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Motivations and Trade-Offs for Sustainability in Family Forestry and Tourism Firms: A Cross-National Survey

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Abstract: Family firms are the foundation of economies across the world. Yet, little is understood about what motivates sustainability in these firms, particularly in developing economies. In this study, we examine family forestry and tourism firms in Chile and India and use a novel stated-choice method to understand preferences for sustainability and the trade-offs with profit maximization, law and regulation, and family relations (among others). There were heterogeneous preferences across the sample, with respondents favoring financial outcomes and viewing regulation negatively. Respondents preferred positive environmental impacts, and this was significantly favored by tourism firms. Forestry firms were particularly focused on maintaining satisfactory family relationships, where there was stronger family involvement in the firm's management decisions. Indian respondents were more likely to prefer the *expansion* option in the choice study (financial outcomes), while Chileans preferred the *eco-labeling* choice (sustainability), suggesting more supportive sustainability norms in Chile. Chileans were more likely to exceed legal compliance in their choice selection and favored positive environmental impacts more. Overall, tourism firms were larger in terms of revenues and favored the *eco-labeling* choice with positive environmental impacts but with minimal regulations, while forestry favored *expansion*. These differences may be driven by the resources available to tourism firms for supporting sustainability measures and the importance of sustainability to their business models. Policies to support sustainability among family firms must account for their heterogeneity and must provide supports and incentives rather than regulations to facilitate sustainability.

Keywords: family firms; forestry; choice experiment; trade-off

1. Introduction

Family firms are the most common business form in the world [1]. While catalyzing more sustainable business behavior is critical to the sustainable development agenda, the roles of families and family firms are often misunderstood and overlooked in this space [2]. Family businesses are unique from other firms, as the family system and its emotional dynamics 'overlap' with the business system [3]. Stewardship theory provides that family firms are more likely to be sustainable than other firms [4], as they are driven by a mixture of financial and non-financial goals, such as 'familiness' and maintaining positive feelings amongst family members [5], as well as maintaining a positive image and name for the family in the community where the firm is embedded [6]. These non-financial goals may be prioritized above profit maximization. According to literature on family forestry firms, there are two competing strategic orientations that effect sustainability [7]. On the one hand, firms can be innovative, risk-taking, and proactive in pursuing sustainability. On

the other hand, family firms may be financially conservative and focused on security and family control.

In this study, we use a novel stated-choice method to understand how sustainability goals are traded-off against financial outcomes, environmental effects, regulatory compliance, stakeholder satisfaction and family dynamics. Our aim is to build insight into what motivates sustainability in family firms, drawing from a survey of family-owned and -operated firms in Chile and India that are involved in the forest sector and tourism (i.e., restaurants, accommodations, and tour operations) sectors. Both are nature-based sectors where social license to operate is critical, meaning sustainability is more salient [8–10].

Importantly, this study goes beyond the simple tripartite sustainability dimensions of economic, social, and ecological to integrate the effect of family dynamics (including emotions) into sustainability decisions, which the literature suggests is a critical part of strategic decision-making and sustainability in family firms [3,11,12].

2. Sustainability in Family Firms

Understanding why profit-seeking firms engage in sustainable behavior has been an important focus of sustainability literature [13,14], yet there is no consensus around whether sustainability improves a firm's financial performance [15,16]. However, evidence suggests positive relationships between sustainability and financial performance, with a number of mediators [17,18]. Stewardship theory suggests that family firms are more likely to put the interests of the firm above personal interests [4]. Under stewardship perspectives, family owners identify their firm's success with their family names [19] and are more likely to value socioemotional wealth (SEW) over strictly financial gains. SEW encompasses the non-financial aspects of owning the family firm, such as family closeness and ties [20,21], and evidence shows that family firms are more embedded in their local communities, with stronger stakeholder relationships than non-family firms, leading to more prosocial behavior (see: Kim et al. [6] and Berrone et al. [5]).

However, in the quest for dynastic succession and family control, there may be a "dark side" to family ownership, as the family seeks to survive and maintain their ownership over the firm at any cost, potentially reducing sustainability (see Kellermanns et al. [22]). As Lamb & Butler [23], (p. 1400) suggested, rather than stewardship theory, "multiple agency theory is in play [in family firms, where] . . . different principals have different goals, and even different agents have different goals, in particular when it comes to CSR [corporate social responsibility] outcomes".

The personal emotional and psychosocial contexts within each firm have been identified as critical to sustainability in family firms [3]. Evidence shows that positive emotional feelings between family members in family firms leads to more sustainable behavior, whereas emotions that are negative may be reflected in mistrust and conflict [24]. Sharma & Sharma [25] documented that internal conflict prevents family firms from giving expression to sustainability goals and directing resources and capabilities to their implementation. It is argued that the unique cultural and emotional dynamics within family firms, and the different goals and interests among family members, lead to the heterogeneity globally in firm sustainability [26].

2.1. Sustainability in the Forest and Tourism Sectors: Focus on Family Firms

Few studies have examined sustainability in family firms involved in tourism or forestry firms, and there are even fewer cross-cultural studies [27,28].

2.1.1. Forestry

Family firms are an important part of forest industries around the globe [29]. While sustainable development has three components, much of the literature examining sustainability among family forestry firms has focused on the economic dimension [30]. Of the few sustainability studies of family forestry firms, Lähtinen et al. [31] found that forest landowners and sawmill firms in Finland (many of these family-owned) understood the

importance of environmental and social issues to their 'social license to operate'. However, there was more emphasis placed on social issues among the firms studied; in particular, the firms prioritized the health and wellbeing of their workers and delivering livelihoods for local communities. The authors attributed this tendency towards social issues to the welfare state framework in Finland, which reflects cultural norms and values.

Li et al. [32] found that sustainability among Finnish and Chinese small-to-medium forest firms (many of these family-owned) was often viewed as vague and difficult to implement. They documented that often family firms simply do not have the resources or the capabilities to implement sustainability measures, and the effect of achieving these on financial outcomes was not well-understood. However, family forestry firms were concerned with the wellbeing of customers, employees, and local forest owners (typically families also). They also argued that sustainability is shaped by culture, with different ethics and values that shape expectations of firms and their sustainability practices. Further, research in the United States showed that family forestry firms took an intergenerational perspective to their business [33] and integrated non-financial goals such as SEW [34], but how these interacted with other demands was not well-understood.

Li & Toppinen [35] found that forestry companies are primarily reactive when it comes to adopting sustainability measures (rather than proactive), responding to external pressures for adoption of voluntary sustainability measures, such as from certification bodies, NGOs, and regulators, the former for which Li & Toppinen argue have been the most transformative in advancing sustainability (beyond legal and regulatory compliance). In this sense, other factors such as social networks and information can play a relevant role in decision-making process related to forest management [36].

2.1.2. Tourism

Tourism across the world is composed primarily of family and single-owner firms, with evidence suggesting that personal values motivate sustainability behavior, despite the financial constraints [37,38]. Family tourism firms were defined by the owner's lifestyle goals, connection to community, and family involvement [39,40], and maintaining environmental integrity is important to their competitiveness [41]. In a literature review on family tourism firms across Latin America, López-Chávez et al. [42] argued that most of the literature ignores the effect of family dynamics on firm decision and behavior. However, more studies are analyzing the effect of 'familiness' as a resource for firm performance. López-Chávez and colleagues documented that succession planning was equally important in Latin America as it was in Europe and North American family tourism firms, and families build values to support an intergenerational perspective, which is an important resource.

The interaction of economic, social, and ecological goals, and how these goals drive sustainability, was explored by Kallmuenzer et al. [7], who provided evidence on the trade-offs for sustainability in rural family tourism firms in Austria using a stated-choice method. They found that family tourism firms generated more utility from ecological and social outcomes than profit maximization, which they theorized was because of the importance of maintaining SEW and corporate citizenship. However, they highlighted that family firms were reluctant to make decisions that increased regulation and employment numbers, which would generate costs to the firm and threaten their survival.

2.2. General Perspective

Cennamo et al. [20] posited that in comparison to non-family firms, family firms are more sensitized to stricter government regulations (because of the costs) and are more aware of stakeholder demands, and these factors are calculated in their trade-offs in making strategic decisions, like pursuing sustainability. There has been a lack of empirical evidence into how decision makers in family firms balance stakeholder, environmental and government regulation [43]. This information may support broader understanding for motivating more sustainability in family firms. Further, how these compliance, stakeholder,

and financial dimensions are ranked and compared to the emotional and psychosocial dimensions in family firms remains unclear [3].

To date, there have been no studies examining and comparing the sustainability preferences of forestry and tourism firms or studies testing the effect of family dynamics on these preferences—especially in less-developed countries.

3. Methods

3.1. Study Areas

The study areas were chosen because of the importance of tourism and forestry to their economies. In Chile, surveys were performed in the Los Rios and Los Lagos regions, located between 39°15′ and 44°03′ south latitude, and are two of the sixteen administrative regions of the country. These regions cover 67,000 km^2 and are divided into three physiographic units: the Coastal Range, the Central Valley, and the Andes Range. This area has a temperate oceanic climate (Cfb) with an annual average rainfall of 2100 mm and a mean temperature of 12.9 °C [44,45]. Forests cover about 54% of the territory [46]. The main economic activities are forestry, agriculture, livestock and dairy production, aquaculture (salmon farming), and tourism. Almost three-quarters (71%) of the region's 1.2 million people live in urban areas, in cities such as Valdivia and Puerto Montt.

In India, surveys were performed in the state of Kerala, which is located between 8°18′ and 12°48′ northern latitudes, on the west coast of India. Kerala covers about 39,000 km^2 and can be divided into three physiographic units: coastal plains, central midlands, and highlands on the east. This area has a humid tropical rainforest climate with some cyclonic activity, although this varies from the coast to the cool mountains in the east. Rainfalls average 2817 mm per year [47], and forests cover about 27% of the state [48]. The main economic activities are tourism and services, industry (shipbuilding, mining, and oil), and agriculture (including agro-forestry and forestry). About half (48%) of the state's 34.6 million people live in urban areas. Trivandrum is the capital with some 2 million inhabitants.

3.2. Choice Survey and Experiment

Surveys were conducted between November 2018 and June 2019 in Chile, and November 2019 and January 2020 in India. The instrument was prepared in English (for India, where in Kerala, English is commonly spoken) and translated into Spanish and back to English to check whether the original scales were preserved (for Chile).

The survey included two main categories of questions: general socio-economic classification and attitudinal questions, and choice questions to understand trade-off and preferences for sustainability (drawn from Kallmuenzer et al. [7]). Participants were randomly selected from chamber of commerce lists of family firms in the tourism or forestry sectors. Respondents were approached through an invitation letter and email to the owner. Surveys typically took 30 min to complete. The final sample sizes were 117 family firm representatives from Chile, with a response rate of 44%, and 126 from India, with a response rate of 52%. The total number of complete surveys used in the analysis was *n* = 243.

3.3. Choice Experiment

While family business literature typically uses structural equation modeling to understand sustainability decisions, a choice modeling approach provides richer details on the trade-offs and dynamics in making sustainability decisions (or not) in the family firm context [7]. In these studies, respondents are asked a series of questions, where a unique set of alternatives, or a scenario, is presented each time. Random utility theory (RUT) suggests that people obtain utility from the specific attributes that make up a scenario and choose the option that provides the highest utility to them [49–51]. The results can provide information on the importance or weight attached to each attribute (here, sustainability motivations), and how sustainability interacts with other factors.

A good or service *i* will be chosen over the good/service *j* where $U_{iq} > U_{jq}(i \neq j \in A)$ ($i \neq j$), *A* being a set of alternatives [52]. According to this theory, the utility delivered

by a good consists in a deterministic part (V) by an individual's characteristics (s), the attributes of the good (x), and other stochastic attributes (e) with unobservable components. Therefore, the utility function of the individual q with respect to the good i can be represented as: $U_{iq} = V(x_i, s_q) + e_{iq}$, where V is the observed utility function. Expanding the expression, the good i will be chosen over the good j where the difference between the deterministic parts is higher than the stochastic section, as can be appreciated in the following relation:

$$P\left[(U_{iq}, U_{jq}) \forall j \neq i\right] = P\left[(V_{iq} - V_{jq}) > (e_{jq} - e_{iq})\right] \tag{1}$$

Multiple attributes analysis was used to obtain values and the weight of each component through respondents' answers [53]. In developing the utility functions, we assumed that individual i's utility from choosing strategy j in choice situation t was derived from a (K × 1) vector of attributes for various environmental and social strategies, x_{ijt}, after accounting for personal characteristics:

$$U_{ijt} = x_{ijt}\beta_i + \varepsilon_{ijt}, \tag{2}$$

where β_i are individual-specific parameters and the error term ε_{ijt} is following a Type 1 extreme value distribution function with a variance given by $\mu_i^2\left(\dfrac{\pi^2}{6}\right)$; μ_i is an individual-specific scale parameter. The coefficients of the choice model were estimated by applying the maximum simulated likelihood (MSL) estimator within the NLOGIT software. To account for individual heterogeneity, we also estimated a random parameters model (RPL) with a normal distribution for parameters.

An alternative specific labeled design was constructed for 12 scenarios. This efficient experimental design was generated using the Dp-optimal criterion, with prior values collected from the existing literature (sign and magnitude) and validated with experts and compared to results from a small pilot, per the recommendations outlined in Hensher et al. [51] and Bliemer et al. [54]. The optimization applied a genetic algorithm solver (Evolver, Palisade Decision Tools), and the minimum value of the Dp-error was 1.83×10^{-7}.

The 12 choice combinations were randomly divided into two blocks and each respondent was asked a set of six choice questions, providing their most preferred option. The order of appearance of the choice questions and the position of the attributes and options were randomized across respondents to control for potential order bias. A scenario description was presented before introducing the choice questions.

In this labeled stated-choice experiment, participants selected between three alternative scenarios: expanding the company (*competitiveness*), obtaining eco-label certification (the *sustainability approach*), and increasing salaries and improving working conditions (*compliance*). Each scenario had different impacts on social and ecological systems and financial outcomes according to the values of the contextual attributes they included: *income*, *stakeholder satisfaction*, *regulatory compliance*, and *social responsibility* (impact on ecosystems and family relations). Respondents could also select '*None*' if no options were preferred [50,51]. Table 1 shows variables and levels used in the experiment, and Figure 1 is an example of the card used to illustrate the choice scenarios.

Table 1. Variables and levels of the experiment.

Employment Opportunities	Economic Outcome	Legal Regulation Compliance	Ecosystem Impacts	Family Relations	Local Community Relations
Loss of employment (two jobs cut)	Low (−1%)	Low	Negative	Conflict	Unsatisfactory
No changes	Medium (1%)	Meet legal regulation	Neutral	No changes	Indifferent
Two jobs created	High (3%)	Exceed compliance	Positive	Satisfactory	Satisfactory

	Option 1 Invest in *expanding* the company *(Competitiveness)*	Option 2 Invest in obtaining *eco-label certification* *(ESS approach)*	Option 3 Increase salaries and *improve working conditions (Compliance)*	None
Employment Opportunities	Two jobs created	Two jobs cut	Two jobs cut	
Financial Outcome (Rate of Return)	High (3%)	High (3%)	Low (-1%)	
Adherence to Legal Regulations	Low	Going above regulations	Meet legal requirements	
Impact on Ecosystem	Positive	Neutral	Neutral	
Family Relations	Happy	No change	Happy	
Satisfaction of Local Community	Unhappy	Happy	Indifferent	
Best				
Worst				

Figure 1. Example Experiment from the Survey Instrument (1 out of 6 shown to each respondent).

A *sustainability approach* typically has a positive social and ecological impact, lower financial outcomes, and higher stakeholder satisfaction. A *compliance* approach has a moderate-to-low negative social and environmental impact and lower financial outcomes. Finally, *competitiveness* has a significant negative social and environmental impact, higher income, and lower stakeholder satisfaction. There are cases where *stakeholder satisfaction* may benefit from *competitiveness* while also benefiting the ecosystem, or where the *compliance* option includes salary increases for employees. Respondent's preferences, if stable, may reflect behavior in practice and may inform public preferences for sustainability outcomes.

4. Results

4.1. Characteristics of the Sample

The sample, comprising 243 family firms working in the forestry or tourism sectors located in Chile and India, is described in Table 2. While this is a relatively small sample size, it offers novel insight into a difficult-to-access population. Of the 125 tourism firms, 61 are from India and 64 in Chile. For the 118 forestry firms, 65 are in India and 53 are in Chile. Surveyed firms had a mean age of 12.2 years (ranging from less than one to 95 years); firms from the tourism sector were typically younger (8.2 years compared to 15.2 years for forestry).

The number of employees varies from 1 to 215 with a mean of 15.8. Mean yearly revenue was $258,776 (USD), and the median was $98,740, varying from $680 to $5,661,079 across the sample. The highly skewed distribution is due to a number of outliers, or companies with larger revenues. Indian firms had higher average annual revenues ($355,955);

however, more than 70% of them reported revenues under $300,000. This high average is due to 11 firms (8.5%) with annual revenues over $1 million USD, which led to a positively skewed variable. In the Chilean sample, the average revenue was $152,613, with only two firms (1.7%) having revenues over $1 million USD. Most respondents were second-generation firms (53%), followed by first-generation (43%) and third-generation (4%). Almost all respondents made the strategic decisions in their firms (89%).

Table 2. Characteristics of the firms in the sample and firms of the tourism and forestry sectors.

Characteristics	Tourism Firms $n = 125$	Forestry Firms $n = 118$	Full Sample $n = 243$
	Mean (SD)		
Country			
Chile	64	53	117
India	61	65	126
Firm			
Age of the firm (years) ***	8.4	15.2	12.2
Mean (Std. dev.)	(8.4)	(13.2)	(11.8)
Permanent employees	13.65	8.37	11.03
(number) ***	(24.33)	(11.37)	(19.12)
Yearly revenue (USD) **	$319,007	$194,317	$258,776
	($671,802)	($415,884)	($561,495)
Family generations	1.71	1.78	1.75
(number) ns	(0.7)	(0.7)	(0.7)
Family participation in	4.33	4.23	4.28
decisions (out of 5) ns	(1.08)	(1.08)	(1.08)
Part of the family (%)	74.6	96.7	85.6
Firm manager			
Male (%)	62.7	80.6	71.6
Age (years) ns	43.55	42.25	42.91
	(10.24)	(12.10)	(11.20)
Experience a manager of	8.22	9.91	9.06
the firm (years) ns	(6.40)	(9.79)	(8.28)

Notes: standard deviations (SD) are in parentheses; ***: significant differences with $p < 0.01$ using *t*-tests; **: significant differences with $p < 0.05$ using *t*-tests; ns: non-significant.

Respondents themselves were on average 43 years old, with the range varying from 26 to 79 years-old (respondents from the tourism sector were on average younger). Only 28% of the firms were managed by women in the sample, and this value is higher for the tourism sector (37%). Mean managerial experience for managers was 9 years, ranging from 1 to 50 years.

While tourism firms were larger in terms of revenues, younger, and with a larger female representation, managers typically had similar ages, experience, and levels of family participation in firm decisions.

4.2. Perspectives on Sustainability

Figure 2 illustrates respondents' answers to statements related to sustainability. Most respondents agreed that less regulation is better, particularly in India and the tourism sector, who were more likely to strongly agree. There were strong levels of agreement to the statement that the only goal for the business is to maximize profits.

Chilean respondents were most likely to agree that their firm had a 'sustainability vision', typically a written statement detailing their commitment to sustainability; the opposite is true among Indian respondents. Tourism firms were slightly more likely to have sustainability visions. Finally, there was general agreement on the statement 'the environment is a priority', with unanimous support in Chile, and higher levels of agreement in the tourism sector.
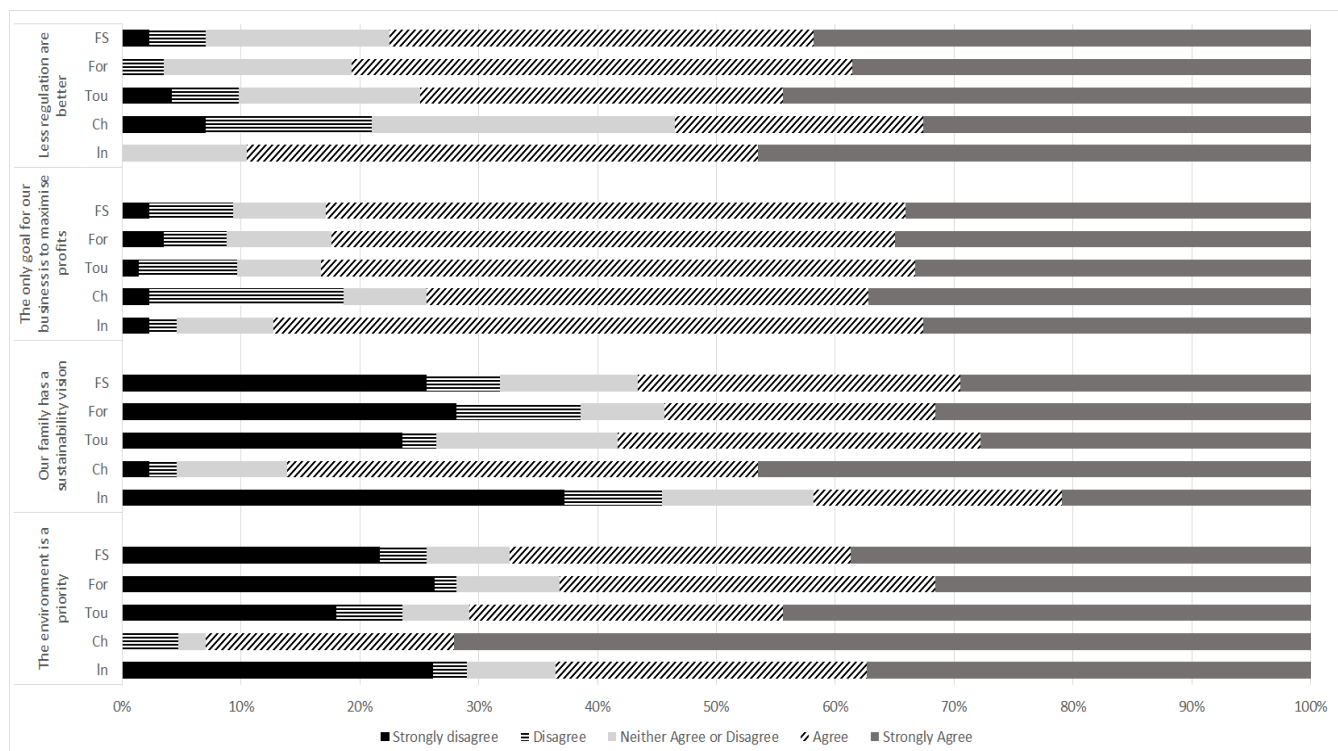
Figure 2. Responses to sustainability statements. Note: FS means full sample (*n* = 243); For = forestry (*n* = 125); Tou = tourism (*n* = 118); Ch = Chile (*n* = 117) and In = India (*n* = 126).

4.3. Fitted Models

Table 3 presents the multinomial logit (MNL) and random parameters model (RPL) results. These confirmed some of our expectations and are consistent with the literature. For economic outcomes, high income/return is preferred, but creating more employment opportunities was not statistically significant. High compliance with regulations was viewed negatively; however, positive impacts for the environment significantly impacted the respondents' choices across sectors.

While satisfactory family relations were preferred over conflicts or tensions, positive community relations did not significantly affect the choices of respondents. Naturally, maintaining neutral relations with the community seems significantly more important than having unsatisfactory relations. Yet, as evidenced by the improvement in the goodness-of-fit of the models, there is substantial heterogeneity in the sample in the way the financial results, ecosystem impacts, and stakeholder relations are valued (Table 3). Further results by country and sector are included in Tables 4 and 5. The results indicate that the expanding solution was preferred by the Indian sample, whereas the eco-label was preferred by Chileans. More significant results were found for the Chilean sample: they chose financial outcomes; they were more likely to exceed legal compliance and favored positive environmental impacts, and they were more likely to choose indifferent community relations (compared to negative relations).

Table 5 shows important differences between forestry and tourism firms, with stronger effects documented among tourism firms. Forestry firms favored expansion and the eco-labeling (sustainability) approaches more than tourism firms. There was a heightened importance on satisfactory family relations among forestry firms, and at minimum having indifferent community relations as compared to unsatisfactory relations—this may be explained by the higher proportion of family managers in the forestry sample (96.7% compared to 74.6% in tourism) and the fact that forestry firms were typically more established. Tourism firms were more likely to select financial outcomes (and they typically reported higher revenues), and they also favored positive impacts on ecosystems, reflecting

the importance of ecological integrity to their business model. Tourism firms preferred a minimal approach when it came to legal regulation and were less likely to choose meeting or exceeding regulations.

Table 3. Models for the full sample.

Variables and Levels	Coefficient	Pr (>|z|)	Coefficient	Pr (>|z|)
Model	MNL		RPL	
Expanding	1.223 **	<0.001	3.030 **	<0.001
Eco-label (ESS)	0.456 **	<0.001	0.481	0.138
Employment opportunities (Number of jobs)	0.040	0.341	0.059	0.333
Financial outcome (% growth)	0.100 **	<0.001	0.214 **	<0.001
Legal regulation compliance (Low compliance)				
Just legal regulation	−0.267 **	0.034	−0.559 **	0.014
Exceed compliance	−0.535 **	0.001	−1.129 **	0.001
Ecosystem impacts (Negative)				
Neutral	0.026	0.823	−0.205	0.359
Positive	0.224 **	0.665	0.450 **	0.024
Family relations (Conflict)				
No changes	−0.262 **	0.020	−0.070	0.726
Satisfactory	0.083	0.517	0.450 **	0.024
Local community relations (Unsatisfactory)				
Indifferent	0.308 **	0.024	0.614	0.010
Satisfactory	−0.048 **	0.733	−0.284	0.191
Std. dev.				
Expanding			3.030 **	<0.001
Eco-label (ESS)			0.481	0.138
Financial outcome			5.935 **	<0.001
Local community relations			2.540 **	<0.001
LL	−1181.18 (12 df)		−729.69 (16 df)	
Chi-sq	53.44 (12 df)		1375.03 (16 df)	
N		1290 observations		
AIC	2386.4		1491.4	
AIC/N	1.85		1.156	

Notes: base categories are in parenthesis. df: degrees freedom. **: $p < 0.01$.

Table 4. RPL Models by country.

Variables and Levels	Coefficient	Pr (>|z|)	Coefficient	Pr (>|z|)
Model	Chile		India	
Expanding	−0.028	0.907	2.094 ***	<0.001
Eco-label (Sustainability)	0.329 **	0.040	0.709 **	<0.001
Employment opportunities (Number of jobs)	0.034	0.573	0.058	0.393
Financial outcome (% growth)	0.206 **	<0.001	0.046	0.191
Legal regulation compliance (Low compliance)				
Just legal regulation	−0.402 **	0.041	−0.347	0.110
Exceed compliance	0.350 *	0.081	−0.420 *	0.091
Ecosystem impacts (Negative)				
Neutral	−0.258	0.249	0.087	0.626
Positive	0.350 **	0.081	0.238	0.241

Table 4. *Cont.*

Variables and Levels	Coefficient	Pr (>|z|)	Coefficient	Pr (>|z|)
Family relations (Conflict)				
No changes	0.117 *	0.089	−0.415 **	0.018
Satisfactory	0.354	0.104	−0.024	0.902
Local community relations (Unsatisfactory)				
Indifferent	0.546 **	0.022	0.046	0.832
Satisfactory	−0.402 *	0.073	0.097	0.653
Std. dev.				
Expanding	1.596 **	<0.001	68.703 **	<0.001
Eco-label (Sustainability)	0.706 **	<0.001	55.452	0.138
Financial outcome	0.004	0.981	0.009 **	<0.001
Local community relations	0.660 **	0.009	0.069 **	<0.001
LL	−500.59 (16 df)		−95.13 (16 df)	
Chi-sq	172.13 (16 df)		1470.84 (16 df)	
N	534 observations		756 observations	
AIC	1033.2		222.3	
AIC/N	1.935		0.294	

Notes: base categories are in parenthesis. df: degrees freedom. *: $p < 0.05$; **: $p < 0.01$; ***: $p < 0.001$.

Table 5. RPL Models by industry.

Variables and Levels	Coefficient	Pr (>|z|)	Coefficient	Pr (>|z|)
Model	Tourism		Forestry	
Expanding	2.812 **	<0.001	3.961 ***	<0.001
Eco-label (Sustainability)	0.159	0.727	0.735 *	0.041
Employment opportunities (Number of jobs)	0.067	0.482	0.099	0.245
Financial outcome (% growth)	0.334 **	<0.001	0.064	0.389
Legal regulation compliance (Low compliance)				
Just legal regulation	−1.125 **	0.034	−0.030	0.928
Exceed compliance	−1.717 **	0.001	−0.578	0.141
Ecosystem impacts (Negative)				
Neutral	−0.092	0.761	−0.245	0.510
Positive	0.762 **	0.009	0.288	0.340
Family relations (Conflict)				
No changes	−0.478 *	0.089	0.304	0.336
Satisfactory	−0.141	0.656	1.246 **	0.001
Local community relations (Unsatisfactory)				
Indifferent	0.268	0.427	1.285 **	0.001
Satisfactory	−0.242	0.423	−0.198	0.560
Std. dev.				
Expanding	4.636 **	<0.001	8.817 **	<0.001
Eco-label (Sustainability)	3.111 **	<0.001	2.132 **	<0.001
Financial outcome	0.047	0.776	0.077	0.620
Local community relations	0.907 **	0.004	0.029	0.957
LL	−406.00 (12 df)		−729.69 (16 df)	
Chi-sq	717.26 (12 df)		695.64 (16 df)	
N	696 observations		594 observations	
AIC	844		641.5	
AIC/N	1.213		1.080	

Notes: base categories are in parenthesis. df: degrees freedom. *: $p < 0.05$; **: $p < 0.01$; ***: $p < 0.001$.

5. Discussion

There are different theories around what motivates sustainability in family firms and the implications of family dynamics on sustainability decisions: stewardship perspectives argue that the 'familiness' dimension encourages more sustainability (see: Hernandez [4]; Berrone et al. [5]), while others argue family dynamics can have a 'dark side', as families seek to maintain control of the firm at any cost [22]. In this study, we use a choice method approach to understand how family firms in forestry and tourism trade off various factors, such as family relations, financial outcomes, sustainability, and community relations (among others). Among the 243 family firms surveyed in Chile and India, we found that most were second-generation firms, followed by first-generation firms. Tourism firms tended to be larger (in terms of revenues), younger, and with higher female representation in management decisions. Forestry companies had the highest representation of family in management decisions.

What we found was that less regulation was viewed as better, particularly among Indian firms and those involved in the forestry sector. There were strong levels of agreement across the board that the only goal for the business was to maximize profits. Chilean respondents expressed unanimous support for the statement that the environment is a priority, with the tourism sector also in strong agreement, which confirms the work of Kallmuenzer et al. [7] on the importance of the environment to close-to-nature businesses and their competitiveness.

Although there was heterogeneity in preferences, generally, respondents favored positive financial outcomes and viewed regulations negatively. However, generating positive impacts for the environment was commonly important to respondents. Maintaining positive family relations was preferred over tensions, and Pieper [3] argued that positive family dynamics create the emotional foundation for pursuing sustainability in firms. Yet, the respondents were relatively (and surprisingly) indifferent to community relations. Nevertheless, they did not want unsatisfactory community relations. This suggests that 'embeddedness' in their local communities is less important to these firms in motivating sustainability, like that previously documented more generally by Kim et al. [6] and Berrone et al. [5].

Across countries, Indian respondents were more likely to prefer the expansion option, while Chileans opted for eco-labeling choices. Cultural differences likely had an effect on the choices of respondents, with the results for the Chilean sample being more significant: they preferred financial outcomes, were more likely to exceed legal compliance, favored positive environmental impacts, and selected indifferent community relations over negative relations. These finding are in line with Oware et al. [55], who detected a positive and significant association with environmental disclosure in family-controlled firms in India; especially when the CEO is female. Conversely, Miroshnychenko & De Massis [56] argued that family firms engage less in pollution prevention, green supply chain management, and green product development practices than non-family firms based on a survey from 45 countries.

There were important sectoral differences, which are likely driven by individual- and structural-level factors. Evidence from the forestry literature suggests that forestry firms are typically reactive in adopting sustainability and focus their sustainability activity on social and economic issues, while the tourism literature suggests that individual-level factors, such as lifestyle, are important drivers for sustainability in family tourism firms. This study documented more significant results among tourism firms, who preferred the eco-labeling approach, while forestry firms favored expansion. While tourism firms were larger in terms of revenues and typically selected financial outcomes in the choice survey, they also favored positive impacts on ecosystems, but with a minimal approach to legal regulation. In this sense, Memili et al. [57] indicate that a high long-term orientation is relevant for the adoption of sustainability practices among family firms in the Turkish hospitality tourism sector. Forestry firms placed more importance on satisfactory family relations, and we

documented a higher proportion of family managers in the forestry sample, suggesting more 'familiness' in these firms.

Future research must consider differences among countries and sectors, given the relation of economic activities with nature. In our study, both sectors have operations interlinked with natural spaces; this fact allows for the understanding of sustainability in a specific sense. Reinforcing the resilience of firms and economic activities is key in the face of recent and emerging crises scenarios related to climate change and pandemics, given differential effects and outcomes.

6. Conclusions

Understanding what motivates sustainability in family firms is critical to sustainable development, particularly in less-developed and developing countries, where family firms are foundational to economies. Stewardship theory suggests that family firms are more sustainable because of the importance of maintaining family ownership over the long term, while other scholars have suggested that the quest to maintaining family ownership can produce unsustainable behavior or a 'dark side' in family firms. In this study, we analyzed the motivations for sustainability in family firms using a novel stated-choice method, where respondents selected their preferred scenarios, with various attributes such as financial outcomes, family relations, environmental impact, and community relations (among others). The respondents were drawn from Chile and India and were involved in the forestry and tourism sectors. The preferences across the sample were heterogenous, with respondents favoring financial outcomes and viewing regulation negatively; the latter point being most prominent in tourism. There was general support for generating positive environmental impacts. Respondents were also supportive of maintaining satisfactory family relations, particularly in the forestry sample, which had stronger family involvement in their firm's management decisions. The sample preferred indifferent community relations to negative or positive relations.

Indian respondents opted for expansion, while Chileans preferred the eco-labeling alternative, suggesting more support for sustainability norms in Chile. This was also reflected by unanimous support in the Chilean sample for the statement, 'the environment is a priority'. Chileans were more likely to exceed legal compliance in their choice selection and favored positive environmental impacts more. Tourism firms were typically larger in terms of revenue and preferred eco-labeling and positive environmental impacts, but with minimal regulations, while forestry favored expansion; this may be due to the ability of tourism firms to support sustainability measures and may be linked to their business model.

While this study offers a snapshot of two countries and two sectors, we suggest that policies to support sustainability among family firms must account for heterogeneity in goals, family dynamics, and resource availability within each firm, which in turn influences their willingness and ability to pursue sustainability. The importance of financial outcomes to family firms must not be underestimated. We observed differences between Chile and India in the acceptability of sustainability, with more supportive sustainability norms in Chile that translate into more support for eco-labeling and positive impacts on the environment. We also document differences between sectors in sustainability, with a greater emphasis on sustainability in tourism and more focus on positive environmental impacts; while the forest sector placed more importance on family relations and typically included family more in management decisions. Whether a focus on family brings out the 'dark side' of family forestry firms is a topic worthy of more research attention. We note that respondents generally did not support greater regulation, reflecting an aversion to red tape, which suggests sustainability policies must be focused on incentivizing rather than regulating sustainability. Further research on what motivates more sustainable behavior will be critical; in practice, the use of non-state-market-driven governance, such as certification and seals, has been important to sustainability in forestry and tourism (as

opposed to regulation); however, whether these provide the financial incentives to catalyze sustainability remains uncertain.

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