Research Paper

Building Resilient Tourism Systems: The Strategic Role of Financial Sustainability in Portuguese Tourism Firms

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ABSTRACT

This study examines the economic and financial sustainability of Portuguese tourism firms operating within Division 55 (Accommodation) and Division 56 (Food and Beverage Service Activities), using Return on Assets (ROA) as the central indicator of economic and financial sustainability to assess variations over time, across firm sizes and among regions. Drawing on a dataset of 8,735 firms and 113,559 observations from 2011 to 2023, the analysis relies on ROA due to its analytical robustness and suitability for longitudinal and cross-sectional comparison. Given the absence of normality and homogeneity of variances, robust statistical techniques were applied, namely Welch's ANOVA and the Games-Howell post hoc test with bootstrapping, to ensure reliable inference. The findings reveal significant differences in financial sustainability over the study period, between firms of different sizes and across regions. Small firms record higher average ROA than micro, medium or large firms, while the Algarve emerges as the highest-performing region and the Autonomous Region of the Azores presents the weakest results. The study is limited by its exclusive reliance on quantitative financial indicators, without incorporating qualitative dimensions that might enrich understanding of sustainability drivers, and by the constraints posed by data non-normality. The results emphasise the need for policy measures tailored to regional characteristics and highlight the pivotal role of small firms in resilience in the tourism sector. The study adds value by providing a rigorous, longitudinal and regionally differentiated analysis of financial sustainability within the Portuguese tourism industry.

Keywords: Financial Sustainability, Portugal, Regional performance, ROA, SMEs, Tourism.

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1. INTRODUCTION

Tourism has become a cornerstone of economic development in many countries, particularly in Portugal, where the sector contributes over 14% to GDP and plays a vital role in employment generation, innovation, and regional cohesion (INE, 2025). However, the increasing complexity of global challenges, such as climate change, rising operational costs, and shifting consumer preferences, demands a strategic shift towards sustainable management practices (Gössling et al., 2021).

In this context, the concept of sustainability has evolved from an environmental concern to a multidimensional framework encompassing economic, social, and environmental goals. For tourism enterprises, especially small and medium-sized ones, achieving economic and financial sustainability is crucial to ensuring long-term viability, resilience in the face of crises, and alignment with the United Nations' Sustainable Development Goals (SDGs) (Becerra-Vicario et al., 2023).

This article explore how companies operating in the Portuguese tourism sector incorporate economic and financial sustainability practices and how such practices influence competitive performance. Drawing on data from the Balance Sheet Analyses System (Sistema de Análise de Balanços Ibéricos, SABI) database, the study evaluates financial indicators, such as liquidity, solvency, profitability, and cash flow, to assess how these dimensions correlate with sustainable strategic management. In addition, the study addresses the main opportunities and challenges faced by companies adopting sustainable financial practices.

Despite the growing importance of sustainability in tourism, empirical evidence on the economic and financial sustainability of tourism firms remains fragmented, particularly regarding longitudinal performance, firm size and regional disparities. In the Portuguese context, there is a lack of comprehensive, large-scale analyses that assess how financial sustainability has evolved over time and how it differs across firm characteristics and territorial contexts. This research problem motivates the present study.

Accordingly, this study aims to analyse the economic and financial sustainability of Portuguese tourism firms between 2011 and 2023, focusing on temporal dynamics, firm size and regional location.

To guide the empirical inquiry, the following research hypotheses were formulated: RH1: There are statistically significant differences in the economic and financial sustainability of companies between 2011 and 2023; RH2: There are statistically significant differences in the economic and financial sustainability of companies according to firm size; RH3: There are statistically significant differences in the economic and financial sustainability of companies across different Portuguese regions.

Given the absence of normal distribution in the Return on Assets (ROA) variable, as indicated by the Kolmogorov-Smirnov and Shapiro-Wilk tests, and the lack of homogeneity of variance among groups (Levene's test), a robust analytical approach was adopted. Specifically, Welch's ANOVA was employed, with bootstrapped Post hoc Games-Howell tests, to improve reliability and to accommodate heteroscedasticity and unequal sample sizes.

The structure of this paper is as follows. Following this introductory section, the literature review explores theoretical and empirical perspectives on sustainability in tourism, with particular emphasis on financial sustainability indicators and their relevance to strategic management. The methodology section details the data source, sample selection and statistical procedures applied. This is followed by the results section, which presents the findings associated with each research hypothesis. The discussion contextualises these results in light of existing literature, offering interpretations and identifying practical implications. Finally, the conclusion summarises the main insights, outlines policy recommendations, and suggests avenues for future research.

Accordingly, this study assesses economic and financial sustainability using Return on Assets (ROA) as the sole performance indicator.

2. LITERATURE REVIEW

Tourism has long been recognised as a key driver of economic growth and territorial development, particularly in countries with rich cultural and natural heritage such as Portugal. The sector contributes significantly to national GDP and employment, while simultaneously stimulating complementary sectors including transport, retail, gastronomy, and real estate. However, as several authors point out (Müller & Sobreira, 2024), economic growth alone does not guarantee balanced

or sustainable development. When driven by short-term goals and poorly planned expansion, tourism can exacerbate regional asymmetries, place unsustainable pressure on local infrastructure, and marginalise host communities.

The concept of sustainable development has emerged as a corrective lens to these imbalances. Rooted in the Brundtland Report (1987) and further operationalised through Agenda 21 and the United Nations 2030 Agenda, sustainable development encompasses a multidimensional perspective that integrates economic viability, environmental responsibility, and social equity. In the context of tourism, this requires not only reducing the ecological footprint of travel and hospitality but also ensuring fair labour practices, cultural preservation, and equitable value distribution across the value chain (Costa & Leite, 2022).

Over the past decade, sustainability has gained increasing relevance in the strategic management of tourism enterprises. The shift from reactive environmental compliance to proactive sustainability integration is evident in both academic discourse and industry practice. According to Theodoulidis et al. (2017), firms that embed sustainability into their operational and strategic core tend to perform better in the long term, both financially and reputationally. This is particularly true for businesses that report according to recognised frameworks, such as the Global Reporting Initiative (GRI), which promotes transparency and promotes stakeholder engagement and innovation.

The adoption of the SDGs has further strengthened the link between tourism and sustainability. Among the 17 SDGs, several are particularly pertinent to the sector: SDG 8 (Decent Work and Economic Growth), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action). These goals encourage tourism enterprises to rethink their business models, placing greater emphasis on inclusion, resource efficiency, and environmental stewardship. Research by Becerra-Vicario et al. (2023) and Akyildirim et al. (2025) indicates that firms that align with the SDGs are more resilient, more attractive to ethical investors and consumers, and more likely to benefit from emerging financial incentives, such as those provided by green investment programmes. Given the well-established and widely disseminated nature of the SDGs, this study does not aim to analyse each goal individually, but rather to use the SDG framework as a strategic reference to contextualise economic and financial sustainability in the tourism sector.

Despite these advantages, integrating sustainability into the business strategy remains uneven. Small and medium-sized enterprises (SMEs), which dominate the tourism sector in Portugal, often

face significant barriers to implementation, including limited technical capacity, lack of funding, and the absence of formal sustainability training (Mucharreira et al., 2019). Addressing these challenges requires systemic support, including public-private partnerships, fiscal incentives, and targeted capacity-building programmes.

Within the broader sustainability paradigm, economic-financial sustainability holds a particularly critical role. It refers to a business's ability to maintain financial health over time, ensuring profitability, solvency, and the capacity to invest and grow without compromising environmental or social responsibilities. Financial sustainability is not only a prerequisite for long-term survival but also an enabler of innovation, adaptation, and value creation (Belas et al., 2024).

Beyond the tourism context, economic sustainability has been extensively discussed in the broader management and sustainability literature as a key condition for long-term organisational survival and resilience (Dyllick & Hockerts, 2002; Bansal & DesJardine, 2014). These studies emphasise that economic sustainability underpins firms' capacity to balance short-term performance with long-term value creation.

Economic sustainability is widely recognised as a foundational pillar of business resilience, particularly in sectors characterised by high volatility and external shocks, such as tourism. Financial viability enables firms to absorb crises, invest in innovation, and support long-term environmental and social commitments (Belas et al., 2024; Castilla-Polo & Sánchez-Hernández, 2025). Empirical evidence further suggests that economically sustainable firms are better positioned to maintain employment, ensure service quality, and contribute to regional development over time (Becerra-Vicario et al., 2023; Ye et al., 2025).

To evaluate economic-financial sustainability, several key performance indicators are employed in the literature and practice: Liquidity ratios, such as the current ratio and quick ratio, which assess a firm's ability to meet short-term obligations; Solvency ratios, which reflect long-term financial stability and debt management; Profitability indicators, including ROA, Return on Equity (ROE), and net profit margin; Interest coverage ratios, which measure a company's ability to service debt; and Cash flow from operations, which indicates the real capacity to sustain activity without external funding (Kavyashree et al., 2024).

In recent years, the integration of financial and sustainability indicators has become increasingly important for tourism enterprises. According to Castilla-Polo and Sánchez-Hernández (2025), firms that incorporate sustainability into their financial reporting frameworks are better positioned

to identify risks, attract investors, and ensure long-term resilience. Moreover, empirical analyses using databases such as SABI enable comparative assessments of company performance, helping identify correlations between sustainable practices and financial robustness (Ye et al., 2025).

Although various indicators contribute to a comprehensive understanding of financial sustainability, such as liquidity and solvency ratios (Dsouza et al., 2023), the choice to use ROA is because it enables a standardised comparison between companies of different sizes and sectors of activity, which is particularly relevant in large data sets covering several years, as is the case in this analysis (Floros & Voulgaris, 2016). In addition, the selection of ROA also reflects the availability and consistency of data in the SABI database.

3. METHODOLOGY

This paper was developed to analyse the economic and financial sustainability of companies in the tourism sector, namely companies with Division 55 - Accommodation and Division 56 - Food and Beverage Service Activities. Return on Assets (ROA) is used as the sole indicator of economic and financial sustainability, given its suitability for comparing firms of different sizes over time. The sample comprises 8,735 companies over the period 2011 to 2023, yielding 113,559 observations. The regional analysis follows the Portuguese NUTS II classification, comprising Northern Portugal, Central Portugal, Lisbon and Tagus Valley, Alentejo, Algarve, the Autonomous Region of Madeira, and the Autonomous Region of the Azores. The sample was taken from the SABI database, a data search tool that provides various economic and financial indicators for Iberian companies, made available by the Applied Management Research Unit (Unidade de Investigação Aplicada em Gestão, UNIAG). The SABI database was selected for its comprehensive coverage of Portuguese firms, its data reliability, and its extensive use in prior empirical research on financial performance and sustainability, which supports comparability and methodological robustness (Mucharreira et al., 2019; Floros & Voulgaris, 2016).

An inferential analysis was developed to test the formulated research hypotheses. A One-Way analysis of variance (ANOVA-One-Way) was conducted to assess whether there are differences in the economic and financial sustainability of companies depending on their location, sector of activity and size (Pallant, 2020).

Data normality was assessed using the Kolmogorov-Smirnov and Shapiro-Wilk tests. The assumption of homogeneity of variance was assessed using Levene's test. Bootstrapping

procedures were developed to improve the reliability of the results, correct for deviations from normality in the sample distribution, and account for differences in group sizes.

Of the various variables used to assess the economic and financial sustainability of companies listed in section 2, ROA was used, as in Lee e Kang (2021). Although various indicators were identified and reviewed, the selection of ROA was based on its relevance, availability in the SABI database, and its suitability for comparisons across firms and years (Floros & Voulgaris, 2016). The limitation of using a single indicator is acknowledged, and future research may expand this scope to include other dimensions of financial sustainability.

4. RESULTS

This section presents the empirical findings derived from the analysis of financial sustainability across Portuguese tourism enterprises. Drawing on firm-level data between 2011 and 2023 and using ROA as the primary indicator of economic-financial performance, the analysis tests the formulated research hypotheses concerning temporal variation, firm size, and regional disparities. Given the lack of normal distribution and homogeneity of variance across groups, robust statistical procedures, Welch's ANOVA and Games-Howell post hoc tests with bootstrapping, were employed to ensure reliable and valid results. The findings are reported below, organised according to each tested research hypothesis.

In relation to RH_1, the analysis reveals statistically significant differences in the economic and financial sustainability of companies between 2011 and 2023. Normality tests indicated that the ROA variable does not follow a normal distribution [Kolmogorov-Smirnov = 0.223, $p < 0.001$]. Levene's test confirmed the absence of homogeneity of variance among the groups [Levene (12, 159012) = 333.827, $p < 0.001$]. Consequently, Welch's ANOVA was applied, and the results showed significant differences between years [Welch's F (12, 56139.999) = 977.841, $p < 0.001$]. The Games-Howell post hoc test, interpreted through bootstrapping procedures, identified statistically significant differences in ROA between several of the years under analysis.

As detailed in Table 1, the average ROA in 2023 was significantly higher than in most other years, except for 2016 and 2022, for which the differences were not statistically significant. The most pronounced drop occurred in 2012, when ROA declined by 9.47% compared to 2023, and a general downward trend was observed from 2012 to 2016.

Table 1. Analysis of variance of mean ROA from 2011 to 2023

(I) Year		Mean Difference (I-J)	Standard Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
2023	2011	5,90886332*	0,15271230	0,000	5,4029139	6,4148128
	2012	9,46635758*	0,15529503	0,000	8,9518438	9,9808713
	2013	7,91047914*	0,15755735	0,000	7,3884708	8,4324875
	2014	5,81797517*	0,16760361	0,000	5,2626783	6,3732720
	2015	3,91324663*	0,16785563	0,000	3,3571216	4,4693716
	2016	-,66257690*	0,16584317	0,004	-1,2120267	-0,1131271
	2017	,69471927*	0,17479747	0,005	0,1155941	1,2738445
	2018	0,31183085	0,15544114	0,729	-0,2031468	0,8268085
	2019	0,37070361	0,15023777	0,396	-0,1270284	0,8684356
	2020	3,72414296*	0,15159629	0,000	3,2219052	4,2263808
	2021	7,87905488*	0,15299769	0,000	7,3721723	8,3859375
	2022	-0,19970421	0,15039232	0,984	-0,6979467	0,2985383

Source. Own Elaboration. *. The mean difference is significant at the 0.05 level

Regarding RH$_2$, the results confirm statistically significant differences in financial sustainability across companies of different sizes. Levene's test once again indicated non-homogeneity of variance [Levene (3, 159021) = 443.755, p < 0.001]. Welch's ANOVA showed significant differences between groups [Welch's F (3, 2135.728) = 99.775, p < 0.001]. Post hoc Games-Howell tests, interpreted with bootstrapping, confirmed that small enterprises demonstrated significantly higher mean ROA compared to micro, medium, and large enterprises.

As shown in Table 2, small enterprises - defined as those with 11 to 49 employees, turnover between €700,000 and €8,000,000, and total assets between €350,000 and €4,000,000 - exhibited the highest average ROA. Conversely, medium-sized enterprises - those with 50 to 249 employees, turnover between €8,000,000 and €40,000,000, and assets between €4,000,000 and €20,000,000 - had the lowest average financial sustainability.

Table 2. Analysis of variance of mean ROA by company size

Dimension		Mean Difference (I-J)	Standard Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Micro	Small	-1,1179640*	0,07107588	0,000	-1,300563	-0,9353641
	Medium	0,8541724*	0,18274868	0,000	0,3844653	1,3238795
	Large	0,45934357	0,38283240	0,627	-0,527513	1,4462011

Small	Micro	1,11796402*	0,07107588	0,000	0,9353641	1,3005639
	Medium	1,97213646*	0,18676465	0,000	1,4921259	2,4521470
	Large	1,57730759*	0,38476565	0,000	0,5855339	2,5690813
Medium	Micro	-,85417243*	0,18274868	0,000	-1,323879	-0,3844653
	Small	-1,9721364*	0,18676465	0,000	-2,452147	-1,4921259
	Large	-0,39482887	0,41998798	0,783	-1,476343	0,6866862
Large	Micro	-0,45934357	0,38283240	0,627	-1,446201	0,5275139
	Small	-1,5773075*	0,38476565	0,000	-2,569081	-0,5855339
	Medium	0,39482887	0,41998798	0,783	-0,686686	1,4763439

Source. Own Elaboration. *. The mean difference is significant at the 0.05 level

For RH₃, the results also demonstrate statistically significant regional disparities in ROA. Levene's test confirmed the lack of variance homogeneity [Levene (6, 159018) = 170.368, $p < 0.001$], and Welch's ANOVA identified significant differences among the regions [Welch's F (6, 28006.427) = 146.318, $p < 0.001$]. The Games-Howell post hoc test confirmed that companies based in the Algarve had significantly higher ROA than those in all other regions, while the Autonomous Region of the Azores consistently recorded the lowest ROA values. These regional patterns are summarised in Table 3.

Table 3. Analysis of variance of mean ROA by company headquarters region

Region		Mean Difference (I-J)	Standard Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Northern Portugal	Algarve	-2,3548719*	0,12810808	0,000	-2,732602	-1,977141
	L_V_T	-1,0104807*	0,08647177	0,000	-1,265432	-0,755528
	C_P	,77580291*	0,10055548	0,000	0,4793212	1,0722846
	Alentejo	,52517039*	0,17543154	0,044	0,0078286	1,0425122
	R_A_A	1,99181995*	0,19147441	0,000	1,4270977	2,5565422
Algarve	N_P	2,35487199*	0,12810808	0,000	1,9771417	2,7326022
	L_V_T	1,34439127*	0,12655869	0,000	0,9712285	1,7175540
	C_P	3,13067490*	0,13656917	0,000	2,7280002	3,5333496
	Alentejo	2,88004238*	0,19828252	0,000	2,2953568	3,4647280
	R_A_M	1,83770364*	0,21806636	0,000	1,1946548	2,4807524
	R_A_A	4,34669193*	0,21260805	0,000	3,7197080	4,9736759
Lisbon and Tagus Valley	N_P	1,01048072*	0,08647177	0,000	0,7555289	1,2654325
	Algarve	-1,3443912*	0,12655869	0,000	-1,717554	-0,971228

	C_P	1,78628363*	0,09857396	0,000	1,4956442	2,0769231
	Alentejo	1,53565111*	0,17430331	0,000	1,0216336	2,0496686
	R_A_A	3,00230067*	0,19044125	0,000	2,4406215	3,5639799
Central Portugal	N_P	-,77580291*	0,10055548	0,000	-1,072284	-0,479321
	Algarve	-3,1306749*	0,13656917	0,000	-3,533349	-2,728000
	L_V_T	-1,7862836*	0,09857396	0,000	-2,076923	-1,495644
	R_A_M	-1,2929712*	0,20310752	0,000	-1,891939	-0,694002
	R_A_A	1,21601703*	0,19723566	0,000	0,6343243	1,7977097
Alentejo	N_P	-,52517039*	0,17543154	0,044	-1,042512	-0,007828
	Algarve	-2,8800423*	0,19828252	0,000	-3,464728	-2,295356
	L_V_T	-1,5356511*	0,17430331	0,000	-2,049668	-1,021633
	R_A_M	-1,0423387*	0,24883224	0,001	-1,776092	-0,308585
	R_A_A	1,46664955*	0,24406296	0,000	0,7469381	2,1863610
Autonomous Region of Madeira	Algarve	-1,8377036*	0,21806636	0,000	-2,480752	-1,194654
	C_P	1,29297126*	0,20310752	0,000	0,6940028	1,8919397
	Alentejo	1,04233875*	0,24883224	0,001	0,3085852	1,7760923
	R_A_A	2,50898830*	0,26039145	0,000	1,7411268	3,2768498
Autonomous Region of the Azores	N_P	-1,9918199*	0,19147441	0,000	-2,556542	-1,427097
	Algarve	-4,3466919*	0,21260805	0,000	-4,973675	-3,719708
	L_V_T	-3,0023006*	0,19044125	0,000	-3,563979	-2,440621
	C_P	-1,2160170*	0,19723566	0,000	-1,797709	-0,634324
	Alentejo	-1,4666495*	0,24406296	0,000	-2,186361	-0,746938
	R_A_M	-2,5089883*	0,26039145	0,000	-3,276849	-1,741126

Source. Own Elaboration. L_V_T = Lisbon and Tagus Valley; C_P = Central Portugal; R_A_A = Autonomous Region of the Azores; N_P = Northern Portugal; R_A_M = Autonomous Region of Madeira

The superior performance of firms in the Algarve may reflect the region's mature tourism infrastructure and sustained international demand, whereas the comparatively lower performance in the Azores may be attributed to geographical constraints, a smaller market, and higher operational costs associated with insularity.

Welch's ANOVA confirmed the existence of statistically significant differences in ROA across regions [Welch's $F_{(6, 28006.427)}$ = 146.318, $p < 0.001$]. The Games-Howell post hoc test, interpreted using bootstrapping procedures, further revealed that these differences were significant concerning the regional location of company headquarters.

As shown in Table 3, companies based in the Algarve region exhibited the highest levels of economic and financial sustainability, with significantly higher ROA values than firms in other regions. In stark contrast, firms headquartered in the Autonomous Region of the Azores recorded the lowest average ROA, suggesting comparatively weaker financial performance. This

divergence highlights the pronounced influence of regional context on firm-level financial outcomes within the Portuguese tourism sector.

5. DISCUSSION

The analysis of variance in ROA averages from 2011 to 2023 reveals marked fluctuations in the economic and financial sustainability of tourism enterprises. The decline observed in 2012, the most significant in the series, may be attributed to the repercussions of the 2010–2014 economic and financial crisis and Portugal's subsequent bailout by the Troika. A further drop in ROA was recorded in 2020 and 2021, which can reasonably be associated with the global economic downturn caused by the COVID-19 pandemic, a phenomenon widely recognised for its disruptive impact on tourism (Gössling et al., 2021).

The recovery in ROA figures in recent years suggests greater resilience among companies in the sector. This may reflect improved financial management practices, a growing emphasis on sustainable business models, and stronger alignment with the SDGs, particularly those relating to decent work, economic growth, and responsible consumption (Becerra-Vicario et al., 2023).

Regarding company size, the results indicate that small enterprises consistently demonstrate higher average ROA than micro, medium, and large enterprises. This trend may be attributed to the typically leaner structures of small firms, which enable more agile decision-making, tighter financial control, and a stronger customer orientation. Furthermore, smaller firms often benefit from closer relationships with their stakeholders and a more flexible approach to adapting business strategies to market changes (Mucharreira et al., 2019; Belas et al., 2024).

Regional disparities in financial sustainability were also evident. Companies based in the Algarve exhibited higher ROA than those in other Portuguese regions. This result is likely linked to the Algarve's robust tourism infrastructure, strong brand recognition, and high levels of international demand. In contrast, firms operating in the Autonomous Region of the Azores recorded the lowest ROA values, which may be due to geographic isolation, limited market access, and seasonal dependency (Costa & Leite, 2022).

These findings underscore the importance of considering both internal (e.g., firm size, management practices) and external (e.g., regional context, macroeconomic shocks) factors when assessing financial sustainability in tourism. They also support the argument that sustainable financial performance is not solely determined by profitability but is shaped by broader structural

and contextual variables. As such, promoting resilience in the sector requires a multidimensional policy approach that includes tailored support for SMEs, regional development strategies, and the systemic integration of sustainability principles.

Although this study does not directly model competitiveness outcomes, the results provide relevant insights into how economic and financial sustainability practices may influence the competitive performance of tourism firms. Higher and more stable ROA values reflect firms' ability to efficiently allocate resources, absorb external shocks, and sustain operations over time, which are key elements of competitiveness in volatile sectors such as tourism (Belas et al., 2024; Becerra-Vicario et al., 2023). The superior performance observed among small firms and in regions with more mature tourism ecosystems suggests that financially sustainable business models enhance adaptability, strategic flexibility, and long-term competitive positioning.

In this sense, economic and financial sustainability should be understood not merely as an accounting outcome, but as a strategic capability that supports competitiveness, resilience, and sustained value creation in tourism enterprises.

6. CONCLUSION

This study has examined the economic and financial sustainability of tourism enterprises in Portugal over the period 2011 to 2023, with a particular focus on ROA as a key performance indicator. The findings reveal statistically significant differences in financial sustainability across time, firm size, and regional location. The findings of this study provide empirical support for the research hypotheses proposed in the Introduction. Specifically, the results confirm significant differences in economic and financial sustainability over time (RH1), across firm sizes (RH2), and between Portuguese regions (RH3). These results are consistent with previous studies that emphasise the role of financial sustainability as a determinant of resilience and long-term performance in tourism firms (Belas et al., 2024; Becerra-Vicario et al., 2023; Castilla-Polo & Sánchez-Hernández, 2025).

In line with the literature reviewed, the superior performance of small firms and of regions with more mature tourism ecosystems supports the argument that financial sustainability is shaped by both internal firm characteristics and contextual regional factors.

The temporal analysis highlights the tourism sector's vulnerability to macroeconomic shocks, such as the sovereign debt crisis and the COVID-19 pandemic, both of which had significant impacts

on firms' profitability. Nonetheless, the post-crisis recovery indicates an increasing capacity for resilience, potentially driven by the gradual integration of sustainability principles into strategic and financial management.

In terms of firm size, small enterprises exhibited the most favourable financial performance. This suggests that leaner structures and more adaptive management approaches may enhance financial sustainability amid economic uncertainty. However, these firms often lack the institutional support and resources necessary to fully leverage sustainable growth potential, underscoring the need for targeted public policy measures.

Geographically, the Algarve region stands out for its strong financial indicators, reflecting the benefits of a mature, diversified tourism market. By contrast, peripheral regions, particularly the Azores, face structural constraints that limit their ability to achieve comparable performance levels. These findings suggest that regional context plays a critical role in shaping enterprise outcomes and that national strategies must account for such asymmetries.

From a policy perspective, this research advocates for a more nuanced approach to tourism governance, one that supports regional equity, facilitates access to financial and technical resources for SMEs, and incentivises the integration of sustainability reporting practices. Moreover, enhanced training and capacity-building initiatives are essential to empower firms across all regions and sizes to align with the SDGs and improve long-term resilience.

This study is subject to certain limitations that should be acknowledged. First, the analysis relies exclusively on a single financial indicator (ROA) to proxy economic and financial sustainability, which, although widely used and suitable for comparative analysis, does not capture other relevant dimensions such as liquidity, leverage, or cash flow dynamics. Second, the exclusive use of quantitative secondary data limits the ability to capture managerial practices and qualitative drivers of sustainability. Finally, data non-normality constrained the choice of statistical techniques, although robust methods were employed to mitigate this issue.

Future research should explore other financial and non-financial indicators of sustainability, including employee well-being, customer satisfaction, and environmental performance. In addition, qualitative methods could provide deeper insights into the specific challenges faced by firms in implementing sustainable financial strategies. Expanding the scope of analysis to include comparative international case studies would also strengthen the generalisability of the findings.

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During the preparation of this work, the author(s) used ChatGPT to improve language, grammar, or structure. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

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