

Assessing the Interplay between Financial Trade-offs and ESG Practices in Small Restaurants

Dorina Nicoara-Popescu

Universitat de Barcelona, Barcelona, Spain

Received: 25 October 2025. Revision received: 6 January 2026. Accepted: 17 January 2026

Abstract

This study examines whether environmental and governance (E&G) practices enhance or constrain performance in small European restaurants, a sector that is increasingly exposed to sustainability demands yet remains underrepresented in recent ESG research. While prior studies on large and listed firms typically report positive sustainability performance links, evidence for micro and family-owned restaurants remains scarce. This research gap is particularly critical because these small businesses are most likely to be significantly affected by emerging regulatory frameworks, such as the EU's CSRD, given their limited resources and narrow margins. Addressing this gap, we assess whether E&G practices operate as strategic resources or instead generate short-term financial trade-offs in resource-constrained settings. Using data from 1,390 small restaurants and applying partial least squares structural equation modelling (PLS-SEM), we evaluate the effects of E&G practices on operational efficiency, profitability, and productivity. Results reveal significant negative associations across all outcomes, indicating that E&G adoption may increase operational and financial pressures without producing immediate improvements. The study contributes to the hospitality and SME sustainability literature in three ways. First, it provides sector-specific evidence on how E&G practices shape firm outcomes in small restaurants. Second, it clarifies the short-run tensions SMEs face when implementing sustainability initiatives amid emerging regulatory expectations. Third, it advances an approach for measuring observable E&G practices in micro-enterprises, addressing persistent challenges in sustainability-SME assessment. Overall, the findings question assumptions of uniformly positive sustainability effects and underscore the need for context-sensitive sustainability policies and managerial strategies in the hospitality sector.

Key Words: environmental and governance practices; sustainability trade-offs; operational efficiency; profitability; productivity; small restaurants; firm performance; Resource-Based View; stakeholder theory; PLS-SEM.

JEL Classification: L83, Q56

Reference: Nicoara-Popescu, D. (2026). Assessing the Interplay between Financial Trade-offs and ESG Practices in Small Restaurants. *Journal of Tourism and Services*, 17(32), 202-222. <https://doi.org/10.29036/57eca570>

1. Introduction

Sustainability has shifted from a peripheral concern to a strategic business imperative, driven by the consensus that environmental compliances enhance investor value and supports long-term performance (Maak & Pless, 2009; Dong, 2023). This is supported by an expanding body of research linking sustainability practices to various financial and governance outcomes (Belas et al., 2024; Gillan et al., 2021; Juracka & Valaskova, 2025; Kovermann & Velte, 2021; Lagasio & Cucari, 2019; López-Torres et al., 2025; Poliakova et al., 2024; Rahi et al., 2021; Velte, 2022). Furthermore, mandatory disclosure frameworks like the EU's CSRD position ESG as a source of competitive advantage (Yadav et al., 2025; EU CSRD, 2022) and align ethical conduct with competitiveness (Friede et al., 2015).

The restaurant industry, a cornerstone of the European economy (European Labor Authority, 2024; Maynard et al., 2021), represents a relevant setting for these dynamics. Sustainability in this sector has become a strategic necessity, shaped by consumer expectations and regulatory pressures (Elhoushy & Jang, 2023; Kim & Hall, 2020). However, the sector is characterized by intense competition and narrow margins, heightening its vulnerability to new pressures (Dani et al., 2021; Rasoolimanesh et al., 2023).

While the sustainability–performance link is well documented in large corporations and major hospitality groups (Babajee et al., 2022; Rhou, & Singal, 2020; Waddock & Graves, 1997), this perspective fails to capture the reality of small and family-owned restaurants. These SMEs operate with limited financial, technical, and managerial slack (Durrani et al., 2024; Jansson et al., 2017; Pillai & Williams, 2022), making the costs of E&G implementation a critical threat to financial survival (Dani et al., 2021; Rasoolimanesh et al., 2023). Existing research on sustainability in the small restaurant sector is scarce (Flagstad et al., 2022; Tandon et al., 2024) and largely focused on consumer-facing outcomes (Namkung, & Jang, 2013). This omission is critical, as their size exposes them to short-term cost pressures that may not be immediately offset by revenue gains (Cerciello et. all., 2023).

We focused exclusively on Environmental (E) and Governance (G) dimensions because they yield direct, measurable operational outcomes, like energy efficiency and process control, that align with our study metrics (return, efficiency). Conversely, the Social (S) dimension produces indirect, long-term benefits (e.g., trust, morale) that are not immediately short-term observable, and could confound the analysis. Consequently, the research question is: Do E&G practices in small European restaurants act as strategic resources for performance, or do they impose short-term financial trade-offs?

To address this gap, we employ the Resource-Based View (RBV) (Barney, 1991) and Stakeholder Theory (Freeman, 1984). RBV frames E&G initiatives as capabilities that enhance competitiveness (Aragón-Correa & Sharma, 2003), influence financial outcomes (Sharma et al., 2019), and contribute to intangible assets (Ademi & Klungseth, 2022; da Cunha et al., 2025). Stakeholder Theory emphasizes alignment with expectations (Freeman et al., 2007; Hörisch et al., 2014), which builds trust and firm value (Aydoğmuş et al., 2022). Together, these lenses provide a robust justification for analysing how E&G practices shape performance in resource-constrained small restaurants.

This study offers three specific contributions to the literature: First, refining the sustainability–performance debate in SMEs, we provide crucial evidence on the short-term financial trade-off in resource-constrained contexts, challenging the universal "win-win" perspective prevalent in the general sustainability literature. Second, by addressing a sectoral omission, we extend sustainability research into the underrepresented sector of small restaurants, providing insight into how sustainability policies affect this economic segment. Third, precise causal testing: by deliberately excluding the social dimension from the ESG measurement, we offer a precise test of the direct impact of measurable Environmental and Governance practices on specific financial metrics (operational efficiency, profitability, and productivity), enriching both academic theory and managerial practice.

The remainder of the paper presents the literature review and hypotheses, followed by data and measures, methodology and results, discussions, and finally the conclusion.

2. Literature review

2.1 Theoretical foundations

This study builds on two complementary perspectives: the Resource-Based View (RBV) and Stakeholder Theory. The RBV conceptualizes E&G practices as strategic resources that can generate sustained competitive advantage (Barney, 1991), while Stakeholder Theory emphasizes the performance benefits of managing stakeholder relationships (Freeman, 1984). Although Agency Theory is widely used in E&G research (Jensen & Meckling, 1976), its applicability to small owner-managed restaurants is limited due to the overlap between ownership and management.

According to the RBV, competitive advantage stems from possessing valuable, rare, inimitable, and non-substitutable resources (Barney, 1991, 2001). Sustainability practices are often categorized as such, delivering reputational and operational benefits (Hart, 1995). Empirical studies confirm that robust sustainability commitment fosters intangible assets, legitimacy, trust, and innovation capacity, which underpin value creation (Brammer et al., 2012; Surroca et al., 2010). Investments in environmental management systems, transparent governance, and ethical supply chains can therefore be interpreted not merely as compliance measures but as distinctive capabilities that enhance firm performance (Delmas et al., 2013; Flammer & Luo, 2017). However, the RBV highlights a critical challenge for SMEs: sustainability initiatives can strain limited resources through high compliance costs and the diversion of managerial focus from core operations (Baumann-Pauly et al., 2013; Jenkins, 2009). This resource constraint is particularly relevant in hospitality, where certification often leads to increased costs (Nicholls, 2015). Conversely, while evidence from large firms suggests that sustainability integration improves efficiency and stakeholder relations, leading to superior risk-adjusted returns and resilience during crises (Chen et al., 2022; Clark et al., 2015; Eccles et al., 2014, 2015), Contingency Theory posits that these performance outcomes are ultimately conditional upon firm scale and industry-specific contexts (Sousa & Voss, 2008).

Stakeholder Theory complements this view by focusing on the relational dimension, viewing the firm as embedded in networks of stakeholders, customers, employees, regulators, and communities, whose expectations must be balanced to secure legitimacy and long-term success (Freeman, 2023). Instrumental approaches emphasize that proactive sustainability engagement reduces conflict, builds trust, and enhances legitimacy, thereby constituting a source of competitive advantage (Donaldson & Preston, 1995; Jones et al., 2018). In small, community-dependent restaurants, this relational asset is vital, as confirmed by studies linking responsible practices to brand equity and loyalty in hospitality (Chen et al., 2022; Namkung & Jang, 2013; Nguyen, 2020).

In summary, the integration of RBV and Stakeholder Theory provides a comprehensive framework to examine the tension between the strategic potential of E&G and the resource limitations that impose short-term costs on small restaurants.

2.2 E&G and operational efficiency

Operational efficiency, measured by resource utilization (e.g., asset and inventory turnover), is critical in the cost-sensitive restaurant sector. Research suggests that integrating E&G practices enhances efficiency through process innovation, cost reduction, and strengthened resource allocation (Eccles et al., 2014; Hart, 1995; Surroca et al., 2010). Such practices create organizational capabilities that optimize processes (Chuang & Huang, 2018) and improve supply management in hospitality (Kim & Hall, 2020; Namkung & Jang, 2013). E&G initiatives (e.g., energy efficiency, eco-certification) are thus interpreted as RBV resources that generate operational advantages and reinforce legitimacy via Stakeholder Theory (Barney, 1991; Kotsantonis et al., 2016; Rodríguez-Fernández, 2016). While general evidence supports efficiency gains (Chen et al., 2022; Clark et al., 2015), small restaurants face disproportionately high initial capital and organizational costs for compliance and technology upgrades (Jenkins, 2009). Stricter environmental regulations can reduce SME growth for up to two years (Zhong et al., 2025), illustrating the significant short-term burden they create. Early-stage environmental improvements typically raise operating costs (Majid et al., 2023), reinforcing a short-term cost–benefit trade-off. Because financial returns emerge only after a delay, these investments strain working capital and asset utilization in the short run. We therefore hypothesize that:

H1: The adoption of Environmental and Governance (E&G) practices in small restaurants is associated with a short-term trade-off that negatively impacts operational efficiency.

2.3 E&G and profitability

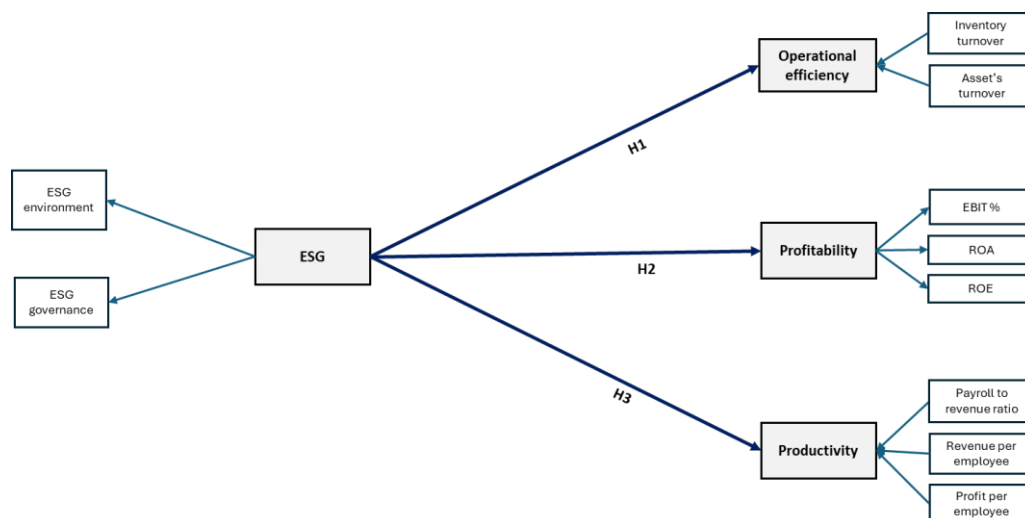
Profitability is the most studied outcomes in the sustainability–performance debate, with meta-analyses reporting a predominantly positive relationship, with governance quality often the strongest driver (Friede et al., 2015; Orlitzky et al., 2003). Mechanisms include reduced capital constraints (Cheng et al., 2014; Dhaliwal et al., 2011), enhanced accounting profitability (D’Amato, 2024; Eccles et al., 2014), and stronger competitiveness (Rodríguez-Fernández, 2016; Saeidi et al., 2015). In the hospitality sector, sustainability engagement is linked to customer loyalty and revenue productivity (Inoue & Lee, 2011; Kang et al., 2010), crisis resilience (Chen et al., 2022), and yields broadly positive outcomes across countries (Alatawi et al., 2023; Hwang et al., 2024; Úbeda-García et al., 2021). However, these gains rely on firms’ ability to absorb upfront costs and leverage reputation effects, requirements that resource-constrained small restaurants struggle to meet (Baumann-Pauly et al., 2013). Consequently, short-term investments in E&G practices are likely to depress profitability rather than improve it (Cerciello et al., 2023), supporting the trade-off view. This is compounded by the lack of standardized ESG ratings for SMEs, which prevents smaller firms from capturing the market value typically associated with sustainability reporting (Fabijańska et al., 2025; Nguyen, 2020). We therefore hypothesize that:

H2: The adoption of Environmental and Governance (E&G) practices in small restaurants is associated with a short-term trade-off that negatively impacts profitability.

2.4 E&G and productivity

Productivity reflects how effectively labour inputs are converted into financial outcomes such as revenue and profit, and is critical in labour-intensive service settings (Guilding, 2012; Hinkin & Tracey, 2000). From the RBV, E&G practices reinforce human capital and organizational routines, enhancing labour productivity (Barney, 1991; Hart, 1995). Investments in efficiency and systematic waste management reduce inefficiencies (Ambec & Lanoie, 2008; Hart & Ahuja, 1996). Stakeholder Theory adds that compliance and transparency foster legitimacy and stability, improving employee cooperation (Donaldson & Preston, 1995; Jones et al., 2018). Empirically, sustainable practices boost revenue per employee via demand-side gains (Namkung & Jang, 2013) and lower overhead costs (Eccles et al., 2014; Inoue & Lee, 2011), amplified by governance quality (He et al., 2024). While the long-term benefits are clear, small, labour-intensive restaurants face immediate friction. The high initial training and process disruption costs associated with new E&G systems (Delmas & Pekovic, 2013; Jenkins, 2009) temporarily decrease labour efficiency and morale, leading to a short-term drop in measured productivity (Escobarragan & Becker, 2025). We therefore hypothesize that:

Figure 1. Research model



Source: authors’ own elaboration

H3: The adoption of Environmental and Governance (E&G) practices in small restaurants is associated with a short-term trade-off that negatively impacts productivity.

We show the research model in Figure 1 based on the previously mentioned considerations. The model checks the relationships between E&G practices and the company's outcomes (H1, H2, and H3).

3. Methods

3.1 Sample

To test our hypotheses, we extracted data from the Orbis Europe database, which provides standardized financial and sustainability information on private firms using Moody's ESG metrics. The final sample consists of 1.390 small restaurant companies across Europe, after data cleaning and the removal of incomplete records. Sustainability data were available for 2021 period, which was selected as the reference year, since the 2022 dataset included only seven listed firms in the sector and was therefore not representative.

3.2. Variables

3.2.1 Dependent variables

In this study, three dependent variables were selected to assess the operational and financial performance of restaurants in relation to their E&G practices.

3.2.1.1 Operational efficiency

The first outcome, efficiency, was modelled as a formative construct and measured by inventory turnover and total assets turnover. Each ratio captures a distinct facet of operational efficiency; they are not interchangeable, so covariance between them is not required, and omitting one would alter the conceptual domain of efficiency. In such cases, the indicators form the latent variable, so a formative specification is appropriate in PLS-SEM (Hair et al., 2019; Diamantopoulos & Winklhofer, 2001; Petter et al., 2007). In accounting contexts, composites built from efficiency ratios are commonly modelled formatively (Rodgers, 2011).

3.2.1.2 Profitability

The profitability was modelled as a reflective construct, with EBIT margin, return on assets (ROA), and return on equity (ROE) as its indicators. In this case, the indicators are manifestations of the underlying latent concept of financial profitability (Aydoğmuş, et. all. 2022; Friede, et. all. 2015). A restaurant that is more profitable is expected to consistently exhibit higher values across all these measures. Thus, profitability is conceptualized as reflective, where the latent construct drives the observed indicators.

3.2.1.3 Productivity

Productivity was modelled as a formative construct, assessed through payroll to revenues ratio, revenue per employee and profit per employee. These measures reflect different dimensions of labour-related performance, which is a particularly relevant aspect in small, labour-intensive restaurants

(Guilding, 2012; Namkung, 2013). Since each indicator represents a distinct contribution to the broader notion of productivity, the construct is specified as formative (Hair, et. all. 2019).

3.2.2. Independent variable

The independent variable, Environmental and Governance (E&G) performance, is operationalized using standardized indicators from Moody's ESG Solutions accessed through the Orbis database. This dataset is particularly suitable for SMEs because it overcomes common disclosure gaps by generating comparable E&G scores for private firms based on verifiable information such as size, industry, and location. The Environmental (E) score reflects exposure to, and management of risks related to resource use and waste, while the Governance (G) score captures organizational structures, internal controls, and financial transparency. These components function as formative indicators of the final E&G construct, mitigating bias common in self-reported sustainability data (Becchetti et al., 2022).

Although the original sustainability construct included environmental, governance, and social dimensions, the social indicator displayed a negative loading, signalling weak construct validity. This is consistent with operational realities in small restaurants, where formal social policies show minimal adoption or variability (Kotsantonis et al., 2016). Retaining this dimension would therefore introduce measurement noise rather than analytical value. Consequently, the final composite focuses on the more observable and operationally relevant E and G dimensions.

4. Results

This study employed a quantitative research design to analyze the relationships among the latent variables defined in the conceptual model. Data analysis was conducted using Smart PLS 4, which applies the partial least squares structural equation modeling (PLS-SEM) technique (Hair et al., 2016; Wold, 1982; Lihmüller, 1989). PLS-SEM was selected due to its appropriateness for exploring complex causal relationships among unobserved constructs and its ability to simultaneously assess both measurement and structural models that integrate reflective and formative constructs (Hair et al., 2016; Hair et al., 2019).

The analytical procedure followed a two-step approach. First, the measurement model was examined to ensure the reliability and validity of the reflective constructs, as well as the adequacy of the formative specifications (Hair, et. all. 2019; Henseler, et. all. 2015). Once these conditions were satisfied, the second step involved testing the structural model to evaluate the hypothesized relationships between constructs (Chin, 2010).

To assess the significance of the path coefficients, a bootstrapping procedure was applied with 5,000 subsamples. This non-parametric resampling technique provides robust standard errors and p-values, enhancing the reliability of statistical inference (Streukens & Leroi-Werelds, 2016; Efron & Tibshirani, 1994).

4.1. Measurement model assessment

Table 1. Descriptive statistics, correlations, and VIF

Descriptive statistics	Mean	SD	VIF	λ	s.e.	P-value	Cronbach's alpha	CR	AVE
E&G							0.786	0.903	0.823

reflective construct -
Outer loading

E&G environmental	5.204	1.525	1.723	0.894	0.011	0.000			
E&G governance score	23.935	3.566	1.723	0.920	0.007	0.000			
Operational efficiency				formative construct - Outer weight	n/a	n/a	n/a		
Inventory turnover	74.827	117.793	1.007	0.386	0.096	0.000			
Asset's turnover	2.007	1.916	1.007	0.891	0.050	0.000			
Profitability				reflective construct - Outer loading	0.813	0.882	0.716		
EBIT %	0.047	0.138	1.972	0.851	0.020	0.000			
ROA	6.803	15.828	2.306	0.950	0.012	0.000			
ROE	32.388	158.956	1.562	0.722	0.040	0.000			
Productivity				formative construct - Outer weight	n/a	n/a	n/a		
Payroll to revenue ratio	27.502	12.708	1.221	0.806	0.059	0.000			
Revenue per employee	0.291	0.260	1.087	0.789	0.050	0.000			
Profit per employee	0.041	0.140	1.135	0.640	0.062	0.000			

Source: authors' own elaboration from Smart PLS4 output

To verify that the observed variables accurately captured their intended latent constructs, we assessed measurement quality using different criteria for reflective and formative constructs.

4.1.1 Reflective constructs (E&G and Profitability)

For reflective constructs, we first evaluated outer loadings (λ). All indicators loaded strongly on their respective constructs, with values ranging from 0.722 to 0.950, exceeding the minimum recommended threshold of 0.5 (Hair, et. all. 2011; Hair, et. all. 2019). This confirms that each indicator contributes substantially to the measurement of its latent construct.

Convergent validity was assessed using the Average Variance Extracted (AVE). Both ESG (AVE = 0.823) and Profitability (AVE = 0.716) exceeded the recommended value of 0.50 (Werts et al., 1974; Hair, et. all. 2019), indicating that the constructs explain a large proportion of variance in their indicators.

Internal consistency reliability was confirmed through Composite Reliability (CR) and Cronbach's Alpha (Chin, 1998; Nunnally & Bernstein, 1994). For ESG, Cronbach's alpha was 0.786, and CR was 0.903, while for Profitability, Cronbach's alpha was 0.813 and CR was 0.882. All values exceeded the 0.7 threshold (Nunnally & Bernstein, 1994), confirming that the indicators are reliable in measuring their constructs.

4.1.2 Formative constructs (Operational efficiency and Productivity)

For formative constructs, reliability and validity assessment follow a different logic, since indicators are not expected to be highly correlated but instead represent distinct dimensions of the construct. Hair et al. (2022) suggest that formative indicators should have outer weights of at least 0.20

to reach statistical significance, while the variance inflation factor (VIF) should remain well below 3 to rule out multicollinearity.

We evaluated the outer weights and their statistical significance. For Operational Efficiency, both Inventory Turnover (weight = 0.386, $p < 0.001$) and Asset Turnover (weight = 0.891, $p < 0.001$) were significant, confirming that each indicator contributes uniquely to the construct. Similarly, for Productivity, Payroll-to-Revenue Ratio (0.789, $p < 0.001$), Revenue per Employee (0.789, $p < 0.001$), and Profit per Employee (0.640, $p < 0.001$) all showed significant contributions, supporting the validity of the formative measurement.

To assess potential multicollinearity among the formative indicators, we examined their Variance Inflation Factor (VIF) values. All scores were substantially below the conservative cut-off of 3 proposed by Hair et al. (2019), thereby confirming that multicollinearity is not a concern for the measurement models.

Table 2. Discriminant validity

Fornell-Larcker	E&G	Profitability
E&G	0.907	
Profitability	-0.157	0.846
Heterotrait - Monotrait (HTMT)	ESG	Profitability
E&G		
Profitability	0.170	

Source: authors' own elaboration from Smart PLS4 output

Discriminant validity was examined through multiple complementary approaches. First, we applied the Average Variance Extracted (AVE) criterion (Fornell & Larcker, 1981), which is suitable for reflective measurement models (Barclay et al., 1995). An AVE value above 0.50 (Chin, 1998) indicates adequate discriminant validity at the construct level, and this requirement was satisfied for all reflective constructs in the study. Following the Fornell–Larcker criterion, discriminant validity is further established when the square root of each construct's AVE is greater than its correlations with other latent variables (Fornell & Larcker, 1981; Chin, 1998). As reported in Table 2, this condition is consistently met, with the diagonal AVE square root values exceeding the off-diagonal correlations. To further strengthen the assessment, we employed the Heterotrait-Monotrait (HTMT) ratio of correlations (Henseler et al., 2015). All HTMT values fell below the conservative threshold of 0.85, providing additional evidence of discriminant validity.

4.2. Structural model assessment and results

PLS-SEM evaluates the structural model using several key criteria. First, the model's explanatory strength was assessed through the coefficient of determination (R^2), with values above the 0.10 benchmark proposed by Falk and Miller (1992) regarded as acceptable. Second. The Stone–Geisser Q^2 statistic assesses predictive relevance, where values above zero confirm that the model has predictive capability (Geisser, 1975; Stone, 1974; Hair et al., 2019; Shmueli et al., 2019). Third, the statistical significance of path coefficients is evaluated through bootstrapping, ensuring that hypothesized relationships are empirically supported (Chin, 1998; Henseler, et. all. 2009; Hair et al., 2016, 2023).

Table 3. Inner model assessment indicators

Inner model assessment.	Q^2	R^2	f-square
-------------------------	-------	-------	----------

Operational efficiency (formative construct)	0.057	0.060	E&G -> efficiency	0.064
Profitability (reflective construct)	0.110	0.114	E&G -> profitability	0.025
Productivity (formative construct)	0.023	0.025	E&G -> productivity	0.128

Source: authors' own elaboration from Smart PLS4 output.

The explanatory power of the model was evaluated using the coefficient of determination (R^2). Following Falk and Miller's (1992) guideline, values above 0.10 are considered acceptable. In our results, profitability ($R^2 = 0.114$) slightly exceeds this threshold, while operational efficiency ($R^2 = 0.060$) and productivity ($R^2 = 0.025$) fall below it, indicating limited explanatory power for these constructs. In addition, the effect size (f^2) was examined to assess the relative contribution of E&G to each endogenous variable. Based on Cohen's (1988) benchmarks (0.02 > small, 0.15 > medium, 0.35 > large), E&G shows small effects on efficiency ($f^2 = 0.064$) and profitability ($f^2 = 0.025$), and a small-to-moderate effect on productivity ($f^2 = 0.128$).

Taken together, these results suggest that while E&G contributes to the variance of the three constructs, its explanatory impact remains modest overall, with the strongest relative influence on productivity. Although the R^2 values are modest, it is important to note that in PLS-SEM, low explanatory power does not necessarily undermine the model's value, since the approach primarily emphasizes prediction and the identification of meaningful relationships.

Furthermore, the predictive relevance was assessed using the blindfolding procedure to calculate Stone-Geisser's Q^2 statistic (Geisser, 1975; Stone, 1974). As shown in Table 3, all endogenous constructs yielded positive Q^2 values, efficiency (0.057), profitability (0.110), and productivity (0.023), confirming that the model possesses predictive validity (Hair et al., 2022; Shmueli et al., 2019).

Table 4. Structural model: path coefficients and p-values of direct, indirect effect and total effect

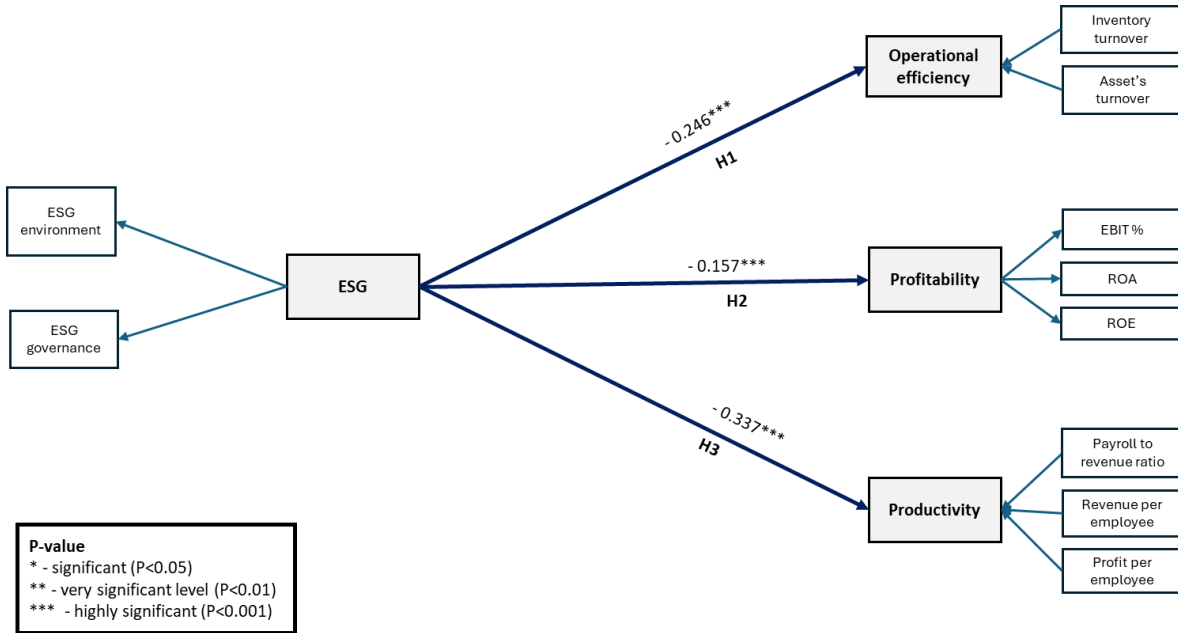
Hypothesis		O	M	SD	T statistics	P values
H1	E&G -> efficiency	-0.246	-0.249	0.022	11.327	0.000
H2	E&G -> profitability	-0.157	-0.160	0.023	6.888	0.000
H3	E&G -> productivity	-0.337	-0.339	0.022	15.263	0.000

Source: authors' own elaboration from Smart PLS4 output.

By applying the bootstrapping method with 5,000 subsamples, we assessed the path coefficients and their statistical significance for the structural model (see Figure 2 and Table 4). Following Chin (1998), standardized path coefficients above 0.10 are considered meaningful, while significance is established at $p < 0.05$.

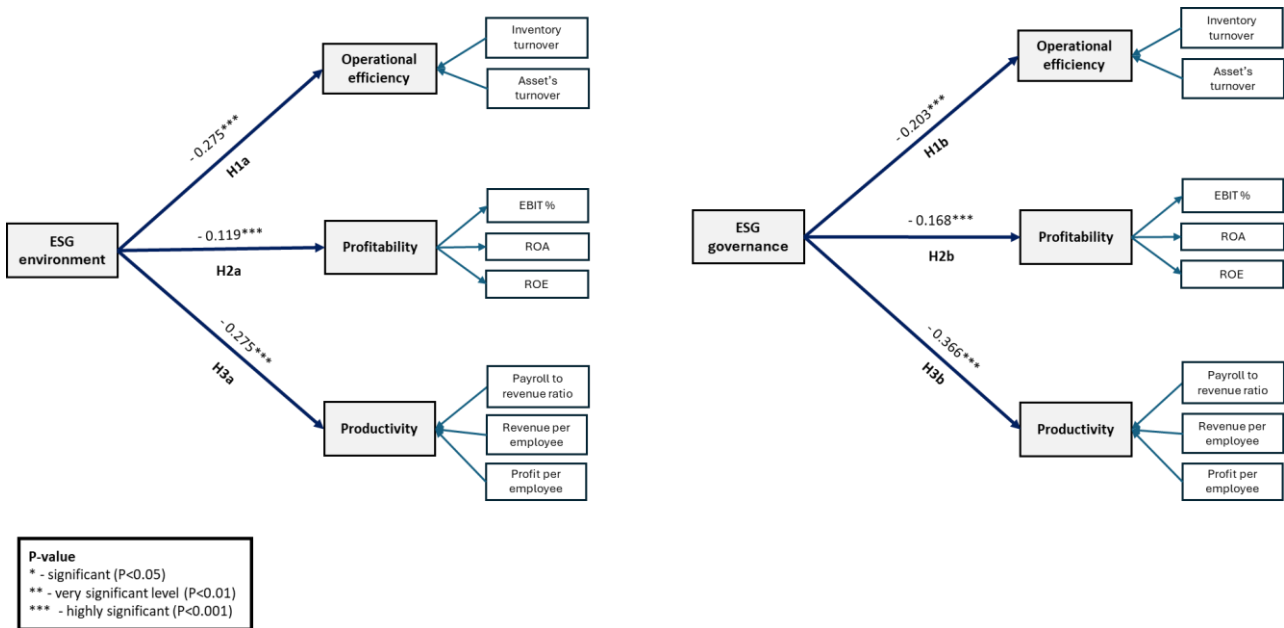
The analysis shows that the paths from E&G to all three performance dimensions are negative and statistically significant. Specifically, E&G exhibits a negative effect on Operational Efficiency ($\beta = -0.246$, $t = 11.327$, $p = 0.000$), Profitability ($\beta = -0.157$, $t = 6.888$, $p = 0.000$), and Productivity ($\beta = -0.337$, $t = 15.263$, $p = 0.000$). Thus, Hypotheses 1, 2 and 3 are supported. These findings indicate that higher E&G scores are associated with lower efficiency, profitability, and productivity outcomes, suggesting that E&G implementation may impose costs or resource burdens that negatively affect short-term financial and operational performance.

Figure 2. Tested model: path coefficients and P-value



Source: authors' own elaboration.

Figure 3. Tested model: path coefficients and P-value.



Source: authors' own elaboration.

To demonstrate the robustness and theoretical relevance of the aggregated E&G measure, a supplemental analysis was performed where Environmental (E) and Governance (G) were modelled as separate exogenous constructs, consistent with general ESG literature. The results confirmed a consistent trade-off (Figure 3): The Environmental (E) model showed a significant negative relationship with Operational Efficiency ($\beta = -0.275, p=0.000$), Profitability ($\beta = -0.119, p=0.000$), and Productivity ($\beta = -0.275, p=0.000$). The Governance (G) model also showed a significant negative relationship with Operational Efficiency ($\beta = -0.203, p=0.000$), Profitability ($\beta = -0.168, p=0.000$), and Productivity ($\beta =$

-0.366, $p=0.000$). The consistent negative direction of all paths in both standalone models empirically rejects the assumption of divergent effects in this context. These findings reinforce the conclusion that the total short-term resource burden associated with implementing E&G systems is the dominant mechanism, thus validating the use of the aggregate E&G construct to capture the overall magnitude of this simultaneous trade-off.

5. Discussion

This paper examined the relationship between environmental and governance (E&G) practices and financial outcomes in small restaurants. Drawing on contingency theory, which posits that the ESG-performance relationship is conditional on industry-specific factors, we developed a framework to assess how E&G dimensions influence performance within resource-constrained contexts. Our empirical analysis provides strong evidence, confirming our hypothesized negative relationship: E&G practices are significantly associated with reduced operational efficiency, profitability, and productivity in this specific segment. This core finding is consistent across operational, profitability, and productivity metrics and is further supported by the robustness check (Figure 3), which showed similar negative outcomes when disaggregating the E and G dimensions.

While predominant literature, largely focusing on large, publicly listed firms, highlights a generally positive link between ESG and financial performance (Friede et al., 2015; Eccles et al., 2014; Margolis & Walsh, 2003), this consensus is heavily dependent on firm scale and resource availability. Our findings validate the prediction that in settings marked by severe contextual constraints, specifically the thin margins, intense competition, and cost-centric nature of small hospitality firms, these factors effectively reverse the conventional relationship. The results demonstrate that, for this sector, E&G practices increase operating costs without generating sufficient immediate financial returns. This outcome strongly resonates with earlier studies documenting the paradoxical effects of sustainability initiatives, which impose short-term burdens despite their long-term promise (Aragón-Correa & Sharma, 2003; Renard, 2003; Rojo-Suárez & Alonso-Conde, 2023).

Recent studies consistently validate our findings regarding the scale disadvantage faced by SMEs. Zengin (2025) and Wu et al. (2022) found that the financial benefits of ESG initiatives are significantly more likely to materialize in larger firms, which are better equipped to absorb implementation costs and leverage reputational gains. This scale gap is further supported by Amitrano et al. (2025), who highlight that smaller firms lack the necessary organizational intellectual capital to effectively integrate and translate sustainability practices into a competitive advantage. Furthermore, evidence from the service sector reinforces the observed strain: while studies on large hotels report long-term financial benefits (Pereira-Moliner et al., 2021; López-Gamero et al., 2023; Perramon et al., 2022), Matsali et al. (2025) found a negative correlation between ESG scores and financial performance (ROA) in listed tourism services. This suggests the high initial cost and organizational complexity create a steep J-curve effect (Klassen & Whybark, 1999) that is particularly challenging for small firms with minimal operating slack.

To better understand these dynamics, our results are interpreted through the combined lenses of Resource-Based Theory (RBT) and Stakeholder Theory. From an RBT perspective, E&G practices in small restaurants frequently require significant commitments of financial capital, managerial time, and organizational routines that often fail to satisfy the criteria for sustained competitive advantage, valuable, rare, inimitable, and non-substitutable (Barney, 1991). The scale disadvantages of certification schemes and compliance mean that fixed costs overwhelm efficiency gains for SMEs (Renard, 2003; Jaffee, 2007). Durrani et al. (2024) explicitly cite lack of finance and high initial costs as major barriers for SMEs adapting environmental sustainability. E&G practices consume resources that are neither distinctive nor effectively deployable, creating operational inefficiencies by redirecting capital and managerial time from core business activities (Taylor, 2005; Delmas & Toffel, 2008). Without strong dynamic capabilities to reconfigure resources and integrate sustainability (Aragón-Correa & Sharma, 2003; Schaltegger &

Wagner, 2006), these commitments remain liabilities rather than sources of competitive advantage (Pinske & Kolk, 2012; Hart & Dowell, 2011). Stakeholder Theory offers a complementary explanation. Firms adopt E&G practices to secure legitimacy with customers and regulators (Freeman, 1984; Donaldson & Preston, 1995). However, if stakeholder demands, including greater ESG disclosure burdens (Mahmood et al., 2025), exceed a small firm's ability to respond credibly, the firm may face reputational risks (Chatterji et al., 2009). The difficulty of producing credible and comparable sustainability reporting (Boiral & Henri, 2017) can lead to perceptions of greenwashing, which weakens trust and reduces expected returns (Lyon & Montgomery, 2015). In these cases, stakeholder pressures paradoxically weaken financial outcomes because the costs of conforming outweigh the non-financial benefits, especially when demands exceed organizational capacity.

Taken together, these results confirm that sustainability practices are not uniformly beneficial. Their impact depends on the interaction of firm resources, stakeholder expectations, and industry-specific conditions. For small European restaurants, sustainability increases operating costs without delivering immediate financial rewards, amplifying existing vulnerabilities in a highly competitive, low-margin sector. Consistent with RBT, E&G practices become a disadvantage when they consume resources that are neither distinctive nor effectively deployable. Future research should therefore investigate the boundary conditions that determine whether E&G practices serve as strategic assets or liabilities (Porter & Kramer, 2006; Hart & Dowell, 2011).

6. Conclusion

In sum, our findings contribute a critical nuance to sustainability scholarship, establishing that in resource-constrained, micro-scale hospitality contexts, Environmental and Governance practices function more as performance burdens than strategic assets. The study empirically demonstrates that, for small European restaurants, the financial, organizational, and managerial costs of E&G adoption currently outweigh the potential competitive advantages, leading to reduced operational efficiency, profitability, and productivity. This is primarily due to scale disadvantages and implementation capacity constraints, which prevent these firms from effectively converting their sustainability commitments into valuable, inimitable resources. Research and theory show that scale and implementation capacity determine whether the adoption of sustainability adds value or imposes costs.

This paper's primary audience includes academics studying ESG, SME management, and contingency theory; policymakers responsible for drafting sustainable finance regulations; and industry professionals managing small, independent restaurants. For policymakers, the evidence underscores the urgent need for context-sensitive ESG guidelines that account for the operational realities of small firms (Fenwick, 2022; Garrido-Ruso et al., 2024). Simplified reporting mechanisms and subsidized capital investment are necessary to mitigate the disproportionate burdens of compliance. For managers, the study advises a strategic, incremental adoption of E&G practices, prioritizing basic, cost-saving initiatives over complex, resource-intensive certification schemes that require organizational scale.

7. Future Research

While this study offers robust empirical evidence regarding the negative financial trade-offs of E&G practices in small European restaurants, its limitations suggest several promising avenues for future research. The primary constraint lies in the cross-sectional nature of the data, which prevents definitive conclusions regarding causality. Consequently, future work must prioritize conducting rigorous tests on the direction of causality, particularly investigating the possibility of reverse causation, where robust financial health may be a prerequisite for achieving high ESG performance in resource-constrained SMEs, rather than a consequence of it (Gaál & Nagy, 2025). Furthermore, it remains crucial to investigate

the boundary conditions that determine whether E&G practices serve as strategic assets or liabilities. This calls for longitudinal and contextual studies that track small restaurants over extended time horizons to precisely determine the elusive J-curve inflection point, enabling researchers to identify when initial cost burdens transition into sustained financial gains. Such studies should also investigate how factors such as consumer willingness to pay and local regulatory regimes modify the observed trade-offs across national contexts in Europe. Finally, given the aggregated nature of the E&G construct in this study, future research should specifically isolate and disaggregate the governance dimension to determine which specific practices, such as formal ethics codes versus simple financial oversight, are most costly or beneficial for the management and performance of small, family-run firms.

References

1. Ademi, B., & Klungseth, N. J. (2022). Does it pay to deliver superior ESG performance? Evidence from US S&P 500 companies. *Journal of global responsibility*, 13(4), 421-449. <https://doi.org/10.1108/JGR-01-2022-0006>
2. Alatawi, I. A., Ntim, C. G., Zras, A., & Elmagrhi, M. H. (2023). CSR, financial and non-financial performance in the tourism sector: A systematic literature review and future research agenda. *International Review of Financial Analysis*, 89, 102734. <https://doi.org/10.1016/j.irfa.2023.102734>
3. Ambec, S., & Lanoie, P. (2008). Does it pay to be green? A systematic overview. *Academy of Management Perspectives*, 22(4), 45–62. <https://doi.org/10.5465/amp.2008.35590353>
4. Amitrano, C. C., Hani Gheith, M., Troise, C., & Cappa, F. (2025). Individual and organizational intellectual capital, ESG dimensions and competitive advantage: a focus on Italian SMEs. *Journal of Intellectual Capital*, 1-21. <https://doi.org/10.1108/JIC-12-2024-0411>
5. Aragón-Correa, J.A. and Sharma, S. (2003), “A contingent resource-based view of proactive corporate environmental strategy”, *Academy of Management Review*, Vol. 28 No. 1, pp. 71-88. <https://doi.org/10.5465/amr.2003.8925233>
6. Aydoğmuş, M., Gülay, G., & Ergun, K. (2022). Impact of ESG performance on firm value and profitability. *Borsa Istanbul Review*, 22, S119-S127. <https://doi.org/10.1016/j.bir.2022.11.006>
7. Babajee, R. B., Seetanah, B., Nunkoo, R., & Gopy-Ramdhan, N. (2022). Corporate social responsibility and hotel financial performance. *Journal of Hospitality Marketing & Management*, 31(2), 226-246. <https://doi.org/10.1080/19368623.2021.1937433>
8. Barclay, D., Higgins, C., & Thompson, R. (1995). The partial least squares (PLS) approach to casual modeling: personal computer adoption and use as an Illustration.
9. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
10. Barney, J. (2001). Is the resource-based “view” a useful perspective for strategic management research? Yes. *Academy of Management Review*, 26(1), 41–56. <https://doi.org/10.5465/amr.2001.4011938>
11. Baumann-Paul, D., Wickert, C., Spence, L. J., & Scherer, A. G. (2013). Organizing corporate social responsibility in small and large firms: Size matters. *Journal of Business Ethics*, 115(4), 693–705. <https://doi.org/10.1007/s10551-013-1827-7>
12. Belas, J., Dvorsky, J., Hlawiczka, R., Smrcka, L., & Khan, K. A. (2024). SMEs sustainability: The role of human resource management, corporate social responsibility and financial management. *Oeconomia Copernicana*, 15(1), 307-342. <https://doi.org/10.24136/oc.2937>
13. Boiral, O., & Henri, J.-F. (2017). Is sustainability performance comparable? A study of GRI reports of mining organizations. *Business & Society*, 56(2), 283–317. <https://doi.org/10.1177/0007650315576134>

14. Brammer, S., Jackson, G., & Matten, D. (2012). Corporate social responsibility and institutional theory: New perspectives on private governance. *Socio-Economic Review*, 10(1), 3–28. <https://doi.org/10.1093/ser/mwr030>
15. Cerciello, M., Busato, F., & Taddeo, S. (2023). The effect of sustainable business practices on profitability. Accounting for strategic disclosure. *Corporate Social Responsibility and Environmental Management*, 30(2), 802–819. <https://doi.org/10.1002/csr.2389>
16. Chatterji, A. K., Levine, D. I., & Toffel, M. W. (2009). How well do social ratings actually measure corporate social responsibility? *Journal of Economics & Management Strategy*, 18(1), 125–169. <https://doi.org/10.1111/j.1530-9134.2009.00210.x>
17. Chen, C.-D., Su, C. H. J., & Chen, M.-H. (2022). Are ESG-committed hotels financially resilient to the COVID-19 pandemic? An autoregressive jump intensity trend model. *Tourism Management*, 93, 104581. <https://doi.org/10.1016/j.tourman.2022.104581>
18. Cheng, B., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal*, 35(1), 1–23. <https://doi.org/10.1002/smj.2131>
19. Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295–336). Mahwah, NJ: Lawrence Erlbaum Associates.
20. Chin, W. W. (2010). How to write up and report PLS analyses. In V. C. Esposito Vinzi (Ed.), *Handbook of Partial Least Squares. Springer Handbooks of Computational Statistics*. (pp. 655–690). Berlin, Heidelberg: Springer.
21. Chuang, S. P., & Huang, S. J. (2018). The effect of environmental corporate social responsibility on environmental performance and business competitiveness: The mediation of green information technology capital. *Journal of Business Ethics*, 150(4), 991–1009. <https://doi.org/10.1007/s10551-016-3167-x>
22. Clark, G. L., Feiner, A., & Viehs, M. (2015). From the stockholder to the stakeholder: How sustainability can drive financial outperformance. Oxford University, Arabesque Partners Report
23. Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Routledge.
24. da Cunha, Í. G. F., Policarpo, R. V. S., de Oliveira, P. C. S., Abdala, E. C., & do Nascimento Rebelatto, D. A. (2025). A systematic review of ESG indicators and corporate performance: proposal for a conceptual framework. *Future Business Journal*, 11(1), 106. <https://doi.org/10.1186/s43093-025-00539-1>
25. D'Amato, V., D'Ecclesia, R., & Levantesi, S. (2024). Firms' profitability and ESG score: A machine learning approach. *Applied Stochastic Models in Business and Industry*, 40(2), 243–261. <https://doi.org/10.1002/asmb.2758>
26. Dani, R., Juyal, D., & Rawal, Y. S. (2021). A critical analysis of the restaurant industry's effect on environment sustainability. *Science Progress and Research*, 1(4), 435–442. <https://doi.org/10.52152/spr/2021.165>
27. Delmas, M. A., & Toffel, M. W. (2008). Organizational responses to environmental demands: Opening the black box. *Strategic Management Journal*, 29(10), 1027–1055. <https://doi.org/10.1002/smj.701>
28. Delmas, M. A., Etzion, D., & Nairn-Birch, N. (2013). Triangulating environmental performance: What do corporate social responsibility ratings really capture? *Academy of Management Perspectives*, 27(3), 255–267. <https://doi.org/10.5465/amp.2012.0123>
29. Delmas, M., & Pekovic, S. (2013). Environmental standards and labor productivity: Understanding the mechanisms that sustain sustainability. *Journal of Organizational Behavior*, 34(2), 230–252. <https://doi.org/10.1002/job.1827>
30. Diamantopoulos, A., & Winklhofer, H. M. (2001). Index construction with formative indicators: An alternative to scale development. *Journal of marketing research*, 38(2), 269–277. <https://doi.org/10.1509/jmkr.38.2.269.18845>

31. Donaldson, T., & Preston, L. E. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of Management Review*, 20(1), 65–91. <https://doi.org/10.5465/amr.1995.9503271992>
32. Dong, B. (2023). A systematic review of the ESG strategy literature and future outlook. *Frontiers in Sustainable Development*, 3(4), 105-112. <https://doi.org/10.54691/fsd.v3i4.4784>
33. Durrani, N., Danish, R. Q., & Leedy, T. (2024). Barriers to adaptation of environmental sustainability in SMEs: A qualitative study. *Plos One*, 19(1), e0298580. <https://doi.org/10.1371/journal.pone.0298580>
34. Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *Management science*, 60(11), 2835-2857. <https://doi.org/10.1287/mnsc.2014.1984>
35. Eccles, R. G., Krzus, M. P., & Ribot, S. (2015). Models of Best Practice in Integrated Reporting 2015. *Journal of Applied Corporate Finance*, 27(2). <https://doi.org/10.1111/jacf.12123>
36. Efron, B., & Tibshirani, R. J. (1994). An introduction to the bootstrap. Chapman and Hall/CRC.
37. Elhoushy, S., & Jang, S. (2023). How to maintain sustainable consumer behaviours: A systematic review and future research agenda. *International Journal of Consumer Studies*, 47(6), 2181-2211. <https://doi.org/10.1111/ijcs.12905>
38. Escoz Barragan, K., & Becker, F. S. R. (2025). Keeping pace with the digital transformation—exploring the digital orientation of SMEs. *Small Business Economics*, 64(3), 1361-1385. <https://doi.org/10.1007/s11187-024-00947-7>
39. European Labour Authority. (2024). Accommodation and food service activities: Issues and challenges related to labour mobility. *Publications Office of the European Union*. <https://www.ela.europa.eu/sites/default/files/2024-10/horeca-report-ela.pdf>
40. European Parliament & Council of the European Union. (2022, December 14). Directive (EU) 2022/2464 amending directives 2004/109/EC, 2006/43/EC, and 2013/34/EU as regards corporate sustainability reporting. Corporate Sustainability Reporting Directive. *Official Journal of the European Union*, L 322, 15–80.
41. Fabijańska, A., Wolczek, P., & Sikacz, H. (2025). Can machine learning bring ESG ratings closer to small and medium-sized enterprises?. *Oeconomia Copernicana*. <https://doi.org/10.24136/oc.3162>
42. Falk, R. F., & Miller, N. B. (1992). A primer for soft modeling. University of Akron Press,.
43. Fenwick, M. (2022). ESG disclosure and SMEs: Short-term costs and long-term benefits. European Corporate Governance Institute (ECGI) Law Working Paper No. 640/2022.
44. Flagstad, I., Hauge, Å. L., & Johnsen, S. Å. K. (2022). Certification dissonance: Contradictions between environmental values and certification scheme requirements in small-scale companies. *Journal of Cleaner Production*, 358, 132037. <https://doi.org/10.1016/j.jclepro.2022.132037>
45. Flammer, C., & Luo, J. (2017). Corporate social responsibility as an employee governance tool: Evidence from a quasi-experiment. *Strategic Management Journal*, 38(2), 163–183. <https://doi.org/10.1002/smj.2492>
46. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
47. Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Boston: Pitman. ISBN: 9780273019138
48. Freeman, R. E. (2023). *Stakeholder theory: The state of the art (Updated ed.)*. Cambridge University Press. <https://doi.org/10.1017/9781009054083>
49. Freeman, R.E., Harrison, J.S. and Wicks, A.C. (2007), *Managing for Stakeholders: Survival, Reputation, and Success*, Yale University Press, New Haven, CT.
50. Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, 5(4), 210–233. <https://doi.org/10.1080/20430795.2015.1118917>

51. Gaál, A., & Nagy, A. Z. (2025). Analysis of the Small and Medium-Sized Enterprises ESG Rating in Hungary. *International Journal of Applied Economics, Finance and Accounting*, 22(1), 82-93. <https://doi.org/10.33094/ijaefa.v22i1.2241>
52. Galli, D., Torelli, R., & Caccialanza, A. (2024). Sustainability performance and sustainability reporting in SMEs: a love affair or a fight? *Journal of Management & Organization*, 30(3), 574-599. <https://doi.org/10.1017/jmo.2023.40>
53. Garrido-Ruso, M., Ferrer, R. C., & Civera, C. (2024). Does ESG implementation influence performance and risk in SMEs? Evidence from Spanish firms. *Sustainability Accounting, Management and Policy Journal*, 15(3), 475–495. <https://doi.org/10.1108/SAMPJ-09-2023-0380>
54. Geisser, S. (1975). The predictive sample reuse method with applications. *Journal of the American Statistical Association*, 70(350), 320-328. <https://doi.org/10.1080/01621459.1975.10479865>
55. Gillan, S. L., Koch, A., & Starks, L. T. (2021). Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance*, 66, 101889. <https://doi.org/10.1016/j.jcorpfin.2021.101889>
56. Guilding, C. (2012). *Accounting essentials for hospitality managers*. Routledge. <https://doi.org/10.4324/9780080954004>
57. Guilding, C., Lamminmaki, D., & McManus, L. (2014). Guilding, C., Lamminmaki, D., & McManus, L. (2014). Staff turnover costs: In search of accountability. *International Journal of Hospitality Management*, 36, 231-243. <https://doi.org/10.1016/j.ijhm.2013.10.001>
58. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. 3rd Edition. Thousand Oaks: Sage. <https://www.pls-sem.net/pls-sem-books/a-primer-on-pls-sem-3rd-ed/>
59. Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks: Sage Publications.
60. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–151. <https://doi.org/10.2753/MTP1069-6679190202>
61. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
62. Hair, J.F., Hult, G. T.M, Ringle, Christian, Sarstedt, M. (2023). *Chapter 7 Case Study Update Using Smart PLS 4*.
63. Hart, S. L. (1995). A natural-resource-based view of the firm. *Academy of Management Review*, 20(4), 986–1014. <https://doi.org/10.5465/amr.1995.9512280033>
64. Hart, S. L., & Ahuja, G. (1996). Does it pay to be green? An empirical examination of the relationship between emission reduction and firm performance. *Business Strategy and the Environment*, 5(1), 30–37. [https://doi.org/10.1002/\(SICI\)1099-0836\(199603\)5:1<30::AID-BSE38>3.0.CO;2-Q](https://doi.org/10.1002/(SICI)1099-0836(199603)5:1<30::AID-BSE38>3.0.CO;2-Q)
65. Hart, S. L., & Dowell, G. (2011). Invited editorial: A natural-resource-based view of the firm. *Journal of Management*, 37(5), 1464–1479. <https://doi.org/10.1177/0149206310390219>
66. He, Y., Qi, R., So, K. K. F., & Li, Y. (2024). Which ESG dimensions matter in the hotel industry? Evidence from the cost of debt. *International Journal of Hospitality Management*, 122, 103866. <https://doi.org/10.1016/j.ijhm.2024.103866>
67. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
68. Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In R. R. Sinkovics & P. N. Ghauri (Eds.), *Advances in International Marketing* (Vol. 20, pp. 277–319). Emerald. [https://doi.org/10.1108/S14747979\(2009\)0000020014](https://doi.org/10.1108/S14747979(2009)0000020014)

69. Hinkin, T. R., & Tracey, J. B. (2000). The cost of turnover: Putting a price on the learning curve. *Cornell Hotel and Restaurant Administration Quarterly*, 41(3), 14–21. <https://doi.org/10.1177/001088040004100313>
70. Hörisch, J., Freeman, R. E., & Schaltegger, S. (2014). Applying stakeholder theory in sustainability management: Links, similarities, dissimilarities, and a conceptual framework. *Organization & environment*, 27(4), 328–346. <https://doi.org/10.1177/1086026614535786>
71. Hwang, D. H. S., Song, H. J., Lee, S., & Kang, K. H. (2024). The moderating role of national economic development on the relationship between ESG and firm performance in the global hospitality industry. *International Journal of Hospitality Management*, 120, 103788. <https://doi.org/10.1016/j.ijhm.2024.103788>
72. Inoue, Y., & Lee, S. (2011). Effects of different CSR dimensions on corporate financial performance in tourism-related industries. *Tourism Management*, 32(4), 790–804. <https://doi.org/10.1016/j.tourman.2010.06.019>
73. Jaffee, D. (2007). *Brewing Justice: Fair Trade Coffee, Sustainability, and Survival*. University of California Press.
74. Jansson, J., Nilsson, J., Modig, F., & Vall, G. H. (2017). Commitment to sustainability in small and medium-sized enterprises: The influence of strategic orientations and management values. *Business Strategy and the Environment*, 26(1), 69–83. <https://doi.org/10.1002/bse.1901>
75. Jenkins, H. (2009). A ‘business opportunity’ model of corporate social responsibility for small- and medium-sized enterprises. *Business Ethics: A European Review*, 18(1), 21–36. <https://doi.org/10.1111/j.1467-8608.2009.01546.x>
76. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
77. Jones, T. M., Harrison, J. S., & Felps, W. (2018). How applying instrumental stakeholder theory can provide sustainable competitive advantage. *Academy of Management Review*, 43(3), 371–391. <https://doi.org/10.5465/amr.2016.0111>
78. Juracka, D., & Valaskova, K. (2025). Progress towards sustainable activities: Principal component analysis (PCA) of SMEs in the European Union. *Journal of International Studies (2071-8330)*, 18(2). <https://doi.org/10.14254/2071-8330.2025/18-2/1>
79. Kang, K. H., Lee, S., & Huh, C. (2010). Impacts of positive and negative CSR on company performance in hospitality. *International Journal of Hospitality Management*, 29(1), 72–82. <https://doi.org/10.1016/j.ijhm.2009.05.006>
80. Kim, J. H., & Hall, C. M. (2020). Can sustainable restaurant practices enhance customer loyalty? The roles of value, satisfaction, and trust. *Journal of Hospitality and Tourism Management*, 45, 337–347. <https://doi.org/10.1016/j.jhtm.2020.03.004>
81. Klassen, R. D., & Whybark, D. C. (1999). The impact of environmental technologies on manufacturing performance. *Academy of Management Journal*, 42(6), 599–615. <https://doi.org/10.5465/256982>
82. Kotsantonis, S., Pinney, C., & Serafeim, G. (2016). ESG integration in investment management: Myths and realities. *Journal of Applied Corporate Finance*, 28(2), 10–16. <https://doi.org/10.1111/jacf.12169>
83. Kovermann, J., & Velte, P. (2021). CSR and tax avoidance: A review of empirical research. *Corporate Ownership and Control*, 18(2), 20–39. <https://doi.org/10.22495/cocv18i2art2>
84. Kularatne, T., Wilson, C., Månsson, J., Hoang, V., & Lee, B. (2019). Do environmentally sustainable practices make hotels more efficient? A study of major hotels in Sri Lanka. *Tourism Management*, 71, 213–225. <https://doi.org/10.1016/j.tourman.2018.09.009>
85. Lagasio, V., & Cucari, N. (2019). Corporate governance and environmental social governance disclosure: A meta-analytical review. *Corporate social responsibility and environmental management*, 26(4), 701–711. <https://doi.org/10.1002/csr.1716>

86. Lohmöller, J. B. (1989). *Latent Variable Path Modeling with Partial Least Squares*. Heidelberg: Physica-Verlag.
87. López-Gamero, M. D., Molina-Azorín, J. F., Pereira-Moliner, J., & Pertusa-Ortega, E. M. (2023). Agility, innovation, environmental management and competitiveness in the hotel industry. *Corporate Social Responsibility and Environmental Management*, 30(2), 548-562. <https://doi.org/10.1002/csr.2373>
88. López-Torres, G. C., García-Pérez-de-Lema, D., Santos-Jaén, J. M., & Torres, F. J. Á. (2025). The Impact of Knowledge Sharing Quality on Environmental Practices to Improve the Financial Performance of SMEs: The Mediating Role of Advanced Management Technologies. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.70240>
89. Lyon, T. P., & Montgomery, A. W. (2015). The means and end of greenwash. *Organization & Environment*, 28(2), 223–249. <https://doi.org/10.1177/1086026615575332>
90. Maak, T., & Pless, N. M. (2009). Business leaders as citizens of the world: Advancing humanism on a global scale. *Journal of Business Ethics*, 88(3), 537–550. <https://doi.org/10.1007/s10551-009-0122-0>
91. Mahmood, A., Mehmood, A., Terzani, S., De Luca, F., & Djajadikerta, H. G. (2025). The effect of ESG disclosure on firm value in the European context. *Management Decision*. <https://doi.org/10.1108/MD-10-2024-2480>
92. Majid, S., Zhang, X., Khaskheli, M. B., Hong, F., King, P. J. H., & Shamsi, I. H. (2023). Eco-efficiency, environmental and sustainable innovation in recycling energy and their effect on business performance: evidence from European SMEs. *Sustainability*, 15(12), 9465. <https://doi.org/10.3390/su15129465>
93. Margolis, J. D., & Walsh, J. P. (2003). Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly*, 48(2), 268–305. <https://doi.org/10.2307/3556659>
94. Matsali, C., Skordoulis, M., Papagrigoriou, A., & Kalantonis, P. (2025). ESG Scores as Indicators of Green Business Strategies and Their Impact on Financial Performance in Tourism Services: Evidence from Worldwide Listed Firms. *Administrative Sciences*, 15(6), 208. <https://doi.org/10.3390/admsci15060208>
95. Maynard, D. d. C., Zandonadi, R. P., Nakano, E. Y., Raposo, A., & Botelho, R. B. A. (2021). Green Restaurants ASSESSment (GRASS): A tool for evaluation and classification of restaurants considering sustainability indicators. *Sustainability*, 13(19), 10928. <https://doi.org/10.3390/su131910928>
96. Molina-Azorín, J. F., & Font, X. (2016). Mixed methods in sustainable tourism research: an analysis of prevalence, designs and application in JOST (2005–2014). *Journal of Sustainable Tourism*, 24(4), 549-573. <https://doi.org/10.1016/j.tourman.2015.01.008>
97. Namkung, Y., & Jang, S. S. (2013). Effects of restaurant green practices on brand equity formation: Do green practices really matter?. *International Journal of Hospitality Management*, 33, 85-95. <https://doi.org/10.1016/j.ijhm.2012.06.006>
98. Nicholls, A. (2010). Fair trade: Towards an economics of virtue. *Journal of business ethics*, 92(Suppl 2), 241-255. <https://doi.org/10.1007/s10551-010-0581-3>
99. Nguyen, D. T. T. (2020). An empirical study on the impact of sustainability reporting on firm value. *Journal of Competitiveness*. 12(3):119-135. <https://doi.org/10.7441/joc.2020.03.07>
100. Nunnally, J. C. & Bernstein, IH (1994). *Psychometric theory*.
101. Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, 24(3), 403–441. <https://doi.org/10.1177/0170840603024003910>
102. Pereira-Moliner, J., López-Gamero, M. D., Font, X., Molina-Azorín, J. F., Tarí, J. J., & Pertusa-Ortega, E. M. (2021). Sustainability, competitive advantages and performance in the hotel industry: A synergistic relationship. *Journal of Tourism and Services*, 12(23), 132-149. <https://doi.org/10.29036/jots.v12i23.282>

103. Perramon, J., Oliveras-Villanueva, M., & Llach, J. (2022). Impact of service quality and environmental practices on hotel companies: An empirical approach. *International Journal of Hospitality Management*, 107, 103307. <https://doi.org/10.1016/j.ijhm.2022.103307>
104. Petter, S., Straub, D., & Rai, A. (2007). Specifying formative constructs in information systems research. *MIS quarterly*, 623-656. <https://doi.org/10.2307/25148814>
105. Pillai, R. D., & Williams, S. (2022). Unlocking corporate social responsibility in smaller firms: Issues and opportunities. *Thunderbird International Business Review*, 64(2), 231–244. <https://doi.org/10.1002/tie.22315>
106. Pinske, J., & Kolk, A. (2012). Addressing the climate change–sustainable development nexus: The role of multistakeholder partnerships. *Business & Society*, 51(1), 176–210. <https://doi.org/10.1177/0007650311427426>
107. Poliakova, A., Hamarneh, I., Jibril, A. B., & Kicova, E. (2024). The interconnections between CSR, financial management, and sustainability in service sector SMEs. *Journal of Tourism and Services*, 15(29), 227-247. <https://doi.org/10.29036/jots.v15i29.873>
108. Porter, M. E., & Kramer, M. R. (2006). The link between competitive advantage and corporate social responsibility. *Harvard business review*, 84(12), 78-92.
109. Rahi, A. F., Akter, R., & Johansson, J. (2021). Do sustainability practices influence financial performance? Evidence from the Nordic financial industry. *Accounting Research Journal*, 35(2), 292-314. <https://doi.org/10.1108/ARJ-12-2020-0373>
110. Rasoolimanesh, S. M., Ramakrishna, S., Hall, C. M., Esfandiar, K., & Seyfi, S. (2023). A systematic scoping review of sustainable tourism indicators in relation to sustainable development goals. *Journal of Sustainable Tourism*, 31(7), 1497-1517. <https://doi.org/10.1080/09669582.2020.1775621>
111. Renard, M.-C. (2003). Fair trade: Quality, market and conventions. *Journal of Rural Studies*, 19(1), 87–96. [https://doi.org/10.1016/S0743-0167\(02\)00051-7](https://doi.org/10.1016/S0743-0167(02)00051-7)
112. Rhou, Y., & Singal, M. (2020). A review of the business case for CSR in the hospitality industry. *International Journal of Hospitality Management*, 84, 102330. <https://doi.org/10.1016/j.ijhm.2019.102330>
113. Rodgers, W., & Guiral, A. (2011). Potential model misspecification bias: Formative indicators enhancing theory for accounting researchers. *The International Journal of Accounting*, 46(1), 25-50. <https://doi.org/10.1016/j.intacc.2010.12.002>
114. Rodríguez-Fernández, M. (2016). Social responsibility and financial performance: The role of good corporate governance. *BRQ Business Research Quarterly*, 19(2), 137–151. <https://doi.org/10.1016/j.brq.2015.08.001>
115. Rojo-Suárez, J., & Alonso-Conde, A. B. (2023). Short-run and long-run effects of ESG policies on value creation and the cost of equity of firms. *Economic Analysis and Policy*, 77, 599-616. <https://doi.org/10.1016/j.eap.2022.12.017>
116. Saeidi, S. P., Sofian, S., Saeidi, P., Saeidi, S. P., & Saeidi, S. A. (2015). How does corporate social responsibility contribute to firm financial performance? The mediating role of competitive advantage, reputation, and customer satisfaction. *Journal of business research*, 68(2), 341-350. <https://doi.org/10.1016/j.jbusres.2014.06.024>
117. Schaltegger, S., & Wagner, M. (2006). Integrative management of sustainability performance, measurement and reporting. *International Journal of Accounting, Auditing and Performance Evaluation*, 3(1), 1–19. <https://doi.org/10.1504/IJAAPE.2006.010098>
118. Sharma, D., Bhattacharya, S., & Thukral, S. (2019). Resource-based view on corporate sustainable financial reporting and firm performance: evidences from emerging Indian economy. *International Journal of Business Governance and Ethics*, 13(4), 323-344. <https://doi.org/10.1504/IJBGE.2019.10021060>

119. Shmueli, G., Ray, S., Estrada, J. M. V., & Chatla, S. B. (2019). The elephant in the room: Predictive performance of PLS models. *Journal of Business Research*, 95, 455–464. <https://doi.org/10.1016/j.jbusres.2017.12.010>
120. Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J.-H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: Guidelines for using PLSpredict. *European Journal of Marketing*, 53(11), 2322–2347. <https://doi.org/10.1108/EJM-02-2019-0189>
121. Sousa, R., & Voss, C. A. (2008). Contingency research in operations management practices. *Journal of Operations management*, 26(6), 697–713. <https://doi.org/10.1016/j.jom.2008.06.001>
122. Stone, M. (1974). Cross-validators choice and assessment of statistical predictions. *Journal of the royal statistical society: Series B (Methodological)*, 36(2), 111–133. <https://doi.org/10.1111/j.2517-6161.1974.tb00994.x>
123. Streukens, S., & Leroi-Werelds, S. (2016). Bootstrapping and PLS-SEM: A step-by-step guide to get more out of your bootstrap results. *European Management Journal*, 34(6), 618–632. <https://doi.org/10.1016/j.emj.2016.06.003>
124. Surroca, J., Tribó, J. A., & Waddock, S. (2010). Corporate responsibility and financial performance: The role of intangible resources. *Strategic Management Journal*, 31(5), 463–490. <https://doi.org/10.1002/smj.820>
125. Tandon, A., Kaur, P., Makkar, M., & Tanwar, S. (2024). Building resilience and competitiveness of small restaurants through sustainability practices. *International Journal of Hospitality Management*, 116, 103659. <https://doi.org/10.1016/j.ijhm.2024.103659>
126. Taylor, P. L. (2005). In the market but not of it: Fair Trade coffee and Forest Stewardship Council certification as market-based social change. *World Development*, 33(1), 129–147.
127. Úbeda-García, M., Claver-Cortés, E., Marco-Lajara, B., & Zaragoza-Sáez, P. (2021). Corporate social responsibility and firm performance in the hotel industry. The mediating role of green human resource management and environmental outcomes. *Journal of Business Research*, 123, 57–69. <https://doi.org/10.1016/j.jbusres.2020.09.055>
128. Velte, P. (2022). Meta-analysis on Corporate Social Responsibility (CSR): A literature review. *Management Review Quarterly*, 72, 627–675. <https://doi.org/10.1007/s11301-021-00211-2>
129. Waddock, S. A., & Graves, S. B. (1997). The corporate social performance–financial performance link. *Strategic Management Journal*, 18(4), 303–319. [https://doi.org/10.1002/\(SICI\)1097-0266\(199704\)18:4](https://doi.org/10.1002/(SICI)1097-0266(199704)18:4)
130. Werts, C. E., Linn, R. L., & Jöreskog, K. G. (1974). Intraclass reliability estimates: Testing structural assumptions. *Educational and Psychological measurement*, 34(1), 25–33. <https://doi.org/10.1177/001316447403400104>
131. Wold, H. (1982). *Soft modeling: The basic design and some extensions*. In K. G. Jöreskog & H. Wold (Eds.), *Systems under indirect observation: Part II* (pp. 1–54). North-Holland.
132. Wu, S., Li, X., Du, X., & Li, Z. (2022). The impact of ESG performance on firm value: The moderating role of ownership structure. *Sustainability*, 14(21), 14507. <https://doi.org/10.3390/su142114507>
133. Yadav, S., Samadhiya, A., Kumar, A., Luthra, S., & Pandey, K. K. (2025). Environmental, social, and governance (ESG) reporting and missing (m) scores in the industry 5.0 era: Broadening firms' and investors' decisions to achieve sustainable development goals. *Sustainable Development*, 33(3), 3455–3477. <https://doi.org/10.1002/sd.3306>
134. Zengin, B. (2025). Does size matter? Exploring the moderating role of firm size in the ESG–profitability relationship. *Gazi İktisat ve İşletme Dergisi*, 11(3), 268–283. <https://doi.org/10.30855/gjeb.2025.11.3.005>
135. Zhong, Y., Yao, X., & Lin, W. (2025). The impact of environmental regulation on the growth of small and micro enterprises: Insights from China. *Sustainability*, 17(5), 2118. <https://doi.org/10.3390/su17052118>

Brief description of the author:**Dr. Dorina Nicoara-Popescu**

ORCID ID: <https://orcid.org/0000-0003-3927-0801>

Affiliation: Business Administration Department, Universitat de Barcelona, Barcelona, Spain

Email: dorina.dpn@gmail.com

Dr. Dorina Nicoara-Popescu is a University Lecturer at the Universitat de Barcelona. She holds a PhD in Business and Economics (2015) and ANECA certification. With more than a decade of experience in higher education, she has taught across undergraduate and master's programs in multiple institutions. Her research focuses on the effects of digital transformation and sustainability practices on firms' financial performance.