Chaire Energie et Prospérité

Vers une normalisation des divulgations d'informations climatiques des entreprises :

les initiatives européenne et internationale

What are the Drivers of Corporates' climate transparency?

Evidence from the S&P 1200 Index

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Research context

- Sustainable reporting is constantly developing and represents an important evolution of the transparency expected by investors
- Climate disclosures have become a favoured regulatory tool for addressing climate risk to financial and market stability
- COP 21 (2015) when the Financial Stability Board (FSB) launched an international initiative, the **Task Force on Climate-related Financial Disclosures (TCFD),** to produce recommendations for corporate reporting on the financial implications of climate change
- The recommendations (July 2017) specify the elements of climate reporting with regards to 4 areas: Governance, Strategy, Risk management and Metrics and targets
- Since 2018, the TCFD recommendations were incorporate into the list of questions of the annual Carbon Disclosure Project (CDP) questionnaire
- **Two levels of climate transparency are considered: responding to the annual CDP questionnaire and the level of compliance with the TCFD recommendations**

Research context

What are the determinants of climate transparency for a global sample of firms ?

We investigate the typical profile of a climate risk transparent company regarding two stages of transparency:

i) the likelihood of responding to the CDP questionnaire

ii) the extent to which companies comply with the TCFD recommendations.

Theoretical foundation and hypothesis

Over the past 40 years, there has been an increasing number of academic works devoted to environmental disclosure.
We retain 2 theories that can allow us to explain climate disclosure legitimacy and agency theories.

Hypothesis 1: There is a negative relation between environmental/climate performance and climate disclosure

Hypothesis 2: There is a positive relation between Board diversity and climate disclosure

Hypothesis 3: There is a positive relation between Institutional ownership and climate disclosure.

Hypothesis 4: There is a positive relation between environmental/climate regulations and climate disclosure.

Data and Methodology

2 dependents variables

1) Response to CDP questionnaire

- Binary variable 0 or 1

2) TCFD Compliance measured by the Climate Risk and Opportunities Reporting Index (CRORI)

- Adapted from CRORI by Amar et al (2021)
- 24 questions from the TCFD recommendations in the 4 areas
- Computed from the CDP survey and Eikon Refinitiv database
- Score from 0 to 1

Data and Methodology

Sample : 571 firms from the S&P 1200 index over 2020-21

2 stages model : fractional regression model

13 Explanatory variables

Environmental and climate performance	Governance mechanism	Regulatory factors	Control variables
Firm's CO_2 emission (+) Environmental controversies (+) ISO 14000 (-) SDG 13 (-)	Independent board member (+) Gender diversity (+) CSR committee (+) CSR external audit (+) Institutional ownership (+)	Laws and policy (+)	Size Profitability EPI climate change score

RESULTS / GENERAL MODEL

Extract of **the two-part fractional regression model– Firms' decision to answer the CDP questionnaire**	
ISO 14000	**0.088*** **
CSR Committee	**0.199*** **
Env-controversies	**-0.251*** **
Independ. Board	**0.001***
Institutional Share	**-0.005***
Laws&Policies	
CSR External Audit	
Gender Diversity	
CO2 Emissions	
SDG 13	

The companies **that responded to CDP** are mainly those that

- are ISO 14 000 certified
- have few environmental controversies
- have set up a CSR committee

RESULTS /GENERAL MODEL

Extract of the two-part fractional regression model (2P-FRM) – Degree of compliance with the TCFD recommendations	
ISO 14000	0.028***
CSR External Audit	0.048***
CO2 Emission	0.008***
SDG 13	0.021***
Institutional Share	0.002*
Laws&Policies	0.002***
Gender Diversity	0.028***
Independent board	
Env-controversies	
CSR Committee	

- Companies that are **most TCFD compliant** are those that
  - are ISO 14000 certified
  - follow the SDG13 guidelines
  - emit the most GHGs emissions
  - have an external CSR audit
  - have more women on the Board
  - are located in countries with the most climate regulations

RESULTS / SECTOR

Drivers of the …	Likelihood of responding to CDP High stake sector	Compliance with TCFD High Stake sector
ISO 14000		
SDG 13		0.027***
Envi-Controversies	-0.250***	
CO2 Emissions		0.011***
CSR Committee	0.209***	
CSR Ext. Audit		0.055**
Indpdt. Board	0.002**	-0.000**
Instit. Own.		0.002**
Laws&Policies	0.005**	0.002***
Assets	0.065***	
Tobin 5Y	0.52**	
EPI	0.015***	
N	628	399

TCFD High stake sectors : Finance, Energy, Food, Buildings and transportation

RESULTS / GEOGRAPHICAL REGION

	Response to CDP questionnaire			Compliance with TCFD recommendations		
	Anglo-Saxon	Europe	Asia	Anglo-Saxon	Europe	Asia
ISO 14000	0.119***		0.237***	0.024**		0.122***
SDG 13	0.032***					
Env-Controversies	-0.290***	-0.270**		0.060***		
CO2 Emissions	-0.020**	0.024**	-0.060***		0.017***	
CSR Committee	0.169*		0.219*			-0.0511**
CSR Ext. Audit				0.039***	0.082***	
Indpdt. Board					-0.000*	
Gender Div.			-0.008**		0.002***	
Instit. Own.	-0.019***		-0.007*			
Assets	0.076***	0.025*				
Tobin 5Y	0.036**		-0.118***	-0.009***		
N	532	384	180	330	255	144

The drivers of climate transparency differ widely across regions

CONCLUDING REMARKS

- The 2 levels of transparency are explained by different drivers

- Companies that are ISO 14000 certified are more transparent (levels 1 & 2)
- Different governance mechanisms explain the climate transparency (level 1 vs level 2)
- Compliance with TCFD recommendations is influenced by the level of regulation in the home country

- Areas for further study : Determine a more refined measure of climate performance