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Sustainability in Family and Nonfamily Businesses in the Wine Industry

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Abstract

The implementation of environmentally sustainable initiatives within organizations is a shared research topic across both sustainability and family business research. Using a case study approach, this paper provides an in-depth exploration of the presence, role, and strategic nature of environmentally sustainable processes within the Chilean wine industry. Our interview process resulted in 21 interviews between July and November of 2014. Our findings suggest that the recognized tendency of family firms to both engage in and benefit from sustainability practices may not only be owed to their desire to preserve family socio-emotional wealth, but also the unique ability to better incorporate, apply, and effectively benefit from such investments. These findings extend previous work in this area by recognizing additional processes necessary for the development of proactive sustainability practices which are not considered using the motivation-based schema common in extant work. Our findings are analyzed and discussed as they relate to both family business and sustainability research and serve as a bridge between these two related research domains.

Keywords: best practices, sustainability, family business, wine industry

Sostenibilitat en les empreses familiars i no familiars del sector vitivinícola

Resum

La implementació d'iniciatives ambientalment sostenibles a l'interior de les organitzacions és un tema de recerca compartit tant en la investigació sobre la sostenibilitat com en l'empresa familiar. Utilitzant un enfocament d'estudi de cas, aquest article ofereix una exploració en profunditat de la presència, el paper i la naturalesa estratègica dels processos ambientalment sostenibles a la indústria vitivinícola xilena. El nostre procés va donar lloc a 21 entrevistes entre juliol i novembre de 2014. Els nostres resultats suggereixen que la tendència reconeguda de les empreses familiars a participar i beneficiar-se de pràctiques de sostenibilitat no només es deu al seu desig de preservar la riquesa sòcio-emocional familiar, sinó que també la capacitat única d'incorporar, aplicar i beneficiar-se eficaçment d'aquestes inversions. Aquestes troballes amplien el treball anterior en aquesta àrea reconeixent processos addicionals necessaris per al desenvolupament de pràctiques de sostenibilitat proactives que no es consideren utilitzant l'esquema basat en la motivació comú en el treball actual. Les nostres troballes s'analitzen i es discuteixen ja que es relacionen tant amb l'empresa familiar com amb la recerca de sostenibilitat i serveixen de pont entre aquests dos dominis de recerca relacionats.

Paraules clau: bones pràctiques, sostenibilitat, empresa familiar, indústria vitivinícola

Sostenibilidad en las empresas familiares y no familiares del sector vitivinícola

Resumen

La implementación de iniciativas ambientalmente sostenibles dentro de las organizaciones es un tema de investigación compartido tanto en la investigación sobre sostenibilidad como en la de empresas familiares. Utilizando un enfoque de estudio de caso, este artículo proporciona una exploración en profundidad de la presencia, el papel y la naturaleza estratégica de los procesos ambientalmente sustentables dentro de la industria vitivinícola chilena. Nuestro proceso resultó en 21 entrevistas entre julio y noviembre de 2014. Nuestros hallazgos sugieren que la tendencia reconocida de las empresas familiares a participar y beneficiarse de prácticas de sostenibilidad puede no solo deberse a su deseo de preservar la riqueza socioemocional familiar, sino también la capacidad única de incorporar, aplicar y beneficiarse eficazmente de dichas inversiones. Estos hallazgos amplían el trabajo previo en esta área al reconocer procesos adicionales necesarios para el desarrollo de prácticas proactivas de sostenibilidad que no se consideran utilizando el esquema basado en la motivación común en el trabajo existente. Nuestros hallazgos se analizan y discuten en relación con las empresas familiares y la investigación sobre sostenibilidad y sirven como puente entre estos dos dominios de investigación relacionados.

Palabras clave: buenas prácticas, sostenibilidad, empresa familiar, industria vitivinícola

Introduction

The strategic idiosyncrasies of family firms and their desire to pursue family-centered non-economic goals are commonly studied in the domain of family business research. A core component of such familial goals is the transgenerational nature of family firms, which promotes the pursuit of a long-term strategic time horizon when compared to their non-family counterparts (Aronoff 2004; Randolph et al. 2019).

Accordingly, family firms pursue business outcomes that reinforce and preserve the socio-emotional wealth of the owning family, and thus are motivated by outcomes that benefit the owning family's reputation, image, and ability to appease community stakeholders (Gallo 2004; Dyer and Whetten 2006; Deephouse and Jaskiewicz 2013; Bingham et al. 2011). When taken together, this evidence strongly supports the notion that family business strategy is compatible with investments in environmental sustainability. Indeed, previous research has emphasized this alignment with evidence suggesting that family firms may have increased willingness and ability to pursue strategies related to environmental sustainability or the responsibility to conserve natural resources and protect global ecosystems to support health and wellbeing. (Sharma and Sharma 2011; Berrone et al. 2010; Goodland 1995). While insightful, the growing body of knowledge in this field is generally based on a relatively narrow portion of family businesses and general assumptions that do not wholly reflect the nuanced underpinnings of strategic development which much consider numerous contextual factors in determining the applicability of environmental sustainability initiatives.

Most of the work in this domain is largely based on the implicit notion that environmental sustainability initiatives are costly and competitively disadvantageous, at least in the short term when a purely economic perspective is taken (Miles and Coven 2000; Sharma and Sharma 2011; Froio and Bezerra 2021). The underlying logic being that the non-economic goals of family firms suggest they are more willing to accept the economic costs due to the potential for owning families to gain affective endowments less desirable to non-family firms. However, scholars have increasingly recognized that non-economic goals and socio-emotional wealth may be equally salient within non-family firms (Miller and Le Breton-Miller 2014; Hiller 2013). However, certain institutional contexts may actually directly align environmental sustainability initiatives with the immediate competitiveness of firms within certain industries (Miles and Covin 2000; Rosen 2001). The global wine industry is one example (Flint and Golcic 2009).

In the present paper we develop arguments regarding the nature of environmental sustainability initiatives within both family and non-family owned Chilean wineries. Our arguments seek to develop a better understanding of the likelihood of family firms to engage in sustainability initiatives and the competitive outcomes associated with engaging in these initiatives. Considering the broad nature of our research topic, our explorations follow recommendations in the family business field (e.g. De Massis and Kotlar 2014) and are conducted through a case study design. Our findings suggest that family-owned Chilean wineries are prone to incorporate a greater amount of environmental sustainability processes, which result in competitive benefits when compared to their non-family competitors.

While these findings are aligned with those in the broader literature, the global wine industry is one that largely embraces environmental sustainability, attracts business owners that prioritize socio-emotional wealth, and rewards environmental sustainability. The fact that in such an institutional context family firms still seemingly possess an increased likelihood of engaging in these strategic behaviors suggests that the underlying logics of family-centered non-economic goals, transgenerational succession intentions, and long-term strategic orientations are not sufficient to wholly encapsulate the strategic motivations of family firms in this industry.

As such, the present research seeks to expand our understanding of the additional processes available to family firms beyond their tendency to pursue non-economic goals to explore additional factors of their ability and willingness to incorporate environmental sustainability processes, and potentially benefit from them more effectively than non-family firms who may possess the same, or similar, motivations. In doing so, we generally follow the Gioia approach inductive research design (Gioia, Corley and Hamilton 2013), in order to more explicitly explore the intricacies of proactive environmental sustainability investments in the context of family business strategy using arguments that allow for the simultaneous consideration of both economic and non-economic motivations and outcomes (e.g., Triple Bottom Line; Elkington 1997 and 1998).

Literature Gap and Theory Development

A driving force behind the on-going development of family business research is grounded evidence that suggests that family firms possess significant strategic idiosyncrasies, which distinguish them from non-family firms. This notion—which has evidence across numerous organizational, industry, and international contexts—is generally argued under the assumption that family firms use their organization as a vehicle to pursue family-oriented affective endowments that benefit the owning family (Gomez-Mejia et al. 2011).

Such affective endowments, or socio-emotional wealth (Gomez-Mejia et al. 2007), create a unique bundle of motivations, capabilities, and desires that force family business scholars to question some of the seminal assumptions of strategic management in order to take into consideration non-financial goals (Zellweger et al. 2013; Chrisman, Pankaj and Patel 2012). However, the socio-emotional wealth construct is not unidimensional and may emerge with varying implications across both family and non-family firms considering family and organizational factors, as well broader considerations in the competitive environment (Miller and Le Breton-Miller 2014).

The study of environmental management and environmental sustainability is one of the areas in which socio-emotional wealth motivations can manifest in family firms (Muller, Canale and Discua 2022). Particularly, the long-term transgenerational goals of family firms are inherently aligned with a culture of sustainability that emphasizes the importance of affective outcomes such as image and reputation (Hoffman, Hoelscher and Sorenson 2006), transgenerational value creation (Salvato and Melin 2008), and goodwill among community stakeholders (Binghman et al. 2011). However, despite the increased attention and overlap between socio-emotional wealth goals and environmental sustainability, research on the topic is new. Recent studies have recognized the need to go beyond solely considering firm-based socio-emotional wealth outcomes when studying the environmental sustainability of family firms and take into considering the stakeholder and institutional contexts that may facilitate or impede the firm's ability to pursue such goals (Cruz et al. 2014).

In light of the literary structural diversity underlying the study of environmental sustainability and environmental preservation in family firms (Miroshnychenko et al. 2022), we follow extant work to suggest that while family firms may be more inclined to possess positive attitudes towards sustainability initiatives (e.g. Sharma and Sharma 2011), actual outcomes related to those attitudes may be reinforced, or inhibited, depending upon the institutional logics within the competitive landscape and their alignment with proactive environmental sustainability strategies, family firm sustainability, and sustained competitiveness. In other words, while a growing body of research has recognized the conceptual alignment between socio-emotional wealth motivations and socially responsible business practices in family firms, extant work has often "neglected the role of contextual factors that amplify or mute the relationship between firm type and social actions." (Cruz et al. 2014, 1296).

To address this gap, we study the tendency of family-owned Chilean Wineries to invest in proactive environmental sustainability strategies. We argue that this tendency is owed not only to the socio-emotional wealth motivations of owning families but because of the unique institutional landscape in this industry that not only protect family-owned wineries from acquisition from multi-national competitors—which is not the case in the global wine industry (Bell and Giuliani 2007; Gwynne 2006)—but that such firms are in a unique position as recent entrants in the global wine market to gain additional competitive benefits from adapting sustainability practices without the liability of tradition which may inhibit other wineries around the globe (Negro, Hannan and Rao 2011).

In pursuing these goals, we seek to contribute to ongoing research regarding contextual factors in determining the role of sustainability investments and environmental sustainability in family firm strategy. We hope to extend extant work which places an emphasis on the presence of sustainability motivations in family firms to greater incorporate the study of organizational implementation; with the recognition that the implementation of sustainability strategies of family firms may be just as idiosyncratic as the family-oriented goals that underlie them. As such, we follow a two-stage model of theory development to contribute to the study of environmental management practices and their organizational antecedents (e.g. Orsato 2009; Delmas and Toffel 2004; Dodds et al. 2013). We first argue that family-owned wineries are likely to have greater intentions to invest in proactive process and sustainability initiatives when compared to their non-family counterparts owing to their desire to use the family firm as a vehicle for reinforcing family socio-emotional wealth. Then, we develop arguments that the institutional logics of family-owned Chilean wineries present a competitive landscape which promotes and rewards such activity, increasingly the likelihood that these motivations will result in positive organizational outcomes.

Family-Owned Wineries and Proactive Sustainability Initiatives

Research evidence suggests that family firms are willing to sacrifice the maximization of financial outcomes in order to reinforce and preserve the socio-emotional wealth of the owning family (Berrone et al. 2010; Gomez-

Mejia et al. 2007; Chrisman et al. 2012). While this tendency serves as a primary area of distinction when comparing family and non-family firms, research exploring how family firms remain competitive in light of their socio-emotional wealth motivations potentially restricting their ability to pursue competitive growth opportunities is still in the early stages of development. Recent evidence suggests this process is somewhat complex (Chrisman and Patel 2012; Cennamo et al. 2012). A growing body of literature has considered the behavioral and strategic processes that allow family firms to remain competitive in industries without sacrificing their socio-emotional wealth outcomes. Examples include unique innovation strategies, risk willingness, sustaining goodwill in their consumer communities, and maintaining a long-term strategic orientation leading to more sustainable, albeit potentially smaller, corporate portfolios (Gomez-Mejia et al. 2011; Zellweger and Kammerlander, 2015;

While insightful, the majority of literature in this area primarily considers the strategic maneuvering of large and/or publically owned family firms in developed countries. Although large publicly traded family firms may possess similar socio-emotional wealth goals, they are not representative of the small privately owned family businesses (Le Breton-Miller and Miller 2006; Ensley 2006; Frank, Kessler and Korunka 2012). Hence, while substantial advances have been made in this field, there is still the need for exploratory reach that considers the broad range of motivations and strategic incentives for smaller family firms to proactively invest in sustainability practices that consider market, industry, and institutional contexts holistically.

From last 15 years the agricultural sector is undergoing major transitions as reduced international barriers have allowed relatively small and previously isolated markets to compete at the global scale (Keating et al. 2010). Like many others, the global wine industry is growing rapidly (Mariani, Pomarici and Boatto 2012), but wineries are under increasing pressure to adapt sustainable socially responsible practices, which may hinder their ability to remain competitive when meeting growing global demand (Marshall, Cordano and Silverman 2005). This institutional landscape has resulted in the increased acquisition of smaller privately owned vineyards, less than 82 acres (33 hectares) average size per vineyard farm, which may have particularly difficulty incorporating such practices while scaling their operations, by larger corporate competitors (Bell and Giuliani 2007; Geraci 2000). However, family owned vineyards may be particularly competent in adhering to these institutional pressures due to the alignments of sustainability outcomes with the transgenerational objectives of socioemotional wealth motivated family firms. In short, while sustainability investments continue to be secondary goals among many large firms in the wine sector (Kariyapperuma and Collins 2021). We expect family firms are more likely to proactively invest in these processes and remain competitive in the industry when compared to their non-family counterparts (Muller, Canale and Discua 2022).

In short, through integrating both socioemotional wealth and institutional approaches, we posit that the changing pressures of the global wine industry are particularly aligned with the values of family firms. Additionally, by inductively studying the particular landscape of a specific industry we intend to refine these arguments to gain a more thorough and nuanced understanding of how family firms may recognize this potential overlap and translate their particularistic motivations and capabilities to achieve increased competitiveness against their non-family counterparts. Our study of these factors is guided by the following two research questions.

Research Question 1: Why, and to what extent, are family-owned wineries motivated to proactively pursue sustainability processes?

Research Question 2: What impact, if any, do these motivations have on the competitiveness of family-owned wineries within their industry, particularly when compared to non-family rivals?

Research Context

The Chilean wine industry has experienced considerable growth in recent years (Egan and Bell 2002). This has propelled the industry to a level of global competition. While the global wine industry has experienced a rapid inflow of external investment from global multinationals - which now owns a considerable portion of the industry worldwide (Bell and Giuliani 2007; Gwynne 2006)—the regulatory environment of Chile creates barriers to such foreign direct investment and as such has retained a healthy presence of relatively small family-owned vineyards. Many of these wineries belong to multigenerational traditional farming families in other agricultural sectors. As a primary player in the global wine sector, the Chilean wine industry has felt increasingly pressure to engage in sustainable operation practices, socially motivated operational decisions, and increased philanthropic expectations. The onset of these institutional pressures has resulted in the rapid modernization of the industry as well as substantial investment on the part of Chilean vineyards and wineries (Basso et al. 2023). However, the relatively newness of Chilean wineries may allow them to be more capable in addressing these pressures as they do not have the liability of tradition, nor institutional protection that is common in other prominent wine producing regions (Gamble and Taddei 2007). As a result, we perceive the Chilean wine industry as an ideal context for the study of proactive sustainability processes. While we expect Chilean wineries to overall be more apt in investing in proactive sustainability processes (Mora 2019), the opportunity for retained competition and alignment with family-based institutional logics which prioritize socio-emotional wealth outcomes together suggest that family-owned Chilean wineries are in a unique position to both incorporate and benefit from such practices (Felzensztein 2014).

Research Methodology

We used a qualitative methodology to explore our research questions. Data for this project was collected through personal interviews. Using interviews allowed us to take into account the interviewees' experience while taking into consideration specific institutional contextual factors that may not be observed through other forms of data collection.

The selection of the firms was conducted using an opposed sampling approach. This technique is recommended to ensure the potential for observing varying and antagonistic cases. This type of diversity is recommended considering the multi-dimensionality of our research questions (Eisenhardt and Graebner 2007). The sample of firms was selected based on four descriptive criteria. First, we defined family enterprises as those in which members of the family own 50% or more, those in which 50% or more of the top executives belong to the family, and the CEO perceives the enterprise as a family firm (Westhead et al. 2001). Second, we looked for a representative sampling of the three most important geographical areas (valleys) in the industry, from the valleys of Aconcagua, Casablanca, and Maule. Third, we selected a proportional sampling of the type of wine produced; bulk or bottled. And, fourth, we looked for a variety of both first generation and multigenerational firms. The enterprise characteristics of the sampling are shown in Table 1.

Twelve Chilean Vineyards participated in the study. Seven of which are classified as family enterprises based upon our aforementioned definition. In each firm, up to three people were involved in the interview process. In most cases, these people were the founder, patriarchal owner, or other top executive. Our interview process resulted in 21 interviews and more than 34 hours of recording conducted between July and November of 2014. The interviews were conducted in person, using open and semi-structured questions related to sustainable practice. Secondary information was collected from public sources—including the Viñas de Chile's database and The Code of Sustainable Winegrowing Practices Workbook (Wine Institute and California Association of Winegrape Growers 2013) and integrated through a triangulation processes to ensure construct validity (Yin 2003). Data were categorized through contextualization techniques that led to a structured data analysis.

While the interviews were loosely structured, a particular emphasis was placed on collecting

TABLE 1. CASES STUDIED AND CHARACTERISTICS OF THE FIRMS INTERVIEWED (2014)

Company	Family	Turnover USD millions	Valley	Product	Gen	Familiy Ownership	Familiy management	Sustainable initiatives	Interviewees	Age
1	*Yes*	21-40	Maipo Valley	Bottled	2nd	70 percent	100 percent	a, c, d, f, g, l	CEO (son) Marketing Manager (daughter)	51-60 31-40
2	*Yes*	21-40	Maipo Valley	Bottled	1st	99 percent	100 percent	c, e, f, g	CEO (patriarch) Chief Operations Officer (non family manager)	61-70 31-40
3	*Yes*	1-20	Maule Valley	Bottled	2nd	80 percent	60 percent	c, d, e, f, g, j, k, l	CEO (son) Sales Manager (son) Quality Manager (non family manager)	41-50 31-40 31-40
4	*Yes*	1-20	Maule Valley	Bottled	1st	100 percent	100 percent	a, b, c, d, e, f, g, k	CEO (patriarch) Winemaker/Oenologist (non family manager)	61-70 31-40
5	*Yes*	21-40	Maule Valley	Bulk	2nd	65 percent	60 percent	e, g, k	Commercial Manager (son)	41-50
6	*Yes*	1-20	Casablanca Valley	Bottled	1st	100 percent	100 percent	a, b, c, d, e, f, g, h, k, l	CEO (patriarch) Commercial Manager (son)	61-70 41-50
7	*Yes*	21-40	Maule Valley	Bottled	1st	100 percent	90 percent	a, d, e, g, k	CEO (patriarch)	51-60
8	No	21-40	Maipo Valley	Bottled	NA	0 percent	0 percent	a, b, c, d, e, f, h, k	Chief Operations Officer Quality Manager	41-50 41-50
9	No	21-40	Maule Valley	Bulk	2nd	20 percent	10 percent	c, g, k, l	General Manager Sales Manager	51-60 41-50
10	No	21-40	Maule Valley	Bottled	NA	0 percent	0 percent	c, e, g, k	General Manager	41-50
11	No	1-20	Maipo Valley	Bottled	NA	0 percent	0 percent	e, g, k	Quality Manager	51-60
12	No	21-40	Maipo Valley	Bottled	NA	0 percent	0 percent	b, c, f, g	Chief Operations Officer Winemaker/Oenologist	41-50 41-50

Sustainable initiatives

a Green Building
b Wind / solar energy
c Organic Recycling
d Organic /Biodynamic practices
e Environmental Management System
f Carbon footprint program
g Safety at work OHSAS 18001
h Pollution management
i Risk management
j Supply chain management
k Employee training & involvement
l Community relations

Source: Own elaboration.

data regarding sustainability practices, particularly in the following areas: management of energy, waste material and water, management of risk and occupational health of the own workers and the workers of subcontractors, management of the supply chain, workers' training, local community participation and community relationship development. Additional information was then collected regarding the motivations of the firm's sustainability strategy, particularly from components such as family values, reputation, founder's influence and the relationships among parents, their children and siblings, and also other concepts, which provide more knowledge, and comprehension of the issue. Data was organized and analyzed using NVivo software in accordance to the methodology of Gibbs (2002). NVivo allows to code and categorize data according to themes, concepts, patterns or relationships that emerge from the analysis. Primary and secondary data were paired to create concept tables that illustrate relevant findings for each enterprise and family, leading to a more clear comprehension of the cases.

Data Analysis

Data analysis involved the following steps: first cases were distinguished by the extent of their sustainability initiatives in accordance to the Triple Bottom Line Model; with regard to both input and output activities. Triple Bottom Line as it is a model in which companies can integrate sustainable practices into every facet of their business operations, including supply chains, trading partners and the use of renewable energy, to positively impact society and the environment, as well as get benefits (Golicic, Flint and Signori 2016). Afterwards, a keyword search was conducted. The keywords searched included: organic, recycling, pollution, biodynamics, etc. in order to classify these activities as economic, environmental or social initiatives. A summary of these results is shown in Table 2.

TABLE 2. SUMMARY REPRESENTATION OF THE EVIDENCE IN IN THE 12 CASE STUDIES

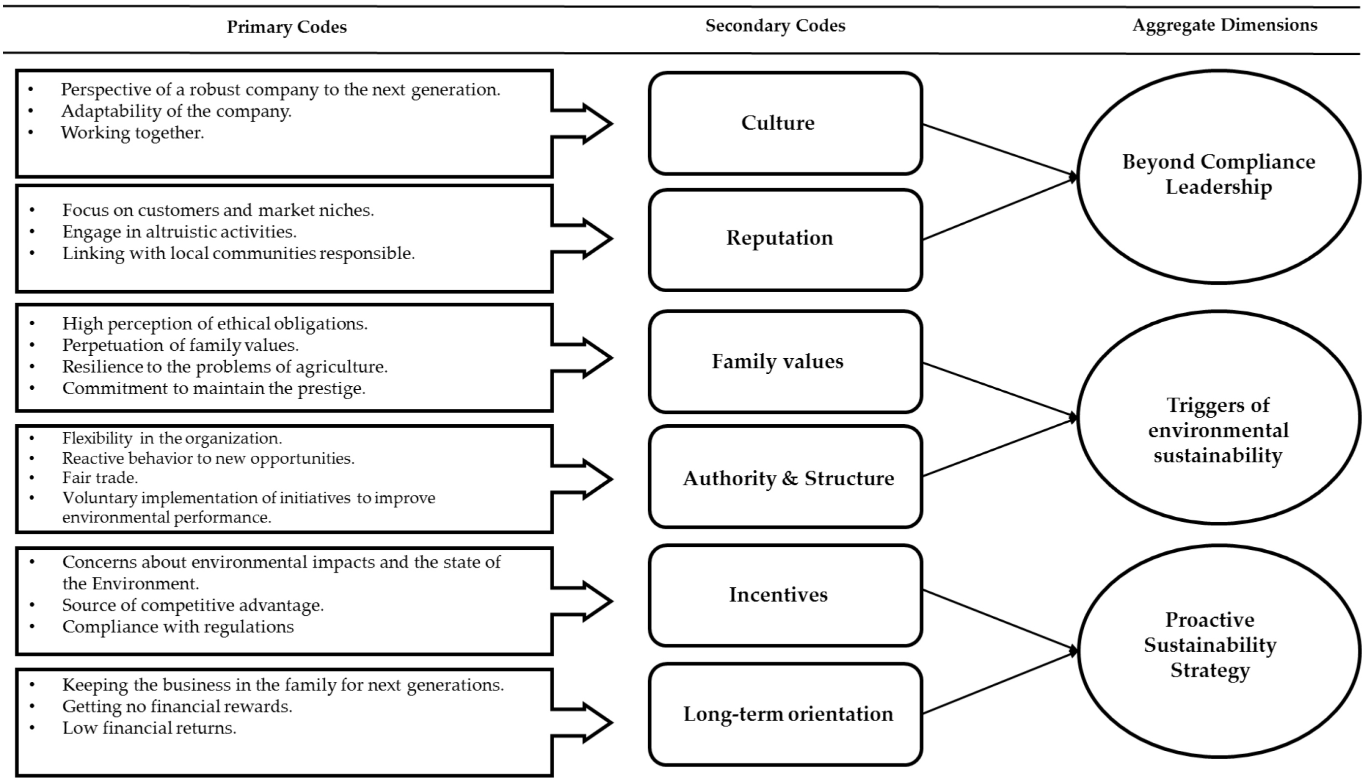
		Inputs actitivites			Outputs actitivites		
Company	**Family**	Economic	Environmental	Social	Economic	Environmental	Social
1	*Yes*	1	1	1		2	1
2	*Yes*		1			3	
3	*Yes*	1	2	1		2	2
4	*Yes*		1	1		4	2
5	*Yes*					3	
6	*Yes*		3			5	2
7	*Yes*		2			3	
8	No		3			5	
9	No					3	1
10	No				1	2	1
11	No					3	
12	No		1			3	

Number of activities for each type of behavior in each firm

Source: Own elaboration.

As a second step, an open coding strategy was implemented. Here, responses were analyzed in order to identify factors as either proactive or reactive behaviors. Data was exhaustively coded to distinguish factors particularly relevant to a more proactive strategy, for example, in pursuit of long-term goals, patient capital, etc. The following step was to discuss the primary codes in order to provide an interpretation according to the methodology suggested by Gioia, Corley and Hamilton (2013). Then, each case related to the topic was evaluated individually before to measure the evaluations and analyze any initial finding. The evaluation was the last step, in which a summary chart was created following the format of Gioia, Corley and Hamilton (2013). Finally, the information was sorted and summarized for our analysis by showing how we progressed from primary to secondary codes and from secondary codes to aggregate dimensions.

TABLE 3. DATA STRUCTURE



Source: Own elaboration.

Findings

Our findings in this case analysis suggest family-owned businesses differ from non-family businesses regarding sustainable initiative, even in contexts where such activities are highly desired. Following our research questions, our findings are summarized in two phases of reference, following the framework model of Silverman, Marshall and Cordano (2005).

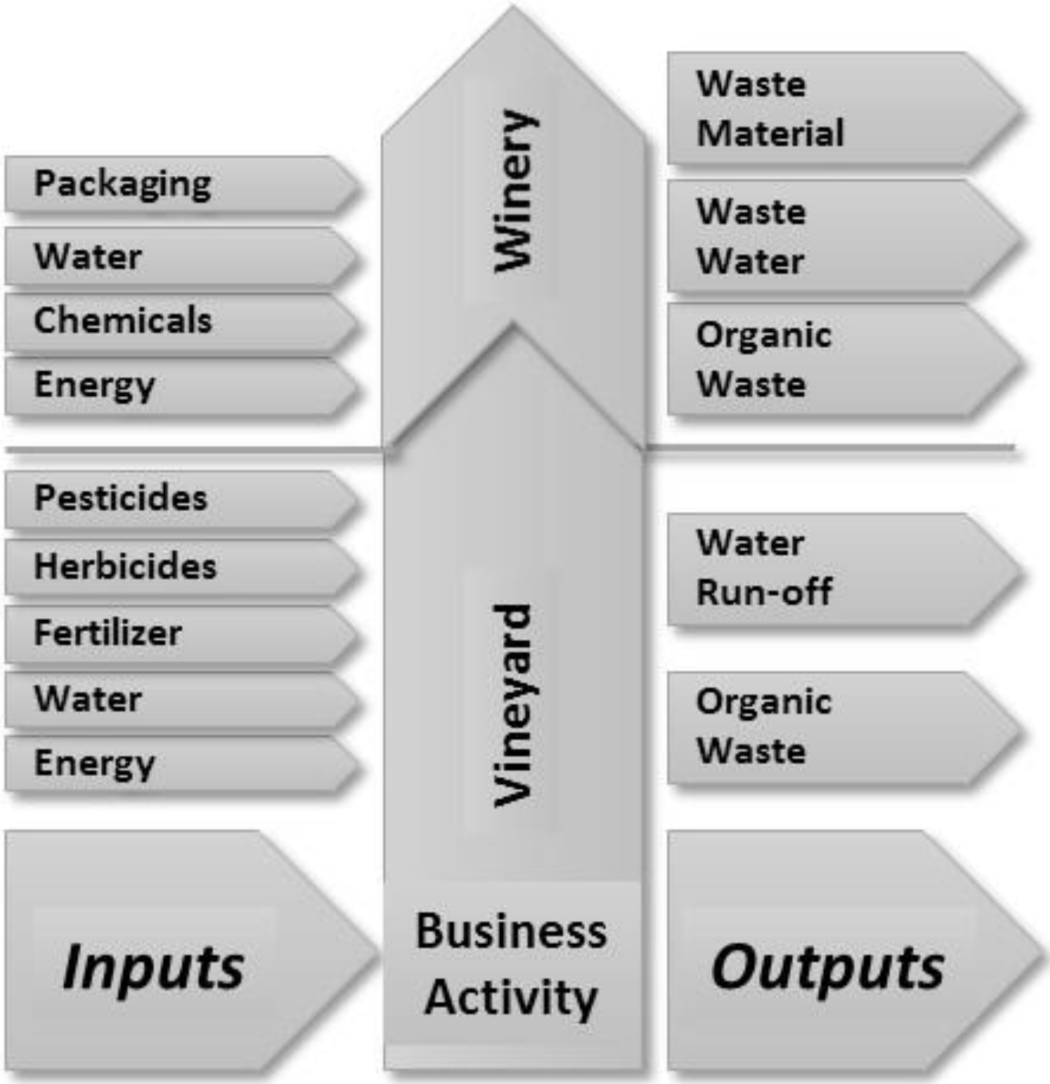
For each phase, the initiatives are each classified into one of the three parts of the Triple Bottom Line TBL model (WCED 1987, 43). The results obtained are summarized in Table 2.

Our first finding reveals that family-owned businesses tend to have clearer goals and desire to be more proactive than companies than non-family firms, regarding sustainability initiatives. In net terms, family-owned businesses have an average of 6.2 proactive initiatives; this is 34% more initiatives compared to 4.6 initiatives of non-family owned businesses. Additionally, initiatives in family firms tend to be more long term, including such practices as the implementation of crops using biodynamic and organics practices, and utilizing green building practices. These goals are considerably more long-term and ambitious than those most commonly found in non-family firms. For illustration, changing a plantation, harvest and production model can take up to three years and in some cases up to five years.

This tendency may be best illustrated in the following example. Company 6 has ten sustainable initiatives which are inspired by Allan York who has been named the father of biodynamics. The CEO (father) of the company stated: "We believe that the future of farming will provide better care of the environment and smooth integration with the community. Our decision to migrate towards crops with biodynamic practices has been easy although its implementation has been difficult and complex, but we have taken a route where it is difficult to go back. Our children are the most motivated with this change."

Conversely, the few non-family businesses open to similar proactive initiatives, such as biodynamic practices, did not integrate them as

FIGURE 1. TYPICAL ENVIRONMENTAL IMPACTS IN THE VINEYARD AND WINERY



Source: Own elaboration.

a primary aspect of the main business. Most likely due to a question of resistance to change in new cultivation practices. Specifically, only one out of five companies mentioned this type of sustainability initiative when probed but unlike family firms, none included them in the primary discussion of the firm. These findings are in alignment with extant work on socio-emotional wealth in family firms (Berrone et al. 2010; Gomez-Mejia et al. 2007) which suggest that family firms pursue non-financial goals—like reputation (Zellweger et al. 2013)—in a long term perspective. While insightful for our first research question, these findings do not themselves speak to distinct competitiveness benefits family firms may achieve from incorporating such practices.

Measuring the Triple Bottom Line model

With regard to determining competitive outcomes of sustainability practices, we base our design and analysis on the Triple Bottom Line (TBL) model. Particularly, we adopt concepts of "Our common future" through "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987, 43). In attempt to wholly encapsulate the multi-dimensional nature of competitive outcomes for our approach, we adapt each of the three dimensions—economic, environmental, and social—in the TBL model. This way of reaching the definition of sustainability is appropriate for business contexts as it recognizes the need of balance between ecological, social and economic objectives (Sharma and Ruud 2003).

Briefly; the economic dimension of competitiveness is generally discussed by the impact an initiative has on the company's economic development, primarily illustrated through financial ratios, ROA, ROI, and also prices and payment conditions for suppliers or risk taken on by management. The environmental dimension is represented by the occurrence of negative events in natural surroundings, such as water, ground or air pollution, rational use of resources and how the initiative addresses them. The social dimension refers to actions that affect the community, the company's ethical behavior, employee professional development, or corporate culture.

The Economic Dimension

Within the TBL framework, firm economic development assumes that economic and environmental issues are not opposed; instead, they are mutually dependent and reinforcing. From this perspective, it is economically viable if it is environmentally friendly and economically equitable when the social dimension is considered (Stavins, Wagner and Wagner 2003). Our findings in this dimension are more difficult to observe because not all interviewees are outspoken when answering questions regarding the financial health of their firm. In our sample, three family firms present initiatives derived from this perspective, companies 1 and 3 are in a supplier development program and a fair payroll system for its workers. Only one non family-owned business shows a policy in this area. In the case of Company 1 the Marketing Manager said that: "Our new projects do not only seek to be economically viable from a financial point of view, because this implies fast financing of the project in the market, we also include environmental and social factors in the costs. When our vineyard says it is sustainable, we are really thinking about all the long-term factors." This suggests that while family firms were more likely to engage in proactive sustainability initiatives, they did so with relatively little concern for economic impact.

Taking the previous matter into account, we asked ourselves: "How does long term ambition function in family-owned businesses?" Some authors (e.g., James 1999) have concluded that long-term priorities include risk management and reduction. Whereas long-term objectives are more specific and could involve creating competitive advantages such as leadership, expenses, quality or innovation. Long term investments are real costs and anticipated amortization periods. In other words, while long-term sustainability initiatives may be economically viable in the long-term, they may not be attractive for firms primarily motivated by economic outcomes, since the impact of such initiatives in the short-term may have negative financial consequences. This not only speaks to the tendency of family-owned wineries to engage in more initiatives, but their increased competitiveness, if not profitability which we could not account for.

Proactive vs Reactive Environmental Initiatives

Following the model of Silverman, Marshall and Cordano (2005), Figure 1 illustrates that vineyard activities can be divided into two phases. Input activities, such as the group of activities which are necessary to grow, obtain, harvest, and otherwise generate raw materials (i.e., grapes) in wine making, including the relationships across the supply chain and (2) output activities: such as the management of residues, water reutilization and treatment, use of chemical products, among others, during production and distribution processes. An example proactive environmental strategy is the voluntary implementation of practices and initiatives that seek to reduce environmental impact of operational processes and are characterized by the early adoption of different practices in proactive anticipation of future regulations (González-Benito and González Benito 2005).

The evidence collected in our study reveals that six out of the six family firms carried out diverse environmental protection activities in the input stage. For example, the business Manager from Company 6 has stated: "In energy efficiency terms, we are preparing for the ISO 50.001 certification. For this, we have developed different initiatives, such as biomass use to reduce fossil fuel consumption, the implementation of natural cooling systems in our cellars and the use of recycled oil-based biodiesel, among other initiatives." Other types of initiatives mentioned by these firms were: low volume irrigation systems, erosion control, grape skin compost, reduction or elimination of insecticides, fungicides, chemical fertilizers and herbicides and the incorporation of biodynamic practices to produce organic wine. This last point also includes a very relevant practice which is the recuperation of old vineyard that is free from genetic modification (GMO) in line with the discovery by Aragón-Correa (1998) and González-Benito and González-Benito (2005). In contrast, the evidence collected from non-family firms reveals that only two of the companies have implemented one of these practices.

On the other hand, a reactive environmental strategy is focused on carrying out corrective actions, in other words, they are performed to reduce damage, also known as environmental reparation and compensation measures (Arnold 1994). In many cases, waste from companies in this field highly pollutes the soil, air and water, or waste management poses a health risk to workers and the surrounding population. In Chile regulations are very strict and if the environmental impact assessment deduces eventual environmental risk, the company must propose risk control and prevention measures. The goal of risk prevention measures is to avoid the appearance of unfavorable effects on the population or the environment, and the risk control measures are aimed at avoiding harm to human life and health or the environment. This is why the 12 companies have declared a contingency plan however the role of this plan and its use is highly disparate between family and non-family firms. Our questions examine what types of initiatives in output management exceed the rules. For example, five of seven family firms have started a water waste treatment system, in order to convert this effluent and be able to be returned to the water cycle Friedman versus two of five of the non-family firms.

To further illustrate these differences, there are multiple ways firms in our sample approach waste management, including: recycling refuse and glass (Company 1), 3R's training program (Reduce, Reuse, Recycle) by Company 6. Pomace use and cardboard packaging recycling (company 4), energy audit and green buildings (company 6), generation of electricity using solar or wind energy (company 4 and 5), toxic chemicals, water, energy and solid residues reduction plan. In short, while all companies are prepared to engage in reactive initiatives, by legal requirement, family firms were prepared to implement a larger quantity and greater variety of initiatives. Conversely, non family-owned businesses focused primarily on emission control and regulated OHSAS 18001 Occupational health programs, which while more immediate, suggests an overall less developed environmental strategy.

Proactive vs Reactive Social Initiatives

The dichotomy between economic and social outcomes of business has been a dilemma in organizational research since its inception, and exists far beyond just the wine industry. Traditional economic theory indicates that administrators should be focused on maximizing the wealth of their shareholders and rarely considers other stakeholders. In fact, Friedman (1970) was very critical to considers other stakeholders and although he never denied the existence of needs and social problems; he simply stated that this was a role for the State. Therefore, a proactive social strategy should not be confused with corporate environmental sustainability. Recent literature shows that many authors have sought the missing link between financial and social performance, without questioning firm roots, values and commitments (Margolis and Walsh 2003). This balanced complementary approach is illustrated in our findings which reveal a clear social orientation among family firms when compared to their non-family counterparts. From an input perspective, such as regarding hiring practices, there seems to have been less progress made regarding social initiatives. This tendency is not exclusive to family-owned businesses in our study, or to the wine industry overall (Sethi 1979).

Our findings in this dimension show that three of the seven family-owned vineyards have implemented some kind of social initiative. Company 3 stands out the most, it offers a 10% salary increase in the harvest season (March and April) to its workers who come from and live in the same city. The CEO (father) of company 3 stated: "Each of the technological advancements in our vineyard is directed to our goal of being sustainable. We are concerned about our workers' wellbeing, preserving the environment, trying to cause the least impact. In addition, we use resources wisely and encourage this culture in the vineyard." However, no other family firm in our sample has implemented an input-oriented policy related to this issue.

The differences between family and non-family owned firms in our sample become more clearly visible when considering output initiatives. Four family firms have programs related to social initiatives, such as aid to a community hospital, support for a children's school and the implementation of a free harvest festival for the local community. The CEO of Company 3 states that: "To make high quality wine one must always think long term about the investments in projects that one will make. Every year we reinvest 95% of the benefits within the vineyard. That is, it is not an option that tries to reduce the company's net worth, but on the contrary we try to capitalize more and that projects the company into the future. We are not pressured by our shareholders to obtain short term benefits and this has a positive influence on the wine because it allows us to work to make higher quality products."

Here we see a staunch difference in both strategic framing and outcomes when compared to responses from non-family firms. For example, the Chief Operations Officer of company 12 responded: "We cannot afford increasing costs in parts of the process which do not add value to the shareholder or the final product, which is to make a quality product at a low cost". Both statements are very much in line as argued by Tafel-Viia and Alas (2009), in relation to the conflict of interest of an owner and a Manager. Conversely, the CEO of the family vineyard in company 3 says that: "I would say that the family business values such as proximity with people are what make us a great company, in our case we are looking for our company to have horizontal policies; we have direct contact with virtually every one of our employees and have social policies for our people. Beyond the people we have ecology and sustainability which are values that come from the founder and which we have also strongly instilled. That is why all our vineyards are certified as organic viticulture and we are also leading perhaps one of the most important fair trade projects in Chile."

It is precisely in the wine industry where it is less likely to find subcontracting and thus, unfair treatment to workers or treatment outside the Law such as in other more labor-intensive industries like services or mining (Herman 2014). Other initiatives of this type existing in the family vineyards, stated by the interviewees were: absence of practices related to discrimination, given the increase in immigrants to the country and gender equity, as well as freedom of Trade Union Association. Only four out of seven vineyards had a formal trade union, regarding our question about the absence of these kinds of organizations, the unanimous response was that the workers could talk directly to the owners about their needs and problems. In contrast, four out of five non-family owned businesses had trade unions. Together this evidence suggests that while social initiatives may be the least of the three dimensions to be reflected in our study, even here we see that family firms are considerably more prone to developing a proactive social strategy and benefiting from that strategy with regard to employee relations and organizational culture.

Results and Discussion

This study has presented a series of inductive arguments regarding the way in which family-owned firms differ from their non-family owned counterparts in the creation of sustainability policies among Chilean wineries. Our results show that the differences are not only significant but that their respective approaches are starkly opposed. We posit that the primary distinguishing characteristic observed within our analysis is the tendency of family firms to prefer proactive behaviors compared to the reactive attitudes of non-family firms towards challenges of sustainability. These findings contribute to our understanding of sustainability strategies in family firms and contribute to on-going research in three primary discussions: (a)

Proactive sustainability strategies, (b) Triggers of environmental sustainability and (c) Beyond compliance leadership.

Proactive Sustainability Strategy

A primary contribution of our study is our finding that family firms are motivated to adopting a proactive environmental strategies, which we argue is owed to the socioemotional wealth desires of family firms. This finding contributes to extant work which has recognized the greater predilection of family firms to invest in sustainable socially responsible activities (Cruz et al. 2014; Sharma and Sharma 2011), by illustrating that these arguments are not purely from the perspective of distinct motivations between firm types. Specifically, even in cases where both family and non-family firms are motivated to engage in these behaviors, owing to the presence of institutional pressures within their competitive context, family firms may be more apt at implementing a more proactive and thorough strategy that more effectively accomplishes their sustainability goals and hence allow family firms greater competitive benefit. Such competitive benefits may be most effectively illustrated when considering the long-term competitive advantages such as lower costs in harvesting processes and inputs (in the case of organic agriculture), innovation in the launching of new products (Chileans wines were already well known but organic from one side or biodynamic vintages are a whole new proposition) and the acquisition of other intangible assets such as the strengthening of corporate reputation (Coelho and Montaigne 2019)

Non-family firms, on the other hand, are more focused on reactive, low-cost policies that appeal to increasing institutional pressures but only when doing so does not conflict with short-term outcomes. Specifically, increased production demands in world markets and price declines due to the emergence of new competitors strongly limit and direct the types of sustainability initiatives pursued by non-family firms in our sample. This stark difference in the balance of economic and non-economic goals emerges in various points within our interviews. “In our business,” noted the CEO of Company 6 a family firm, “we’re not constantly having to justify our financial results so we can prioritize the long term. Since we’re not under the pressure of institutional owners, we have the luxury of being faithful to our roots.” But as the CEO of Company 4, another family business, warned, “this long term focus is conditioned upon sacrifice and dedication, and eventually a bit of luck. We’re very clear on the importance of reinvesting in our businesses.”

These non-economic results of our research are fundamentally related to family-based socioemotional wealth goals such as keeping control of the business in the hands of family members, preservation of family ties and culture, continuing the family dynasty and maintaining the image and prestige of a firm closely identified with the family (Gómez-Mejía et al. 2007 and 2011). The non-financial aspects of family businesses satisfy certain affective needs such as identify, perpetuation of the family dynasty, conservation of the family’s social capital, and opportunities to be altruistic towards company employees and the greater community (Zellweger et al. 2012). Our findings not only support this extant position but indicate that these strategic and behavioral idiosyncrasies not only impact the motivations of family firms but also the processes through which they pursue these non-economic outcomes which are equally long-term oriented.

Triggers of Environmental Sustainability

There exist a series of triggers motivating socially responsible behavior that exist beyond the socioemotional wealth motivations discussed above, one of which is a strong commitment to ethical obligations. One of our most provocative findings is that family enterprises are willing to make decisions that seemingly violate, or disregard, economic concern. Four of the family firm CEO's interviewed stated that, despite making it a cornerstone of their production, the market does not yet value organic wines, thus their retail prices must be set accordingly making it difficult for these companies to recoup their investment (Companies 1, 2, 4 and 6). This puts the businesses at risk but also demonstrates their firmness in sticking to company values. A sense of authority and control are also part of the principles of family-run businesses. "We follow the values taught by my father," the second-generation CEO of Company 3 told us. "The results of his sacrifice took 20 years to materialize and we're not going to change direction now."

Our study has demonstrated that values in family firms can be attributed to the family archetypes they stem from, the result of a transfer of structures, roles and control mechanisms. Such businesses have replicated these structures and the power relationships they imply. Structures, influence and authority in family-owned enterprises are closely bound up with each other and characterized in the first generation by paternalistic and authoritarian leadership. According to the sales manager (second generation) of Company 5, "Our business is the sale of bulk wine. We've been thinking about changing because it's a low-price product with limited value added, but we've always operated that way." This resilience, even in the face of economic decline, is not present among the non-family firms in our sample. This finding reinforces previous findings in the study of family socio-emotional wealth by suggesting that the socioemotional wealth motivations of family firms may supersede economic goals when they conflict (Gomez-Mejia et al. 2011) but also extend these arguments by suggesting that such decisions may not be technically strategic as they have been studied historically. Instead, this finding suggests that socioemotional wealth logics may be institutionalized within the family network which not only extends into the firm network, but also potentially replaces it. While this finding may ostensibly contradict extant work (Chrisman and Patel 2012), it suggests that greater work is necessary in understanding the role of logical and knowledge processes within family firm decision making, particularly when their socioemotional wealth motivations contradict their economic reality.

Beyond Compliance Leadership

The culture of a business is centered upon the shared and deeply rooted values, beliefs, attitudes and behaviors that determine its conduct, actions and ways of doing things (Garmendia 1990, 62-68). It has also been defined (Wilkins and Ouchi 1983) as the set of fundamental beliefs, expectations and principles shared by the members of a firm. From these beliefs and expectations emerge the rules that strongly configure the behavior of individuals and groups within a firm and differentiate it from other organizations. The predominant culture in family businesses is the product of its beliefs, values, expressions, agreements, history and social relationships. The transmission of these cultural patterns occurs in a relatively stable manner in both the family and the company as a whole (Hall, Melin and Nordqvist 2001). Thus, all the information, values, models and beliefs passed on to family members since an early age condition their behavior and development, and therefore the behavior and development of the firm as well. As the CEO of Company 1 pointed out, "It's difficult for us to change the company's line of business. These vineyards were here long before we came along. I remember as a child playing among the vines with my siblings and cousins. We used to spend the summer here, often helping out wherever we could. Especially during harvest time, we didn't go to school but we didn't mind, nor, I suspect, did my father. There was always a shortage of hands for the work to be done."

Reputation also clearly plays an important role in the relationships an organization maintains with its interest groups. It is the sum of all the intangible assets of a company that are aimed at generating more value. Villafañe (2003) posits that reputation can be seen as a puzzle composed of different intangible pieces of entrepreneurial life (ethics, environmental sustainability, corporate identity, mission, corporate government, communication with stakeholders). The integrated management of these pieces is what builds a good reputation. Two types are generally distinguished: (i) product quality reputation, and (ii) managerial reputation. Different agents both internal and external make their own valuations as a function of their experiences and expectations. For the firm itself, reputation is difficult to influence.

One of the purposes of our research was to measure the impact of sustainability policies on the competitiveness of family wineries, particularly in comparison with non-family firms. As the quality manager of non-family Company 11 explained, "We have seen various vineyards migrate rapidly to biodynamic viticulture with the intention of reducing impacts both in handling and harvesting. We're still far from achieving that goal, [the family firms] have set the bar high and it will be difficult for us to catch up." This finding speaks to the inherent and necessary overlap between the fields of environmental sustainability and family business strategy, and while this contribution does not speak to any specific on-going research discussion it serves as a fundamental reminder of the importance of organizations, and particularly family firms, in illustrating that for-profit organizations do not exist as the enemies of environmental sustainability. Instead, these vineyards and their history are illustrative of the very essence of what environmental initiatives are trying to sustain.

Conclusions

The present research intends to provide insight, grounded in an inductive research design, exploring the role of environmental sustainability practices within family firms. Building from a plethora of evidence suggesting that family firms are more motivated to pursue environmental strategies we intended to explore how that relationship exists within an institutional context that promotes environmental sustainability among all members. Our findings, collected from Chilean wineries, provide evidence suggesting that even in cases when institutional pressures promote (or require) environmental sustainability processes, there is a predilection among family firms to go beyond regulatory compliance and develop more proactive strategies. Additionally, we discuss how these activities may result in greater long-term competitiveness of family firms as well as short-term economic turmoil. Generally, our findings are aligned with extant findings regarding environmental strategies of family business. However, in presenting a more nuanced and detailed look as specific familial motivations and behaviors we contribute to this literature by recognizing the need of a developing more intricate models in this domain that reflect, and measure, not only the distinct motivations of family firms but their distinct operational and application modes which may serve as additional sources of distinct outcomes between family and non-family firms as well as the heterogeneity of family firms. Finally, we hope that this case study provides further evidence of the convergence between family business and sustainability research and provides the groundwork for future research studying shared phenomena therein.

Limitations and Future Research

As is the case for all grounded inductive exploratory research, the evidence presented in our case study cannot be statistically generalized (Yin 2003). However, this does not hinder our findings which present ample opportunity for developing quantitative research designs in future studies. Particularly, our findings suggest the need to expand extant research models that have hitherto emphasized distinguishing strategies of differentiation the motivations of family and non-family firms, rarely considering how the same logical schema which may fundamentally alter the strategic motivations of the firm may also impact their methods of process implementation, with equally variable outcomes. While the contextual specificity of our case study provides little in terms of quantitative foundations that can be broadly applied in in other research contexts, the reliability of our findings across multiple organizational cases presents compelling evidence to support our claims and provide strong support for the need of future empirical studies. Additionally, and more generally, we hope that this study provides additional support to on-going efforts studying the overlap of sustainability and family business research which, as the domain continues to develop, may provide more specific opportunities to use the findings of our research to synergistically develop these fields.

APPENDIX 1 SUSTAINABILITY STRATEGY AND EVIDENCE FROM THE CASE STUDIES

Company	Family	Inputs	Primary Code	Outputs	Primary Code
1	Yes	The company has made a great number of innovations in the process of maintaining and harvesting the vineyard. It is one of the first vineyards to implement biodynamic practices. “Our Father began, with great effort, the first and pioneering efforts in the industry in Chile. We have grown at annual rates of 30% but without neglecting our employees or our suppliers, especially from the local community, who have faithfully worked for over 20 years in our vineyard. Our exports are mainly to the countries of the European Community, which is a very demanding market. We began certifying the three standards ISO 9001, ISO 14001 and OHSAS 18001 and ISO 26000 Corporate Social Responsibility this year. We also planned the Certification of Origin” (interview with the CEO).	Linking with local communities	The company designed a waste recycling system. It is certified on all ISO standards and other related international standards. “When my father asked me to work in the company, the growth was already high but my father thought the company needed a next step and he called us. I worked in marketing at a Bank, but in those days I had a very prosperous, urban life and the on the farm there seemed nothing to do. I told my father, “Dad, I have a good job, you are on a farm, and to me that does not make sense now”. However, two years later, the topic was reversed and I asked my Dad, “What about this offer”? “It has always been available”, said my father, and then we made a deal and I started working in the vineyard. I knew nothing about wine, but soon learned and understood what to do; We knew that the real customers were around the world, not in Chile. In the next eight years the company grew 5 fold” (interview with the Marketing Manager).	Working together

Company	Family	Inputs	Primary Code	Outputs	Primary Code
2	Yes	The company is discontinuing its use of fertilizers and pesticides in all stages of vineyard maintenance. It has also begun a water-rationing program. One part of the vineyard~~s~~ has started producing organic wines. “Our balance is extremely positive regarding the transformation to organic wines in two aspects: environmental care and quality. In addition, this commitment has enabled us to show our *terroirs* in the purest possible way. When we harvested the first grapes of organic production in 2011 in our vineyard in the Maipo Valley, this started a trend in this area of Chile, and my Family are proud of it” (interview with the CEO).	Source of competitive advantage	Although they have few initiatives, the focus is on improving environmental performance. They have a project to transform their vineyards to organic. “Although I am not a member of the family, from the beginning they have had a strong commitment to produce the best possible wines. Building a vineyard and a brand as recognized as this one requires ~~a~~ long-term vision to see the potential and patience to get there. Nothing happens overnight in the wine business. Despite funding problems, we are making serious efforts to improve our process” (interview with the COO).	Concerns about environmental impacts

Company	Family	Inputs	PC	Outputs	PC
3	Yes	This company has led a number of environmental protection initiatives including air, soil and water treatment. It has a preference in hiring workers who are from the local community. They have implemented a *Fair Trade* process. “We are a small vineyard that produces very high quality wine. My family name is on the label. Our motivation is to make the best possible product; we need not only *the best grapes*, but also to have a good relationship with the community. We are leading a Fair Trade project. This began after the earthquake of 2010 when we saw how the country was experiencing such a complicated period. We, as a family company, decided it was a great opportunity to try to help people and develop a project of building houses supported by customers and partners, it was great! From this initiative we thought about finding new ways to be closer to the people, not only in difficult times” (interview with the CEO).	Engage in altruistic activities	During the production process, a lean production system is handled. Workers are constantly trained in work systems. They have implemented a full set of EMS. The Quality Manager also serves as the Manager of Sustainability. “Our system is based on four points: one is the price you pay for when we buy grapes from other producers. The idea is that the farmer is a benefit that allows you to develop. This may seem so obvious that sometimes it is not given. There are years when the farmer fails to cover their costs. Another important point is that a percentage of the cost of the raw material (grapes), replaces the workers who have been in the vineyard and they decide how to invest it to support the community. Sometimes they need bikes or to fix/build a school. Last year more than 10 projects were implemented. In addition, the Fair Trade has criteria of non-discrimination against women, political criteria, for example. All people have freedom of association” (interview with the CEO).	High perception of ethical obligations

Company	Family	Inputs	PC	Outputs	PC
4	Yes	One of the highlights of this company has been a program to reduce water consumption, planting vines that support more drought and implementing modern irrigation, which is available in 87% of the vineyards. This has made it possible to reduce the water consumed by 30% per hectare achieving greater efficiency. “The cycle starts in our vineyards, with the growing equipment, in the soil~~s~~. In this area, we have set up measurement processes that allow us to maintain efficient control and know the weather conditions that affect them, to make informed decisions and thus have a water management program. We have also drastically reduced the use of synthetic fertilizers and herbicides. We have also included thousands of kilos of compost to our vineyards, obtained from the remnants of the grape~~s~~ fermentation process. My kids were very young when I started this business. Today, they are teenagers and have seen the positive evolution of the Vineyard" (interview with the CEO).	Voluntary implementation of initiatives to improve environmental	They have a reduction program in glass bottles. In fermentation processes, they have implemented a system of maintaining the temperature of the winery by a natural heating system saving thousands of kW of energy per year. The vineyard generates 15% of its own energy through wind power. “Energy efficiency and emission reduction greenhouse gases has been a priority. We use geothermal energy and wind plus a special isolation system to maintain the temperature throughout the year of our cellar and our wine barrels. This has meant reducing by 80% the use of energy in this part of this process. We have also developed bottles 20% lighter, which has allowed us to reduce the consumption of glass by over 1,000 tons. We have replaced the plastic labels with paper labels, which are more environmentally friendly. All measures we know today are not necessarily reflected in higher consumer prices, but we are committed to the long term of our business, we may not see the results in 10 years. (Interview with the CEO).	Concerns about environmental impacts and the state of the Environment

Company	Family	Inputs	PC	Outputs	PC
5	Yes	In this Company, the environment protection systems are scarce despite efforts to remain competitive, the company bet on the low-cost market. “When we took over, we understood that this business was long term and we have a "whole arm" who are members of the family, but it is not going to misunderstand, a lot more people work here besides our family and they are as good as some of us who are family members. This is a company that has a structure of top-level human resources, which have quality controls, business managers and among them are family members, but they are the fewest. You do not think that is an address based on the family.” (interview with the Commercial Manager).	Keeping the business in the family	Overall, the company meets the legal standard and makes an effort to implement some other standards. “The company founded by my father, went through a very difficult economic time and were on the brink of financial bankruptcy. However, our niche is to maximize the volume per hectare and sell in bulk. During the 80s, the reduction of the wine prices responded to internal problems of the sector itself as a sales strategy followed by other competing countries, especially the new producers. In the case of the bulk sales, we want to move towards a higher value-added bottled packaging.” (interview with the Commercial Manager).	Compliance with regulations

Company	Family	Inputs	PC	Outputs	PC
6	Yes	This company has become ~~a~~ 100% biodynamic, which involves the removal of fertilizers and pesticides in the phases of growth and harvest. “We follow the example of Alan York, one of the fathers of modern bio dynamism. Our focus has been to work the soil so that it can deliver all that it is able to offer. For example, compost systems, key natural fertilizer in agriculture and biodynamic viticulture. We are also using fertilizers prepared from salts. I see a future working with family, my children are still small, but working with a child is something that I think every parent longs for. My older son finished school this year and wants to study engineering, but before he starts working here, I think it is great that he develops on his own. In the wine industry, working with the family is a very positive thing in the sense that the energy that people spend in this business is huge and if you look at the vines that have been the most successful in the world they are family businesses, they are not vines belonging to a holding” (interview with the CEO).	Commitment to maintain the prestige	Biodynamic systems are also present in the stages of production and distribution of wine. No artificial components are added to wine and barrels are all made of wood, they do not use stainless steel. “We have continued to maintain ~~a~~ high quality wine in our cellars, winemaking is done only with native yeasts. Regarding work in the cellar, this should be a mirror of what is happening in the vineyard. Fermenting grapes bio dynamically from native yeast in the same fruit, and not using commercial yeasts. We have never added nitrogen compounds to nourish the yeast. It makes no sense for us to work so much in the vineyard, if this effort will later be weakened in the cellar with the application of chemicals. Fermentation~~s~~ takes slightly longer, but it will occur at lower temperatures and, therefore, it will produce much less extractive and friendlier tannins” (interview with the CEO).	Focus on customers and market niches.

Company	Family	Inputs	PC	Outputs	PC
7	Yes	This company has a line of organic wines, which started being produced in 2010. The change from traditional the culture has been slow and costly. Along with these efforts, they are implementing an EMS. “The wine produced in Chile, in general, has a lot of wood flavor and smell, it is too artificial. We want that when someone drinks a glass of our wine he/she enjoy the sense of origin, the grape rather than wood. A natural wine. Our wines have less alcohol and less wood, they are much friendlier and much better for pairing, the organic process has made us to return to the origin of how wines were produced 100 years ago" (interview with the CEO).	Reactive behavior to new opportunities.	This vineyard designed and built a new building certified under LEEDS standards. Other improvements, include rationalized processes of temperature maintenance, lowering power consumption. "We had seen these kinds of green buildings in Australia and Oregon that have climates similar to Chile so when we decided to move part of our wineries and headquarters we did not hesitate to embark on a project of this type. In earlier times, some ideas were taken into account to save energy or reduce the environmental impact during the construction process and restrict the production of waste. These were some of the points that count towards creating a building certified as sustainable. We are very proud of that" (interview with the CEO).	Voluntary implementation of initiatives to improve environmental performance

Company	Family	Inputs	Outputs
8	No	It is one of the first vineyards in Chile to design a program for measuring the carbon footprint. They also removed all the air conditioners that use refrigerants that damage the ozone layer. In general, this vineyard has a sophisticated system of environmental care. Its wine is 70% organic. "Most of the shareholders of this vineyard are of European origin. That is why the board of directors decided, ten years ago, to implement the measurement of carbon footprint and that was the beginning of a program which is underway. In fact, some European countries have begun to request limited carbon footprint imported products, and some major chain stores in Germany, Sweden, and the United Kingdom, require that products such as wine have information about CO2 emissions on their labels." (Interview with the CEO).	From the point of view of the outputs, this vine meets all environmental and regulatory requirements and is certified ISO 9001, ISO 14001 and OHSAS 18001. The Company continuously monitors the production process, so that the products delivered meet the requirements. Complying with the Law is a major concern. Another focus of the company is aimed at establishing a TQM and continuous improvement culture" (interview with the Quality Manager).
9	No	The company produces 100% of bulk wine and grapes to other wineries. They have no environmental care nor social assistance initiatives. This company was bought from a family business in the area that no longer wanted to continue operating. The General Manager is a member of the family who was the owner. The Family maintains 10% of the ownership. interview with the Sales Manager).	The company complies with the minimum environmental regulations. They recycle waste, re-incorporating it into the ground. "Our product is competitive by cost. In fact, most of our processes are outsourced. The current owners have other larger vineyards and we are part of the process of vertical integration" (interview with the General Manager).
10	No	This vineyard has a traditional farming system of the 1970s; they have not operated any environmental protection or social initiative systems. "Producing and selling wine is not the same as selling whiskey or rum, it is evident that there is something *noble* in wine and therefore the business strategy is different. However, make no mistake; wine is still an industrial product with ~~a~~ strong aristocratic pride. It is difficult for us to compete after just 27 years, an insignificant amount of time compared to the vineyards of the old world" (interview with General Manager).	This company has a recycling system for process waste and ISO 14001 certifications. (interview with General Manager).
11	No	This company grows crops through traditional vineyard cultivation, since they are in a complex and very humid geographical area; they use many herbicides to control weeds. Workers have appropriate protection. They meet ~~at~~ the level of sanitary regulations by law. "Since you have to wait a year to see the fruits of this work, one of the problems we have here are the winter frosts. We have about 15 per year at least. We use low-impact herbicides to achieve a better result. A long time ago, we produced smoke to lessen the impact of frost. One year ago, we lost much of the production and it was a very bad year" (interview to the Quality Manager).	They have a plan to improve production systems and to reduce electricity consumption with new cooling systems. They implemented a new training program for their workers to improve the safety standards. (interview to the Quality Manager).
12	No	Two years ago, they started a new system for measuring carbon footprint and they have many other plans to improve the harvesting and production systems. They have made efforts to reduce the use of pesticides and herbicides and only use them for serious emergencies when the weather is severe. "The strongest markets for us are now Brazil and Chile, because they are not very demanding, compared with Europe, especially Holland and England. Our main goal is to transform into a more prestigious vineyard in terms of sales. Another emerging country is Ukraine, they are not big volume buyers, but you can sell to them at a good price" (interview with the COO).	One of the milestones was the opening of a green sustainable building. They reuse the wastewater for irrigation and reduced energy consumption. "The Board of Directors wanted to see a project for our wine tour that was different from other vineyards. This led to the design and construction of this building to keep people warm and cold wherever they are, including insulating glass and a roof design in order to reduce the effect of heat. In fact during construction, a high percentage of local and recycled materials were bought, along with an extensive program separating construction waste to maximize recycling and reduce landfill" (interview with the COO).

Source: Own elaboration.

References

Aragón-Correa, Juan Alberto. 1998. "Strategic proactivity and firm approach to the natural environment." *Academy of management Journal* 41(5): 556-567.

Arnold, Frank S. 1994. *Economic analysis of environmental policy and regulation*. New York: John Wiley and Sons.

Aronoff, Craig. 2004. "Self-Perpetuation Family Organization Built on Values: Necessary Condition for Long-Term Family Business Survival." *Family Business Review* 17(1): 55-59.

Basso, Franco, Guillermo Ibarra, Raul Pezoa, and MauricioVaras. 2023. "Horizontal collaboration in the wine supply chain planning: A Chilean case study." Journal of the *Operational Research Society*. https://doi.org/10.1080/01605682.2023.2174457.

Bell, Martin, and Elisa Giuliani. 2007. "Catching up in the global wine industry: innovation systems, cluster knowledge networks and firm-level capabilities in Italy and Chile." *International Journal of Technology and Globalisation* 3(2-3). 197-223.

Berrone, Pascual, Cristina Cruz, Luis R. Gomez-Mejia, and Martín Larraza-Kintana. 2010. "Socioemotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less?" *Administrative Science Quarterly* 55:82–113.

Bingham, John B., W. Gibb Dyer Jr, Isaac Smith, and Gregory L. Adams. 2011. "A stakeholder identity orientation approach to corporate social performance in family firms." *Journal of Business Ethics* 99(4): 565-585.

Cennamo, Carmelo, Pascual Berrone, Cristina Cruz, and Luis R. Gomez-Mejia. 2012. "Socioemotional Wealth and Proactive Stakeholder Engagement: Why Family-Controlled Firms Care More About Their Stakeholders." *Entrepreneurship Theory and Practice* 36(6): 1153-1173.

Chrisman, James J., and Pankaj C. Patel. 2012. "Variations in R&D investments of family and nonfamily firms: Behavioral agency and myopic loss aversion perspectives." *Academy of Management Journal* 55(4): 976-997.

Chrisman, James J., Jess H. Chua, Allison W. Pearson, Timm Barnett. 2012. "Family involvement, family influence, and family-centered non-economic goals in small firms." *Entrepreneurship Theory and Practice* 36(2): 267-293.

Coelho, Alfredo, and Etienne Montaigne. 2019. "The Chilean wine cluster." In *The Palgrave Handbook of Wine Industry Economics*, edited by Adeline Alonso Ugaglia, Jean-Marie Cardebat, and Alessandro Corsi, 487-506. Cham: Palgrave Macmillan.

Cruz, Cristina, Martin Larraza-Kintana, Lucía Garcés-Galdeano, and Pascual Berrone. 2014. "Are Family Firms Really More Socially Responsible?" *Entrepreneurship Theory and Practice* 38(6): 1295-1316.

De Massis, Alfredo, and Josip Kotlar. 2014. "The case study method in family business research: Guidelines for qualitative scholarship." *Journal of Family Business Strategy* 5(1): 15-29.

Deephouse, David L., and Peter Jaskiewicz. 2013. "Do Family Firms Have Better Reputations Than Non-Family Firms? An Integration of Socioemotional Wealth and Social Identity Theories." *Journal of Management Studies* 50(3): 337-360.

Delmas, Magali, and Michael W. Toffel. 2004. "Stakeholders and Environmental Management Practices: An Institutional Framework." *Business Strategy and the Environment* 13(4): 209-222.

Dodds, Rachel, Sonya Graci, Soyoung Ko, and Lindsay Walker. 2013. "What drives environmental sustainability in the New Zealand Wine Industry? An examination of driving factors and practices." *International Journal of Wine Business Research* 25(3): 164-184.

Dyer Jr., W. Gibb, and David A. Whetten. 2006. "Family firms and social responsibility: Preliminary evidence from the S&P 500."

Entrepreneurship Theory and Practice 30(6): 785-802.

Egan, David Egan, and Alison Bell. 2002. "Chilean wines: a successful image." *International Journal of Wine Marketing* 14(2): 33-42.

Eisenhardt, Kathleen M., and Melissa E. Graebner. 2007. "Theory building from cases: opportunities and challenges." *Academy of Management Journal* 50(1): 25-32.

Elkington, John. 1997. *Cannibals with forks. The triple bottom line of 21st century*. Oxford: Capstone Publishing Limited.

Elkington, John. 1998. "Partnerships from cannibals with forks: The triple bottom line of 21st-century business." *Environmental Quality Management* 8(1): 37-51.

Ensley, Michael. 2006. "Family Businesses Can Out-Compete: As Long as They Are Willing to Question the Chosen Path." *Entrepreneurship Theory and Practice* 30(6): 747-754.

Felzensztein, Christian. 2014. "The Chilean wine industry: new international strategies for 2020." *Emerald Emerging Markets Case Studies* 4(2): 1-12.

Flint, Daniel J., and Susan L. Golicic. 2009. "Searching for competitive advantage through sustainability: A qualitative study in the New Zealand wine industry." *International Journal of Physical Distribution & Logistics Management* 39(10): 841-860.

Frank, Hermann, Alexander Kessler, and Christian Korunka. 2012. "The impact of market orientation on family firm performance." *International Journal of Entrepreneurship and Small Business* 16(4): 372-385.

Friedman, Milton. 1970. "A theoretical framework for monetary analysis." *The Journal of Political Economy* 78(2): 193-238.

Froio, Patrícia Jacomini, and Barbara Stolte Bezerra. 2021. "Environmental sustainability initiatives adopted by logistics service providers in a developing country–an overview in the Brazilian context." *Journal of Cleaner Production* 304: 126989.

Gallo, Miguel Ángel. 2004. "The family business and its social responsibilities." *Family Business Review* 17(2): 135-149.

Gamble, Paul R., and Jean-Claude Taddei. 2007. "Restructuring the French Wine Industry: The Case of the Loire." *Journal of Wine Research* 18(3): 125-145.

Garmendia, José Antonio. 1990. *Desarrollo de la Organización y Cultura de la Empresa*. Madrid: Escuela Superior de Gestión Comercial y Marketing, ESIC.

Geraci, Victor W. 2000. "The family wine-farm: vintibusiness style." *Agricultural History* 74(2): 419-432.

Gibbs, Graham R. 2002. *Qualitative data analysis: Explorations with NVivo*. Buckingham: Open University Press (Understanding social research).

Gioia, Dennis A., Kevin G. Corley, and Aimee L. Hamilton. 2013. "Seeking qualitative rigor in inductive research notes on the Gioia methodology." *Organizational Research Methods* 16(1): 15-31.

Golicic, Susan L., Daniel J. Flint, and Paola Signori. 2016. "The triple bottom line in the global wine industry." In *9th Academy of Wine Business Research Conference. Wine Business Research that Matters. Conference Proceedings*, edited by Johan Bruwer, Larry Lockshin, Armando Corsi, Justin Cohen, and Martin Hirche, 427-436.

Gomez-Mejia, Luis R., Cristina Cruz, Pascual Berrone, and Julio De Castro, J. 2011. "The bind that ties: Socioemotional wealth preservation in family firms." *The Academy of Management Annals* 5(1): 653-707.

Gómez-Mejía, Luis R., Katalin Takács Haynes, Manuel Núñez-Nickel, Kathryn J.L: Jacobson, and José Moyano-Fuentes. 2007. "Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills." *Administrative Science Quarterly* 52(1): 106-137.

González-Benito, Javier, and Óscar González-Benito. 2005. "Environmental proactivity and business performance: an empirical analysis." *Omega* 33(1): 1-15.

Goodland, Robert. 1995. "The concept of environmental sustainability." *Annual Review of Ecology and Systematics* 26(1): 1-24.

Gwynne, Robert N. 2006. "Governance and the wine commodity chain: upstream and downstream strategies in New Zealand and Chilean wine firms." *Asia Pacific Viewpoint* 47(3): 381-395.

Hall, Annika, Leif Melin, and Mattias Nordqvist. 2001. "Entrepreneurship as radical change in the family business: Exploring the role of cultural patterns." *Family Business Review* 14(3): 193-208.

Herman, Agatha. 2014. "Are we there yet? Exploring empowerment at the microscale in the South African wine industry." *Environment and Planning A: Economy and Space* 46(8): 1927-1945.

Hiller, Janine S. 2013. "The Benefit Corporation and Corporate Social Responsibility." *Journal of Business Ethics* 118: 287-301.

Hoffman, James, Mark Hoelscher, and Ritch Sorenson. 2006. Achieving Sustained Competitive Advantage: A Family Capital Theory." *Family Business Review* 19(2): 135-145.

James, Harvey S. 1999. "Owner as Manager, Extended Horizons and the Family Firm." *International Journal of the Economics of Business* 6(1): 41–55.

Kariyapperuma, Nishanthi, and Eva Collins. 2021. "Family logics and environmental sustainability: A study of the New Zealand wine industry." *Business Strategy and the Environment* 30(8): 3626-3650.

Keating, Brian A., Peter S. Carberry, Prem S. Bindraban, Senthold Asseng, Holger Meinke, and John Dixon. 2010. "Eco-efficient agriculture: Concepts, challenges, and opportunities." *Crop Science* 50(S1): 109-119.

Le Breton-Miller, Isabelle, and Danny Miller. (2006). Why Do Some Family Businesses Out-Compete? Governance, Long-Term Orientations, and Sustainable Capability. *Entrepreneurship Theory and Practice*, 30(6), 731-746.

Margolis, Joshua D., and James P. Walsh. 2003. "Misery Loves Companies: Rethinking Social Initiatives by Business." *Administrative Science Quarterly* 48(2):268–305.

Mariani, Angela, Eugenio Pomarici, and Vasco Boatto. 2012. "The international wine trade: Recent trends and critical issues." *Wine Economics and Policy* 1(1), 24-40.

Marshall, R. Scott, Mark Cordano, and Murray Silverman. 2005. "Exploring individual and institutional drivers of proactive environmentalism in the US wine industry." *Business Strategy and the Environment* 14(2): 92-109.

Miles, Morgan P., and Jeffrey G. Covin. 2000. "Environmental Marketing: A Source of Reputational, Competitive, and Financial Advantage." *Journal of Business Ethics* 23(3):299-311.

Miller, Danny, and Isabelle Le Breton-Miller. 2014. "Deconstructing socioemotional wealth." *Entrepreneurship Theory and Practice* 38(4): 713-720.

Miroshnychenko, Ivan, Alfredo De Massis, Roberto Barontini, and Francesco Testa. 2022. "Family firms and environmental performance: A meta-analytic review." *Family Business Review* 35(1): 68-90.

Mora, G. Marcos. 2019. "The Chilean wine industry." In *The Palgrave Handbook of Wine Industry Economics*, edited by Adeline Alonso Ugaglia, Jean-Marie Cardebat, and Alessandro Corsi, 177-200. Cham: Palgrave Macmillan.

Muller, Claudio G., Fernanda Canale, and Allan Discua Cruz. 2022. "Green innovation in the Latin American agri-food industry: understanding the influence of family involvement and business practices." *British Food Journal* 124(7). 2209-2238.

Negro, Giacomo, Michael T. Hannan, and Hayagreeva Rao. 2011. "Category reinterpretation and defection: Modernism and tradition in Italian winemaking." *Organization Science* 22(6): 1449-1463.

Orsato, Renato J. 2009. "When Does it Pay to be Green?" In *Sustainability Strategies. INSEAD Business Press Series*, by Renato J. Orsato, 3-22. London: Palgrave Mcmillan, Hampshire. 3-22.

Randolph, Robert V., Benjamin N. Alexander, Bart J. Debicki, and Robert Zajkowski. 2019. "Untangling non-economic objectives in family & non-family SMEs: A goal systems approach." *Journal of Business Research* 98: 317-327.

Rosen, Christine Meisner. 2001. "Environmental strategy and competitive advantage: an introduction." *California Management Review* 43(3): 8.

Salvato, Carlo, and Leif Melin. 2008. "Creating Value Across Generations in Family-Controlled Businesses: The Role Of Family Social Capital." *Family Business Review* 21(3): 259-276.

Sethi, S. Prakash. 1979. "A Conceptual Framework for Environmental Analysis of Social Issues and Evaluation of Business Response Patterns." *Academy of Management Review* 4(1): 63–74.

Sharma, Sanjay, and Audun Ruud. 2003. "On the path to sustainability: integrating social dimensions into research and practice of environmental management." *Business Strategy and the Environment* 12(4): 205–214.

Sharma, Pramodita, and Sharma, Sanjay. 2011. "Drivers of Proactive Environmental Strategy in Family Firms." *Business Ethics Quarterly* 21(2): 309-334.

Silverman, Murray, R. Scott Marshall, and Mark Cordano. 2005. "The greening of the California wine industry: implications for regulators and industry associations." *Journal of Wine Research* 16(2): 151-169.

Stavins, Robert N., Alexander F. Wagner, and Gernot Wagner. 2003. "Interpreting sustainability in economic terms: dynamic efficiency plus intergenerational equity." *Economics Letters* 79(3): 339-343.

Tafel-Viia, Külliki, and Ruth Alas. 2009. "Differences and Conflicts between Owners and top Managers in the Context of Social Responsibility." *Engineering Economics* 64(4): 86-94.

Villafañe Gallego, Justo. 2003. *La buena reputación: claves del valor intangible de las empresas*. Madrid: Ediciones Pirámide.

World Comission on Environment and Development, WCED. 1987. *Our common future. World Commission on Environment and Development*. Oxford: Oxford University Press.

Westhead, Paul, Marc Cowling, and Carole Howorth. 2001. "The Development of Family Companies: Management and Ownership Imperatives." *Family Business Review* 14(4): 369–385.

Wilkins, Alan L., and William G. Ouchi. 1983. "Efficient Cultures: Exploring the Relationship between Culture and Organizational Performance." *Administrative Science Quarterly* 28(3): 468-481.

Wine Institute and California Association of Winegrape Growers. 2013. *The Code of Sustainable Winegrowing Workbook*. San Francisco (Third Edition).

Yin, Robert K. 2003. *Case Study Research: Design and Methods*. Thousand Oaks: Sage Publications.

Zellweger, Thomas M., Franz W. Kellermanns, James J. Chrisman, and Jess H. Chua. 2012. "Family control and family firm valuation by family CEOs: The importance of intentions for transgenerational control." *Organization Science* 23(3): 851-868.

Zellweger, Thomas M., Robert S. Nason, Mattias Nordqvist, and Candida G. Brush. 2013. "Why do family firms strive for nonfinancial goals? An organizational identity perspective." *Entrepreneurship Theory and Practice* 37(2): 229-248.

Zellweger, Thomas, and Nadine Kammerlander. 2015. "Family, Wealth, and Governance: an Agency Account." *Entrepreneurship Theory and Practice* 39(6): 1281-1303.