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The sustainability orientation in the wine industry: An analysis based on age as a driver

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Abstract

Few studies probe small and medium enterprises (SMEs) in the context of sustainability. Thus, this study examines the sustainability orientation in SMEs and its impact on financial performance, considering the 'ageing effect'. It employs a sample of Italian SMEs operating in the wine sector, using a survey questionnaire to collect qualitative and quantitative data for analysis. Accordingly, although sustainability remains typically unembedded within such SMEs, when it is embedded, a positive correlation with performance is evident. Furthermore, age is a relevant variable that can explain a different sustainability orientation and its impact on financial performance. This research contributes insight into sustainability orientation in SMEs, extending the sustainability, age, and SME performance literature. Managerial implications suggest the need to better emphasise social issues and invest more in skilled human resources and training programmes.

KEYWORDS
ageing effect, financial performance, small and medium enterprises, sustainability orientation, wine industry

1 | INTRODUCTION

Environment and social issues have garnered much interest, and their relevance in managing a business increases yearly at strategic and operating levels. Companies are increasing investments in sustainability given external and internal pressures (Laura et al., 2022; Windolph et al., 2014). More theoretical and empirical studies on sustainability strategy formulation and implementation are required to help managers successfully develop sustainability (Kantabutra & Ketprapakorn, 2020; Rodrigues & Franco, 2019), as the need to understand the impact of businesses on the value chain under the sustainability orientation lens is growing.

Sustainability orientation refers to 'the preservation of nature, life support, and community in the pursuit of perceived opportunities to bring into existence future products, processes, and services for gain, where gain is broadly construed to include economic and non-economic gains to individuals, the economy, and society' (Shepherd & Patzelt, 2011, p. 137). The sustainability orientation literature highlight that companies' sustainable projects are disconnected from day-by-day management (Hong et al., 2019). Indeed, to survive in the market, organisations cannot afford to be successful only in their business; it is crucial to protect the environment, safety, and welfare (Gunasekaran & Spalanzani, 2012) and there is a need to study sustainability as a unique notion, instead of isolated social or environmental problems (Cantele & Zardini, 2020). Furthermore, sustainable projects must be integrated into the business strategy: 'This will be the case for many years to come, or at least until we find an as yet unknown solution'. (Gunasekaran & Spalanzani, 2012, p. 35).

Companies are increasing their sustainability efforts and involvement (Busco et al., 2017). However, academic studies are yet to clarify how to be outstanding regarding sustainability (Lee & Raschke, 2020). Though research highlights that sustainability seems to be affected by firm characteristics, such as size and age, the current insight on the subject is notably fragmented (Balasubramanian et al., 2021).

Furthermore, most sustainability studies focus on large companies (Rubio-Andrés et al., 2020); large, multinational organisations usually overshadow the environmental and social impacts of small and medium enterprises (SMEs) (Johnson, 2015) because of the availability

of information on their websites. Additionally, studies focus on economics and management issues, ignoring sustainable practices (Bartolacci et al., 2020; Bruwer et al., 2018) and their impacts on financial performance (Bartolacci et al., 2020).

Consequently, given the relevance of SMEs in economies of different countries, there is a need for studies on SMEs and their sustainable behaviour and practices (Bartolacci et al., 2020; Rossi & Luque-Vílchez, 2021; Rubio-Andrés et al., 2020). SMEs comprise approximately 90% of companies worldwide—and 99% in Europe (European Commission, 2019). Their importance also is on the rise in Italy, capturing approximately 70% of employment and creating approximately 55% of value added (Dana, 2018). Thus, it is vital to highlight their unique advantages in supporting sustainability (Klewitz & Hansen, 2014). Moreover, it is important to investigate how SMEs face and implement sustainability given that they could face low social, environmental, and financial impacts individually—but considerable, aggregately (Lawrence et al., 2006) as per the network they create (Moore & Manring, 2009).

An extensive understanding of different geographical areas and industries in which SMEs operate is also essential to identify the main sustainable practices that exert a positive impact on financial performance (Bartolacci et al., 2020; De Steur et al., 2020). In line with Lawrence et al. (2006), this study primarily investigates SMEs operating in the wine sector in the Italian context because of their prevalence and relevance in impacting sustainability. It depicts key aspects of the SMEs with a specific focus on how their sustainability orientation impacts financial performance, thereby bridging the noted gaps in the literature (Hong et al., 2019).

The Italian context was chosen because Italy has devoted much effort to sustainability practices, and Italian SMEs have expressed interest in this development (Del Baldo, 2017). The wine industry was selected for its economic activity representativeness (Bresciani et al., 2016), allowing for studying multi-faceted business management issues (Orth et al., 2007; Presenza et al., 2017); the industry also includes sustainability aspects (De Steur et al., 2020; Kariyapperuma & Collins, 2021). Moreover, though the wine industry is traditionally considered ecologically driven, with a relevant impact on the environment (Kariyapperuma & Collins, 2021), reality says otherwise, and sustainability determinants have been largely ignored (Barber et al., 2009; Borsellino et al., 2016; Gabzdylova et al., 2009; Merli et al., 2018). Further, probing a specific industry creates homogeneity in analysing firms.

We observed the sample behaviour from the age and size perspectives to understand the related impact on sustainability performances (Badulescu et al., 2018), as studies call for further investigations of the two variables (Lwango et al., 2017). Furthermore, we depicted the key sustainability factors to indicate 'what should be measured' or 'what should be done' for SMEs to improve their sustainability orientation and performance (Nikolaou & Tsalis, 2013). Thus, the novelty of this study is demonstrated in its investigation of the relationship between sustainability orientation and company age in a sample of SMEs and the consequences on financial performance.

The rest of the paper is organised as follows. Section 2 presents the theoretical background of the study. Section 3 explains the research methods. Section 4 reports the empirical evidence of the impact of sustainability and company age on financial performance. Section 5 discusses the results. Section 6 concludes the study.

2 | LITERATURE REVIEW

2.1 | Sustainability in small and medium enterprises

Despite the common vision that sustainability sheds light on the interdependence of economic, social, and environmental aspects, there are several definitions of sustainability (Elkington, 1997), as sustainability orientation aims to achieve the three elements (O'Connor, 2006) to foster firm competitive advantage (Shashi et al., 2018).

Moreover, factors that motivate companies to invest in sustainability include corporate legitimacy, market success, and internal improvement (Windolph et al., 2014). Studies highlight how it is essential to incorporate sustainability within a company's strategy to create a common orientation and sustainability-oriented culture (Epstein & Buhovac, 2014; Schaltegger et al., 2012), with positive effects on business performance (Danso et al., 2019; Shu et al., 2020). Although most companies consider sustainability particularly relevant for their business, there are considerable differences in their approaches (Broccardo et al., 2019; Ortiz-Martínez & Marín-Hernández, 2022).

External environments like regulatory frameworks and stakeholder pressure may positively affect or bar companies' sustainability orientation (Harrison & Freeman, 1999; Testa et al., 2016). Internal features, such as age, gender, experiences, ownership, size, and sectors (Balasubramanian et al., 2021; Songini et al., 2013), are also crucial. Roberts (1992) and Moore (2001) reveal that a company's age and size strongly affect sustainability involvement and performance. Regarding company size, the general impression seems to be that large companies engaged more with sustainability than SMEs (Balasubramanian et al., 2021; Baumann-Pauly et al., 2013), though other studies fail to reach a consensus as to whether SMEs are better or worse in sustainability (Lepoutre & Heene, 2006).

SMEs must find a balance between financial, human, and material resources and social and environmental issues, as scant financial resources can hinder sustainable strategy development (Burlea-Schiopoiu & Mihai, 2019). Some studies show how SMEs represent a fertile ground for sustainability, given their flexible organisational structure that easily adapts and quickly responds to new ideas (Russo & Perrini, 2010). This flexibility enhances the spread of the sustainability culture within the organisation (Badulescu et al., 2018). Furthermore, SMEs are characterised by strong local engagement (Draper, 2000), as their actions are considered more sustainable than large companies and socially and environmentally responsible (Badulescu et al., 2018).

Regarding sustainability, SMEs have been described as companies with a relevant ethical rather than economic approach (Jamali et al., 2009); engagement with the local community and strong relationships with several stakeholders (Cantele & Zardini, 2020); prevalent informal sustainability practices (Lee et al., 2016; Vázquez-Carrasco & López-Pérez, 2013); and reduced inclination to externally reveal sustainability practices (Fassin, 2008; Jenkins, 2006), given the idea that their social and environmental effects are insignificant (Battisti & Perry, 2011; Roberts et al., 2006). SMEs seem to invest in sustainability mainly for employment reasons and not regulation and market pressure (Masurel, 2007).

Other studies highlight that their social and environmental actions and impacts are limited (Hitchens et al., 2005; Mihai et al., 2017). Indeed, most SMEs consider sustainability as an investment without much financial return (Akben-Selcuk, 2019; Arvidsson, 2010; Lee et al., 2016); thus, there is a lower propensity toward sustainability, with a motivation not necessarily to improve environmental impacts (Masurel, 2007). SMEs are reluctant to invest in sustainability, mainly because of limited capital (Burlea-Schiopoiu, 2013) and awareness of the benefits associated with sustainability (Journeault et al., 2021). Limited resources, time, skills, and knowledge are obstacles to implementing social and environmental initiatives within SMEs (El Baz et al., 2016; Jenkins, 2006).

Local stakeholders can play collaborative roles in supporting sustainability practices within SMEs, acting as trainers, specialist analysts, or financial providers (Journeault et al., 2021). Indeed, arguably, when companies integrate sustainability practices, they can reach superior performance (Bretherton & Chaston, 2005). Regarding the social sphere, financial constraint is perceived as the main barrier to SMEs' social involvement (Ashton, 2017; Sharma, 2000), even if SMEs invested in socially responsible business practices positively impact financial performance (Hammann et al., 2009). Regarding the environmental pillar, within SMEs, there is a positive relationship between firm size and related engagement in environmental aspects (Hoogendoorn et al., 2015), where specific firm-level elements hinge on SMEs' environmental orientation (Bartolacci et al., 2020).

Thus, the dominant idea that SMEs are reluctant to invest in sustainability practices is nuanced. Studies argue that SMEs that undertake social and environmental initiatives generally aim to improve their image in the local community (Park & Campbell, 2017; Rahman & Norman, 2016) to enhance visibility, competitiveness, legitimation (Bansal & Roth, 2000), and relationships with key stakeholders (Kurucz et al., 2008), consequently improving financial performance (Epstein & Schnietz, 2002). However, in some cases, SMEs fail to externally disclose sustainability information (Ortiz-Martínez & Marín-Hernández, 2022).

Moreover, attitude or individual reasons from owners or managers are among the important motivational factors behind sustainability initiatives (Nejati et al., 2017; Revell et al., 2009), even if the attitude does not always accord with the sustainability practice implementation (Cassells & Lewis, 2011).

Hence, focusing on firm size and SMEs, it is not easy to state unequivocally whether SMEs are oriented toward sustainability, though when this orientation is present and investments are made, there are positive impacts on financial performance (Bartolacci et al., 2020; Broccardo & Zicari, 2020; Friedman & Miles, 2001; Vijfvinkel et al., 2011). Sustainability project implementation remains superficial and detached, complying with specific (e.g., external) requests rather than being part of a wider strategy (Santos, 2011). Consequently, the study proposes the following hypothesis:

> **H1.** Sustainability orientation in SMEs requires more effort to be better integrated.

2.2 | Age as a determinant of company sustainability

Some studies note significant differences between young and older firms, referring to sustainability orientation (Djupdal & Westhead, 2015; Messersmith & Wales, 2013); sustainability involvement increases as firms grow older (Badulescu et al., 2018), and active social dimension and innovation commitment can help firms survive (Ahmad et al., 2020; Sgroi et al., 2016).

According to the Observatory of European SMEs (2002), the involvement of SMEs in sustainability activities increases with the company's age, and 'more than five years' marks the point of change. Indeed, a relationship exists between age, size, and company involvement in sustainability (Jeppesen et al., 2012). A firm older than 10 years is usually medium-sized, with significant domestic and international markets and sustainability projects. Djupdal and Westhead (2015) show that young or micro firms, with sustainable certification, have significantly superior effectiveness. However, critical evidence on older firms (Withisuphakorn & Jiraporn, 2016) shows that they are more sustainability-oriented. In the first instance, the stable economic and financial performances allow older firms to invest more in sustainability issues while younger firms are more focused on survival or growth, with less interest in sustainability investments. Even so, over time, mature firms achieve fame and do not require additional social consensus through sustainability projects. Thus, they are less implicated by sustainability. However, young firms must build their reputation and thus must obtain greater benefits from investments in sustainability. Environmental certification can help young firms to obtain the external resources for development. Even if young and small firms are less devoted to sustainability issues, their flexible and reactive organisational structure can enhance sustainability implementation (Anderson & Eshima, 2013).

Despite this evidence, SMEs need help to improve their overall sustainability (Bruwer et al., 2018), as they lack training regarding environmental management (Cassells & Lewis, 2017). Moreover, it is unclear whether the acquisition of specific business-related knowledge is the real trigger for sustainability culture (Perez Nuñez & Musteen, 2020). Finally, few studies find weak effects of age on sustainability orientation (Badulescu et al., 2018; Trencansky & Tsaparlidis, 2014; Wiklund, 1999). Thus, the study proposes the following hypothesis:

H2a. Older SMEs are more sustainability-oriented.

H2b. Older SMEs, when sustainability-oriented, show higher economic performances.

2.3 | Age as a determinant of company performances

Sustainability is a key success, innovation, and profitability factor for companies (Baumgartner, 2014). Over the last years, SME managers have increasingly become aware of the importance of investing in sustainable practices given the positive impact on financial performance (Burlea-Schiopoiu & Mihai, 2019). Profitably can reduce tensions from the general and global conditions, allowing companies to focus on sustainability investments. By analysing economic performance and the returns on sustainability investments, it is possible to lay the foundations for future value generation, as highlighted in the Hart and Milstein framework (Hart & Milstein, 2003), confirmed for SMEs (Moore & Manring, 2009).

Notably, younger firms have more reactive and elastic organisational structures than older firms, though lacking settled business processes, extensive market knowledge, and an intelligible strategy, resulting in a small capacity to connect strategic intentions to performance results (Slevin & Covin, 1997). However, older firms are characterised by the reverse, with a strong ability to pursue entrepreneurial strategies and decision-making processes (Anderson & Eshima, 2013) and a strong commitment to innovation, proactiveness, and risk-taking (Henderson, 1999), given their greater amount of resources (Karami & Tang, 2019). Nonetheless, studies note that entrepreneurial strategies among older firms are associated with past market situations and experiences that increasingly differ from market expectations (Sørensen & Stuart, 2000).

Furthermore, 'ageing' affects innovation, financial, and growth performances (Coad et al., 2018). As firms age, the benefits of their accumulated knowledge in all key aspects of the business—technology, supply chain, customers relationship, human capital, and financing—are overwhelmed by inflexibility, inertia, rigid rules, routines, and organisational structure, highlighting how age negatively affects the firm's performance (Pervan et al., 2017). Yin et al. (2022) find a moderating effect of firm age on the link between sustainability and performance.

Nunes et al. (2013) argue that age and size can limit young SMEs' growth. The correlation between age and growth is negative, with greater relative importance in younger SMEs (Lotti et al., 2009; Nunes et al., 2013). Young SMEs must reach a minimum size to remain in business; in their later life phase, the relation between age and growth loses importance as SMEs reach a dimension considered adequate for market survival. Further, Lwango et al. (2017) note that profitability is negatively moderated by size and firm age.

In most cases, younger firms compensate for the absence of well-defined routines and processes with faster adaptation to changing environmental exigencies and potential for growth and better performances (Hill & Rothaermel, 2003). Thus, we propose the following hypothesis:

3 | METHOD

The study analysed a sample of Italian SMEs operating in the wine industry, using questionnaires (Groenland & Dana, 2020) to collect quantitative and qualitative data. However, the focus on the wine industry may affect sustainability; though this sector is ecology-driven, sustainability key factors remain to be explored (Merli et al., 2018), and variances may occur per company size and age. Furthermore, the focus on a single industry is justified by the presence of similar sustainability practices (Ioannou & Serafeim, 2019), enhancing comparability.

We employed a qualitative approach to discuss existing concepts and identify new ones (Dana & Dumez, 2015). Qualitative analysis is appropriate for entrepreneurship studies as it helps formulate better policies for the future (Dana & Dana, 2005). The sample comprises Italian SMEs working in the wine industry, classified using the Commission Recommendation 2003/361/CE (May 6 2003) criteria. We used the Aida database to obtain the first list of companies, which amounted to 1248 SMEs countrywide. Given the scarcity of relevant financial and non-financial data, this first list was reduced to 624 firms, and questionnaires—created in 2018—were sent.

Data collection was completed in 2020 after several calls to solicit replies. The compilation was then requested by the management control office. The questionnaire questions ranged from the company profile, key financial and non-financial data from services and products offered, type of customers, key activities, innovation, and sustainability. It also addressed sustainability, probing into the SMEs' sustainability involvement, actions, and projects. Further, it covered the main elements of sustainability using open- and closed-ended questions. Quantitative and qualitative data (Dana & Dumez, 2015) were gathered via Google Survey and analysed using the SPSS software. Using a questionnaire allows for collecting a significant amount of data, thus enabling statistical analysis to draw up generalisations.

We gathered 116 responses, although 10 were only partially completed and thus not valid, leaving 106 questionnaires, or a response rate of approximately 17% of the reduced samples. This accords with Lund (2021), who notes that this percentage represents a valid rate for questionnaire studies, ensuring the significance of the research. The sample is characterised by SMEs with average revenues of 6.5 million euros, average total assets of nine million euros, and approximately 10.47 employees. Further, regarding the localisation of the sample, 28% operate in the northwest regions of Italy; 15% in the northeast; 18% in the central regions; 22% in South Italy; and 17% in the islands; thus, the companies are equally geographically distributed, supporting sample heterogeneity and a random selection. Data analysis was conducted using descriptive statistics and regression.

4 | RESULTS

The study analysed sustainable projects of the wine-industry SMEs to examine their sustainability orientation in-depth. A sustainable project is an activity that includes at least one aim to improve social, environmental, or sustainable economic aspects. Future or existing products or processes may be targeted to preserve the environment and local territory (Shepherd & Patzelt, 2011). Table 1 shows the H1 test results on the sustainability orientation in SMEs.

Apparently, most of the samples are not involved in sustainable projects; 53% of the SMEs declared no activities on environmental and social themes. Nonetheless, to explore the relationship between sustainability and company age, companies were clustered by age (Table 2):

Generations A through F include companies ranging from 1 to 52 years old, at 10-year (A–C) and 20-year (D–F) intervals. We analysed the sustainable orientation through the lens of sustainable projects linked with company age to test H1 and verify H2a on the age (Table 3).

The younger companies are more sensitive to sustainable projects, particularly those of less than 20 years (Generation A and B), but also companies aged from 31 to 50 years. However, older companies with more than 50 years (Generation E), show a weak sustainability orientation. We asked respondents to clarify the meaning of sustainability, and the main association was with the environment (Table 4).

Only Generations A (1–10 years) and E relate sustainability beyond the environmental to the economic dimension, demonstrating an adequate understanding of sustainability orientation. Consequently, it is interesting how the main relevance in defining sustainability is devoted to environmental aspects, neglecting social and sustainable economic ones, confirmed by emerging key aspects declared by companies to implement sustainability (Table 5).

Regarding key aspects to successfully implement sustainability, only Generations A and E mention social engagement. Probing the nature of sustainable projects further, it is evident how past and future projects are only oriented to the environment for sustainability implementation improvement (Table 6).

When companies undertake projects, the social dimension is forgotten and the focus is on the environment. References to social facets are occasional, demonstrating that sustainability remains anchored to environmental aspects. However, comparing past and current sustainable projects, a more proactive behaviour becomes evident, as companies try to find new energy sources or new organic production methods. Further, regarding the value proposition on the improvement of social and environmental performance, the main projects focus on the environment (see Table 7).

Additionally, photovoltaic and organic practices are crucial in the context of improving environmental performance, while the social aspect is ignored. Younger companies are more sensitive to sustainability projects, while older companies (from 51 to 70 years) are detached. The sustainability orientation is, again, mainly focused on environmental aspects, while the social and economic ones are neglected. Furthermore, to better understand this evidence, we analysed the performance of each generation to test H2b, conjecturing that older SMEs show greater economic performances. Table 8 compares the average values of the main economic indicators, such as return on sales, return on assets, return on equity (ROE), and return on investment, in the different generations, highlighting the best performing values.

From Table 8, companies belonging to Generations B and D saw better performances. The former performed better in the operative area and the latter outperformed also in ROE. Further, Table 9 reports on the correlation between performance and sustainability projects by age.

Regarding sustainability, Generations B and D, with the most sustainability projects, saw improved economic indicators. Table 10 reports on further correlations between sustainability, customer orientation, and cost reduction.

Companies more sensitive to sustainability never aim to lower costs, but those focusing on sustainability orientation try to build

TABLE 1 Sustainable projects involvement

Sustainable projects implementation	
Yes	**No**
47%	53%

Source: Own elaboration.

TABLE 2 Company age

Company generation by age				
A	**B**	**C**	**D**	**E**
1–10 years	11–20 years	21–30 years	31–50 years	51–70 years
28.3%	15.1%	17.9%	21.7%	17%

Source: Own elaboration.

TABLE 3 Sustainable projects by the age

		Sustainable projects		
		Yes	**No**	**Total**
Generation	A	60.87%	39.13%	100%
	B	73.08%	26.92%	100%
	C	48.28%	51.72%	100%
	D	65%	35%	100%
	E	5.56%	94.44%	100%

Source: Own elaboration.

TABLE 4 Sustainability meaning

Company generation by age									
A 1–10 years		B 11–20 years		C 21–30 years		D 31–50 years		E 51–70 years	
High costs and high turnover—Production without impact on the environment	75.2%	Low environmental impact—Safety	81.3%	Suitable materials and processes—Respect for the environment	84.7%	Ethical and environmental—Biological respect	77.3%	Cost-containment—Reduce environmental impact	79.4%

Source: Own elaboration.

TABLE 5 Key aspects for successful sustainability implementation

Relevant sustainable key aspects									
A		B		C		D		E	
1–10 years		11–20 years		21–30 years		31–50 years		51–70 years	
Commitment and perseverance in sustainable activities—Machinery and technological systems	82.5%	respect for the environment—Biodiversity	71.6%	Energy saving—Quality	78.4%	Creating a new business—Reducing chemical use	86.3%	Respect for the territory—energy saving	81.5%

Source: Own elaboration.

TABLE 6 Main sustainable projects already implemented and under implementation

Projects implemented									
A 1–10 years		B 11–20 years		C 21–30 years		D 31–50 years		E 51–70 years	
Photovoltaic—New technologies	69.3%	Lands and use of crop protection products	72.6%	Energy saving—Photovoltaic	68.3%	New technologies—Reduction of phytosanitary use	75.6%	Innovation process—Photovoltaic	82.3%
Projects under implementation									
A 1–10 years		B 11–20 years		C 21–30 years		D 31–50 years		E 51–70 years	
Organic method	85.4%	Elimination of synthetic products—Phytosanitary reduction	81.3%	Research—Clean energy	79.7%	Recycled material—Biological	67.9%	Company visibility—Low environmental impact	75.9%

Source: Own elaboration.

TABLE 7 The value proposition to improve social and environmental performance

Where to invest to improve social and environmental performance									
A 1–10 years		B 11–20 years		C 21–30 years		D 31–50 years		E 51–70 years	
Photovoltaic—Biological	88.1%	Organic—Respect for the environment	85.6%	Cooperation—Renewal of the structure—Waste reduction	78.3%	photovoltaic—Organic certification	85.3%	Control of environmental emissions and reduction	84.2%

Source: Own elaboration.

customer loyalty. Further, Table 11 incorporates age and sustainability and reports on a regression analysis.

Table 12 shows the strong relationship between age and sustainability, as younger firms are more eager to implement sustainable projects than older firms. Further, to investigate the effect of age and sustainability in explaining and predicting performance, we employed multiple linear regression using the simultaneous entry of variables. The tables 11 and 12 present the multiple regression results. We employed regression model fitting to evaluate the effect of the variables.

TABLE 8 Economic performance

Generation	ROS	ROA	ROE	ROI
A (1 to 10 years)	1.98	1.10	−1.12	2.52
B (11 to 20 years)	3.43	2.80	−0.81	5.46
C (21 to 30 years)	1.67	−0.13	−3.97	3.25
D (31 to 50 years)	1.64	1.19	8.63	4.72
E (51 to 70 years)	1.76	1.33	−0.20	2.09

Abbreviations: ROA, return on assets; ROE, return on equity; ROI, return on investment; ROS, return on sales.
Source: Own elaboration.
The Significance of up arrow indicates positive correlation and down arrow indicates negative Correlation.

TABLE 9 Correlation

Generation	ROI	ROA	ROE
A (1 to 10 years)	↘	–	↗
B (11 to 20 years)	↗	↘	↗
C (21 to 30 years)	↘	↗	↘
D (31 to 50 years)	↗	↗	–
E (51 to 70 years)	↘	↗	–

Abbreviation: ROA, return on assets; ROE, return on equity; ROI, return on investment.
Source: Own elaboration.

Age and sustainability have a significant effect on performance. The relationship between sustainability and performance is positive, and the performance of older firms declines with age, while young firms have high performance.

5 | DISCUSSION

This empirical research attempts to make sense of the literature on SMEs regarding sustainability orientation and age. A reason for this complexity lies in different facets of SMEs and their related industry (Ortiz-Martínez & Marín-Hernández, 2022). Consequently, we focus on a single sector, the wine industry, as it is traditionally considered green (Borsellino et al., 2016; Ioannou & Serafeim, 2019; Merli et al., 2018); thus, it is expected to be sustainability-oriented. However, the implementation of sustainability projects remains rough (Santos, 2011), including among Italian wine SMEs. The findings reveal some features of SMEs in sustainability implementation: informal and unstructured sustainability practices, low association of sustainable projects with the business strategy, and reduced external communication of sustainability projects (Battisti & Perry, 2011; Lee et al., 2016). The main sustainable projects are devoted to protecting the environment (Allet, 2014; Bartolacci et al., 2020; Hoogendoorn et al., 2015).

Consequently, H1 is confirmed, as less than half of analysed SMEs implement sustainable projects. Perhaps, reduced financial resources are obstacles to sustainable orientation (Burlea-Schiopoiu & Mihai, 2019), together with time, knowledge, and lack of skilled resources (El Baz et al., 2016). Despite the ecological, social, and economic goals of the sustainability orientation, SMEs largely consider only the ecological dimension, neglecting the other two. Moreover, limited financial resources could be an obstacle to finding a balance between social and environmental issues (Ashton, 2017; Burlea-Schiopoiu & Mihai, 2019; Sharma, 2000), highlighting the challenge of translating sustainability into practice (Bebbington & Bury, 2009),

TABLE 10 Sustainability, customer orientation, and cost reduction correlation

		Correlations		
		Q_reduction cost actions	Q_custumer loyalty activities	Q_presence of sustainable projects
Q_reduction cost actions	Pearson correlation	1	0.390[a]	0.143
	Two-tailed test		0.000	0.143
	N	106	106	106
Q_custumer loyalty activities	Pearson correlation	0.390[a]	1	0.302[a]
	Two-tailed test	0.000		0.002
	N	106	106	106
Q_presence of sustainable projects	Pearson correlation	0.143	0.302[a]	1
	Two-tailed test	0.143	0.002	
	N	106	106	106

[a]The correlation is significant at the 0.01 level (two-tailed).
Source: Own elaboration.

TABLE 11 Sustainability and age regression

Model summary					
Model	R	R square	Adjusted R square	Std. error of the estimate	Durbin-Watson
1	0.857[a]	0.735	0.732	0.77598	1.833

ANOVA						
Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	173.414	1	173.414	287.994	0.000
	Residual	62.623	104	0.602		
	Total	236.038	105			

Coefficients						
		Unstandardised coefficients		Standardised coefficients		
Model		B	Std. error	Beta	t	Sig.
1	(Constant)	4.064	0.172		23.582	0.000
	Age	−0.920	0.054	−0.857	−16.970	0.000

[a]Dependent Variable: Sustainable Projects.
Source: Own elaboration.

TABLE 12 Sustainability, age, and performance regression

Model summary					
Model	R	R square	Adjusted R square	Std. error of the estimate	Durbin-Watson
1	0.866[a]	0.750	0.745	45.313131	2.185

ANOVA						
Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	633405.104	2	316702.552	154.242	0.000
	Residual	211487.820	103	2053.280		
	Total	844892.924	105			

Coefficients								
		Unstandardised coefficients		Standardised coefficients			Collinearity statistics	
Model		B	Std. error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	126.336	25.352		4.983	0.000		
	Age	−41.519	6.146	−0.647	−6.755	0.000	0.265	3.769
	Sustainable Projects	14.662	5.726	0.245	2.561	0.012	0.265	3.769

[a]Dependent Variable: Performance.
Source: Own elaboration.

especially for SMEs, which is characterised by an unstructured strategic planning process (Truant & Broccardo, 2020) and a lack of integration of sustainable goals. Hence, regarding H1, SMEs are situated at the infancy of sustainability orientation given their limited capital (Burlea-Schiopoiu, 2013; Burlea-Schiopoiu & Mihai, 2019) and lack of skilled human resources to lead them into a full and integrated sustainability implementation.

Regarding H2a, first, age impacts company attitude toward sustainability orientation (Yin et al., 2022), unlike studies that claim the irrelevance of age. Second, the study sheds light on how younger companies are more sensitive to sustainable projects (Nunes et al., 2013). Companies older than 10 years are more inclined toward sustainability investments and projects (Jeppesen et al., 2012), focusing on new techniques and organic practices. This aspect can be explained by the need of young companies to build or increase their reputation (Anderson & Eshima, 2013), despite scant financial and human resources. However, firms older than 50 years are insensitive to sustainability orientation, probably because of their established maturity and fame (Withisuphakorn & Jiraporn, 2016). Consequently, H2a is not confirmed.

TABLE 13 Evidence of sustainability in small and medium scale enterprises

	SMEs and sustainability orientation				
	A	B	C	D	E
	1–10 years	11–20 years	21–30 years	31–50 years	51–70 years
Sustainable project sensitivity	√	√	√	√	x
Environmental dimension integration	√	√	√	√	√
Social dimension integration	X	x	x	x	x
Economic sustainable dimension integration	X	x	x	x	x
Positive impact of sustainability on performance	X	√	√	√	√

Source: Own elaboration.

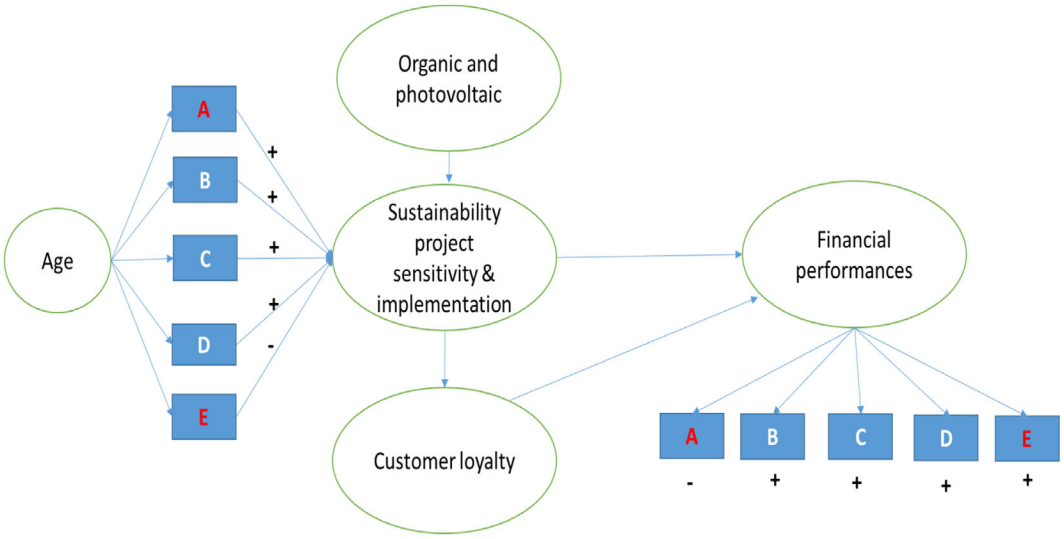

FIGURE 1 Age as a driver toward sustainability orientation and financial performance. A = 1–10 years; B = 11–20 years; C = 21–30 years; D = 31–50 years; E = 51–70 years. *Source*: Own elaboration. [Colour figure can be viewed at wileyonlinelibrary.com]

H2b is also not confirmed; younger companies, even if with fewer resources, are more inclined to invest in sustainable projects, with a return on economic performance, than older ones, likely because of the innovation propensity of younger firms (Coad et al., 2018) and the need to reach the minimum dimension for their survival (Lwango et al., 2017). Furthermore, SMEs that engage in sustainability outcomes in building customer loyalty (Kurucz et al., 2008) show an improvement in economic performance, as sustainable projects and performances show a positive correlation (Bartolacci et al., 2020), even if the approach to sustainability is superficial, and such projects are not integrated into the strategic planning process. Table 13 presents the main evidence that characterises SMEs and sustainability orientation.

In summary, younger firms are more sensitive to sustainability than older ones; younger companies achieve fewer positive effects of sustainability on financial performance, mainly given the higher initial investments in the first stage of business; older companies' performances seem to be less influenced by sustainable projects given their established position in the market; SMEs focused on the environment, neglecting the social and economic dimensions; and sustainability positively impacts on performances after 10 years. Additionally, the results shed light on how organic and photovoltaic practices are crucial for SMEs in the wine sector, and sustainability orientation is useful to build customer loyalty. Figure 1 presents a model to summarise age as a driver and its effects on sustainability orientation and, consequently, on financial performance.

The figure highlights 'age' that, even if with moderate effects, impacts sustainability orientation, except for Generation E. The sustainability orientation affects financial performance, except for Generation A. Further, organic and photovoltaic practices could enhance sustainability implementation and financial performance, with effects on customer loyalty.

6 | CONCLUSION

Given that SMEs are considered fertile ground for sustainability implementation, and considering that these exert a relevant impact on the world economy, it is important to study SMEs under the sustainability lens; in response to suggestions of Balasubramanian et al. (2021), Kantabutra and Ketprapakorn (2020) and Rodrigues and Franco (2019) focused on the implementation of sustainability strategies in SMEs and on the impact on financial performance. Clear evidence was found demonstrating that when sustainability is embedded within SMEs, there is a positive correlation with performance. The research also reveals that age is a relevant variable that can explain a different sustainability orientation and the related impact on financial performance. Bruwer et al. (2018) and Rubio-Andrés et al. (2020) noted lacunae with regards to researches about sustainability policy in SMEs, and Bartolacci et al. (2020) noted a lack of relevant researches in SME performance. This paper makes important contributions to the literature in terms of insight into sustainability orientation in SMEs, extending the sustainability, age, and SMEs performance literature. Thus, our research has both relevant theoretical and practical implications – including policy relevance.

At the theoretical level, the study bridges the literature gap, where studies largely focus on SMEs' corporate governance and management rather than sustainable aspects (Bartolacci et al., 2020). Accordingly, it responds to the call in the literature by revealing the sustainable practices in a particular industry (Ortiz-Martínez & Marín-Hernández, 2022) and geographical area (Rossi & Luque-Vílchez, 2021), shedding light on the complexity of sustainability, that lies both on SMEs features, as previously described, and the belonging sector. Furthermore, our study contributes with regards to age – the missing variable behind the incomplete picture in strategy and management studies. We underline the relevance of age and size, as these are causal variables affecting sustainability (Badulescu et al., 2018; Moore & Manring, 2009), supporting in particular the part of the literature that considers age as relevant variable (Badulescu et al., 2018; Djupdal & Westhead, 2015; Yin et al., 2022) and contrasting the literature vein that claims not significant effects of the age variable (Badulescu et al., 2018; Trencansky & Tsaparlidis, 2014; Wiklund, 1999), showing the sensitiveness of younger companies to sustainable orientation. Additionally, the effects of age and size on sustainability and financial performance (Bartolacci et al., 2020; De Steur et al., 2020; Withisuphakorn & Jiraporn, 2016) are demonstrated, even if younger companies exert no positive influence (Nunes et al., 2013), given the high initial investments required.

With regards to *managerial implications for practice*, our findings lead us to recommend SMEs to revise their business strategies, avoiding informal and unstructured approach. This approach allows to better plan the investments, that should be more inclined to promote sustainability and integrated in the strategy, to better emphasise social issues and invest more in skilled human resources and training programmes. As noted by Bruwer et al. (2018), findings can help better implement sustainability in SMEs to improve their overall sustainability and executive support (2019). We found that SMEs mainly focus on the environmental dimension, ignoring the social dimension; we therefore recommend skilled human resources and training programmes (such as those discussed by Cassells & Lewis, 2017) to spread the "holistic" sustainability concept and integrate sustainability culture, embracing the environmental, social, and economic dimension.

Regarding 'what should be done' and 'what should be measured', a focus on the integration of social and economic sustainable aspects are, consequently, required in the strategic and control process, considering that active engagement in social issues enhances the ability of companies for a longer survival, as also observed by Ahmad et al. (2020), and also considering that SMEs are characterised by strong local engagement. SMEs must strengthen the deal with local stakeholder, intensifying collaborative dialogue for social actions, gaining also strong positive effects on the local territory. In this vein, social and environmental actions, even if at the local level, can enhance visibility, consensus and key relations, also improving financial performance.

Given that sustainability orientation and investments can boost firm performance, owner-managers of SMEs can thus benefit from our findings. More specifically, younger SMEs (0–10 years old) have not to be discouraged and continue to be inclined to introduce sustainable projects. They have to take advantage of their flexible structure, able to quickly adapt and respond to new projects. Indeed, investments in sustainability, despite the low profit return, when SMEs are young may represent the engine to gain customer loyalty and then reach higher financial performances, in their ageing and growing process, ensuring the survival. When the customer loyalty is achieved, also one step forward is done in the enterprise growth process. On the side of older SMEs (more than 50 years), it is necessary to underline that they must not live off what they have already been acquired, but reinforce their investment in sustainability to ensure continuity.

Additionally, we also offer a *contribution to policy-makers*. Our study can stimulate governments to identify ways, also through specific funds, to promote sustainability within firms and via the development of a stakeholder network, also considering the relevance of SMEs for a local and national sustainable growth.

Concluding, the research, among the few existing, addresses the missing link between sustainability and performance, disentangling the effects of age and size in this process. Specifically, it has been highlighted that if the pillars of sustainability are managed right from the strategy formulation, positive effects for business profitability are evident. This implies that proper attention is given to the strategy formulation, implementation, and communication through the development of specific sustainability-oriented projects, management accounting tools inclusive of environmental and social issues, and investments to increase the knowledge and skills of managers; only in this way it is possible to avoid that the strategic intentions remain stuck at the top level. We also recommend to better disclose sustainability information, because SMEs frequently fail on this side. Indeed, they walk more than they talk.

The quantitative method and the identified sample of SMEs enhance the generalisability of the results.

There are nevertheless some *limitations*. Beyond size, age, and a set of economic indicators, we do not consider additional variables that can impact sustainability and performance. Future studies might incorporate new elements and conduct comparative analyses in other areas and industries (Bartolacci et al., 2020) to validate and enrich the proposed conceptual model.

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