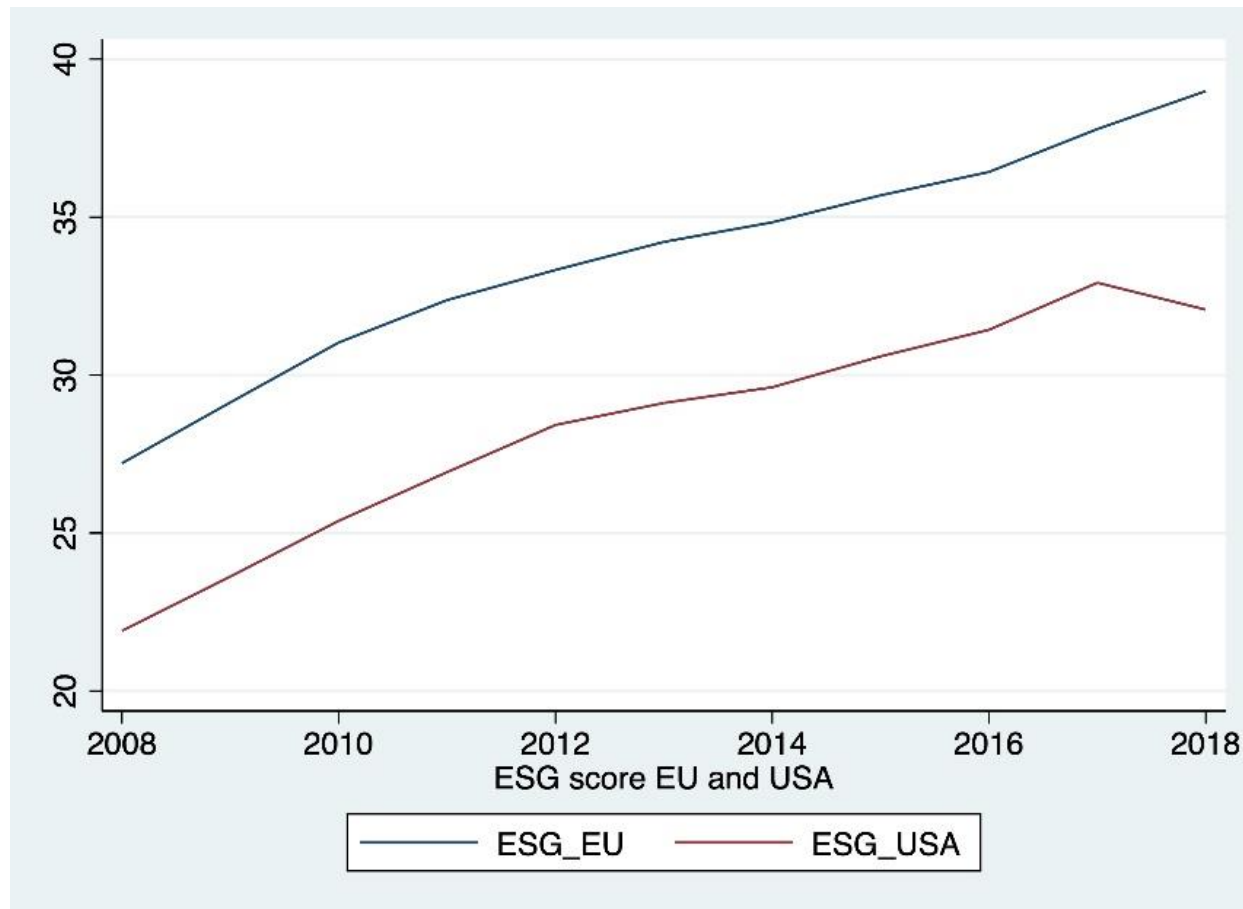
6. RESULTS' DISCUSSION

Analysis of Disclosures of "Double Materiality" or "Dual Materiality"
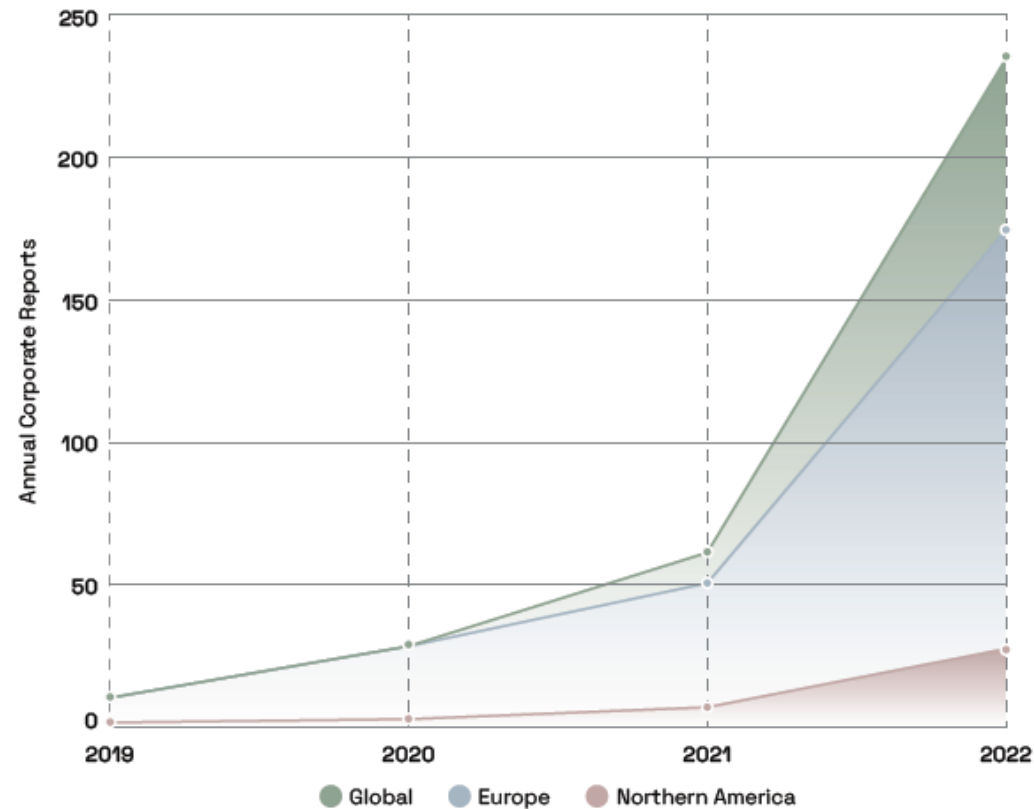
Source: Datamaran, *The ultimate guide to double materiality for corporate strategy*

RESULTS: CORRELATION MATRIX

Matrix of correlations EU

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) ESG disclosure	1.000										
(2) LN Firm's age	0.017	1.000									
(3) LN total assets	0.380	0.040	1.000								
(4) ROE	-0.019	0.057	-0.165	1.000							
(5) Leverage	0.057	-0.015	0.458	0.001	1.000						
(6) Default probability	-0.048	-0.053	0.234	-0.237	0.184	1.000					
(7) Voice & Accountability	-0.164	0.129	0.039	0.063	-0.063	-0.122	1.000				
(8) Political stability	-0.178	0.102	0.051	0.012	-0.056	-0.031	0.776	1.000			
(9) Government effectiveness	-0.152	0.105	-0.049	0.065	-0.074	-0.119	0.854	0.666	1.000		
(10) Regulatory quality	-0.149	0.075	-0.058	0.102	-0.017	-0.137	0.779	0.465	0.790	1.000	
(11) Rule of law	-0.153	0.118	-0.053	0.080	-0.053	-0.135	0.824	0.534	0.923	0.864	1.000

Matrix of correlations USA

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) ESG disclosure	1.000										
(2) LN Firm's age	0.285	1.000									
(3) LN total assets	0.468	0.330	1.000								
(4) ROE	0.084	0.090	-0.000	1.000							
(5) Leverage	0.052	0.098	0.301	-0.201	1.000						
(6) Default probability	-0.120	-0.043	0.107	-0.196	0.221	1.000					
(7) Voice&Accountability	0.028	0.007	0.054	-0.041	0.078	0.065	1.000				
(8) Political stability	0.035	0.003	0.053	-0.033	0.063	0.022	0.894	1.000			
(9) Government effectivness	0.013	0.001	0.055	-0.034	0.069	0.109	0.868	0.725	1.000		
(10) Regulatory quality	0.054	0.009	0.074	-0.010	0.060	0.076	0.569	0.301	0.792	1.000	
(11) Rule of law	0.030	0.013	0.053	-0.032	0.079	0.058	0.855	0.690	0.766	0.629	1.000

6. THE MODEL

In order to compare the effects of institutional factors on ESG disclosure in EU and USA, it is performed the following model.

The study utilizes a fixed-effects multiple linear regression analysis. The model is applied separately for EU and USA sample:

$$ESG = \propto + \beta 1VA + \beta 2PS + \beta 3GE + \beta 4RQ + \beta 5RL + \beta 6LN\ total\ assets + \beta 7\ LN\ Firm's\ age + \beta 8Leverage + \beta 9ROE + \\ + \beta 10prob\ 5\ years\ default$$

Table 3. Multiple regression EU.

ESG disclosure	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Firm's age	.166	.206	0.80	.421	-.238	.57	
Leverage	3.818	.139	27.45	0	3.545	4.09	***
LN total assets	.025	.008	3.16	.002	.01	.041	***
ROE	-.203	.022	-9.23	0	-.246	-.16	***
Default probability	-75.995	18.293	-4.15	0	-111.861	-40.129	***
Voice&Accountability	-18.961	3.491	-5.43	0	-25.806	-12.117	***
Political stability	-3.862	1.018	-3.79	0	-5.859	-1.866	***
Government effectivness	9.981	1.943	5.14	0	6.171	13.791	***
Regulatory quality	-.081	1.419	-0.06	.954	-2.864	2.701	
Rule of law	-4.814	2.103	-2.29	.022	-8.938	-.69	**
Constant	25.83	2.966	8.71	0	20.014	31.645	***

Mean dependent var	42.361	SD dependent var	14.325	
R-squared	0.219	Number of obs	3345	
F-test	93.182	Prob > F	0.000	
Akaike crit. (AIC)	26320.241	Bayesian crit. (BIC)	26387.509	

*** $p<.01$, ** $p<.05$, * $p<.1$

RESULTS: MULTIPLE REGRESSION US

Table 3. Multiple regression USA.

ESG disclosure	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Firm's age	2.361	.213	11.11	0	1.945	2.778	***
Leverage	4.138	.125	33.22	0	3.894	4.382	***
LN total assets	.011	.004	2.77	.006	.003	.018	***
ROE	-.146	.027	-5.44	0	-.199	-.094	***
Default probability	-84.669	13.829	-6.12	0	-111.78	-57.558	***
Voice&Accountability	7.564	10.105	0.75	.454	-12.246	27.373	
Political stability	3.519	7.171	0.49	.624	-10.539	17.577	
Government effectivness	-12.369	21.814	-0.57	.571	-55.133	30.395	
Regulatory quality	2.273	7.223	0.31	.753	-11.887	16.433	
Rule of law	-3.237	13.651	-0.24	.813	-29.999	23.525	
Constant	-8.066	29.15	-0.28	.782	-65.213	49.081	

Mean dependent var	28.422	SD dependent var	14.835	
R-squared	0.245	Number of obs	5349	
F-test	173.274	Prob > F	0.000	
Akaike crit. (AIC)	42274.157	Bayesian crit. (BIC)	42346.588	

*** p<.01, ** p<.05, * p<.1

6. RESULTS' DISCUSSION (Explicative variables)

The strong pressure of the institutional framework generates a more hostile environment for companies that tend to provide only mandatory information without increasing voluntary information. Producing ESG disclosure involves transaction costs for the company, so there is a trade-off to evaluate. A primary benefit of corporate disclosure is to mitigate information asymmetries between the firm and its investors as well as among investors. However, disclosure has direct and indirect costs, which could counterpoise the benefits. The direct costs regard the preparation and dissemination of financial statements. The indirect costs may concern agency costs, because more stakeholders may use the information provided to investors (Christensen et al., 2021).

The relationship between ESG and institutional factors is significant and negative. It follows that as the pressure of institutional factors increases, there is a reduction in ESG disclosure.

For the US, on the other hand, institutional variables are found to be non-significant. In a liberal country where ESG disclosure is exclusively voluntary, institutional variables have no effect on ESG. Companies report on CSR only by their own choice, not due to external institutional pressures.

As we said, in USA, the disclosure of CSR is still rare in regulatory filings (SASB 2017c) but relatively common in standalone CSR reports (Li et al. 2021), because American companies voluntary disseminate ESG disclosure.

Regarding the control variables, for the sample of European companies, ROE, size, leverage, and default are significant. In Europe, ROE and ESG score are negatively correlated. Companies with lower profitability tend to provide more information on ESG to gain appreciation from the market regardless of their economic performance, in terms of organizational legitimacy. This correlation is consistent with some of the literature that suggests that companies disclose ESG information both to gain a competitive advantage (strategic vision) and to comply with a well-established practice (isomorphism vision) (Whelan et al., 2021).

According to another interpretation, it is possible that companies, having achieved a high level of profitability, consider it unnecessary to provide additional information on CSR as high economic performance is sufficient to reassure stakeholders and the market.

The positive and significant effect of firm size on ESG is confirmed. Larger companies tend to increase CSR disclosure as they have more resources and more advanced reporting systems (D'amico et al., 2016; García-Sánchez, 2008).

The leverage variable shows a highly positive correlation. As the level of indebtedness increases, companies tend to increase their CSR disclosure in order to gain appreciation from the market, regardless of their financial situation, in terms of organizational legitimacy.

Regarding the probability of default, expressed in nominal values, there is a strong negative correlation. Companies with a higher probability of default tend to reduce their CSR disclosure.

With reference to the sample of US companies, as far as the control variables are concerned, ROE, size, leverage and default, as well as the firm age, are significant

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7. CONCLUSIONS LIMITS AND FURTHER DEVELOPMENTS

As Jackson and Apostolakou (2010) point out that could be an asymmetric effect that firms adopting 'minimum standards' of CSR, but this regulatory system has little influence on the firm's adoption of best practices.

Some scholars as Doidge et al. (2007) argue that financial globalization decreases the importance of the home-country legal protection. In this context, there has been a spirited debate as to whether and how a firm's home-country legal institutions still play a role in determining firm-level CSR disclosure once the firm has its own access to the global capital market.

7. CONCLUSIONS LIMITS AND FURTHER DEVELOPMENTS

According to our perspective, companies typically engage in ESG reporting as a means to adhere to a prevailing norm or established practice. This trend is observed not only in Europe, where the presence of robust institutions makes ESG disclosure mandatory, but also in the United States, a more liberal country where CSR reporting remains entirely voluntary. A process of isomorphism is taking shape among companies, leading to a convergence wherein corporate sustainability reports are aligning with those published by larger corporations.

Nevertheless, it is important to acknowledge some limitations of the study. Firstly, the analysis does not delve deeply into the causal relationships between the variables, providing only a surface-level examination of their associations. Additionally, the study does not thoroughly explore the nuances of the linear relationships across various levels and dimensions of the explanatory variables.

Furthermore, we have focused our attention on ESG disclosure, which may not fully capture the actual commitment of companies to ESG issues. It would be intriguing to investigate whether the growth in ESG scores over time is accompanied by a corresponding increase in ESG activities.

Despite these limitations, our study offers interesting insights. By collecting data from 2008 to 2018, we focus on a period when reporting was predominantly voluntary, and the two geographical contexts exhibited similar behaviours. Specifically, the UE introduced mandatory ESG disclosure requirements starting in 2017.

7. CONCLUSIONS LIMITS AND FURTHER DEVELOPMENTS

As we said, so far, the information on CSR activities has been voluntary disclosed by firms. After the EU Directive 95/2014, starting the year 2017, non-financial indicators, such as the CSR ones, have to be disseminated as mandatory disclosure. The introduction of the groundbreaking EU Directive has set a clear course towards greater business transparency and accountability on social and environmental issues.

We need to specify that, although the sample is small, it however represents the most important firms on Europe and consequently the best practices on CSR disclosure. So that the present research is the first step of a wider project to enlarge the analysis among a bigger sample.

As future development of the research, it would be interesting to perform the analysis after the introduction of the directive and compare the results, in order to understand if firms have a sustainable and transparent behavior because they are forced to do this (if CSR is just another way of increasing profits), or because of a very general belief that voluntary sustainable behavior has a market appreciation.

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