From Vineyards to Value: The Influence of Corporate Legitimacy and Green Innovation on Sustainable Performance in Wine Tourism

Abstract

Purpose - This research focuses on analysing the impact of Wine Tourism (WT) development on the Sustainable Performance (SP) of Spanish wineries, as well as the mediating effect of Corporate Social Legitimacy (CSL) and Green Innovation (GI) on this link. In addition, age, size and membership in a Protected Designation of Origin (PDO) are introduced as control variables to increase the precision of the cause-effect relationships examined.

Design/methodology/approach - The study proposes a conceptual model based on previous studies, which is tested using structural equations (PLS-SEM) with data collected from 196 Spanish wineries between September 2022 and January 2023.

Findings - The findings of the research reveal the existence of a positive and significant relationship between the development of WT and the SP of Spanish wineries, as well as the partial mediation of CSL and GI in this linkage.

Originality/value – The uniqueness and significance of this study can be attributed to several crucial factors. First, it enhances the understanding and knowledge regarding the advantages associated with WT development. Second, no prior research has conducted a comprehensive study on the WT development as a catalyst for economic, social, and environmental outcomes within the context of Spanish wineries. Third, to the best of the authors' knowledge, no previous study has simultaneously analysed the mediating role of CSL and GI as mediators in the relationship between WT development and the SP of wineries.

Keywords: Wine Tourism, Sustainable Performance, Corporate Social Legitimacy, Green Innovation, Wine industry, Spain.

Paper type: Research paper

Introduction

In recent decades, the tourism sector has undergone major transformations in response to changing patterns of tourism demand, as tourists now prefer shorter and more frequent trips, seeking novel destinations as an alternative to traditional sun and beach experiences (Toubes *et al*., 2021). This shift has led to the emergence of innovative tourism products designed to meet these changing preferences, with a growing fascination for gastronomy, with a particular focus on wine, which has the potential to become a primary motivation for travel rather than a mere secondary activity (Serra-Cantallops *et al*., 2021). Consequently, the relationship between wine and tourism can offer a harmonious synergy in which visitors can satisfy their desire for unique experiences and, at the same time, contribute to the development of the regions where these activities are concentrated (Carrasco *et al*., 2019).

Traditionally, Wine Tourism (WT) has been defined as "visiting vineyards, wineries, wine festivals, and wine fairs where the primary motivations for visitors are tasting grape wine and/or experiencing the characteristics of the wine region" (Hall and Macionis, 1998, p. 267). However, the WT concept is a fertile ground for exploration and has been examined from various perspectives (Nave *et al*., 2021). In the present research, WT is defined as an activity that revolves around the appreciation of vineyards, wine and wineries, with the objective of improving the competitiveness of wineries by serving as a direct distribution channel for wine sales, contributing to territorial development by having a positive impact on the region in which it is carried out, and promoting innovation by introducing a new product to the market, thus diversifying the offer available to consumers.

WT can play a decisive role in regional development by generating economic and social well-being while preserving the environment in which the activity takes place (Festa *et al*., 2023). Thus, this form of tourism can demonstrate its potential through the three dimensions of the Triple Bottom Line: economic, social, and environmental (Sun and Drakeman, 2022). The present research aims precisely to examine whether the development of WT has a positive influence on the economic, social and environmental performance, i.e. Sustainable Performance (SP), of Spanish wineries, given that, although the contribution of WT to territorial development has been widely studied from an economic, social and environmental perspective, as far as the authors are aware, no previous research has specifically addressed the impact of WT development on the SP of Spanish wineries. Therefore, this study, in contrast to previous macro-focused research, seeks to analyse the WT-SP link through a micro-level approach cantered on the key actor of WT activity: wineries.

Likewise, WT development can play a crucial role in increasing the Corporate Social Legitimacy (CSL) of wineries, as well as catalyzing the development of Green Innovations (GIs). On the one hand, WT can have a positive impact on wineries' CSL by fostering transparency and social responsibility, since, by opening their doors to tourism, they can establish a direct connection with visitors and the local community, showcasing their sustainable production practices, their commitment to environmental preservation and their support for the community (Lavandoski *et al*., 2018). This can strengthen the winery's image as a responsible company committed to sustainability, thus providing an opportunity to establish strong relationships with the local community and enhance legitimacy among its stakeholders (Nave *et al*., 2021). On the other hand, WT can also facilitate the exchange of knowledge and experiences, as visitors can bring new perspectives and knowledge in terms of sustainable practices and environmental technologies (Martíne-Falcó *et al*., 2023a). At the same time, wineries can share their best practices and discover new ways to improve their environmental performance through interaction with visitors, fostering collaboration and joint learning, which can ultimately drive GIs in the wine industry (Leenders and Chandra, 2013).

In this particular context, conducting this research is highly essential as it investigates the impact of WT development on the wineries' SP, while also exploring the potential mediating influence of CSL and GI on this relationship. Consequently, the primary objective of the study is to address three specific Research Questions (RQs): (RQ1) What are the potential outcomes associated with WT development on SP of wineries? (RQ2) Can CSL serve as a mediator in the relationship between WT development

and SP of wineries? and (RQ3) Can GI serve as a mediator in the relationship between WT development and SP of wineries? To effectively address these RQs, a comprehensive theoretical model is developed based on an extensive review of relevant literature and subsequently validated using the structural equation modelling technique. In order to gather the necessary primary data, a questionnaire survey was conducted and distributed among wineries in Spain during the period from September 2022 to January 2023.

The uniqueness and significance of this study arise from several crucial factors. First, it enhances the comprehension and knowledge regarding the advantages associated with WT development. Second, it contributes to the existing body of literature by examining the correlation between WT and sustainability. Third, no prior research has conducted a comprehensive investigation into WT development as a catalyst for economic, social, and environmental outcomes within the context of Spanish wineries. Fourth, to the authors' best knowledge, no previous study has simultaneously analysed the mediating role of CSL and GI as mediators in the relationship between WT development and SP of wineries. Fifth, the proposed theoretical model has not been previously examined, so the study represents a new advance in the scientific knowledge of WT development. Sixth, the age of the winery, its size and its membership in a Protected Designation of Origin (PDO) are introduced as control variables in order to examine their impact on the three typologies analysed, thus improving the understanding of the influence of business factors on wineries' performance.

To achieve the goal of this study, the first step following this introduction is to delve deeper into the correlation between WT development, GI, CSL, and the SP of wineries, as discussed in Section 2. Section 3 outlines the methodology employed to attain the specified objectives, providing a detailed set of steps. Moving forward, Section 4 presents the findings obtained from evaluating the global, measurement, and structural model. Lastly, in Section 5, the primary conclusions are presented, along with an acknowledgment of the study's limitations and suggestions for future research to address them.

Theoretical underpinning: Legitimacy theory and Natural Resource-Based View

The effect of WT on CSL, GI and SP can be understood through the joint understanding of Legitimacy Theory (LT) and Natural Resource-Based View (NRBV).

On the one hand, LT is based on the notion that there is a "social contract" between an organization and the society in which it operates (Silva, 2021). In fact, legitimacy has to do with two main concepts: the perception of stakeholders and the effectiveness of the communication channels used by the company. Therefore, LT requires organizations to continuously check whether their survival is serving the satisfaction of the needs of the different stakeholders, since it is the community that determines the usefulness of organizations according to the congruence between what they expect and what they obtain from them (Soewarno *et al*., 2019). In this context, the WT development can become a highly strategic asset by creating and protecting the CSL of wineries through the communication of the sustainable practices developed, the dissemination of gastronomic wealth and the promotion of wine heritage (Duarte-Alonso et al., 2022). For this reason, the higher the degree of WT development, the greater the incentive to develop innovations linked to environmental protection in order to communicate them and thus obtain legitimacy from different stakeholders. Thus, LT justifies the link between the WT and CSL, as well as the link between WT and GIs.

On the other hand, NRBV provides a framework for analyzing the different GI strategies that companies can adopt to cope with environmental threats, as well as the factors that catalyze this type of innovation. This framework is proposed as an extension of the Resource-Based View (RBV), for while that approach stresses the importance of valuable, rare, inimitable and non-substitutable resources as preconditions for competitive advantage, NRBV emphasizes the importance of the firm's relationship with its natural environment as the main source of competitive advantage (Hart, 1995). Therefore, NRBV offers a connection between the natural environment and a firm's resources and capabilities, proposing essentially three strategic capabilities to cope with threats from the natural environment:

pollution prevention, product stewardship and clean technology (Hart and Dowell, 2011). These capabilities form the basis of GIs, enabling companies to improve their economic, social and environmental performance (Khanra *et al*., 2022). In this way, the NRBV makes it possible to justify the link between GI and SP. The argumentation for each of the hypotheses put forward in this research is set out in detail below.

Wine Tourism Development and Sustainable Performance

The academic literature concerning the WT development is extensive, encompassing various recent studies from both the supply and demand perspectives (Marco-Lajara *et al*., 2023a). This body of knowledge emphasizes the importance of fostering wine industries with open-to-visitors wineries, thus adhering to the "cellar door" philosophy (Trigo and Silva, 2022). In this regard, the construction of dedicated facilities, community networks and alliances, and gastronomy play a crucial role in the development and intensification of WT in wineries (Festa *et al*., 2023).

As WT is more developed, the more sustainable the wineries' performance can be. From an economic perspective, WT can be seen as a way to directly sell wine at the winery (Sun and Drakeman, 2022). Scholars often employ direct sales in wineries as a significant measure to assess the economic impact of winery activities, given the economic benefits derived from such activity (Smyczek *et al*., 2020). First, wineries can offer wine at a lower price compared to alternative distribution channels, or maintain a similar price while keeping the margin that intermediaries typically take. Second, wineries gain immediate liquidity, unlike other distribution methods that involve delayed cash flow. Third, direct sales create opportunities for upselling and cross-selling. Fourth, it fosters direct contact with customers, which is crucial for ensuring future wine sales (Fuentes-Fernández *et al*., 2022).

From a social perspective, WT is conceived as a strategy to counteract the negative effects of depopulation and enhance the overall well-being of society, including the workers in wineries (Williams, 2021). The economic profitability and diversification of activities brought about by WT can contribute to the stability of workers and improve their working conditions (Martin and Williams, 2003). It also creates employment opportunities for local residents and offers training or retraining prospects for new jobs within the service sector associated with wineries (Kutateladze *et al*., 2021). However, the benefits of WT extend beyond winery workers and positively impact the entire community, leading to positive externalities such as the beautification of streets and the expansion of cultural and leisure offerings (Duarte-Alonso *et al*., 2021).

From an environmental standpoint, WT can act as a catalyst for promoting the environmental sustainability of wineries, whether through proactive promotion of environmental management practices or reactive responses to environmental concerns (Szolnoki and Tafel, 2022). WT serves therefore as a distinguishing factor for wineries (an internal driver) and contributes to the enhancement of the surrounding environment (an external driver). This improvement is achieved by preserving heritage, promoting gastronomic richness, and conserving biodiversity (Darnay, 2016). Therefore, VT has the potential to encourage the adoption of environmentally friendly practices at wineries, which, in turn, can attract wine tourists who prioritize environmental awareness. By adopting a sustainable approach, wineries not only improve their own environmental performance, but also position themselves as attractive destinations for conscientious wine tourists (Dias *et al*., 2023).

WT, as a form of tourism that aims to preserve and utilize the cultural heritage associated with winemaking, should prioritize the mitigation of cultural and environmental impact (Grimstad and Burgess, 2014). At the same time, it should strive to enhance the economic and social well-being of the wine region where it takes place (Rachão *et al*., 2021). This approach ensures the sustainable management of the cultural resource while promoting the overall welfare of the local community (Lamoureux *et al*., 2022). However, despite the increasing recognition of the activity's role in fostering economic, social, and environmental development, there remains a lack of scientific research that comprehensively analyses the impact of WT on the triple dimensions of winery performance: economic,

social, and environmental. In order to contribute to this research area and based on the literature review conducted, the study proposes the following research hypotheses:

H1. WT development has a positive effect on SP of wineries

Wine Tourism, Corporate Social Legitimacy and Sustainable Performance

CSL refers to the recognition and acceptance that a company obtains from the society in which it operates (Ellerup Nielsen *et al*., 2018). This is a concept related to the public perception of the company and its contribution to society in terms of values, ethics and social responsibility (Chen *et al*., 2008). In this sense, LT argues that legitimacy is a crucial resource for organizations and that its lack can have negative consequences, such as decreased social support, loss of customers, difficulty in attracting talent or regulatory scrutiny, so companies tend to work to maintain and strengthen their legitimacy through social recognition strategies, which may include actions such as the adoption of socially responsible practices, transparent communication and participation in community initiatives (Deegan, 2019).

CSL is important for wineries because it implies that they are seen as trustworthy and legitimate actors in society and can be achieved through the WT development in different ways. First, the WT development can significantly contribute to increase the CSL of wineries by attracting visitors from the region and other geographical areas (McGregor and Robinson, 2019). This can generate a greater link and collaboration with the local community, as the winery becomes a tourist attraction that promotes local tourism and can contribute to the economic development of the area (Golicic, 2022). Second, through WT, wineries can show visitors the cultural richness and traditions related to wine production in the region. This involves sharing the winery's history, traditional winemaking methods, indigenous grape varieties and other relevant cultural aspects (Torres et al., 2021). In doing so, the winery contributes to preserving and promoting local identity, which can generate greater recognition and support from the community (Karagiannis and Metaxas, 2020). Third, WT can represent an opportunity for wineries to show their commitment to sustainable and environmentally responsible practices (Andrade-Suárez and Caamaño-Franco, 2020).

Under the precepts of LT, WT can positively affect all three types of legitimacy. In terms of normative legitimacy, WT can allow wineries to show their alignment with social expectations and norms, since by opening their doors to the public and offering tourism experiences related to wine culture, wineries demonstrate their willingness to share their knowledge and heritage with society (Santos et al., 2020). This openness and transparency can generate recognition of wineries as legitimate actors in the promotion and preservation of the region's winemaking tradition (Tafel and Szolnoki, 2021). As for cognitive legitimacy, WT helps to reinforce shared beliefs and assumptions about how wineries should operate, since, by offering guided tours, wine tastings and other related activities, wineries comply with the idea that they are places where wine is produced and enjoyed (Figueroa and Rotarou, 2018). This reinforces the cognitive legitimacy of wineries by confirming and reinforcing the beliefs of visitors l about the role and importance of wineries in wine culture. Regarding pragmatic legitimacy, WT provides tangible benefits to wineries and strengthens their relationship with different stakeholders, since, by receiving visitors, wineries generate additional income through the sale of products, tourism services and related events (Duarte-Alonso *et al*., 2015).

In turn, the greater CSL derived from WT can lead to an increase in the economic, social and environmental performance of wineries (Marco-Lajara et al., 2023b). Wineries with a solid reputation and a good social image tend to attract more customers, which can result in increased sales and revenues (Martínez-Falcó *et al*., 2023a). In addition, CSL can strengthen relationships with suppliers and facilitate collaboration with other companies, which can generate additional business opportunities, as well as favor access to financing at more favorable rates (Martínez-Falcó *et al*., 2023b). In terms of social performance, CSL implies that a winery operates in a responsible and ethical manner, considering the well-being of its employees, local communities and other stakeholders, which can lead to better working conditions, fair wages and development opportunities for the winery's employees (Dressler, 2017). CSL is also closely related to environmental sustainability, since wineries that operate

responsibly and consider the environmental impacts of their activities tend to implement sustainable practices, such as the efficient management of natural resources, the reduction of carbon emissions and the use of renewable energies (Fernández-Olmos *et al.*, 2023).

Despite the catalytic effect of WT to improve CSL and, as a consequence, business performance, very little academic literature has addressed this task. In fact, to the best of the authors' knowledge, only two investigations have demonstrated the effect of the positive WT-CSL-corporate performance linkage, these being those of Lavandoski et al. (2016) and Lavandoski et al. (2018), contextualizing such analysis in the Portuguese WT industry. This highlights a number of shortcomings around the study of such linkages. First, the academic literature addressing the exposed linkages is very scarce, so it is necessary to generate new scientific knowledge around the subject that allows to understand the meaning of the analyzed relationships. Second, to the best of our knowledge, the effect of the WT development on CSL of wineries has not been explored in the Spanish wine context, so the study sheds light on a wine context that has not been previously approached, thus making it possible to establish similarities and differences with the results of research contextualized in the Portuguese wine industry. Third, there are no previous studies that have analyzed the link between CSL and SP, given that previous research has only focused on the economic dimension of performance. In order to overcome these deficiencies in the academic literature on the subject, the present study aims to formulate the following three hypotheses:

H2. WT development has a positive effect on CSL of wineries

H3. CSL has a positive effect on the SP of wineries

H4. CSL mediates the relationship between WT development and SP of wineries

Wine Tourism, Green Innovation and Sustainable Performance

GI is a concept that encompasses the integration of two essential components vital for effective business administration: innovation and environmental stewardship (Borsatto and Bazani, 2021). In the present study, this form of innovation is elucidated as a progressive or transformative enhancement of products and/or processes with a specific emphasis on energy conservation, environmental preservation, waste recycling, and the implementation of eco-efficient designs. Within this context, the global wine industry has encountered environmental pressures from various stakeholders, compelling it to devise novel products and processes in response to this strategic imperative (Bandinelli *et al.*, 2020).

Wineries that engage in WT activities can amplify the benefits derived from the development of GIs. This is because WT encompasses ecological innovations in both products and processes that revolve around the activity itself (Correia *et al*., 2022). Green product innovations related to WT aim to enrich the experience of wine tourists visiting the winery while highlighting the territory and the surrounding environment in which it operates (Karagiannis and Metaxas, 2020). Examples of such innovations include diversifying the tourist offerings through culinary options, providing accommodations integrated into the winery facilities, and organizing events (Duarto-Alonso and Kok, 2020). Additionally, GI in WT involves wine pairing with complementary food products like cheese, chocolate, or cured meats, as well as incorporating nature-based activities such as mountain biking or horseback riding into the WT experience (Campos-Andaur *et al*., 2022).

The significance of gastronomy, particularly wine, has become integral to the tourism industry, contributing to the promotion of culinary heritage, cultural richness, and economic prosperity in wine regions. According to Sigala (2019), WT can foster an emotional connection between consumers and the values symbolized by wine. Consequently, in the face of mounting international competition within the global wine industry, continuous innovation in the WT product emerges as a critical factor for the long-term survival of wineries. Such innovation not only attracts both existing and new wine tourists but also enhances the economic diversification of wineries (Zamarreño-Aramendia *et al*., 2021). Hence, WT assumes a critical position in driving the advancement of green product innovations, serving as a platform for acquiring valuable external organic knowledge through feedback and improvement

suggestions from visiting wine tourists, while also fostering the effective transfer of knowledge among the diverse members within the winery (Oltean and Gabor, 2022).

Wineries that engage in WT activities serve as conduits for conveying the rich history, gastronomy, and local culture to the visiting tourists, as they remain intricately connected to the social, historical, and cultural fabric of their surroundings (Wu and Liang, 2020). To ensure the effective transmission of winemaking practices, employees receive training centered around sustainability principles, enabling them to subsequently communicate the organization's commitment to sustainability to the tourists (Trigo and Silva, 2022). Moreover, the employees responsible for WT must engage with other team members, such as winemakers, agronomists, and environmental managers, to gain a comprehensive understanding of and aptly convey the organization's sustainable practices (Nave *et al*., 2021). This collaborative approach enhances the repository of ecological knowledge within wineries, thereby influencing the development of GI processes (Martínez-Falcó *et al*., 2023b).

GIs derived from the WT development can in turn have a positive impact on the economic, social and environmental performance of wineries (Martínez-Falcó *et al.*, 2023c). From an economic point of view, the adoption of GIs can have several positive effects for wineries by reducing costs by minimizing energy consumption, mitigating expenses related to waste management and disposal, avoiding environmental penalties, and improving the organization's green image (Zhang and Ma, 2021). From a societal standpoint, the development of GI by wineries can serve as a mechanism to attract and retain top talent while fostering greater employee awareness of environmental issues (Syafri *et al*., 2021). Indeed, as proposed by Wong *et al*. (2020), organizations that adopt GIs tend to contribute more significantly to the satisfaction of their customers and staff, thus improving their overall social performance.

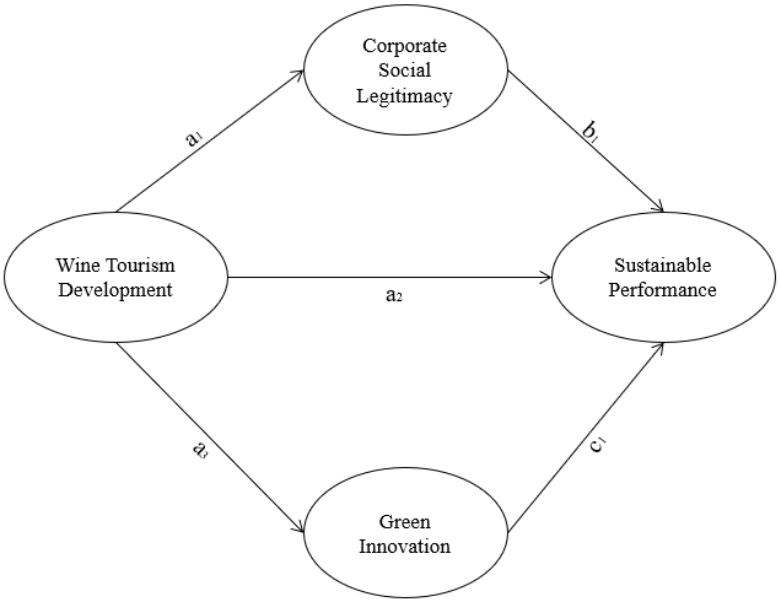
Despite the role of WT to act as a catalyst for GI, very little academic literature has addressed this linkage. In fact, to our knowledge, only Martínez-Falcó *et al*. (2023c) have recently attempted to address this relationship, showing the lack of empirical evidence on the proposed link (WT-GI). However, this study has the limitation of conceiving WT as a dichotomous variable, thus not measuring the effect of the degree of WT development on sustainable performance, but only the effect of the presence of this type of tourism in wineries on their performance in its triple dimension. Moreover, to the best of our knowledge, there is no previous research that has analyzed GI as a mediator in the linkage between WT development and SP (see Figure 1). In order to address this research gap and making use of the literature review developed, the following hypotheses are proposed:

H5. WT development has a positive effect on GI of wineries

H6. GI has a positive effect on SP of wineries

H7. GI mediates the relationship between WT development and SP wineries

Figure 1. Graphical representation of proposed theoretical model



H1 = a2: Wine Tourism Development → Sustainable Performance
H2 = a1: Wine Tourism Development → Corporate Social Legitimacy
H3 = b1: Corporate Social Legitimacy → Sustainable Performance
H4 = a1 x b1: Wine Tourism Development → Corporate Social Legitimacy → Sustainable Performance
H5 = a3: Wine Tourism Development → Green Innovation
H6 = c1: Green Innovation → Sustainable Performance
H7 = a3 x c1: Wine Tourism Development → Green Innovation → Sustainable Performance

Source: own elaboration

Methodology

To ensure a comprehensive comprehension of the methodological components pertaining to this study, this section has been organized into four distinct parts, which are as follows: (1) research context, (2) population and sample collection, (3) variable measurement, and (4) analytical approach.

Research context

There are multiple justifications for selecting the Spanish wine context as the focal point of this study. First, Spain stands out globally in the wine industry, holding the top position in terms of vineyard surface area and volume of wine exports, as evidenced by the latest data from the International Organization of Vine and Wine (OIV). However, the significance of the Spanish wine sector extends beyond economic considerations, encompassing social and environmental dimensions (Calle *et al.*, 2020). This industry contributes to the well-being of citizens and plays a role in preserving the country's cultural heritage and natural environment, which are integral to the operations of wineries (Marco-Lajara *et al.*, 2022). Second, WT has emerged as a crucial element for Spanish wineries. The introduction of the "Wine Routes of Spain" tourism product in 2008 has spurred a growing number of wineries to embrace and promote this form of tourism (Cruz-Ruiz *et al.*, 2020). Currently, there are 35 established wine routes across the Iberian country, indicating the increasing prevalence of WT (Vázquez-Vicente *et al.*, 2021). Third, WT assumes a strategic role in ensuring the sustainability and prosperity of Spanish wineries. By serving as a direct sales distribution channel at the winery, it helps counterbalance the decline in domestic wine consumption and fosters the development of brand ambassadors (Zamarreño-Aramendia *et al.*, 2021).

Population and sample collection

The target population of this study consists of companies involved in wine production operating within the National Code of Economic Activities (CNAE, for its acronym in Spanish) 1102. According to data obtained from the Iberian Balance Sheet Analysis System (SABI, for its acronym in Spanish) database,

the population size comprises a total of 4,373 companies, which serves as the study population. To collect the necessary data for this research, a questionnaire was developed based on an extensive review of relevant literature. To assess the content validity of the questionnaire, a pre-test was conducted involving the participation of environmental managers, quality managers, winemakers, and general managers from Spanish wineries. The purpose of this process was to ensure the comprehension and clarity of the items included in the constructs under analysis. Subsequently, the questionnaire was administered online via the Qualtrics application between September 2022 and January 2023. A detailed discussion on the scale selection for the questionnaire is provided in the following subsection. Initially, a total of 216 questionnaires were collected; however, after implementing a rigorous filtering procedure, 196 valid responses were considered suitable for inclusion in the final sample. It is important to note that the questionnaire was specifically designed for completion by general managers of wineries. This selection was made based on the understanding that top management possesses a comprehensive and strategic understanding of winery operations, indicating a higher level of proficiency in the areas covered by the questionnaire items.

Variable Measurement

To ensure the reliability and validity of the constructs used, we employed validated scales to develop the questionnaire. To measure the WT development and CSL, the scales created by Lawandoski *et al*. (2016) were employed, which comprised 8 items for WT and 6 items for CSL. The measurement of GI was accomplished using Chen's (2008) scale, which conceptualizes GI as a second-order construct consisting of two first-order constructs: green product innovation (4 items) and green process innovation (4 items). To assess SP, scales derived from Wang and Wang (2012), Paulraj (2012) and Paillé et al. (2014) were adopted. These scales contain 15 items and conceive such construct as a second-order variable composed of economic performance (4 items), social performance (5 items) and environmental performance (5 items). It should be noted that all scales used 7-point Likert-type measures and all four variables were considered as reflexive constructs, with WT and CSL being first-order reflexive constructs, and GI and SP being second-order reflexive-reflexive constructs. In addition, the PDO, size and winery age were considered as control variables. On the one hand, PDO was treated as a dichotomous variable, taking the value 1 if the firm was affiliated with at least one PDO, and 0 if it had no affiliation with any appellation. On the other hand, winery size was measured according to the Organization for Economic Co-operation and Development (OECD, 2005) standards. Likewise, winery age was determined by calculating the total number of years since its establishment until the study in 2022.

Analytical approach

The theoretical model presented in this study was examined using the partial least squares structural equation modeling (PLS-SEM) technique, utilizing SmartPLS software version 4.0.0. PLS-SEM is a valuable analytical method that allows for the analysis of relationships among variables, including latent constructs, making it particularly suitable for application in the field of Social Sciences, particularly Management, where many concepts are not directly observable (Dash and Paul, 2021). The selection of PLS-SEM for testing the proposed hypotheses is based on several reasons. First, the theoretical model encompasses both direct and indirect relationships among variables, and PLS-SEM is well-suited for examining such cases as it enables the simultaneous examination of both types of relationships within a single model (Cepeda-Carrión *et al*., 2019). Second, the sample size of the study fulfills the minimum requirements (n=100) for employing the PLS-SEM technique (Reinartz *et al*., 2009). Third, previous research studies have successfully utilized PLS-SEM to analyze the constructs of WT, CSL, GI, and SP, further supporting the appropriateness of this technique for testing the proposed relationships (e.g., Lavandoski *et al*., 2021).

Results

In the current research, the two-stage model, which relies on “latent variable scores”, has been utilized due to the multidimensional nature of GI and SP constructs (Hu and Bentler, 1998). Initially, aggregate

scores were calculated, and subsequently, these scores were employed as indicators of the second-order constructs. In accordance with the recommendations of Hair et al. (2019), the model results are presented in two sections: (1) the evaluation of the measurement model and (2) the evaluation of the structural model.

Prior to delving into the evaluation of both the measurement model and the structural model, an initial assessment of the overall fit was conducted. The results indicate that the model demonstrates a satisfactory global fit, as evidenced by the Standardized Root Mean Squared Residual (SRMSR) value falling below the threshold of 0.08 (0.062 < 0.08), thus rendering the model non-rejectable (Hu and Bentler, 1998). Moreover, Table 1 illustrates that upon verification of the SRMR criterion, both the unweighted least squares discrepancy (d_ULS) and geodesic discrepancy (d_G) indicators remained within the confidence range following bootstrapping, specifically below HI95 and HI99.

Table 1. Assessment of overall model fit.

	Value	**HI95**	**HI99**
SRMR	0.062	0.071	0.096
d_ULS	0.671	0.946	0.974
d_G	0.794	0.801	0.835

Source: compiled by authors

To conduct the analysis of the measurement model, the criteria outlined by Hair et al. (2019) were adhered to, encompassing the examination of individual indicator reliability, assessment of internal consistency reliability, evaluation of convergent validity, and examination of discriminant validity. First, as depicted in Table 2, all indicators for the analyzed variables satisfy the reliability requirement at the individual item level, as their loadings surpass the established threshold of 0.707 found in academic literature (Carmines and Zeller, 1979). Furthermore, all loadings were found to be statistically significant following the implementation of the bootstrapping procedure, indicating that the various indicators exhibit satisfactory levels of individual reliability. Second, concerning the analysis of internal consistency, it can be asserted that all constructs meet the prescribed criterion for internal consistency reliability. This is evident through the attainment of values exceeding 0.8 for Cronbach's alpha, composite reliability (Pc), and the Dijkstra-Henseler (Pa) criterion. Internal consistency reliability refers to the extent to which indicators measuring the same construct exhibit associations with one another (Hair et al., 2021). Third, in terms of discriminant validity, the outcomes derived from the Heterotrait-Monotrait criterion (HTMT) are showcased in Table 3. It is evident that the values are markedly below 0.85, signifying the distinctiveness of each construct and its ability to encapsulate diverse aspects within the proposed model. This outcome reinforces the notion that the designated constructs genuinely capture distinct facets of reality. Thus, the established relationships do not overlap, but instead explore the interdependencies between separate variables.

Table 2. Analysis of the measurement model

Construct/Items	**Outer Loadings**	**Rho_c (Pc)**	**Rho_a (Pa)**	**Cronbach's Alpha**	**AVE**
Wine Tourism (WT)		0.938	0.929	0.924	0.655
WT 1	0.746				
WT 2	0.805				
WT 3	0.852				
WT 4	0.847				
WT 5	0.857				
WT 6	0.795				
WT 7	0.845				
WT 8	0.713				
Corporate Social Legitimacy (CSL)		0.906	0.877	0.875	0.619
CSL 1	0.772				
CSL 2	0.792				

CSL 3	0.763				
CSL 4	0.850				
CSL 5	0.869				
CSL 6	0.756				
Green Innovation (GI)		0.883	0.857	0.803	0.854
GI 1	0.937				
GI 2	0.911				
Sustainable Performance (SP)		0.938	0.929	0.924	0.655
SP 1	0.719				
SP 2	0.885				
SP 3	0.924				

Note: The indicators for the second-order variables are: GIP 1= Green Product Innovation Performance; GIP 2= Green Process Innovation Performance; SP 1= Economic Performance; SP 2= Social Performance; SP 3= Green Performance.

Source: compiled by authors

Table 3. Discriminant validity assessment on the basis of the Heterotrait-Monotrait criterion

	CSL	GI	PDO	SIZE	AGE	SP	WT
CSL							
GI	0.685						
PDO	0.070	0.044					
SIZE	0.069	0.090	0.014				
AGE	0.146	0.108	0.093	0.129			
SP	0.470	0.533	0.086	0.072	0.267		
WT	0.414	0.534	0.064	0.091	0.240	0.630	

Source: compiled by authors

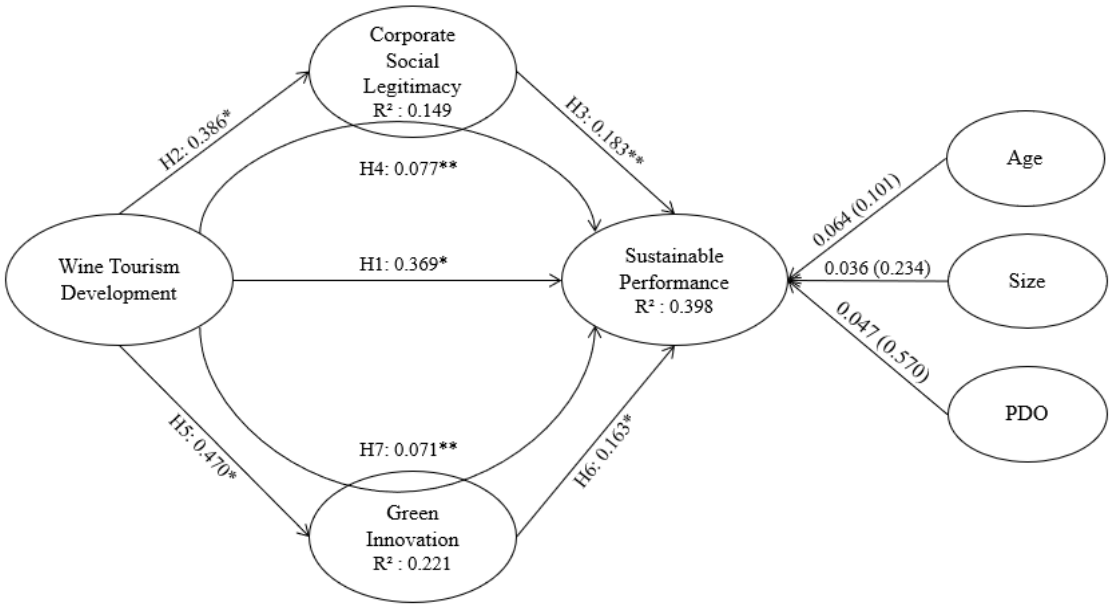
Following the assessment of construct reliability and validity, attention was turned towards evaluating the structural model. The path coefficients and corresponding R-squared values, obtained through a bootstrap test consisting of 5,000 subsamples, are depicted in Figure 2. The findings reveal the existence of positive and statistically significant effects within the examined relationships. Thus, it can be inferred that WT development exerts a significant influence on the SP of wineries, where CSL and GI serve as partial mediators. This finding is supported by the positive and statistically significant direct effect (0.369), as well as the positive and statistically significant indirect effects (0.077 and 0.071).

The empirical findings from the model analysis provide support for the validation of the seven proposed hypotheses. First, a significant and positive association between WT development and SP was observed (H1: β=0.369; p<0.000). This indicates that WT development has a direct impact on SP. Second, a significant and positive effect of WT development on CSL was identified (H2: β=0.386; p<0.000), suggesting that WT directly influences CSL. Third, a positive and significant relationship was established between CSL and SP (H3: β=0.183; p<0.028), implying that CSL contributes to the attainment of SP in wineries. Fourth, WT development exhibited a significant and positive influence on GI (H5: β=0.470; p<0.000), signifying the crucial role of WT development in the formation of GI. Fifth, it was found that GI development has a significant and positive effect on SP (H6: β=0.163; p<0.000), highlighting the contribution of GI to the achievement of SP. Sixth, both CSL (H4. β=0.077; p<0.058) and GI (H7. β=0.071; p<0.071) partially mediate the relationship between WT development and SP, as the effects are positive and statistically significant (see Table 4).

As for control variables, the findings indicate that PDO membership, age, and winery size demonstrate a positive but statistically insignificant impact. Consequently, the direction of this relationship cannot be extrapolated to the entire population. To evaluate the model's quality, the Geisser test (Q2) was conducted, which should yield estimated values above zero (Q2 > 0). Recently, Hair et al. (2019) suggested a new guideline where Q^2 values above 0, 0.25, and 0.50 represent situations of small,

medium, and large predictive relevance, respectively. The predictive relevance of the model is displayed in Table 5 through the measure of cross-validated redundancy, providing the Q^2 results. The model exhibits an intermediate level of predictive relevance as indicated by Q^2 values exceeding 0.250 (Hair et al., 2019).

Figure 2. Theoretical model with R-squared, path coefficients (β) and significance



Notes: **p<0.001 *p<0.05

Source: compiled by authors

Table 4. Results of the structural model for the mediation model

Direct Effects	Path Coefficient	t-Value	P Values	95 % BCCI	Hypothesis supported
WT → SP	0.369	5.635	0.000**	[0.257; 0.477]	H1 supported
WT → CSL	0.386	5.032	0.000**	[0.258; 0.513]	H2 supported
CSL → SP	0.183	2.199	0.028*	[0.070; 0.338]	H3 supported
WT → GI	0.470	7.168	0.000**	[0.364; 0.575]	H5 supported
GI → SP	0.163	1.692	0.041*	[0.012; 0.315]	H6 supported
Indirect Effects	**Path Coefficient**	**t-Value**	**P Values**	**95 % BCCI**	**Hypothesis supported**
WT → CSL → SP	0.077	1.897	0.038*	[0.005; 0.149]	H4 supported
WT → GI→ SP	0.071	1.614	0.042*	[0.020; 0.139]	H7 supported

Notes: BCCI = Bias Corrected Confidence Intervals; **p<0.001 *p<0.05

Source: compiled by authors

Table 1. Construct cross validated redundancy

	SSO	SSE	Q^2 (=1-SSE/SSO)
CSL	1,176.000	1,081.689	0.280
GI	392.000	321.055	0.281
PDO	196.000	196.000	
SIZE	196.000	196.000	
AGE	196.000	196.000	
SP	588.000	439.200	0.253
WT	1,568.000	1,568.000	

Source: compiled by authors

Discussion and conclusions

This research holds great significance as it provides concrete evidence of the strong and meaningful correlation between WT development and the economic, social, and environmental outcomes achieved by Spanish wineries. Additionally, it sheds light on the transformative impact of this form of tourism in stimulating ecological advancements in both product development and manufacturing processes. By embracing WT, wineries enhance their credibility and reputation among stakeholders, thereby solidifying their position within the industry.

WT represents a new opportunity to diversify wine businesses, improving their competitiveness, territorial development and wineries' capacity for innovation in an increasingly hostile and changing environment. In fact, this research demonstrates the importance of WT in catalysing SP, CSL and GIs, thus favouring the competitiveness of wineries while protecting the environment in which they operate.

The research results yield several theoretical and practical implications. From a theoretical standpoint, this study contributes to the academic literature by providing empirical evidence within the Spanish WT industry. Notably, the research establishes the positive and significant impact of WT development on SP, while also highlighting the mediating effects of CSL and GI in this relationship. These findings align with recent research conducted by Marco-Lajara *et al*. (2023c), which demonstrates that WT development fosters product and process innovations in Spanish wineries. Similarly, this study corroborates the results of Lawandoski *et al.* (2018), who identify a positive association between WT development and CS in the context of Portuguese wineries. However, to the best of our knowledge, no prior research has examined the mediating effects of CSL and GI in the primary relationship under investigation. Hence, this study serves as an initial exploration into understanding how the development of WT can enhance legitimacy and facilitate innovations related to environmental preservation, which in turn can lead to higher wineries' SP. Consequently, it is essential to emphasize the necessity for further advancement in exploring these relationships, as the existing academic literature addressing them remains limited. Therefore, the theoretical implications of this study successfully address the three RQs posed, providing evidence of (RQ1) a significant and positive effect between WT development and SP, (RQ2) the mediating role of CSL in the WT-SP relationship, and (RQ3) the mediating influence of GI in this relationship.

As far as the practical implications of the study are concerned, the research highlights the importance of intensifying the degree of development of WT, which can be achieved by making better use of the tangible and intangible wine heritage of the wineries, improving and embellishing the circuit followed by wine tourists during their WT activity, extending the opening hours to the public, building and/or improving restaurants and hotels linked to the wineries, intensifying cultural activities in the winery facilities, the longer opening hours for the public, the construction and/or improvement of restaurants and hotels linked to the wineries, the intensification of cultural activities in the winery facilities, the search for synergies with other types of tourism that are promoted in the wine-growing area and the adhesion to the wine routes that are developed in the area in which the wineries are located. This support for intensifying the development of WT that can be carried out by wine managers can lead to three improvements for wineries: (1) greater economic, social and environmental performance, (2) increased legitimacy among their stakeholders and (3) further development of GIs. This is due to the fact that WT activity allows acting as a distribution channel for wine sales (economic performance), promotes interaction with other stakeholders (social performance and CSL), generates new jobs (social performance and CSL), fosters the feeling of belonging to the brand and brand ambassadors (social performance and CSL), protects the biodiversity of the environment in which the activity is carried out (environmental performance) and boosts the stock of ecological knowledge among workers (environmental performance and GI).

Although the research has yielded valuable contributions, it is essential to recognize its limitations. First, to increase the relevance of the research, it is recommended that the geographical scope be expanded to include other countries known for wine production, allowing comparative analyses

between Old and New World wine-producing nations. Second, investigating further influence of winery size, age and PDO membership, which in this study were only considered as control variables, could provide valuable information, so a future line of research could be to perform a multigroup analysis to observe variations in the proposed model as a function of these variables. Third, the present study has focused only on two mediating variables in the WT-SP relationship, so, as a future direction, it is suggested to explore other possible mediating constructs that may influence this linkage.

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