SOCIAL PERFORMANCE : NEW FRONTIER OF THE ENVIRONMENTAL QUESTION ?

FIRM LEVEL PERSPECTIVE

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Social performance : new frontier of the environmental question ?

- Paris Agreement Preamble

- “Taking into account the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities”

Social performance : new frontier of the environmental question ?

- It is difficult to reconcile energy transition and social impact in a context where

1. **environmental risks are not distributed equitably**, which raises a "distributive justice" issue (socially just repartition of resources)

2. the **different stakeholders do not have the same opportunities to influence decisions concerning their immediate environment**, which raises the issue of "procedural justice “(fairness in the processes that resolve disputes and allocate resources (ex ante)

1- ESG and« distributive justice »

- Distributive justice concerns the socially just repartition of resources (ex post)

⇒Concentrates on outcomes (impact) and its distribution

- How to mitigate the socio-economic impact of the transition for the most exposed/vulnerable stakeholders?

- Which economic and social criteria are relevant?
- At the company level, how can we standardize information on extra-financial performance, particularly social performance?

- More generally, what are the interactions between social performance and environmental performance?

⇒What complementarities between the environmental and social dimensions?

ESG and« distributive justice »

- Three types of data available:

✓ extra-financial rating agencies

✓ official statistics surveys

✓ experimental data

Results on ESG ratings (1)

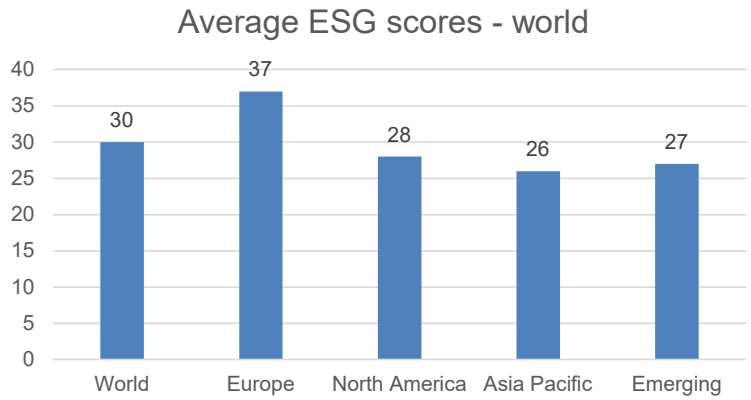
VigeoEiris – Moody's

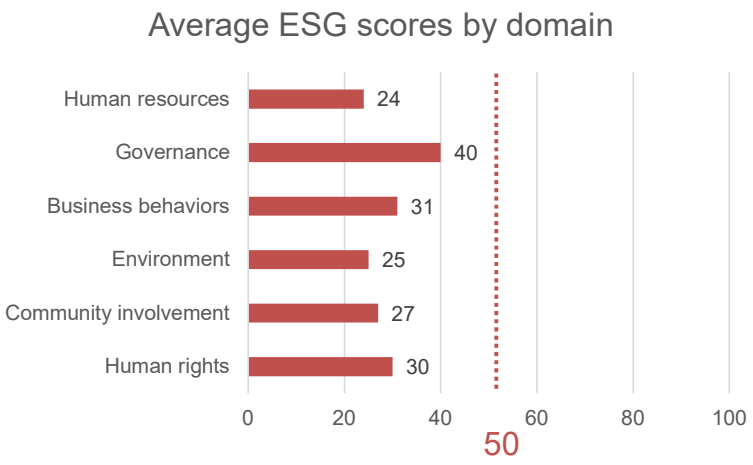
Corporates evaluated **4553**

Sovereigns evaluated 181

Number of indicators 500+

Number of lines in the database 3,5 M





Human resources +7

Environment +10

Governance +4

Human rights +3

Community involvement -1

Business behaviors -2

2010-2018 trends

Results on ESG ratings (1)

- ❑ 600 biggest capitalizations in Europe
- ❑ 2002 - 2007

$$\Pi_{it} = \beta_1 \Pi_{it-1} + \beta_{abc} CSR_{it} + \beta_3 X_{it} + \beta_4 \lambda_{it} + \mu_i + \delta_t + \varepsilon_{it}$$

- Exclusive categories :
  Combinations of 3 practices (HR, ENV, CS)
- 8 dummies defined
- 8 "CSR states"

CSR states	State	%
Ranking below sectoral average on the three dimensions	State000	9
Ranking above sectoral average on Human Resources (HR)	State100	5
Ranking above sectoral average on Environment only (ENV)	State010	5
Ranking above sectoral average on Business Behaviour (BB)	State001	8
Ranking above sectoral average on HR and ENV	State110	12
Ranking above sectoral average on HR and BB	State101	8
Ranking above sectoral average on ENV and BB	State011	8
Ranking above sectoral average on the three dimensions	State111	45

Complementarity test

HR & ENV complementary

$\beta_{111} + \beta_{001} \geq \beta_{101} + \beta_{011}$ and $\beta_{110} \geq \beta_{010} + \beta_{100}$

HR & CS complementary

$\beta_{111} + \beta_{010} \geq \beta_{110} + \beta_{011}$ and $\beta_{101} \geq \beta_{001} + \beta_{100}$

ENV & CS complementary

$\beta_{111} + \beta_{100} \geq \beta_{101} + \beta_{110}$ and $\beta_{011} \geq \beta_{001} + \beta_{010}$

Results on ESG ratings (1)

Table 4. CSR scores and financial performance (Tobin's Q)

	Static		Dynamic		
Variables	Pooled OLS	Fixed-effects	Pooled OLS	System GMM	System GMM
Tobin's Q ($t-1$)			0.575***	0.474***	0.477***
			(0.157)	(0.049)	(0.052)
HR score	−0.007**	−0.006**	0.002	0.013***	
	(0.003)	(0.003)	(0.003)	(0.003)	
ENV score	0.002	0.007	0.004	0.002	
	(0.003)	(0.005)	(0.002)	(0.003)	
BB score	0.003	0.002	0.001	0.004	
	(0.002)	(0.001)	(0.001)	(0.003)	
ENV × HR scores	−0.001	−0.001***	−0.001***	−0.001***	
	(0.0003)	(0.001)	(0.000)	(0.000)	
ENV × BB scores	0.001	−0.001**	0.001	−0.001***	
	(0.001)	(0.000)	(0.001)	(0.000)	
HR × BB scores	0.001**	0.001**	0.001*	0.001***	
	(0.000)	(0.000)	(0.000)	(0.000)	
CSR global					−0.103***
					(0.036)
$l_{\text{total assets}}$	0.290***	−0.318***	−0.200***	−0.153***	−0.127**
	(0.026)	(0.029)	(0.056)	(0.025)	(0.059)
l_{sales}	0.068***	0.136***	0.048**	0.044**	0.055
	(0.024)	(0.029)	(0.027)	(0.019)	(0.060)
R&D ratio	1.016***	1.013***	1.047***	1.283***	1.289***
	(0.515)	(0.317)	(0.257)	(0.503)	(0.420)
No R&D	−0.185	−0.099	−0.113	−0.187	0.099
	(0.169)	(0.083)	(0.071)	(0.167)	(0.102)
Debt ratio	−0.016	0.007	0.123*	0.127*	0.151
	(0.012)	(0.11)	(0.071)	(0.070)	(0.113)
DJSTOXX600 index	0.344***		0.211***	0.196***	0.148***
	(0.048)		(0.073)	(0.045)	(0.039)
Advertising ratio	0.045***	0.038***	0.008	0.011	0.020
	(0.012)	(0.013)	(0.007)	(0.010)	(0.021)
Year dummies	Yes	Yes	Yes	Yes	Yes
Sector dummies	Yes	No	Yes	Yes	Yes
Countries dummies	Yes	No	Yes	Yes	Yes
R^2	0.305	0.231	0.781		
AR1				$p = 0.008$	$p = 0.006$
AR2				$p = 0.336$	$p = 0.301$
Hansen test				$p = 0.667$	$p = 0.684$

Cavaco Crifo 2015, 2016

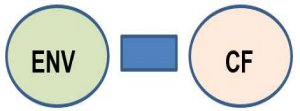
Table 6. CSR states and financial performance: system GMM (dynamic panel data)

Variables	ROA	Tobin's Q
ROA ($t-1$)	0.356**	
	(0.180)	
Tobin's Q ($t-1$)		0.557***
		(0.117)
State000	Ref.	Ref.
State111 (HR, ENV & BB)[a]	0.645*	0.166
	(0.351)	(0.173)
State110 (HR & ENV)[b]	0.676*	0.316
	(0.410)	(0.203)
State100 (HR)	0.471	0.419**
	(0.421)	(0.205)
State001 (BB)	0.571	0.192
	(0.452)	(0.235)
State010 (ENV)	0.476	0.266
	(0.443)	(0.228)
State011 (ENV & BB)	1.075***	0.333
	(0.412)	(0.220)
State101 (HR & BB)	0.743**	0.108
	(0.389)	(0.218)
$l_{\text{total assets}}$	−0.262***	−0.174***
	(0.071)	(0.044)
l_{sales}	0.186***	0.066***
	(0.061)	(0.022)
R&D ratio	−0.470	1.603***
	(0.877)	(0.318)
No R&D dummy	−0.002	0.016
	(0.078)	(0.027)
Debt ratio	−0.145***	0.235**
	(0.049)	(0.120)
DJSTOXX600 index	0.151*	0.156***
	(0.900)	(0.051)
Advertising ratio	−0.023	−0.054
	(0.020)	(0.044)
Year dummies	Yes	Yes
Sector dummies	Yes	Yes
Countries dummies	Yes	Yes
AR1	$p = 0.001$	$p = 0.009$
AR2	$p = 0.286$	$p = 0.297$
Hansen test	$p = 0.799$	$p = 0.659$

Notes: Robust SEs in parentheses.
[a]Ratings are above sectoral average on the three CSR dimensions.
[b]Ratings are above sectoral average on human resources and environment.
***$p < 0.01$; **$p < 0.05$; *$p < 0.10$

Synergies (comp)

Trade-off(subst)



Results on ESG ratings (2)

- 900 biggest capitalizations OECD
- 2004 - 2012

Tableau 14 : Scores RSE (ajustés au secteur), performance et crise

Variables	Avant 2007	Après 2007
HR score	0,476 (0,376)	0,460** (0,198)
ENV score	0,125 (0,286)	– 0,425** (0,194)
CS score	0,448 (0,426)	0,440 (0,301)
HRTS score	0,250 (0,401)	– 0,090 (0,314)
HR * ENV	0,248 (0,197)	0,011 (0,060)
HR * CS	– 0,703** (0,330)	0,482** (0,198)
HR * HRTS	0,019 (0,295)	0,077 (0,161)
ENV * CS	0,058 (0,206)	0,156 (0,181)
ENV * HRTS	– 0,406 (0,298)	0,086 (0,166)
CS * HRTS	0,224 (0,408)	– 0,109 (0,271)

Notes :
(1) Chaque colonne présente les résultats d'une régression distincte, où la variable dépendante est le log du ROA.
(2) Outre les variables indiquées en ligne, chaque régression contrôle des variables suivantes : taille de l'entreprise (ventes), levier financier, ratio R & D sur total des ventes.
(3) Dans les estimations avec effets fixes, les contrôles, invariants tels que le secteur d'activité ou le pays, disparaissent.
(4) Une indicatrice année est systématiquement introduite.
(5) Écarts types entre parenthèses.
(6) *** p < 0,01, ** p < 0,05, * p < 0,1.

Tableau 16 : Scores RSE (ajustés au secteur), performance et réglementation RSE

Variables	Régime RSE non contraignant	Régime RSE contraignant
HR score	0,474** (0,201)	0,871** (0,403)
ENV score	– 0,334** (0,171)	– 0,527 (0,337)
CS score	0,060 (0,275)	– 0,175 (0,484)
HRTS score	– 0,359 (0,281)	– 0,167 (0,463)
HR * ENV	0,042 (0,064)	0,145 (0,203)
HR * CS	– 0,544** (0,189)	– 0,345 (0,412)
HR * HRTS	0,114 (0,161)	– 0,365 (0,347)
ENV * CS	0,225 (0,150)	0,086 (0,328)
ENV * HRTS	– 0,054 (0,162)	0,163 (0,310)
CS * HRTS	0,162 (0,262)	0,391 (0,419)

Notes :
(1) Chaque colonne présente les résultats d'une régression distincte, où la variable dépendante est le log du ROA.
(2) Outre les variables indiquées en ligne, chaque régression contrôle des variables suivantes : taille de l'entreprise (ventes), levier financier, ratio R & D sur total des ventes.
(3) Dans les estimations avec effets fixes, les contrôles, invariants tels que le secteur d'activité ou le pays, disparaissent.
(4) Une indicatrice année est systématiquement introduite.
(5) Écarts types entre parenthèses.
(6) *** p < 0,01, ** p < 0,05, * p < 0,1.

Results on ESG ratings (2)

- 900 biggest capitalizations OECD
- 2004 - 2012

Tableau 18 : Scores RSE (ajustés au secteur), performance et secteur

Variables	Non industrie	Industrie
HR score	0,538*** (0,194)	0,591 (0,434)
ENV score	– 0,164 (0,165)	– 0,998*** (0,411)
CS score	– 0,054 (0,276)	0,473 (0,436)
HRTS score	– 0,412 (0,280)	0,232 (0,496)
HR * ENV	0,018 (0,060)	0,410** (0,203)
HR * CS	– 0,549*** (0,182)	– 0,474 (0,436)
HR * HRTS	0,127 (0,157)	– 0,441 (0,308)
ENV * CS	0,202 (0,141)	0,148 (0,384)
ENV * HRTS	– 0,158 (0,147)	0,346 (0,343)
CS * HRTS	0,351 (0,250)	– 0,195 (0,428)

Notes :
(1) Chaque colonne présente les résultats d'une régression distincte, où la variable dépendante est le log du ROA.
(2) Outre les variables indiquées en ligne, chaque régression contrôle des variables suivantes : taille de l'entreprise (ventes), levier financier, ratio R & D sur total des ventes.
(3) Dans les estimations avec effets fixes, les contrôles, invariants tels que le secteur d'activité ou le pays, disparaissent.
(4) Une indicatrice année est systématiquement introduite.
(5) Écarts types entre parenthèses.
(6) *** p < 0,01, ** p < 0,05, * p < 0,1.
(7) Industrie : automobile, biens de consommation, construction, énergie, biens d'équipement, biens intermédiaires, transport, IAA.

Tableau 19 : Scores RSE (ajustés au secteur), performance et secteurs énergie et finance

Variables	Énergie	Finance
HR score	0,491 (0,500)	1,121*** (0,307)
ENV score	– 0,729 (0,528)	– 0,091 (0,292)
CS score	1,580*** (0,535)	– 1,937*** (0,561)
HRTS score	– 0,370 (0,566)	– 2,110*** (0,631)
HR * ENV	0,476** (0,223)	0,099 (0,087)
HR * CS	– 1,108** (0,564)	– 0,805** (0,323)
HR * HRTS	– 0,043 (0,420)	– 0,187*** (0,239)
ENV * CS	– 0,183 (0,468)	0,238 (0,249)
ENV * HRTS	0,324 (0,451)	– 0,569 (0,253)
CS * HRTS	– 0,270 (0,519)	2,499 (0,610)

Notes :
(1) Chaque colonne présente les résultats d'une régression distincte, où la variable dépendante est le log du ROA.
(2) Outre les variables indiquées en ligne, chaque régression contrôle des variables suivantes : taille de l'entreprise (ventes), levier financier, ratio R & D sur total des ventes.
(3) Dans les estimations avec effets fixes, les contrôles, invariants tels que le secteur d'activité ou le pays, disparaissent.
(4) Une indicatrice année est systématiquement introduite.
(5) Écarts types entre parenthèses.
(6) *** p < 0,01, ** p < 0,05, * p < 0,1.

Results on ESG ratings (2)

- ❑ 900 biggest capitalizations OECD
- ❑ 2004 - 2012

Tableau 24 : Sous-scores RSE et performance (interactions inter-domaine)

Variables	Coeff.	Écart-type
HR2 * ENV1	0,001**	0,0003
HR3 * ENV2	0,001**	0,0003
HR2 * HRTS1	– 0,001**	0,0003
CS1 * HRTS1	0,001**	0,000

Notes :
(1) Chaque colonne présente les résultats d'une régression distincte, où la variable dépendante est le log du ROA.
(2) Outre les variables indiquées en ligne, chaque régression contrôle des variables suivantes : les 10 sous-scores, les termes d'interaction entre ces 10 sous-scores, taille de l'entreprise (ventes), levier financier, ratio R & D sur total des ventes.
(3) Dans les estimations avec effets fixes, les contrôles, invariants tels que le secteur d'activité ou le pays, disparaissent.
(4) Une indicatrice année est systématiquement introduite.
(5) Écarts types entre parenthèses.
(6) *** p < 0,01, ** p < 0,05, * p < 0,01.

– HR1 : amélioration continue des relations avec les salariés ;
– HR2 : développement des compétences et des carrières ;
– HR3 : qualité des conditions de travail ;
– ENV1 : intégration des enjeux environnementaux dans la stratégie d'entreprise ;
– ENV2 : intégration des enjeux environnementaux dans la fabrication et la distribution des produits ;
– CS1 : clients : information, sécurité des produits ;
– CS2 : fournisseurs et sous-traitants : relations responsables (environnement, social) ;
– CS3 : intégrité des affaires (corruption et défaut de concurrence) ;
– HRTS1 : respect des droits de l'homme ;
– HRTS2 : respect des droits de l'homme au travail.

Results on ESG ratings (2) - conclusion

•What social performance indicators are complementary inputs of firm performance ?

- Human resources:
  - The interaction between the criteria of skills, careers and working conditions has a positive effect on CFP
- Customer and supplier relations:
  - The integrity of the business and its interaction with product safety has a positive impact on CFP
- Human rights
  - The interaction of respect for human rights and labor has a negative impact on CFP
- Three pairs of CSR dimensions are complementary:
  - Human Resources and Environment (HR and ENV).
  - Human Resources and Human Rights (HR and HRTS).
  - Environment and Customers and Suppliers (ENV and CS).
- One pair of CSR dimensions is substitutable:
  - Human Resources and Customers and Suppliers (HR and CS)

Tableau 25 : Scores RSE (ajustés au secteur) et performance – approche dynamique

(890 observations)

Variables	Coeff.	Écart-type
L.ROA	0,477***	0,033
HR score	– 0,111	0,395
ENV score	– 0,475**	0,164
CS score	0,588	0,514
HRTS score	0,182	0,491
HR * ENV	0,143**	0,070
HR * CS	– 0,552*	0,318
HR * HRTS	0,561**	0,292
ENV * CS	0,580**	0,239
ENV * HRTS	– 0,334	0,288
CS * HRTS	– 0,332	0,440
Lsales	– 0,090***	0,013
R & D ratio	0,005*	0,003
No R & D	– 0,257***	0,034
Debt ratio	– 0,115***	0,013
Pays dummies	OUI	
Secteurs dummies	OUI	
Années dummies	OUI	
AR1	P = 0,000	
AR2	P = 0,312	
Hansen test	P = 0,788	

*** p 0,01 ; ** p 0,05 ; * p 0,10

Results on ESG practices

- *Official survey of public statistics (COI) and fiscal data (EAE)*
- *Representative sample of more than 8,500 companies with more than 10 employees - private sector in 2003 or 2006*
- *19 organizational and managerial practices observed covering several CSR areas*

- 1 indicateur agrégé RSE + 4 indicateurs RSE par domaine
- Chaque indicateur est analysé en corrélation à la **performance économique « objectivable » selon 3 mesures :** profit net / VA par tête / EBE par tête

Crifo, Diaye, Pekovic 2016; Benhamou, Diaye, Crifo 2016

Results on ESG practices

- ❑ Environmental (Green) standard : ISO14001 , organic labeling, fairtrade, ..
- ❑ Human resources(HR):
  1. Improve employee relations/skills and keep its employees;
  2. central databases for HR & training
  3. internal project group
  4. external services in order to improve HR and training activities;
  5. internet for employees' learning or training
- ❑ Customer and suppliers (CS):

1. use of labeling tools for goods and services
2. delivery or supply of goods or services to a fixed deadline
3. contactor call center for customers
4. Integrated IT-CRM
5. quality standard or quality control procedure demanded by main customer
6. tools to study customer expectations, behavior or satisfaction
7. Internal departments focused on improving safety and environmental issues
8. Long term relationships with suppliers
9. Quality standard or quality control procedure for main supplier
10. IT systemwith main supplier
11. ISO9000 standard (quality management)

HR dummy=1 if HR ≥ mean value of sum = 2.11

CS dummy=1 if CS ≥ MVS = 4.03

- **CSR.**

Sum: (1) green; (2) HR; (3) customer & supplier ={0,1,2,3}

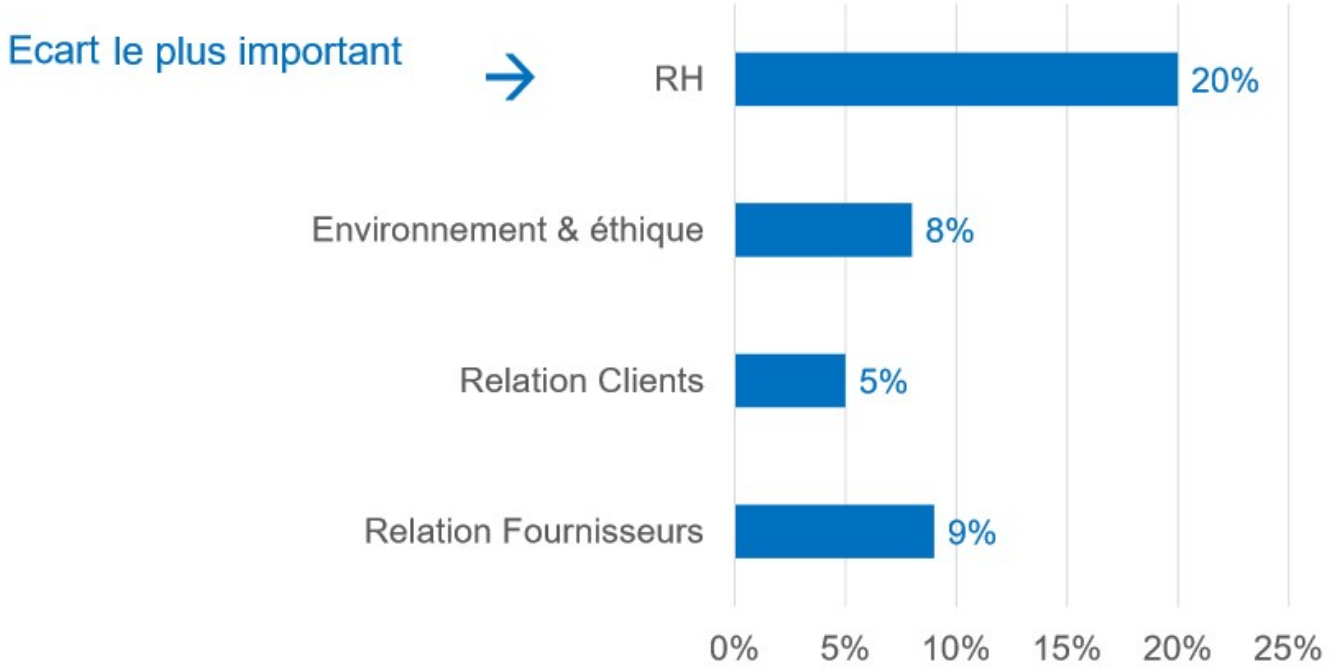
Dummy
CSR_1_0 = 1 if 1 dimension;
CSR_2_0 = 1 if 2 dimensions;
CSR_3_0 = 1 if 3 dimensions

- **Interactions.**

Crifo, Diaye, Pekovic 2016; Benhamou, Diaye, Crifo 2016

Results on ESG practices (1)

Ecart de performance
entre les entreprises avec / sans stratégie RSE : 13% (TCEA)



Benhamou, Diaye, Crifo 2016

Results on ESG practices (2)

Table 2
Qualitative estimations.

Type of interaction	Sign	Coefficient
One dimension		
Green practices only	+	0.53***
HR practices only	+	0.52***
Customer & supplier practices only	+	0.30*
Two dimensions		
Green and HR practices	+	0.59*
Green and customer & supplier practices	+	0.51***
HR and customer & supplier practices	+	0.25**
Three dimensions		
Green, HR, and customer & supplier practices	+	0.43***

- ESG factors in isolation exert a positive impact on a firm's profit
- But ESG are substitutes:

Coeff G+CS= 0.51< 0.83 = coeff G (0.53) + coeff CS (0.3)

- **Green and HR are optimal configurations**:

For firm starting with this configuration it is better not to move to another configuration.
In all other configurations, firms can always improve their profits either by adding or removing some dimensions

Table 3
Quantitative estimations.

Number of dimensions	Sign	Coefficient
1. CSR dimension	ns	0.45
2. CSR dimensions	+	0.26***
3. CSR dimensions	+	0.43***

- **Quantity versus quality**:

More dimensions is better
But a quantitative strategy is less efficient than a qualitative one (tab 2: over the 7 possible qualitative policies, 4 have better results than the best quantitative policy in tab 3).

Crifo, Diaye, Pekovic 2016

Results on ESG practices (3): the wage puzzle

❑ **CSR and wage:**

- **productivity effect:** higher CSR would enhance employee productivity via proactive human resources policies which increase skills / human capital and therefore labor productivity. (Delmas and Pekovic 2013; Edmans 2011; Jones and Murrell 2001; Galbreath 2006, Bailey et al., 2001).
  - ✓ **entrenchment (overinvestment)** => + with base wage, - with bonus

- **motivation effect (hidden cost of incentives)**:

  Compensating differentials (Rosen 1974 / A. Smith 1778) and hedonic models: the higher pay that a company must pay under perfect competition to compensate for bad working conditions.

  - ✓ Employees motivated by the **CSR culture (assortative matching)** would also be likely to trade-off monetary for non-monetary benefits and accept lower wages because their work satisfies their personal values (Burbano 2016, Nyborg and Zhang 2012, Gond et al. 2010, Frank 1996). => - with base wage, + with bonus

Results on ESG practices (3): the wage puzzle

- **Empirical results:**
  - Sample of 15,365 workers (COI + Annual Survey of the Cost of Labor and the Wage Structure (ECMOSS) + Annual Business Survey (EAE) in 2006

- 3 forms of monetary incentives.
  - Base wage. difference between the log of total gross annual wage and the remuneration of paid leave and overtime, bonuses and various supplements.
  - Total wage. sum of the log of total gross annual wage and employee stock and ownership plans (ESOP) and profit sharing and employer's contribution to ESOP and pensions as well as other compensations.
  - Wage premium. Log of the difference between total wage and base wage.

- 3 CSR dimensions: green , HR and customers and suppliers (CS).

Variable	Description	Mean	SD	Min.	Max.
Occupation	Employees work as				
	Management	0.19	0.39	0.00	1.00
	Middle management	0.31	0.46	0.00	1.00
	White-collar worker	0.12	0.33	0.00	1.00
	Blue-collar worker	0.38	0.48	0.00	1.00
Working hours	The number of working hours per week	35.86	10.65	0.00	70.00
Business sectors (a)	Agrifood, consumption goods, intermediate goods, construction, sales, transport and financial and real-estate activities				

Results on ESG practices (3): the wage puzzle

	The base wage	The total wage	Wage premium
Whole sample (N = 13,186)	ns	ns	−1.42***
Manager sample (N = 6,496)	ns	ns	2.63***
Nonmanager sample (N = 6,633)	ns	ns	−1.79***

Note(s): ns: indicates "non-significant"
***: indicates parameter significance at the 1% level

Table 2.
The summary of SEM results – the relation between CSR and wage policies

- Firms adopting CSR practices tend to pay lower wage premium (employee participation and pensions, bonuses and overtime compensation)
- But when we distinguish between managers and nonmanagers, the results reverse: coeff negative for nonmanagers, while it is significant and positive for managers.

➢ CSR practices lead to segmentation and sorting between skills: managers (the high skilled segment) would benefit from both responsible practices (nonmonetary incentives) and bonuses (E+S+W), while nonmanagers (the low skilled segment)would not benefit from such a complementarity but would rather be subject to substitutability between bonuses and nonmonetary incentives (E+S-W).

2- ESG and« procedural justice »

- Procedural justice concerns fairness in the processes that resolve disputes and allocate resources (ex ante)
- How can we give back to the exposed/ vulnerable stakeholders a role, i.e. a capacity to influence the decisions that concern their environment?
- In the company: raises the question of employee participation in the company's decisions and therefore in its governance

⇒Governance: as a mediating factor of environmental and social dimensions

Different forms of employee participation

1. Work organization
High performance work practices (positive interaction E+S)

2. Employee representation
Institutional" mechanisms of employee representation

3. Financial participation, profit-sharing, employee share ownership
Performance related pay) and employee shareholding (wage puzzleE+S-W)

4. Shared governance: worker board level participation

Board level employee representation

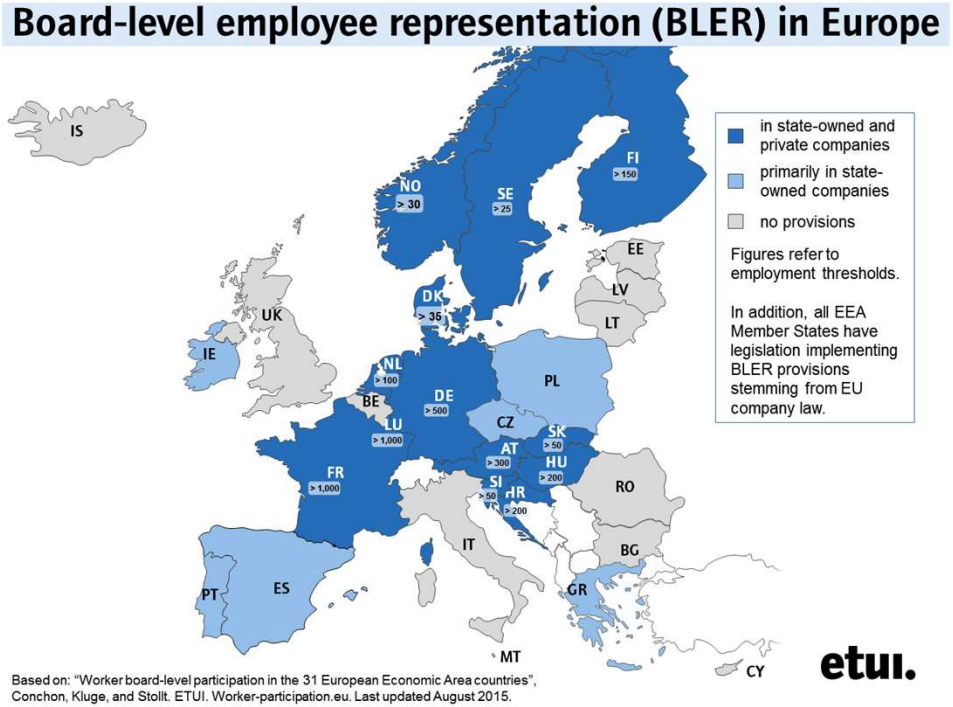
France: laws 2013, 2015 et 2019

between 10 and 15% of BLER, vs 30% in Europe on average

BLER in private companies in Europe

	Moitié	Tiers	Moins du tiers
Pays germanophones	Allemagne (plus de 2 000 salariés)	Allemagne (entre 500 et 2 000 salariés), Autriche, Luxembourg	–
Pays nordiques	–	Danemark (2 rep. minimum), Norvège (1/3 à partir de 50 salariés)	Suède (2 membres si moins de 1 000 salariés, 3 au-delà), Finlande (20 % maximum), *Norvège (1 membre entre 30 et 49 salariés)*
Europe centrale	–	Hongrie, République tchèque, Pologne (environ 1/3 selon la taille du conseil), Slovaquie, Slovénie (entre 1/3 et 1/2)	–
Autres		Pays-Bas	France

Clerc (2018)



Board level employee representation

- Economic justifications:

- investments made by employees in specific human capital (not redeployable) put part of the entrepreneurial risk on the workers

⇒challenges the supremacy of shareholders in terms of governance

- failure of regulators to implement efficient and enforceable regulations (taxes, standards)

⇒going beyond the profit standard - so that companies themselves can take into account the environmental and societal externalities of their activity in their strategy (CSR)

- No consensus in the literature concerning the impact of BLER on performance

↓stock price, ↑ innovation and productivity, ambiguous on wages
(see eg Jäger et al. 2020 2022)

Research question

Executive remuneration : the missing link between BLER and firm performance ?

ESG and executive pay

- The Covid-19 crisis has brought the issue of executive compensation back to the forefront, with calls for moderation of such compensation

- In France, very active debate (disclosure of remuneration in the annual reports of large listed companies)
  - AFEP (French association of private companies), recommends a 25% reduction in executive compensation during the crisis period.
  - In spring 2020, compensation cuts were reported in more than half of the CAC 40 companies.
  - 2019 Pacte law (Action Plan for the Transformation and Growth of Companies) : invitation to disclose the equity ratio (gap between executives and mean or median wage) and to disclose the **variable components of the executive pay based on non-financial performance criteria**

ESG and executive pay

Integration of ESG issues in executive remuneration policies

- ❑ Is developing fast over the past decade
- ❑ Is encouraged worldwide in particular under the initiative of the United Nations and the Principles for Responsible Investment (Hong et al., 2016).
- ❑ Meant to encourage executives to sacrifice short-term payoffs for long-term gains and stakeholder engagement (Flammer, Hong, and Minor 2019).
- ❑ Whereas there is a large literature on executive financial compensation programs (traditional “pay for financial performance plans”), little is known regarding the use and performance effects of CSR contracting (“pay for extra-financial performance plans”), especially at the empirical level (Maas 2016)

ESG and executive pay

Source: PwC & LBS (2021) Willis Tower Watson (2020)

•37% use ESG in annual bonus with an average weighting of 15%
•The most common category of measure in the bonus is Social, including measures focusing on diversity, employee engagement, and health & safety
•The most common category of measure in the LTIP is Environmental, typically measures focusing on decarbonisation and the energy transition

Qu 1 :

ESG bonus and ESG performance

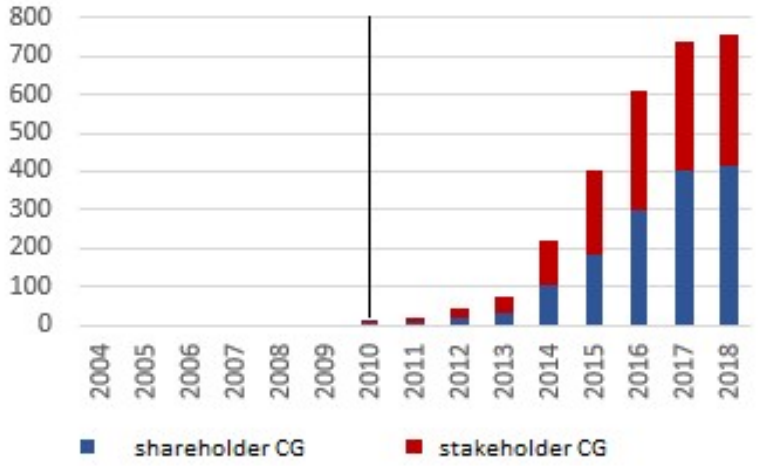
Cavaco Crifo Guidoux, 2020, 2022

Our approach

- Empirical study to identify the mediating factor of the CSR-performance link
- Database of large companies from OECD countries (over 3400 firms) for the period 2004-2018 : VigeoEiris Moody's
- Difference in difference method : difference in performance between the companies that implemented these CSR bonuses and those that did not (control group)

Data: ESG Bonus and governance

	Shareholder	Stakeholder
Objective	Shareholder value	Stakeholder value
Financial Markets	Very active	Limited
Shareholding	Dispersed	Concentrated, blockholders
Discipline device and control	External Market-based (eg. takeover bids threats)	Internal Monitoring (eg. audit)
Incentives and horizon	Short term (objectives based on stock prices) High powered financial incentives	Long term (objectives based on strategic management) Low powered financial incentives
Boards	Represent shareholders interests	Dominated by stakeholders
Total sample	51%	49%
Treated group	54%	46%



Number of companies with ESG bonus

- No observation of ESG bonus adoption before 2010.
- From 2010 to 2018, strong increasing trend with 814 companies that choose to implement ESG bonus.
- Those companies (‘treated’) represent 20 percent of the total sample.

ESG performance

CSR Profile of Companies Adopting CSR Contracting

	HR	ENV	CS	CIN	HRts	CG
Above the sector mean	68%	63%	64%	63%	66%	64%
Below the sector mean	32%	37%	36%	37%	34%	36%

Note: The company's scores and the average scores of its industry are compared for the year of the adoption of CSR contracting.

65 % of the adopting firms belong to the top of their sector for all CSR domains
=> self-selection bias is addressed by our methodology (DiD)

Results

2SLS and cross estimation of ESG bonus and CG

performance indicators: Variations :	ROA	ROE	HR	ENV	Customers and suppliers	Community involvement	Human rights
All companies	-0.4**	-1.1**	+1.0***	+1.2***	+2.0***	+2.0***	1.1***
Companies with a shareholder CG	-0.8**	-1.6*	Non significant	Non significant	1.5***	Non significant	Non significant
Companies with a stakeholder CG	Non significant	Non significant	+1.402***	+2.0***	+2.5***	+2.5***	2.1***

- For firms with a shareholder governance : ESG bonus has no effect on any extra-financial factors except customer and suppliers at a 1% level.
- For firms with a stakeholder governance ESG bonus has a large positive impact on all dimensions of extra-financial performance.

Results

- It may be appealing to adopt ESG bonus to create incentives for ESG adoption and performance
- We observe that ESG bonus seems to have a positive impact on all CSR factors
- But when endogeneity of the adoption of ESG bonus is accounted for it has a large positive impact on all dimensions of extra-financial performance only for firms with a stakeholder governance structure
- Necessity to align managerial incentives with corporate governance
- To increase corporate sustainability: shared governance (board level employee representation)

QU 2:

ESG bonus and BLER

Cavaco, Crifo, Rebérioux , work in progress

Executive remuneration: missing link BLER/performance?

3 data sources: VigeoEiris (VE), Factset, BoardEx + hand processing collection from companies' annual reports.

VE: 600 European companies (the largest listings) over 2010-2018

Our sample: 398 distinct companies for 6 countries: France + those without BLER

Preliminary results

Positive effect of BLERs on the adoption of ESG bonuses

The effect is driven by companies where ERs are present on the compensation committee

The ESG bonus/performance link, heterogeneous according to governance models, linked to the presence of ERs on the compensation committee?

Thank you !

https://sites.google.com/site/patriciacrifo/