

# ESG and financial performance of European banks

and division by geographical location

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# Overview



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# Theoretical framework

- **1. Subject / Object:** relationship between Environmental Social Governance (ESG) performance indicators and the financial performance of European banks.
- **2. Hypothesis:** the study hypothesizes significant differences in ESG performance and financial outcomes between banks categorized by developed versus emerging European countries, Eurozone versus non-Euro countries, and other classifications based on geographical regions and GDP/population clusters.
- **3. Goals:**
  - To statistically compare ESG and financial performance across European banks using novel classifications.
  - To identify how ESG factors correlate with financial performance in developed and emerging European banks.
  - To provide insights for stakeholders on enhancing sustainability and financial results in the banking sector.
- **4. Scope**
  - The research encompasses 108 European banks, utilizing data from Thomson Reuters, the World Bank, and EuroVoc for the year 2018.
  - It employs cluster analysis and ANOVA tests to examine the relationship between ESG scores and financial performance indicators, including variations across geographical regions, functional currency, and clusters related to GDP and population.

# Methodology

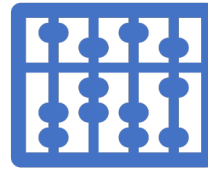


## Data Collection Process

**Initial Screening:** Identification of European countries with available ESG data in Thomson Reuters.

**Cross-Check for Completeness:** Inclusion of all relevant countries, with Cyprus and Malta classified in Emerging Europe despite their absence in Reuters' categories.

**Final Sample Selection:** Analysis of ESG scores in 108 banks (81 Developed, 27 Emerging Europe).



## Variables and Definitions

**Variables:** ESG\_combined, Environment, Social, Governance, and Controversies.

**Source:** Definitions aligned with the ESG scores methodology by Refinitiv.

**Analytical Approach:** ESG combined score integrates ESG pillars, discounted by controversies captured from global media sources.



## Statistical Analysis

**Cluster Analysis:** Two groups based on GDP per capita and population, using IBM SPSS Statistics and TwoStep Cluster Analysis.

**Group Tests and ANOVA:** For analyzing differences across classifications and variables.

# Literature Review

- **Introduction to ESG in Banking Sector** — Scholtens & van't Klooster (2019)

- Banks' dual role in sustainability and financial stability

- **Impact of ESG Policies on Financial Performance** — Nizam, E., et al. (2019), Buallay (2019)

- The cost implications of establishing ESG frameworks and their potential for revenue stability and risk reduction.

- **ESG Performance, Corporate Scandals, and Market Reaction** — Buallay, A., et al. (2020), Shakil, M. H., et al. (2019)

- Significant improvements in the accounting and market-based performance of banks in developing countries post-2008 crisis

- **Ethical Values and ESG Controversies in European Banks** — Ehrenhard, M. L., & Fiorito, T. S. (2018)

- The ethical values of the 25 largest European banks

- **Disaggregated ESG Performance and Stakeholder Consideration** — Jo, H., et al. (2015)

- Customers respond positively to banks' environmental management



# Data Analysis: correlation matrix

	<i>Controv0</i>	<i>ROA</i>	<i>ROE</i>	<i>LEV</i>	<i>CAPADQ</i>	<i>Afees</i>
<i>ESG_comb.</i>	-0.100	0.297**	0.295**	-0.242*	0.022	0.012
<i>Controv.</i>		-0.199*	-0.001	0.326**	-0.013	0.573**
<i>ROA</i>			0.868**	-0.525**	0.273**	-0.182
<i>ROE</i>				-0.319**	0.373**	-0.128
<i>LEV</i>					0.407**	0.167
<i>CAPADQ</i>						-0.019

**Notes.** \*  $p < 0.05$ ; \*\*  $p < 0.01$   
N = 108, except for *AFees* (n = 81).

Table 1. Correlations between the main variables of the study

# Data Analysis: one-way ANOVA

<b>Variables</b>	<b>Western <i>M (SD)</i> N = 33</b>	<b>Southern <i>M (SD)</i> N = 37</b>	<b>Northern <i>M (SD)</i> N = 17</b>	<b>CEE <i>M (SD)</i> N = 21</b>	<b><i>F</i></b>
<i>ESG_comb.</i>	48.7 (12.7)	55.8 (13.9) <sup>a</sup>	43.4 (13.7) <sup>b</sup>	48.3 (19.9)	3.145*
<i>Environment</i>	52.9 (35.1)	54.8 (28.8)	57.7 (29.4)	35.7 (26.6)	2.184
<i>Social</i>	62.7 (22.3)	68.5 (17.3) <sup>a</sup>	51.5 (19.3) <sup>b</sup>	50.7 (23.8) <sup>b</sup>	4.690**
<i>Governance</i>	67.9 (18.7) <sup>a</sup>	56.5 (22.8)	48.3 (19.7) <sup>b</sup>	53.1 (22.2)	4.088**
<i>Controversies</i>	42.9 (39.9) <sup>a</sup>	28.5 (31.8)	25.0 (37.5) <sup>a</sup>	4.9 (14.7) <sup>b</sup>	5.672**
<i>Employees</i>	42803 (58376) <sup>a</sup>	25769 (40656) <sup>a</sup>	6780 (8732) <sup>b</sup>	29722 (64099)	2.074
<i>Total_assets</i>	481582 (633779) <sup>a</sup>	171094 (297982)	103954 (172800) <sup>b</sup>	49486 (87806) <sup>b</sup>	6.590**
<i>ROA</i>	0.59 (0.60)	0.63 (0.71)	1.08 (0.74)	0.87 (2.24)	0.877
<i>ROE</i>	7.44 (5.11) <sup>a</sup>	7.35 (7.66) <sup>a</sup>	11.94 (3.9) <sup>b</sup>	-0.64 (48.31)	1.133
<i>LEV</i>	14.7 (6.4) <sup>a</sup>	11.9 (4.3)	12.2 (4.8)	9.6 (4.8) <sup>b</sup>	4.314**
<i>CAPADQ</i>	19.39 (5.8) <sup>a</sup>	16 (2.9) <sup>b</sup>	19.76 (2.3) <sup>a</sup>	16.24 (4.3) <sup>b</sup>	5.904**
<i>Afees</i>	22.0 (36.1) <sup>a</sup>	8.5 (21.5)	1.1 (1.4) <sup>b</sup>	0.8 (0.5) <sup>b</sup>	3.555*

**Notes.** The *F* statistic is significant at \*  $p < 0.05$ ; \*\*  $p < 0.01$

Table 2. Results of one-way ANOVA for geographical regions in Europe

# Results



No significant difference in financial performance



Concentration of strong banks in Western Europe



The adoption of ESG policies may be driven by a desire other than firms' desire to improve their financial position.



# References

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# Q&A

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