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DO CONSUMERS SHAPE ENVIRONMENTAL PROACTIVITY IN SOUTHEAST EUROPE? INSIGHTS INTO BUSINESS PLANNING AND ORGANIZATIONAL STRATEGIES

RODICA IANOLE-CĂLIN, UNIVERSITY OF BUCHAREST

EDVIN ZHLLIMA, AGRICULTURAL UNIVERSITY OF TIRANA,

BRUNILDA KOSTA, UNIVERSITY OF TIRANA

OUTLINE

- Introduction
- Theoretical background and brief literature review on environmental proactivity
- Dataset and method
- Preliminary findings and discussion

WHY TO EXAMINE ENVIRONMENTAL PROACTIVITY IN SOUTHEAST EUROPE?

Significant contextual goals

- Energy Transition and Economic Development
- Alignment with EU Standards (both for existing and future members)

A mix of practices and perceptions

- Short-term focus of the companies in the region
- Lack of consumer and market pressures
- Sustainability seen as a "luxury"/non-essential

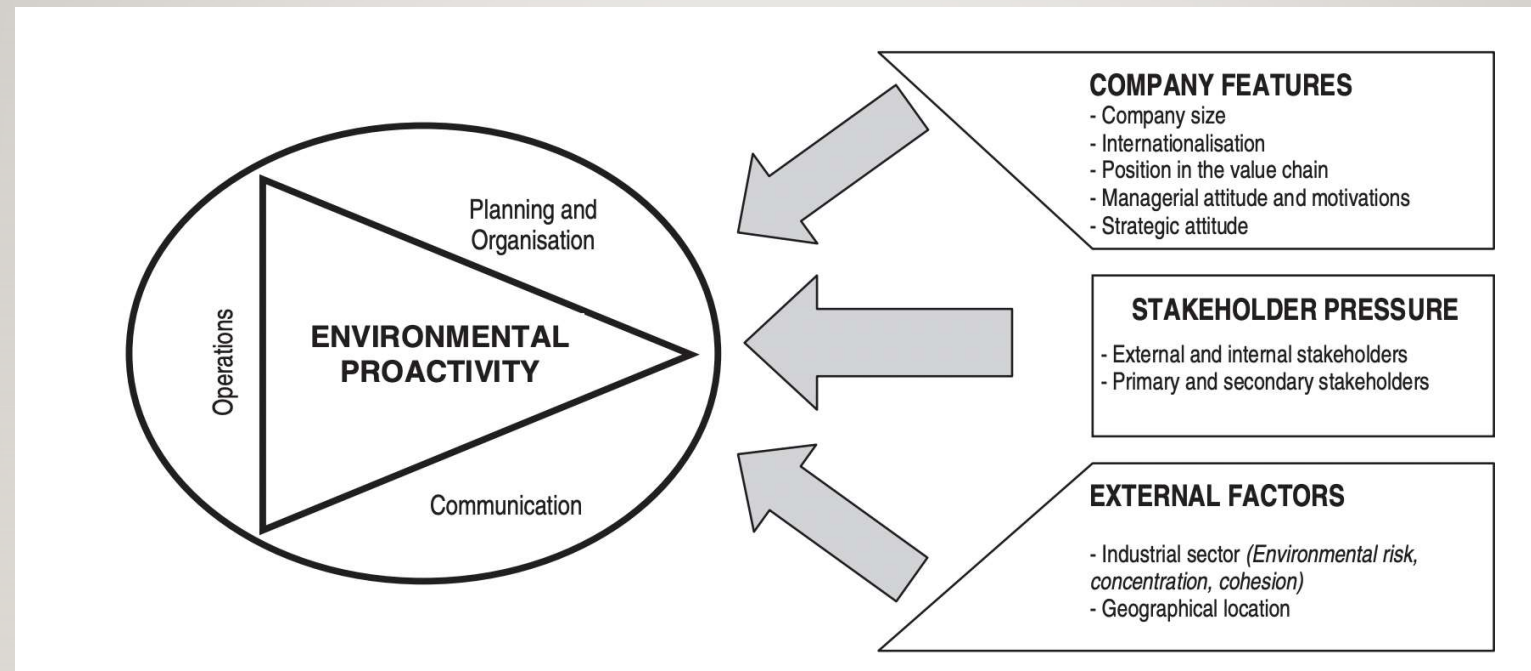
WHAT IS ENVIRONMENTAL PROACTIVITY?

voluntary efforts taken by organizations to reduce their environmental footprint and improve sustainability by going beyond legal compliance (Correa & Sharma, 2003)

adopting sustainable practices voluntarily, often driven by entrepreneurial spirit, customer pressure, or cost savings, despite limited resources and regulatory requirements (Del Brio et al., 2007)

planning and organizational practices, operations, and communication efforts (González-Benito & González-Benito, 2006).

DETERMINANTS OF ENVIRONMENTAL PROACTIVITY



González-Benito, J., & González-Benito, Ó. (2006). *A review of determinant factors of environmental proactivity*. *Business Strategy and the Environment*, 15(2), 87-102. doi:10.1002/bse.450

OUR FOCUS: PLANNING AND ORGANIZATIONAL PRACTICES

- This dimension of environmental proactivity provides a framework that enables the company to make progress in a systematic and coordinated manner.
- Namely, it reflects the degree to which a company
 - **has formulated an environmental policy/objectives**
 - **has established procedures for setting environmental goals**
 - **has assigned environmental responsibilities**

ADAPTED DETERMINANTS FOR ENVIRONMENTAL PROACTIVE PRACTICES (I)

(I) *Company features*

- *H1a: Bigger companies are more likely to plan for environmental proactive practices.*
- *H1b: Companies that have a business strategy are more likely to plan for environmental proactive practices.*
- *H1b: Companies that have a board of directors are more likely to plan for environmental proactive practices*
- *H1d: Companies that have affiliations to business support groups and networks are more likely to plan for environmental proactive practices*
- *H1e: Companies that have a business certification are more likely to plan for environmental proactive practices*

ADAPTED DETERMINANTS FOR ENVIRONMENTAL PROACTIVE PRACTICES (2)

(2) stakeholder pressures

- *H2a: **Customers requiring environmental certifications or adherence to certain environmental standards as a condition to do business with this establishment** are positively related to a company's likelihood to plan for environmental proactive practices.*
- *H2b: Facing stronger formal competition is positively related to a company's likelihood to plan for environmental proactive practices.*
- *H2c: Facing informal competition is positively related to a company's likelihood to plan for environmental proactive practices.*

ADAPTED DETERMINANTS FOR ENVIRONMENTAL PROACTIVE PRACTICES (3)

(3) external forces

- *H3a: Facing monetary losses from extreme weather is positively related to a company's likelihood to plan for environmental proactive practices.*
- *H3b: Facing monetary losses from pollution is positively related to a company's likelihood to plan for environmental proactive practices.*
- *H3c: Having public spending priority on the environment is positively related to a company's likelihood to plan for environmental proactive practices.*

DATASET: BUSINESS ENVIRONMENT AND ENTERPRISE PERFORMANCE SURVEY (BEEPS) 2018-2020

- 41 economies across the European Union, Eastern Europe, Central Asia, the Middle East, and North Africa (<https://www.beeeps-ebrd.com/>).
- The data was collected using a stratified sampling method based on firm size, business sector, and geographic region within a country (Ashyrov & Akuffo, 2020; Ashyrov & Masso, 2020).
- Based on the standardized classification of the **United Nations Statistics Division (UNSD)**, we considered a **sample of countries classified as South-East Europe**, as follows: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Greece, Kosovo, Moldova, Montenegro, North Macedonia, Romania, Serbia, and Slovenia.
- In the process of filtering or inputting missing information, we ended with a final sample of 4,266 observations.

DEPENDENT VARIABLE

Strategic objectives mentioning environmental or climate change issues:

a categorical variable with the value 1 if the establishment has developed such tailored objectives in the last complete fiscal year, respectively the value 0 if this has not happened.

Manager responsible for environmental and climate change issues:

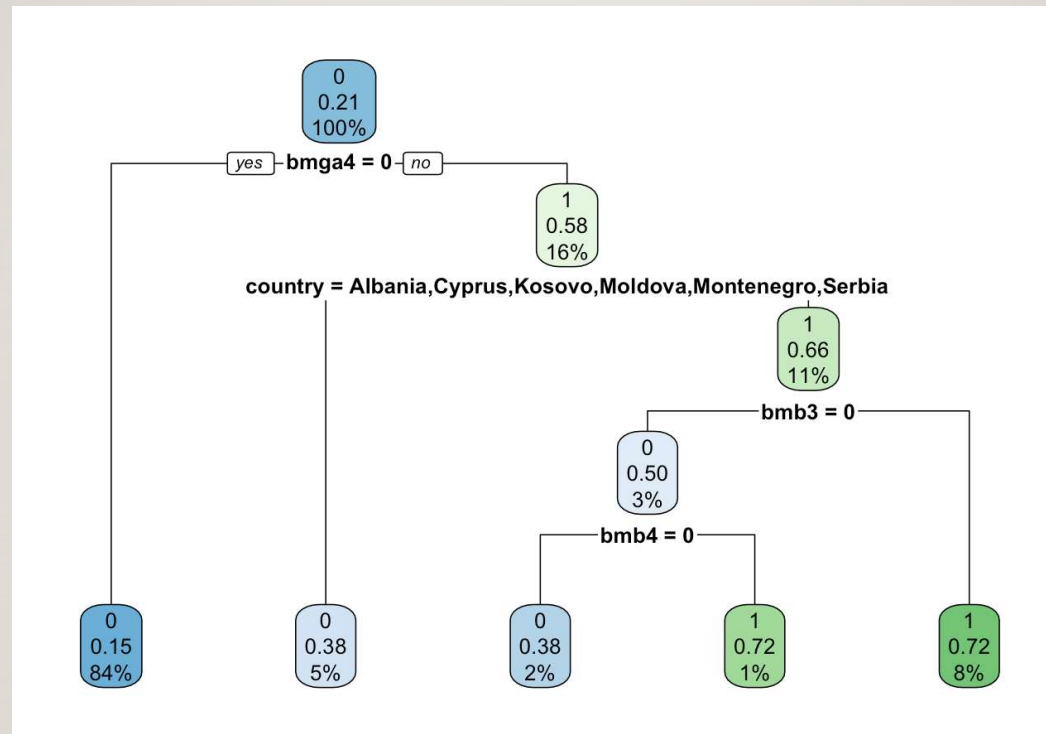
a categorical variable with the value 1 if the establishment has introduced a managerial position devoted to the above issues, in the last complete fiscal year, respectively the value 0 if this has not happened.

FINDINGS: LOGISTIC REGRESSIONS OF THE PROPENSITY TO SET STRATEGIC OBJECTIVES THAT MENTION ENVIRONMENTAL OR CLIMATE CHANGE ISSUES

Variables	Model 1	Model 2	Model 3
Company features			
Company size (reference:small)			
Medium companies	0.402*** (0.099)	0.318*** (0.104)	0.335*** (0.107)
Big companies	0.509*** (0.108)	0.273*** (0.118)	0.326*** (0.124)
Business strategy (reference: no)			
bmb3	0.942*** (0.089)	0.815*** (0.093)	0.806*** (0.097)
Board of directors (reference:no)			
bmb4	0.349*** (0.087)	0.391*** (0.093)	0.437*** (0.103)
Business membership bmb6	0.263*** (0.084)	0.191** (0.089)	0.061 (0.101)
Quality certification b8	0.707*** (0.084)	0.454*** (0.091)	0.418*** (0.097)
Stakeholders pressures			
Customers requirement for environmental standards bmbga4		1.649*** (0.099)	1.592*** (0.104)
Formal competition			
e1(reference:local)		0.095 (0.102)	0.172 (0.105)
international		0.341*** (0.127)	0.348*** (0.132)
Informal competition e11		0.301*** (0.087)	0.310*** (0.092)
External factors			
#exposure to environmental impact - bmgb1			0.351*** (0.122)
Experienced monetary losses from extreme weather:			
Experienced monetary losses from pollution, bmgb2			0.749*** (0.234)
#bmj5 public spending			
priority (reference: transport)			
Energy			0.315** (0.134)
Environment			0.287* (0.162)
Education			-0.305** (0.137)
Health			-0.177 (0.152)
ICT			-0.218 (0.157)
Others			0.137 (0.266)
Constant			
	-2.719*** (0.095)	-3.005*** (0.116)	-3.503*** (0.231)
Country fixed effects			YES
Observations	4,266	4,266	4,266
Log Likelihood	-1,962.676	-1,802.675	-1,740.348
Akaike Inf. Crit.	3,939.351	3,627.350	3,542.695
AUC	0.734	0.786	0.804
Pseudo-R2	0.113	0.184	0.212

CLASSIFICATION TREE (CART) FOR THE PROPENSITY TO SET STRATEGIC OBJECTIVES THAT MENTION ENVIRONMENTAL OR CLIMATE CHANGE ISSUES

bmga4 = Customer requirements
for environmental standards



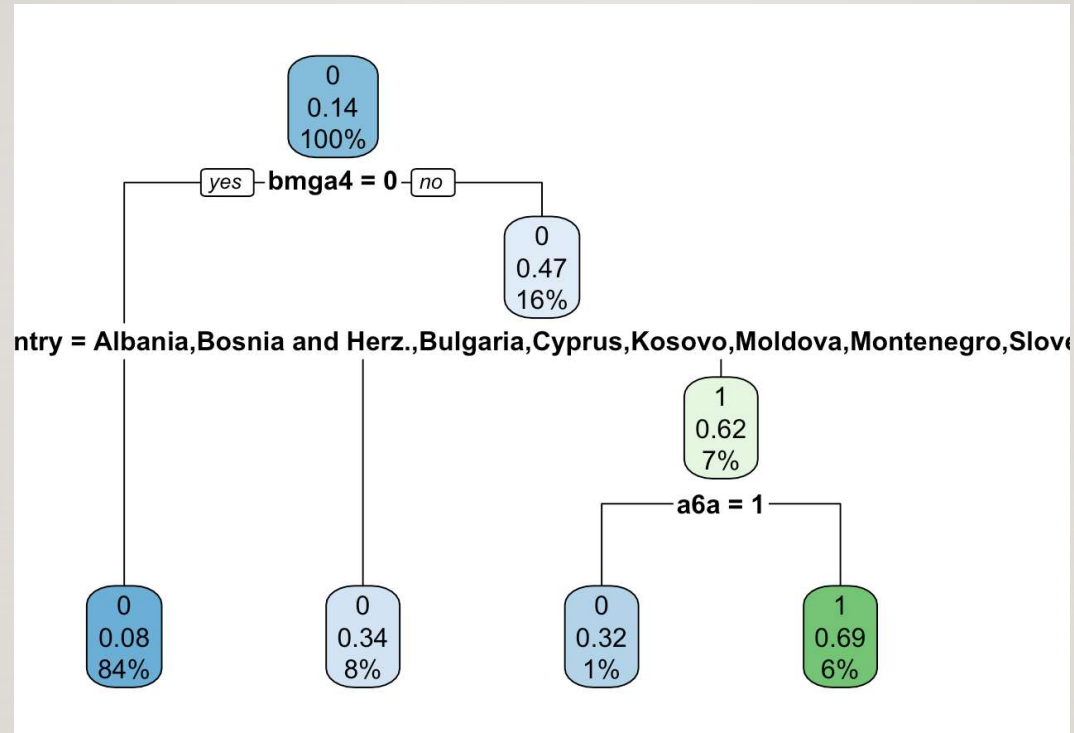
bmb3 = business strategy
bmb4 = board of directors

FINDINGS: . LOGISTIC REGRESSIONS OF THE PROPENSITY TO HIRE AN ENVIRONMENTAL MANAGER

Variables	Model 1	Model 2	Model 3				
Company features				External factors			
Company size (reference:small)				#exposure to environmental impact - bmgb1			0.169 (0.146)
Medium companies	0.457*** (0.126)	0.335** (0.134)	0.356*** (0.137)	<i>Experienced monetary losses from extreme weather:</i>			0.917*** (0.262)
Big	0.919*** (0.129)	0.681*** (0.141)	0.685*** (0.148)	<i>Experienced monetary losses from pollution, bmgb2</i>			
Business strategy (reference: no)				#bmj5 public spending priority (reference: transport)			0.406** (0.167)
bmb3	0.479*** (0.106)	0.252** (0.114)	0.284** (0.120)	Energy			0.237 (0.198)
Board of directors (reference:no)				Environment			-0.082 (0.170)
bmb4	0.609*** (0.103)	0.691*** (0.111)	0.709*** (0.123)	Education			0.202 (0.185)
Business membership bmb6	0.231** (0.102)	0.157 (0.110)	0.008 (0.124)	Health			0.271 (0.190)
Quality certification b8	0.976*** (0.103)	0.693*** (0.111)	0.657*** (0.118)	ICT			0.108 (0.334)
Stakeholders pressures				Others			
Customers requirement for environmental standards bmga4		1.912*** (0.108)	1.936*** (0.115)	Constant	-3.443*** (0.123)	-3.635*** (0.147)	-4.253*** (0.286)
Formal competition e1(reference:local)		-0.020 (0.128)	0.070 (0.132)	Country fixed effects			YES
national		0.197 (0.151)	0.306* (0.157)	Observations	4,266	4,266	4,266
international				Log Likelihood	-1,483.203	-1,319.875	-1,265.540
Informal competition e11		0.093 (0.105)	0.128 (0.112)	Akaike Inf. Crit.	2,980.406	2,661.749	2,593.080
				AUC	0.763	0.825	0.839
				Pseudo-R2	0.132	0.228	0.260

CART FOR THE PROPENSITY TO HIRE AN ENVIRONMENTAL MANAGER

bmga4 = Customer requirements
for environmental standards



A6a – company size

DISCUSSION AND CONCLUSIONS

- Hypotheses testing
 - Most are confirmed in terms of setting strategic objectives (international competition, and some areas of public spending appear with no influence)
 - For hiring an environmental manager, informal competition and experiencing monetary loss (due to climate/pollution) are not significant
- Thus, there seems to be an intention-behavior gap between the objectives and the follow-up actions
- Both CART trees highlight consumer pressures as the first variable to be considered in the pro-environmental decisions
- There are some country differences (with western Balkans being more predilect towards a “no”), and some classical managerial insights related to the importance of business strategy and board of directors

THANK YOU!

brunildakosta@feut.edu.al

ezhllima@ubt.edu.al

rodica.ianole@faa.unibuc.ro

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