

# DIGITALES ARCHIV

ZBW – Leibniz-Informationszentrum Wirtschaft  
ZBW – Leibniz Information Centre for Economics

Gaies, Brahim

## Article

# Banking sector openness, a path to social responsibility? : evidence from Southern European banks

Economics and Business Letters

## Provided in Cooperation with:

University of Oviedo

*Reference:* Gaies, Brahim (2023). Banking sector openness, a path to social responsibility? : evidence from Southern European banks. In: Economics and Business Letters 12 (4), S. 284 - 295.  
<https://reunido.uniovi.es/index.php/EBL/article/download/19305/16127/63907>.  
doi:10.17811/eb1.12.4.2023.284-295.

This Version is available at:

<http://hdl.handle.net/11159/652778>

## Kontakt/Contact

ZBW – Leibniz-Informationszentrum Wirtschaft/Leibniz Information Centre for Economics  
Düsternbrooker Weg 120  
24105 Kiel (Germany)  
E-Mail: [rights\[at\]zbw.eu](mailto:rights[at]zbw.eu)  
<https://www.zbw.eu/econis-archiv/>

## Standard-Nutzungsbedingungen:

Dieses Dokument darf zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden. Sie dürfen dieses Dokument nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen. Sofern für das Dokument eine Open-Content-Lizenz verwendet wurde, so gelten abweichend von diesen Nutzungsbedingungen die in der Lizenz gewährten Nutzungsrechte.



<https://zbw.eu/econis-archiv/termsfuse>

## Terms of use:

*This document may be saved and copied for your personal and scholarly purposes. You are not to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute or otherwise use the document in public. If the document is made available under a Creative Commons Licence you may exercise further usage rights as specified in the licence.*

ZBW

Leibniz-Informationszentrum Wirtschaft  
Leibniz Information Centre for Economics

Mitglied der

Leibniz  
Leibniz-Gemeinschaft

## Banking sector openness, a path to social responsibility? Evidence from Southern European banks

Brahim Gaies<sup>1,\*</sup>

<sup>1</sup> Department of Economics, Finance, and Control, IPAG Business School, France

Received: 11 January 2023

Revised: 23 July 2023

Accepted: 29 August 2023

---

### Abstract

In the aftermath of the 2008 global financial crisis, European banking practices have come under increased scrutiny. Observers often perceive banking sector openness as a conduit for external shocks, intensifying debates around its role. Following this trend, this paper provides an original perspective by investigating the impact of such openness on banks' social responsibility. We focus primarily on Southern European banks, considered the most vulnerable in the European context. Our findings reveal a substantial influence of banking sector openness on the banks' social responsibility. Interestingly, we also uncover that this effect is moderated by banks' financial performance.

**Keywords:** Corporate social responsibility; Banking crisis; Financial globalization; International knowledge transfer; Financial instability; Imitation process

**JEL Classification Codes:** F41, G33, M14, C24, G28

---

### 1. Introduction

Since the 1980s, under the influence of global institutions such as the International Monetary Fund (IMF), the principle of banking sector openness has slowly but surely found its way into the fabric of the economic policy discourse (Bekaert et al., 2011; Gaies et al., 2019). In concrete terms, the reforms essentially involve reducing the constraints imposed on foreign banks, drawing up equal treatment guidelines to promote fair competition between domestic and international banks, and relaxing capital controls (McKinnon, 1973; Shaw, 1973). In this march towards financial liberalization, European banks have become among the most integrated in the world. As a result, their impact, influence and obligations towards the economy, society and the environment have grown considerably. These banks are expected to undergo a corporate social responsibility (CSR) process in which they make a firm commitment to ethical and sustainable practices in all areas of their operations (Forcadell et al., 2017; Saïdane and Ben Abdallah, 2021; Gaies and Jahmane, 2022). Concretely, this implies integrating environmental, social and governance (ESG) considerations into their lending and investment decisions, in addition

---

\* Corresponding author. E-mail: gaies\_brahim@yahoo.fr

Citation: Gaies, B. (2023) Banking sector openness, a path to social responsibility? Evidence from Southern European banks, *Economics and Business Letters*, 12(4), 284-295.

DOI: 10.17811/eb1.12.4.2023.284-295

to respecting the rights and interests of all stakeholders, including employees, customers, shareholders and the communities in which they operate (Birindelli, 2015). However, after the 2008 global financial crisis (GFC), public trust in banks was shaken, giving rise to intense debates about unethical and irresponsible financial practices. For Southern European banks, which rely on large foreign loans making them particularly vulnerable to systemic crises (Detragiache et al., 2018), achieving high social performance is one of the main challenges to restoring their credibility (Forcadell et al., 2020; Aracil et al., 2021; Ziogas and Metaxas, 2021).

According to financial development theory (McKinnon, 1973; Shaw, 1973), the presence of foreign banks enhances the domestic banking sector in terms of efficiency and competitiveness, contributing to improved auditing, accounting and rating organizations. Thus, domestic banks tend to integrate CSR activities and programs to achieve a non-price/cost competitive advantage (Waddock and Graves, 1997). This is all the more relevant as CSR activities can strengthen banks' reputational capital. Such reputation enhancement is instrumental in attracting and keeping customers, boosting risk management, motivating employees, and yielding superior financial outcomes (Forcadell et al., 2017). According to Forcadell et al. (2020), in the wake of the GFC, the banking sector's reputation has been severely damaged by scandals and bailouts, eroding public confidence. Against this backdrop, CSR appears to be an essential tool for repairing banks' tarnished reputations and mitigate the effects of the GFC. More specifically, it is found that corporate governance and transparency, essential components of CSR, significantly improve the disclosure of sustainability information and, thereby, the reputation of banks (Aracil et al., 2021). Bradbury (1991) shows that in foreign-owned companies, CSR disclosure is often higher due to both owner demands and internal strategies. Since CSR represents a part of the strategic knowledge of foreign banks, it can be transferred to domestic banks and help them improve their social responsibility. In addition, domestic banks can take advantage of systemic financial shocks and increase their commitment to social responsibility in order to regain lost trust (Saïdane and Ben Abdallah, 2021).

In contrast to financial development theory, the theory of financial instability (Minsky 1982; Gaies and Nabi, 2021) states that foreign banks could import external financial shocks from the home market to the host market, contaminating domestic banks that are susceptible to financial resource damage. In such a context of banking sector openness, investment in CSR may be limited, especially in banks with relatively low profitability, such as Southern European banks (Ziogas and Metaxas, 2021). In addition, the presence of foreign banks, financial services, and flows could increase competition in the domestic financial market by reducing profits and the net interest margin (Claessens et al., 2001). As Bagnoli and Watts (2003) argue, these increased competitive pressures act as a barrier to investment in social performance because they tend to reduce financial resources and the supply of CSR. Moreover, the intense competition associated with banking sector openness can lead to the transfer of potentially risky financial tools, products, and practices from foreign to domestic banks. This could be at the expense of domestic banks' social responsibility (CSR of banks), when these new financial arrangements allow for high short-term financial performance without social value added (Bayraktar and Wang, 2008).

From this perspective, it seems that banking sector openness might hinder CSR in Southern European banks (Hypothesis 1).

According to Forcadell et al. (2017), while CSR initiatives in banks can amplify their reputation and overall performance, this might not necessarily lead to enhanced financial returns during crises. While CSR initiatives can improve public image and employee morale, during financial crises, stakeholders often prioritize a bank's financial stability. CSR initiatives, seen as long-term investments, might not provide the immediate returns needed in crisis situation. However, highly profitable banks could be better positioned to enhance their reputation through

CSR activities, compared to banks with lower profitability. Indeed, higher financial profitability endows banks with additional resources that can be allocated to CSR initiatives, even in turbulent times (Al-Dah et al., 2018). Thus, financially successful banks can leverage their profitability to enhance their reputation through CSR. Furthermore, the response of banks to competition, financial openness and knowledge transfer can differ according to their profitability (Gaies and Jahmane, 2022). This suggests a possible divergent relationship between banking sector openness and CSR in highly profitable versus less profitable banks.

In light of these considerations, financial performance might moderate the effect of banking sector openness on CSR in Southern European banks (Hypothesis 2).

This paper is the first to investigate whether banking sector openness encourages or discourages banks' social responsibility (Hypothesis 1), while examining how financial performance can moderate this relationship (Hypothesis 2). The study focuses on the case of Southern European banks, as the most exposed banks of the European system, which is one of the most open banking systems in the world. In doing so, we make two key contributions. Firstly, by exploring two opposing theories – financial instability and financial development – we provide valuable new insights into the relationship between banking sector openness and CSR, a topic that has remained largely unexplored in the existing literature. Secondly, this study could help policymakers design targeted strategies to strengthen the resilience and social responsibility of Southern European banks.

The rest of the paper is organized as follows. Section 2 presents the data, sample, and variables. Section 3 outlines the models and discusses the estimation results. Section 4 concludes.

## 2. Data, sample, and variables

Our sample comprises 19 listed Southern European banks from Greece, Spain, Portugal and Italy, covering the period 2002–2018, thus including 323 firm-year observations. Data are extracted from the Thomson Reuters Asset4 and Global Financial Development databases. As dependent variable, we consider alternatively the ESG score (ESG) and the combined ESG score (ESGC) to measure banks' social responsibility (El Ghoul and Karoui, 2017; Jahmane and Gaies, 2020; Saïdane and Ben Abdallah, 2021). Following recent studies on the determinants of corporate social responsibility (e.g., Green and Peloza, 2014; Sheikh, 2019), we select bank size (SIZE), bank leverage (LEVE), bank age (AGE), and bank financial performance (ROAA), as control variables. As explanatory variables of interest measuring the openness of the domestic banking sector (OPEN), we use total net offshore bank loans as a percentage of GDP (OFFSHLOAN), outstanding offshore bank loans as a percentage of GDP (EXTERLOAN), the ratio of foreign bank assets to total bank assets (FOREIASSET), and the ratio of foreign-owned banks to total banks (FOREIBANK). These variables are proposed by Beck et al. (2010). Tables A and B in the Appendix provide the list of banks, data definitions, sources, and descriptive statistics.

## 3. Models, estimations, and results

In order to study the effect of banking sector openness on CSR of banks, we start by estimating the following fixed-effects panel data model<sup>1</sup>:

$$CSR_{it} = \alpha_0 + \alpha_1 SIZE_{it} + \alpha_2 LEVE_{it} + \alpha_3 AGE_{it} + \alpha_4 ROAA_{it} + \alpha_5 OPEN_{it} + \zeta_{it} \quad (1)$$

Table 1 below reports the results of the fixed-effects model (Eq. 1) estimations. It shows a positive effect of banking sector openness (OFFSHLOAN, EXTERLOAN, FOREIASSET and FOREIBANK) on CSR (ESG or ESGC). It seems that greater banking openness strengthens

<sup>1</sup> The model (Eq. 1) includes three dummy variables of individual bank effects, country-specific effects, and time-specific effects.  $\alpha$  represents the vector of the parameters.  $\zeta$  is the vector of the error term.  $i$  indexes cross-sectional units and  $t$  indexes time periods.

banks' social responsibility. This preliminary result is more in line with financial development theory than with Hypothesis 1. It corroborates the possibility that, in the context of an open banking sector, Southern European banks could use CSR to differentiate themselves, restore their reputation after the crisis and rebuild trust, potentially leading to enhanced efficiency and competitive advantage. In addition, while larger SIZE seems to increase CSR of banks, an increase in AGE and LEVE decreases it. Furthermore, Table 1 shows an intriguing and unexpected result indicating a non-significant effect of ROAA on CSR of banks. Before interpreting it, it is crucial to see whether it embodies a symptom of an endogeneity problem in Eq. 1 (Ketokivi and McIntosh, 2017; Lahouel et al., 2019). Following Ketokivi and McIntosh, (2017), Lahouel et al. (2019) and Gaies and Maalaoui, (2022), we check and control for endogeneity employing two-stage fixed-effects least squares (2SLS/FE) modeling.

The Hansen test statistics (Hansen J statistic) in Table 1 indicate the validity of the instruments and then the consistency of the 2SLS/FE approach at the 1% level of statistical significance. According to the table, the results of the 2SLS/FE approach are consistent with those of the OLS/FE approach presented. This indicates that our interpretations and conclusions are not confounded by endogeneity. However, given the persistent lack of a significant impact of ROAA on CSR of banks, we perform a final check regarding a potential asymmetric (threshold) effect of ROAA on CSR of banks and a potential moderating effect of ROAA on the impact of banking sector openness on CSR of banks. This step is crucial to test Hypothesis 2 regarding the moderating effect of financial performance.

Following recent empirical studies based on threshold panel data models (e.g., Wang, 2015; Gaies 2022), we employ the panel smooth threshold estimator to examine whether there is an asymmetric (threshold) effect of ROAA on CSR of banks and whether such an asymmetric effect influences the impact of banking sector openness on CSR of banks. The model can be expressed as follows<sup>2</sup>.

$$CSR_{it} = \alpha_0 + \alpha_1 SIZE_{it} + \alpha_2 LEVE_{it} + \alpha_3 AGE_{it} + \alpha_4 (ROAA_{it} \times f(ROAA < \tilde{y})) + \alpha_5 (ROAA_{it} \times f(ROAA > \tilde{y})) + \alpha_6 (OPEN_{it} \times f(ROAA < \tilde{y})) + \alpha_7 (OPEN_{it} \times f(ROAA > \tilde{y})) + \zeta_{it} \quad (2)$$

Where  $\alpha_4$  and  $\alpha_5$  capture the asymmetric effect of ROAA on CSR of banks, while  $\alpha_6$  and  $\alpha_7$  capture the asymmetric effect of ROAA in moderating the impact of banking sector openness on CSR of banks.

$f(\cdot)$  is an indicator function of the level established (regime) by the ROAA threshold variable.  $\tilde{y}$  is the potential threshold value at the 5% level of statistical significance.

Table 2 reports the results of the fixed-effects threshold panel estimates (Eq. 2) for the 19 Southern European banks listed, and Table 3 presents the corresponding tests of these estimates. The tables indicate that there are single thresholds of ROAA dividing the sample into two levels (regimes) of banks with (relatively) lower and higher financial performance. The threshold values range from -0.6 to 0.3 (Threshold) and are significant at conventional levels of 1, 5 and 10% (Fstat/Prob), as confirmed by Figure 1.

According to Table 2, for banks with lower financial performance, ROAA negatively and significantly impacts CSR at the 5% and 10% levels. Conversely, for banks exhibiting higher financial performance, ROAA positively and significantly influences CSR. The negative impact of financial profitability on CSR for banks with lower financial performance implies that these banks view CSR more as a cost than a strategic investment.

<sup>2</sup> Notations and conventions are in accordance with Eq.1.

Table 1. FE and 2SLS/FE estimates

Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Dependent variable:	ESG	ESG	ESG	ESG	ESGC	ESGC	ESGC	ESGC	ESG	ESG	ESG	ESG	ESGC	ESGC	ESGC	ESGC
	FE panel data								2SLS/FE panel data							
ROA	-0.0146 (0.0677)	0.0119 (0.0527)	0.0186 (0.0606)	0.0273 (0.0490)	-0.0127 (0.0677)	0.0122 (0.0527)	0.0160 (0.0595)	0.0262 (0.0488)	0.0047 (0.0629)	-0.0154 (0.0503)	0.0268 (0.0715)	0.1134 (0.0841)	0.0058 (0.0645)	-0.0138 (0.0519)	0.0213 (0.0651)	0.0853 (0.0772)
SIZE	0.2300*** (0.0353)	0.2511*** (0.0300)	0.1959*** (0.0339)	0.1957*** (0.0209)	0.1984*** (0.0368)	0.2242*** (0.0319)	0.1750*** (0.0358)	0.1697*** (0.0226)	0.2084** (0.0822)	0.2402*** (0.0804)	0.1771** (0.0716)	0.1910*** (0.0504)	0.1761** (0.0829)	0.2073*** (0.0801)	0.1532** (0.0721)	0.1544*** (0.0481)
LEVE	-0.2586** (0.0989)	-0.2063*** (0.0651)	-0.3070*** (0.0921)	-0.2609*** (0.0541)	-0.2583*** (0.0981)	-0.2190*** (0.0661)	-0.3189*** (0.0939)	-0.2633*** (0.0552)	-0.3466** (0.1629)	-0.2690* (0.1474)	-0.3600** (0.1700)	-0.3630*** (0.1015)	-0.3417** (0.1683)	-0.2665* (0.1534)	-0.3480** (0.1740)	-0.3292*** (0.0947)
AGE	-0.1092*** (0.0261)	-0.0473** (0.0226)	-0.0949*** (0.0267)	-0.0914*** (0.0204)	-0.1317*** (0.0279)	-0.0669*** (0.0236)	-0.1102*** (0.0274)	-0.1110*** (0.0213)	-0.1348*** (0.0464)	-0.0978** (0.0465)	-0.1591*** (0.0478)	-0.1237*** (0.0305)	-0.1568*** (0.0468)	-0.1200*** (0.0466)	-0.1759*** (0.0462)	-0.1395*** (0.0295)
FOREIASSET	0.1292** (0.0505)				0.1234** (0.0515)				0.1209*** (0.0434)				0.1122** (0.0457)			
FOREIBANK		0.3042*** (0.0789)				0.3023*** (0.0800)				0.3924*** (0.1484)				0.3824** (0.1526)		
OFFSHLOAN			0.0903** (0.0449)				0.0987** (0.0448)				0.1136** (0.0491)				0.1196** (0.0475)	
EXTERLOAN				0.4416*** (0.0985)				0.4634*** (0.1018)				0.8249*** (0.1642)				0.7144*** (0.1724)
Individual effect	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
Time effect	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
Country effect	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included	Included
Constant	40.1600 (37.6120)	20.2235 (27.3302)	-63.7280** (29.0215)	-18.7443 (14.1475)	35.1826 (37.0367)	14.0404 (26.9793)	-69.7120** (28.7457)	-18.9222 (14.2444)	15.2558 (42.4647)	41.4419 (45.1533)	-57.2724 (38.6569)	20.5836 (27.5867)	16.2144 (43.3622)	41.9647 (45.5770)	-57.2248 (38.4813)	20.3191 (31.0855)
R-squared	0.5614	0.5736	0.5054	0.5557	0.5356	0.5499	0.4954	0.5324	0.5812	0.6538	0.5966	0.6846	0.5455	0.6198	0.5757	0.6176
Fisher	25.49	39.01	21.24	37.78	21.97	30.12	17.96	30.89	8.674	9.732	10.55	12.46	7.536	7.999	9.963	11.21
Hansen J statistic									0.465	0.690	0.992	0.117	0.427	0.605	0.167	0.395

Note: \*\*\*, \*\* and \* denote statistical significance at the 1%, 5% and 10% level, respectively. Robust Standard errors are reported in parentheses. In the 2SLS/FE estimates, we used the lagged values of the endogenous variables as instruments. To ensure the robustness of the instruments and estimates, and to mitigate potential problems related to instrument weakness and overfitting, we confined the lag to the second lag (Ketokivi and McIntosh, 2017; Lahouel et al., 2019; Gaies and Maalaoui, 2022).



Table 2. Extended estimates – Threshold effect

Model	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Dependent variable	ESG	ESG	ESG	ESG	ESGC	ESGC	ESGC	ESGC
Interest variable	FOREIASSET	FOREIBANK	OFFSHLOAN	EXTERLOAN	FOREIASSET	FOREIBANK	OFFSHLOAN	EXTERLOAN
Threshold variable	ROAA	ROAA	ROAA	ROAA	ROAA	ROAA	ROAA	ROAA
SIZE	0.270*** (0.0730)	0.290*** (0.0849)	0.343*** (0.0934)	0.188** (0.0830)	0.238*** (0.0733)	0.282*** (0.0837)	0.318*** (0.0918)	0.167* (0.0828)
LEV	-0.125*** (0.0261)	-0.132*** (0.0325)	-0.0874*** (0.0268)	-0.131*** (0.0343)	-0.125*** (0.0263)	-0.137*** (0.0319)	-0.0906*** (0.0276)	-0.133*** (0.0346)
AGE	0.138 (0.157)	0.237 (0.241)	0.297 (0.201)	0.243 (0.250)	0.158 (0.165)	0.264 (0.246)	0.321 (0.211)	0.262 (0.258)
ROAA (lower financial performance)	-0.0460 (0.0593)	-0.135* (0.0731)	-0.124* (0.0614)	-0.160** (0.0691)	-0.0434 (0.0616)	-0.130 (0.0758)	-0.125* (0.0628)	-0.155** (0.0705)
ROAA (higher financial performance)	0.243*** (0.0827)	0.350** (0.123)	0.148 (0.0892)	0.314** (0.130)	0.251*** (0.0817)	0.369*** (0.121)	0.165* (0.0914)	0.323** (0.131)
FOREIASSET (lower financial performance)	0.169** (0.0674)				0.173** (0.0681)			
FOREIASSET (higher financial performance)	0.000596 (0.0439)				0.00844 (0.0424)			
FOREIBANK (lower financial performance)		0.0987 (0.103)				0.0688 (0.108)		
FOREIBANK (higher financial performance)		0.0236 (0.107)				-0.00807 (0.110)		

Table 2. Extended estimates – Threshold effect (cont.)

Model	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Dependent variable	ESG	ESG	ESG	ESG	ESGC	ESGC	ESGC	ESGC
Interest variable	FOREIASSET	FOREIBANK	OFFSHLOAN	EXTERLOAN	FOREIASSET	FOREIBANK	OFFSHLOAN	EXTERLOAN
Threshold variable	ROAA	ROAA	ROAA	ROAA	ROAA	ROAA	ROAA	ROAA
OFFSHLOAN (lower financial performance)			0.0624**				0.0555**	
			(0.0252)				(0.0247)	
OFFSHLOAN (higher financial performance)			-0.00692				-0.00882	
			(0.0186)				(0.0189)	
EXTERLOAN (lower financial performance)				0.336**				0.328*
				(0.149)				(0.157)
EXTERLOAN (higher financial performance)				0.314*				0.307*
				(0.153)				(0.159)
Constant	-2.143	-3.061*	-3.999**	-2.308	-1.651	-2.980*	-3.668**	-1.990
	(1.499)	(1.582)	(1.725)	(1.417)	(1.498)	(1.558)	(1.702)	(1.408)
R-squared	0.460	0.384	0.377	0.389	0.435	0.355	0.352	0.364

Note: \*\*\*, \*\* and \* denote statistical significance at the 1%, 5% and 10% level, respectively. Robust Standard errors are reported in parentheses. For a comprehensive understanding of the workings, inherent equation structure, and advantages of the panel threshold model compared to a linear model with a predetermined threshold, please refer to Wang (2015).

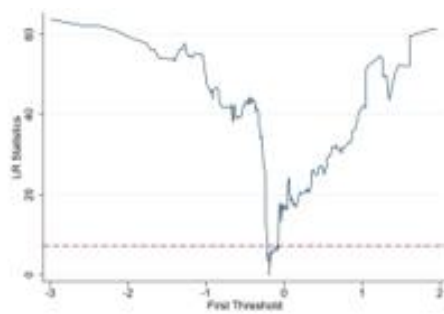


Table 3. Threshold tests

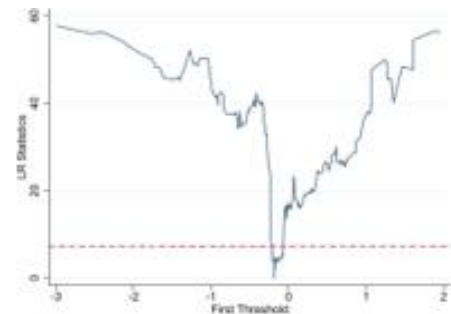
Model 1	Threshold	Lower	Upper	Bootstrap replications	Model 5	Threshold	Lower	Upper	Bootstrap replications
Th-1	-0.186	-0.206	-0.184	300	Th-1	-0.1863	-0.206	-0.184	300
Threshold	RSS	MSE	Fstat	Prob	Threshold	RSS	MSE	Fstat	Prob
Single	28.2300	0.0923	67.25	0.0000	Single	29.8514	0.0976	62.00	0.0000
<b>Model (17)</b>					<b>Model (21)</b>				
Model 2	Threshold	Lower	Upper	Bootstrap replications	Model 6	Threshold	Lower	Upper	Bootstrap replications
Th-1	0.174	-0.014	0.199	300	Th-1	0.1740	-0.003	0.199	300
Threshold	RSS	MSE	Fstat	Prob	Threshold	RSS	MSE	Fstat	Prob
Single	32.5808	0.1065	31.00	0.0200	Single	34.4260	0.1125	30.92	0.0200
<b>Model (18)</b>					<b>Model (22)</b>				
Model 3	Threshold	Lower	Upper	Bootstrap replications	Model 7	Threshold	Lower	Upper	Bootstrap replications
Th-1	-0.607	-0.812	-0.598	300	Th-1	-0.6074	-0.812	-0.598	300
Threshold	RSS	MSE	Fstat	Prob	Threshold	RSS	MSE	Fstat	Prob
Single	32.9355	0.1076	24.91	0.0533	Single	34.6328	0.1132	25.19	0.0433
<b>Model (19)</b>					<b>Model (23)</b>				
Model 4	Threshold	Lower	Upper	Bootstrap replications	Model 8	Threshold	Lower	Upper	Bootstrap replications
Th-1	0.365	-0.234	0.378	300	Th-1	0.3784	-0.234	0.385	300
Threshold	RSS	MSE	Fstat	Prob	Threshold	RSS	MSE	Fstat	Prob
Single	32.3138	0.1056	31.07	0.0700	Single	33.9779	0.1110	30.69	0.0467
<b>Model (20)</b>					<b>Model (24)</b>				

On the other hand, the positive influence of ROA on CSR in high financial performance banks is in line with the slack resource theory (Waddock and Graves, 1997). This indicates that these banks have additional resources to devote to CSR initiatives, potentially yielding long-term strategic benefits such as improved reputation and stakeholder relations. Table 2 also reveals that banking sector openness positively and significantly impacts CSR in banks with lower financial performance. However, this influence becomes weak or non-significant for banks with higher financial performance. In other words, high financial performance banks do not benefit from banking sector openness to enhance their CSR, contrary to low financial performance banks, for which the presence of foreign banks and external banking flows promote their CSR. This counterintuitive result could be explained by the fact that the transfer of CSR knowledge from foreign banks to low financial performance banks is likely to be based on an “imitation process”. Banks with high financial performance appear to improve their CSR based on their internal process, which is facilitated by their higher ROA (Waddock and Graves, 1997). In summary, the findings outlined in Table 2 endorse our second hypothesis (Hypothesis 2), affirming the influence of financial performance as a moderator of the impact of banking sector openness on CSR.

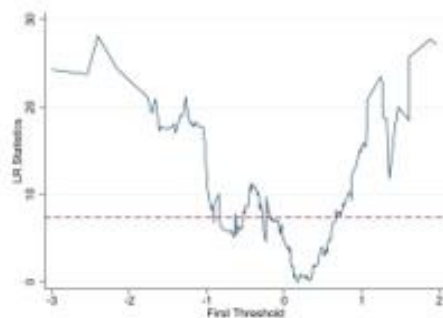
Figure 1. LR statistics



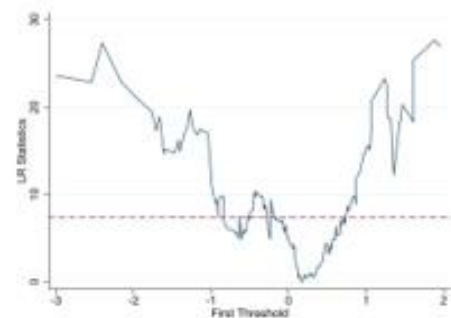
Model 17



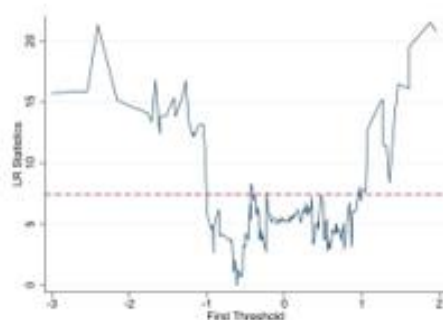
Model 21



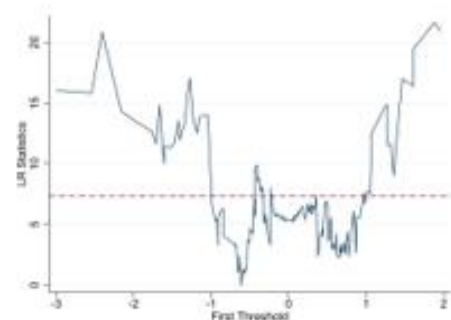
Model 18



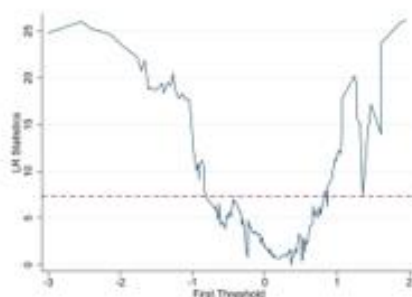
Model 22



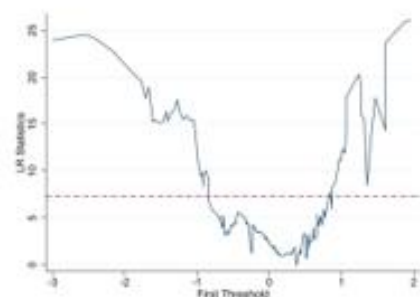
Model 19



Model 23



Model 20



Model 24

*Note.* The dashed lines indicate the critical value of the LR statistic at the 95% confidence level, which is 7.35. All threshold values fall below dashed lines (x-axis), confirming the robustness of the single ROA thresholds.

#### 4. Conclusion

This study contributes to a better understanding of the determinants of CSR in the banking sector, with a particular focus on Southern European banks. Compared with the existing literature, its novelty lies in examining the influence of banking sector openness on CSR practices, and the moderating role that financial performance can play in this relationship. Our main findings underline that, in an open sector, banks can potentially improve their efficiency and competitiveness through CSR. Seen as a strategic tool, CSR can help banks to rebuild their reputations and restore trust post-crisis. Notably, banks with weaker financial performance are the ones that effectively take advantage of the presence of foreign banks and external banking flows to strengthen their CSR. In contrast, banks with higher financial performance do not appear to be making significant use of banking sector openness to strengthen their CSR. This resonates with the often observed “imitation process”, whereby lower-performing entities adopt the successful strategies of their high-performing foreign counterparts. It could also imply that high-performing banks, thanks to their relatively abundant resources, can support CSR initiatives without strategically relying on mimicking foreign banks. These insights present a novel view on how financial openness variably impacts banks via imitation processes, depending on their financial performance. They illustrate a complex, hitherto unexplored relationship between CSR and financial performance in a liberalized banking environment. In addition, the differential effects of banking sector openness point to the need for tailored policy interventions. Policies could encourage high financial performance banks, which are less dependent on CSR imitation, to take innovative CSR initiatives. At the same time, supportive policies could help low financial performance banks to learn from and adopt successful foreign CSR strategies. A valuable future research direction could be to focus on turbulent periods such as the European debt crisis, the COVID-19 pandemic, or the Russo-Ukrainian War. This could reveal whether financial performance outweighs CSR objectives in such times, while considering the moderating effect of profitability and the potential “imitation process”.

#### References

- Al-Dah, B., Dah, M., & Jizi, M. (2018) Is CSR reporting always favorable? *Management Decision*, 56(7), 1506-1525.
- Aracil, E., Nájera-Sánchez, J. J., & Forcadell, F. J. (2021) Sustainable banking: A literature review and integrative framework, *Finance Research Letters*, 42, 101932.
- Bagnoli, M., & Watts, S. G. (2003) Selling to socially responsible consumers: Competition and the private provision of public goods, *Journal of Economics & Management Strategy*, 12(3), 419-445.
- Bayraktar, N., & Wang, Y. (2008) Banking sector openness and economic growth, *Margin: The Journal of Applied Economic Research*, 2(2), 145-175.
- Beck, T., Demirgüç-Kunt, A., & Levine, R. (2010) Financial institutions and markets across countries and over time: The updated financial development and structure database, *The World Bank Economic Review*, 24(1), 77-92.
- Bekaert, G., Harvey, C. R., & Lundblad, C. (2011) Financial openness and productivity, *World Development*, 39(1), 1-19.
- Birindelli, G., Ferretti, P., Intonti, M., & Iannuzzi, A. P. (2015) On the drivers of corporate social responsibility in banks: evidence from an ethical rating model, *Journal of Management & Governance*, 19, 303-340.
- Bradbury, M. E. (1991) Characteristics of firms and voluntary interim earnings disclosure: New Zealand evidence, *Pacific Accounting Review*, 3, 37-62.
- Claessens, S., Demirgüç-Kunt, A., & Huizinga, H. (2001) How does foreign entry affect domestic banking markets? *Journal of banking & finance*, 25(5), 891-911.

- Detragiache, M. E., Tressel, M. T., & Turk-Ariss, R. (2018) Where have all the profits gone? European bank profitability over the financial cycle. International Monetary Fund. May 9, 2018.
- El Ghoul, S., & Karoui, A. (2017) Does corporate social responsibility affect mutual fund performance and flows? *Journal of Banking & Finance*, 77, 53-63.
- Forcadell, F. J., & Aracil, E. (2017) European banks' reputation for corporate social responsibility, *Corporate Social Responsibility and Environmental Management*, 24(1), 1-14.
- Forcadell, F. J., Aracil, E., & Úbeda, F. (2020) The impact of corporate sustainability and digitalization on international banks' performance, *Global Policy*, 11, 18-27.
- Gaies, B. (2022) Reassessing the impact of health expenditure on income growth in the face of the global sanitary crisis: the case of developing countries, *The European Journal of Health Economics*, 1-22.
- Gaies, B., & Jahmane, A. (2022) Corporate social responsibility, financial globalization, and bank soundness in Europe—Novel evidence from a GMM panel VAR approach, *Finance Research Letters*, 47, 102772.
- Gaies, B., & Maalaoui, A. (2022) Macro-Level Determinants of entrepreneurship and endogeneity Bias—A Methodological Contribution, *M@ n@ gement*, 25(3), 22-38.
- Gaies, B., & Nabi, M. S. (2021) Banking crises and economic growth in developing countries: Why privileging foreign direct investment over external debt? *Bulletin of Economic Research*, 73(4), 736-761.
- Gaies, B., Goutte, S., & Guesmi, K. (2019) Are we sentenced to financial globalization? *The Journal of European Economic History*, 48(1), 49-72.
- Green, T., & Peloza, J. (2014) How do consumers infer corporate social responsibility? The role of organisation size, *Journal of Consumer Behaviour*, 13(4), 282-293.
- Jahmane, A., & Gaies, B. (2020) Corporate social responsibility, financial instability, and corporate financial performance: Linear, non-linear and spillover effects—The case of the CAC 40 companies, *Finance Research Letters*, 34, 101483.
- Ketokivi, M., & McIntosh, C. N. (2017) Addressing the endogeneity dilemma in operations management research: Theoretical, empirical, and pragmatic considerations, *Journal of Operations Management*, 52, 1-14.
- Lahouel, B. B., Gaies, B., Zaied, Y. B., & Jahmane, A. (2019) Accounting for endogeneity and the dynamics of corporate social—corporate financial performance relationship, *Journal of cleaner production*, 230, 352-364.
- McKinnon, R. I. (1973) *Money and Capital in Economic Development*, The brookings institution, Washington, D.C.
- Minsky, H. (1982) The Financial-Instability Hypothesis: Capitalist process and the behavior of the economy. In *Financial Crises: Theory, History, and Policy* (pp. 13-39). Cambridge University Press: Cambridge.
- Paltalidis, N., Gounopoulos, D., Kizys, R., & Koutelidakis, Y. (2015) Transmission channels of systemic risk and contagion in the European financial network, *Journal of Banking & Finance*, 61, S36-S52.
- Saïdane, D., & Abdallah, S. B. (2021) African firm default risk and CSR, *Finance Research Letters*, 101964.
- Shaw, E. S. (1973) *Financial deepening in economic development*, Oxford University Press: Oxford.
- Sheikh, S. (2019) Corporate social responsibility and firm leverage: The impact of market competition, *Research in International Business and Finance*, 48, 496-510.
- Shen, C. H., Wu, M. W., Chen, T. H., & Fang, H. (2016) To engage or not to engage in corporate social responsibility: Empirical evidence from global banking sector, *Economic Modelling*, 55, 207-225.

- Waddock, S. A., & Graves, S. B. (1997) The corporate social performance–financial performance link, *Strategic management journal*, 18(4), 303–319.
- Wang, Q. (2015) Fixed-effect panel threshold model using Stata, *The Stata Journal*, 15(1), 121–134.
- Ziogas, I., & Metaxas, T. (2021) Corporate social responsibility in South Europe during the financial crisis and its relation to the financial performance of Greek companies, *Sustainability*, 13(14), 8055.

## Appendix

Table A. List of banks

Alpha Bank SA	Bankinter SA
Banca Carige - Cassa di Risparmio di Genova e Imperia	Bper Banca SpA
	Caixabank SA
Banca Monte dei Paschi di Sie SpA	Eurobank Ergasias Services and Holdings
Banca Popolare di Sondrio ScpA	FinecoBank Banca Fineco SpA
Banco Bilbao Vizcaya Argentaria SA	Intesa Sanpaolo SpA
Banco BPM SpA	Mediobanca Banca di Credito Finziario SpA
Banco Comercial Portugues SA	National Bank of Greece SA
Banco de Sabadell SA	Piraeus Bank SA
Banco Santander SA	UniCredit SpA

Table B. Variables and descriptive statistics

Variable	Mean	Standard deviation	Definition	Sources
ESG	54.04484	22.58441	The ESG score indicates the banks' CSR performance, including the environmental, social, and corporate governance pillars. It is based on data published in the public domain and ranges from 0 (lowest performance) to 100 (highest performance).	Thomson Reuters Asset4 (TRA4)
ESGC	52.47219	21.56249	The combined ESG score measures the banks' overall CSR performance, including the environmental, social, and corporate governance pillars. It is based on data published in the public domain and on environmental, social and governance controversies, as well as negative events reported in the global media. Thus, the ESG score assesses a bank's CSR through public data, while the combined ESG score also includes global media reports on controversies and negative events for a broader evaluation. The score ranges from 0 (lowest performance) to 100 (highest performance).	TRA4
OFFSHLOAN	0.6639736	1.900223	Total net offshore bank loans as a percentage of GDP.	Global Financial Development (GFD)
EXTERLOAN	54.6444	17.58468	Total outstanding offshore bank loans as a percentage of GDP.	GFD
FOREIASSET	11.91667	8.264732	The ratio of foreign bank assets to total bank assets (%).	GFD
FOREIBANK	6.335294	5.404298	The ratio of foreign-owned banks to total number of banks (%).	GFD
ROA	0.7030556	1.563275	Return on Assets (%).	TRA4
SIZE	18.66395	1.192207	Total assets (in logarithm).	TRA4
LEVE	0.2989449	0.1426387	Net total debt to total equity.	TRA4
AGE	91.68421	61.72957	The age of a bank is calculated in years, subtracting the year the bank was founded (data obtained from the bank's official website or its annual reports) from the final year of the study's sample period.	TRA4