

Interplay between environmental, social and governance coordinates and the financial performance of agricultural companies

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Electronic supplementary material

Supplementary Tables S1–S2

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Table S1. Goodness-of-fit tests for the SEM models

Descriptions	Model 1	Model 2	Model 3
	<i>EBIT</i>	<i>ROA</i>	<i>ROE</i>
Wald test for equations			
chi ²	121.19	71.18	70.48
<i>P</i> -value	0.000	0.000	0.000
Alpha Cronbach	0.7595	0.7284	0.6012
Likelihood ratio			
Baseline vs. saturated chi ² _bs (17)	46.84	35.95	35.74
<i>P</i> > chi ²	0.000	0.000	0.005
Information criteria			
Akaike's information criterion (AIC)	4495.622	4318.114	4398.353
Bayesian information criterion (BIC)	4519.601	4342.726	4422.965
Baseline comparison			
Comparative fit index (CFI)	1.000	1.000	0.998
Size of residuals			
Coefficient of determination (CD)	0.812	0.711	0.708

SEM – structural equation modelling; *EBIT* – earnings before interest and taxes; *ROA* – return on assets; *ROE* – return on equity

Source: Own elaboration according to data from Thomson Reuters (2021) Eikon database

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Table S2. Detailed SEM results

Variables	Model 1	Model 2	Model 3
	EBIT	ROA	ROE
<i>CO2_emissions</i>	7.508000 (6.86000)	0.069400*** (0.01840)	0.184000* (0.07330)
<i>Targets_emissions</i>	−8.003000 (6.34500)	−0.006560 (0.01730)	−0.125000 (0.06910)
<i>Policy_emissions</i>	−126.400000** (43.19000)	0.045000 (0.11800)	0.127000 (0.47100)
<i>Targets_diversity</i>	−12.020000* (5.31200)	0.018700 (0.01420)	−0.049900 (0.05680)
<i>Resource_policy</i>	−59.720000 (554.30000)	−4.442000** (1.50800)	−5.122000 (6.01600)
<i>Bribery_corruption_policy</i>	12.080000 (16.08000)	0.207000*** (0.04410)	0.358000* (0.17600)
<i>CSR_sustainability</i>	−27.500000 (140.00000)	−0.597000 (0.34600)	−0.463000 (1.37800)
<i>CSR_strategy</i>	6.232000 (11.68000)	0.123000*** (0.03200)	0.416000** (0.12800)
<i>Compensation_committee</i>	14.820000 (8.13700)	0.050500* (0.02180)	0.022600 (0.08710)
<i>Board_size</i>	−142.60000 (76.42000)	−0.452000* (0.17900)	−2.013000** (0.71400)
<i>Board_gender_diversity</i>	−13.720000 (8.94000)	−0.022900 (0.02270)	−0.072400 (0.09060)
<i>Turnover_employees</i>	−78.440000* (35.48000)	−0.160000 (0.09310)	−0.696000 (0.37100)
<i>Environmental_products</i>	9.062000 (5.93600)	0.000983 (0.01420)	−0.101000 (0.05650)
<i>Number_employees</i>	0.009520** (0.00309)	0.008750 (0.00768)	0.026400 (0.03060)
<i>CSR_sustainability_audit</i>	0.589000 (8.74700)	0.026600 (0.02370)	−0.057300 (0.09440)
<i>Bribery_corruption_fraud</i>	10.640000 (9.04300)	0.006150 (0.02090)	−0.064800 (0.08320)
<i>ESG_score</i>	88.790000*** (23.06000)	−0.208000*** (0.06050)	−0.055100 (0.24100)
<i>cons</i>	10 496.700000 (42 345.20000)	355.200000** (116.00000)	412.700000 (462.90000)
var(<i>e.EBIT</i>)	465 993.700000*** (124 542.00000)	—	—
var(<i>e.ROA</i>)	—	3.510000*** (0.92200)	—
var(<i>e.ROE</i>)	—	—	55.840000*** (14.6600)

Standard errors (SE) in parentheses: *P < 0.05, **P < 0.01, ***P < 0.001; *EBIT* – earnings before interest and taxes; *ROA* – return on assets; *ROE* – return on equity; *CO2_emissions* – total CO₂ equivalent emissions to revenues; *Targets_emissions* – targets emissions score; *Policy_emissions* – policy emissions score; *Targets_diversity* – targets diversity and opportunity score; *Resource_policy* – resource reduction policy score; *Bribery_corruption_policy* – policy bribery and corruption score; *CSR_sustainability* – corporate social responsibility (CSR) sustainability reporting score; *CSR_strategy* – CSR strategy score; *Compensation_committee* – compensation committee independence score; *Board_size* – board size;

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Board_gender_diversity – board gender diversity; *Turnover_employees* – turnover of employees; *Environmental_products* – environmental products score; *Number_employees* – number of employees; *CSR_sustainability_audit* – CSR sustainability external audit score; *Bribery_corruption_fraud* – bribery, corruption and fraud controversies score; *ESG_score* – environmental, social, governance score; *cons* – constant (intercept)

Source: Authors' elaboration according to data from Thomson Reuters (2021) Eikon database