The role of family ownership in international entrepreneurship: exploring nonlinear effects

Salvatore Sciascia · Pietro Mazzola · Joseph H. Astrachan · Torsten M. Pieper

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Abstract Empirical research on international entrepreneurship is growing, but results on the role of family ownership in this phenomenon are inconsistent. We believe these inconsistencies owe to prior researchers having not yet investigated nonlinear relationships. Drawing on opposing perspectives of stewardship and stagnation, we explore potential benefits and drawbacks of family ownership for international entrepreneurship and explore nonlinear relationships among these two variables. Using a sample of 1,035 US family businesses and applying ordinal regression analysis, we find an inverted U-shaped relationship between family ownership and international entrepreneurship: International entrepreneurship is maximized when family ownership stands at moderate levels. We discuss the implications of our findings for theory and practice and indicate avenues for future research.

Keywords Family ownership · International entrepreneurship · Stewardship · Stagnation

JEL Classifications M16 · L26 · F20 · L25

1 Introduction

The field of international entrepreneurship is concerned with studying the entrepreneurial process across national borders (Oviatt and McDougall 2005, p. 540). Research in this field started some 20 years ago and continues to grow (Etemad and Lee 2003; Keupp and Gassmann 2009). However, the role of family in international entrepreneurship has largely been overlooked. Several studies address the difficulties family businesses face when crossing national borders (Donckels and Fröhlich 1991; Flören 2001; Gallo and Estapè 1992; Gallo and Garcia-Pont 1996; Gallo and Sveen 1991; Graves and Thomas 2006; Okoroafo 1999), but only a few distinguished the effects of family ownership from those of family involvement (Fernandez and Nieto 2005, 2006; Zahra 2003). Their empirical evidence shows that family involvement in management positively affects internationalization, while they do not agree on the effects of family ownership. Zahra (2003) supports a positive

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influence, while Fernandez and Nieto (2005, 2006) argue the opposite.

This paper aims to provide explanations for the conflicting results regarding the effect of family ownership on international entrepreneurship. Drawing on two opposing perspectives, stewardship and stagnation (Miller et al. 2008), we hypothesize a nonlinear relationship between family ownership and international entrepreneurship. We propose that the advantages of stewardship for international entrepreneurship exceed the disadvantages of stagnation up to an intermediate level of family ownership. Beyond this point, disadvantages likely exceed advantages. This relationship can be can be graphed as an inverted I-shaped curve. We used ordinal regression analyses on data drawn from 1,035 family businesses based in the United States to test our hypothesis. Our analyses confirmed the inverted *U*-shaped relationship between family ownership and international entrepreneurship.

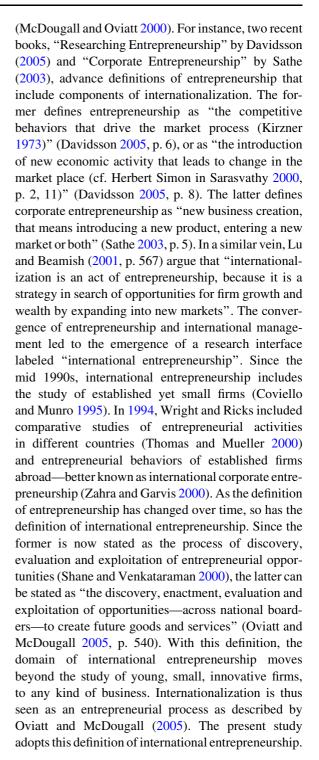
The study contributes to family business and international entrepreneurship literatures in that it helps explain how family ownership affects internationalization. The study integrates stewardship and stagnation perspectives and their opposing predictions on internationalization in the context of family businesses. The integrated model developed here provides possible explanations of conflicting earlier results and allows readers to better understand the dynamics of internationalization in family business.

The remainder of the paper is structured as follows. First, we review the literature on international entrepreneurship and the role of family to highlight gaps in extant research. Second, we introduce stewardship and stagnation perspectives and develop our hypothesis concerning the relationship between family ownership and international entrepreneurship. Third, we present the sample, variable treatments, and analyses. Fourth, we present and discuss the results of our analyses. Fifth, we conclude the paper by highlighting the study's contributions to the literature and indicate avenues for future research.

2 Literature review

2.1 International entrepreneurship

Entrepreneurship and international management are two fields of research with a growing interface



2.2 Drivers of international entrepreneurship

Prior work on the drivers of international entrepreneurship can be classified into organizational factors



(i.e., internal drivers) and environmental factors (i.e., external drivers). Zahra and George (2002) report that organizational factors enhancing international entrepreneurship include human capital (Burgel and Murray 1988; Oviatt and McDougall 1995), financial capital (Bloodgood et al. 1996), network relationships (Zahra et al. 2000), and information deriving from environmental scanning (Autio et al. 1997). Additionally, according to Carpenter and Fredrickson (2001) the background of managers is extremely relevant: High levels of educational background heterogeneity and low levels of functional background heterogeneity drive international entrepreneurship. Moreover, company size (Bloodgood et al. 1996) and location (Fernhaber et al. 2008; Steensma et al. 2000) positively influence international entrepreneurship. In the specific context of small and medium enterprises (SMEs), internal factors enhancing international entrepreneurship include the management team's international experience (Reuber and Fischer 1997), the availability of human capital (Manolova et al. 2002; Gomez-Mejia 1988), the degree of external ownership (George et al. 2005), inter-firm relationships (Dana 2001), and the availability of information related to foreign markets (Welch and Wiedersheim-Paul 1980).

Zahra and George (2002) also report on the environmental factors that enhance international entrepreneurship. The main ones are favourable institutional factors (George and Prabhu 2000), intensity of global competition (Coviello and Munro 1995) and domestic market saturation (Karagozoglu and Lindell 1998). Moreover, according to Carpenter and Fredrickson (2001) environmental uncertainty (i.e., the instability of industry sales) moderates the impact of internal factors amplifying the driving effects of management team heterogeneity.

While much has been done to identify drivers of international entrepreneurship, the role of family has largely been ignored as it has in the entrepreneurship literature in general (Aldrich and Cliff 2003; Kellermanns and Eddleston 2006; Kellermanns et al. 2008). Family impact on international entrepreneurship has only been explored in ethnic entrepreneurship. Research has found that ethnic entrepreneurs can draw on additional resources, such as cheap labor and funding provided by their families (Light and Bonacich 1988). Furthermore, ethnic entrepreneurs can use networks and links with kin in home countries as

resources for import and export or capital to spur internationalization (Light and Gold 2000).

It has been shown that families have significant influence on decision making in their businesses (Mustakallio et al. 2002), thus it follows that they would strongly affect international entrepreneurship. Indeed, family business literature provides some thought on the role of family in internationalization. However, none of the studies have yet connected internationalization with entrepreneurship. Despite this limitation, the findings are relevant for the present study as some of them explore the role of family ownership in internationalization. We review them in the following section.

2.3 International entrepreneurship in family business

Gallo and Estapè (1992) found that family businesses are less prone and slower to internationalize than their non-family counterparts. Their findings, based on Spanish data, were confirmed by Okoroafo (1999) in the United States. Gallo and Garcia-Pont (1996) argued that product orientation and technological inadequacies explain rigidities in family business internationalization. Donckels and Fröhlich (1991) as well as Flören (2001) suggest that family members tend to fear losing business control when internationalizing. Some works have explored the role of familiness, discussing those characteristics that enhance and hinder the development of international cooperations (Cappuyns 2004; Swinth and Vinton 1993). More recently, using a sample of 891 Australian firms, Graves and Thomas (2006) found that managerial capabilities of family firms lag behind those of non-family firms as they expand internationally.

An important commonality among all of the studies mentioned above is that none distinguished family ownership from family involvement. Zahra (2003) first distinguished between these two constructs and his results contrasted with the traditional literature. Using a sample of 409 manufacturing firms based in the United States, Zahra (2003) found family ownership positively influences scale and scope of international sales. Drawing on stewardship theory (Davis et al. 1997), Zahra (2003) also found a positive relationship between family involvement in management and internationalization, as well as an interaction



effect of family ownership and family involvement in influencing internationalization. In other words, Zahra (2003) argues that the positive effect of family ownership is reinforced when family members also participate in the management of the business.

Using a large sample of Spanish manufacturing SMEs with nearly 6,000 family business observations, and drawing on the resource-based view of the firm, Fernandez and Nieto (2005) found the opposite: Internationalization is negatively related to family ownership. On the other hand, and in line with Zahra (2003), the authors found international expansion enhanced by family involvement with the presence of the second and subsequent generations of family in the business. In other words, empirical studies seem to converge towards the recognition of the positive role of family involvement in the management of the company, while they conflict on the role of family ownership in internationalization. The contradictions of these studies have not yet been explored. This paper is an attempt to close this gap. Focusing on the role of family ownership, we provide possible explanations for these opposite findings by adopting the complementary theoretical perspectives of stewardship and stagnation.

3 Hypothesis development

3.1 The integration of two complementary perspectives

The arguments and empirical evidence that justify both positive and negative relationships between family ownership and internationalization lead us to assume that this relationship is nonlinear, meaning that it can have both a positive and negative sign depending on the level of family ownership. We adopted an entrepreneurial approach on internationalization and used two complementary perspectives on family businesses, stewardship and stagnation (Miller et al. 2008), in order to develop our hypothesis on the relationship between family ownership and international entrepreneurship. Using these two well established perspectives in the family business field of research was driven by their complementarities, allowing a synthesis into a nonlinear hypothesis. The stewardship perspective helps explain the positive effects of family ownership on international entrepreneurship, while drawbacks of family ownership on international entrepreneurship are illuminated by the stagnation perspective.

According to stewardship theory (Davis et al. 1997), family businesses have unique characteristics of stewardship (Corbetta and Salvato 2004). Family owners' and managers' stewardship stems from their socio-emotional attachment to the business, which can be very high since the company can serve to satisfy needs for security, social contribution, belonging, and family standing (Ashforth and Mael 1989; Gomez-Mejia et al. 2007; Lansberg 1999). According to Miller et al. (2008), stewardship can take three forms: Stewardship over continuity, over employees, and over customers. Stewardship over continuity means that family business members are concerned with assuring longevity of the company and therefore invest in creating conditions for long-lasting benefit for all family members (Gomez-Mejia et al. 2007; Habbershon and Williams 1999). Stewardship over employees refers to an attitude of nurturing the workforce through motivation and training, as well as transmitting a set of constructive values to employees (Arregle et al. 2007; Beehr et al. 1997; Davis et al. 1997; Guzzo and Abbott 1990; Ward 2004). Stewardship over customers aims to strengthen connections with customers to sustain prosperity and survival (Das and Teng 1998; Gomez-Mejia et al. 2001; Tsui-Auch 2004).

The second perspective portrays a negative picture of family businesses. According to the stagnation perspective, family businesses are characterized by difficulties in growth and survival for several reasons: (a) Resource restrictions, especially capital (Chandler 1990; Grassby 2000; Landes 1949); (b) conservative strategies (Allio 2004; Poza et al. 1997) due to family needs of stability (Morck and Yeung 2003); (c) family conflicts and succession difficulties (Jehn 1997; Levinson 1971; Schulze et al. 2003). Given their different predictions, we think stewardship and stagnation perspectives are well suited to hypothesize about family ownership and international entrepreneurship and to account for a nonlinear relationship between these variables.

3.2 Family ownership and international entrepreneurship

As stated earlier, stewardship in family business manifests itself in stewardship over continuity,



employees, and customers (Miller et al. 2008). Stewardship over continuity derives from the owning family's intentions to pass the company to succeeding generations. In other words, owners view their firm as an asset to pass onto their descendants rather than wealth to consume (Casson 1999). Such an orientation should induce family businesses to spot international entrepreneurship opportunities. If internationalization is relevant to the firm's long-term survival, then the owners may decide to exploit international entrepreneurship opportunities even when the perceived risks are relatively high. Family shareholdings are usually characterized by lower turnover rates and greater patience in waiting for returns, thus reducing the managers' perceptions of internationalization risks (Adams et al. 2005; Sirmon and Hitt 2003). Family ownership may increase managers' investment levels and lengthen their payoff-time horizons (James 1999), thus supporting their assumption of such risks. Owning family members may also have incentives to spot international entrepreneurship opportunities in order to create employment for themselves and for their offspring (Zahra 2005). Finally, stewardship over continuity may also lead to efforts to build reputation (Lyman 1991), which is a crucial resource for entering new markets. Strong reputation can help attract international customers, and strategic alliances partners. Family businesses may benefit from their name recognition and connection to other family businesses outside their home markets (Okoroafo 1999), thus reducing barriers to enter and exploit foreign markets opportunities.

Stewardship over employees derives from the fact that paternalism is often extended from family to non-family employees, thus promoting a sense of commitment and stability (Lee 2006). It may take shape in building a motivated and loyal workforce to keep the firm prosperous and promising (Allouche and Amann 1997). A motivated workforce could in turn be more prone to identify international entrepreneurship opportunities whose exploitation may increase the prosperity of the firm. It manifests itself in a broader assignment of responsibilities (Beehr et al. 1997) and more flexibility (Arregle et al. 2007; Goffee and Scase 1985). As reported by Miller et al. 2008, a family often wants to ensure that all employees are able not only to do their jobs well but also to develop the business. In turn, flexibility and autonomy likely enhance the identification of international entrepreneurship opportunities. Moreover, stewardship over employees manifests itself in deeper training programs (Pruitt 1999), which further enhances the identification and implementation of entrepreneurial opportunities, including those related to entry into new markets and market penetration. Previous knowledge and adequate capabilities are the main determinants for the identification and exploitation of entrepreneurship opportunities (Shane and Venkataraman 2000).

Family ownership is also characterized by stewardship over customers. Family-owned companies appear oriented toward customer loyalty (Fear 1997; James 2006; Miller and Le Breton-Miller 2003; Slater and Narver 1995) and are known to build enduring commercial relationships with both clients and resource suppliers (Gomez-Mejia et al. 2001; Palmer and Barber 2001). Private business owners take a more personal approach to marketing, involving relationship commitment and trust, which increases mutual understanding and solidifies the bonding among exchange partners, a crucial component in international marketing relationships (Witkowski and Thibodeau 1999). The ability to build strong customer relationships could enable family-owned businesses to build new connections abroad and build foreign customers' trust in them. Moreover, if the family firm uses a business-to-business model, it is more likely to follow the customer in its internationalization process. This would make the relationship long-lasting and going beyond a transactional nature. In other words, stewardship over customers could encourage the owning family to pursue international entrepreneurship opportunities and make them easier to exploit.

Drawbacks of family ownership on international entrepreneurship can be explained with the stagnation perspective highlighting family business resource restrictions, conservative behavior, and potential for conflict. The level of international presence is influenced by the availability and quality of resources to invest (Peng 2001). Availability and quality of resources are even more crucial with intangible resources such as information on foreign markets and know-how on international marketing.

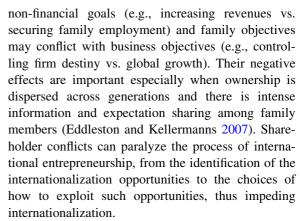
Family owned firms generally have less access to capital markets than non-family firms (Grassby 2000) and a paucity of capital could lead to a lack of resources needed for international entrepreneurship.



Opening the ownership to non-family owners could facilitate the acquisition of relevant resources for international entrepreneurship opportunity recognition and exploitation. Moreover, non-family owners can provide financial, technological and human resources essential for entering foreign markets (Fernandez and Nieto 2005). Equity partners can provide the firm with managers experienced with internationalization and are therefore more apt to increase the efficiency of international activities. Some family businesses suffer from a lack of human resources because parents tend to offer investment opportunities to their children (Lubatkin et al. 2007), even if they have insufficient skills for international entrepreneurship. Lack of resources has been found to be a primary reason why family businesses tend to internationalize later and more slowly than nonfamily businesses (Gallo and Garcia-Pont 1996). Some authors have claimed that resource restrictions and worries about family security give rise to risk aversion (Allio 2004). A few writers have explained this conservatism as a result of the founder's imposition of a restrictive 'generational shadow' (Davis and Harveston 1999; Gedajlovic et al. 2004) that mires firms in traditions.

International entrepreneurship is an uncertain and risky process due to lack of information on foreign markets. Research indicates that family businesses tend to have a conservative attitude (Daily and Dollinger 1992; Donckels and Fröhlich 1991; Ward 1998) and be risk averse (Naldi et al. 2007). Thus, family owners could feel concerned about the safety of family wealth when venturing into foreign markets (Schulze et al. 2001; Zahra 2005).

According to the stagnation perspective, family-owned companies are also reluctant to grow because of shareholder conflicts, which may even endanger the survival of the business (Jehn 1997; Levinson 1971). Although previous research has highlighted that some conflicts, such as task and process conflicts, may have positive effects for sustainability (Kellermanns and Eddleston 2004, 2007), empirical studies have confirmed that relationship conflicts hamper the functioning of the family business (Eddleston and Kellermanns 2007; Ensley and Pearson 2005). Family firms are fertile grounds for such conflicts (Boles 1996; Miller and Rice 1988; Swartz 1989) because divergent groups may pursue competing goals (Gersick et al. 1997). Financial goals may conflict with



In synthesis, family ownership may have both positive and negative effects on the identification and exploitation of international entrepreneurship opportunities. Stewardship and stagnation served as theoretical bases for this conclusion. Our observations led us to hypothesize a nonlinear relationship between family ownership and international entrepreneurship. More specifically, we argue that the relationship is inverted U-shaped. At low to medium levels of family ownership, stewardship over continuity, employees, and customers will likely prevail and promote international entrepreneurship until a certain level of family ownership is reached. At high levels of family ownership, stagnation in terms of lack of resources, low risk-orientation and family conflicts will likely prevail and prevent international entrepreneurship. Hence, we formulate the following hypothesis:

Hypothesis 1 There will be an inverted *U*-shaped relationship between family ownership and international entrepreneurship. Moderate levels of family ownership will be associated with the highest levels of international entrepreneurship.

4 Method

4.1 Sample

We tested our hypothesis using data from a 2007 survey of American family businesses sponsored by the MassMutual Financial Group, Kennesaw State University and the Family Firm Institute (MassMutual, Kennesaw State University, & Family Firm Institute 2007). Data were collected from private



family businesses in the United States by the independent survey firm TNS during the summer of 2007. The firms were part of TNS's ongoing panel and had to meet four criteria. The firm had to have been in business for over 10 years, more than \$1 Million in sales, owned by a family, and at least one family member in the management or on the board of directors. 2,515 firms met these screening criteria and were sent an invitation with the request to participate in an online survey. A total of 1,035 individuals completed the online survey. This corresponds to a response rate of 41%.

There was one respondent per firm, typically in a top-decision making position. Seventy percent of the respondents were among the highest ranking persons in the business (CEO, President, Chief Financial Officer, Chief Operations Manager, or Other). Seventy-six percent of the respondents were male. The average age of the respondent was 50 years. Sixty-eight percent of the respondents were related to the controlling family(ies) by blood or adoption, 25% by marriage; only 7% were not related. The questionnaires were anonymous and confidentiality of the answers was assured.

The average firm in our sample has annual sales of US\$ 29 million (in 2006), has 84 employees, and has been in business for about 27 years. The firms belong to a large variety of industry sectors. In order of importance, these are business/professional services, retail trade or distribution, manufacturing, wholesale trade or distribution, real estate, travel or transportation, healthcare, technology, finance or securities, insurance, telecommunications/utilities, communications, energy, education, and others.

4.2 Variables and their treatment

Our dependent variable is *international entrepre-neurship*. It can be measured by international intensity and international scope (Fernhaber et al. 2008). The former is the percentage of sales generated from international markets in 2006 (Lu and Beamish 2001; Zahra et al. 2000). The latter is the number of different countries in which the company does

business (Zahra 2003). No information was available in our sample on the scope of international sales. Neither did the data allow us to make any statements about the timing of internationalization relative to other alternatives (such as domestic diversification). Hence, our analyses focus on the activity in itself, not the internationalization process. We measured the level of international entrepreneurship through international intensity. More precisely, we used an ordinal measure of foreign sales, adopted by the survey company that collected the data, asking if the percentage was 0, between 0 and 10, between 11 and 25, between 25 and 50, or between 51 and 100. To analyze the data, we ran ordinal regression analyses, which is required given the nature of the dependent variable (McCullagh 1980).

Family ownership was measured using the percentage of the firm's equity held by the owning family in 2006, a measure used by several researchers in previous studies (Astrachan and Kolenko 1994; Litz 1995; Sharma et al. 1996).

We controlled for firm size, age, industry type, past performance, and family involvement. Firm size was measured by company sales in 2006. Firm age was measured by the number of years the firm had been in existence (Davis and Harveston 2000). Industry type was coded into 16 different categories noted above. We used an ordinal measure of past performance, adopted by the survey company that collected the data, asking to what extent the revenues changed in the previous 3 years. The possible answers where "decreased more than 5%", "decreased between 1% and 5%", "no change", "increased between 1% and 5%", "increased between 6% and 10%", "increased between 11% and 15%" and "increased by more than 15%". Family involvement was measured by the percentage of employees belonging to the controlling family. Although this measure is unusual, we believe it is suitable for the features of the sample, which consists mainly of SMEs.

To explore the effects of family ownership on international entrepreneurship, we ran a regression analysis in three steps. First, we tested a "control model" in which we included the control variables only. Second, we tested a "linear model" in which we added family ownership. Third, we tested a "quadratic model" in which we entered family ownership squared. We present and discuss the results in the following section.



¹ One other criterion was that they could not have participated in a TNS survey during the prior 3 months.

5 Results

Table 1 shows correlations among our independent variables. The correlations suggest that multicollinearity is of no concern, permitting the use of regression analysis.

Table 2 shows the results of ordinal regression analyses. Ordinal regression requires the assumption that the effect of the independent variables is the same for each level of the dependent variables. We ran a test of parallel lines to check the validity of this assumption (Norušis 2006). All the models tested were significant.

In all models, size does not significantly influence international entrepreneurship, while past performance, family involvement and age do. Among industry effects on international entrepreneurship, only retail, insurance, healthcare, education and real estate are not significantly correlated with international entrepreneurship.

In the linear model, the regression coefficient of family ownership was negative and significant. In the quadratic model, when entering family ownership squared, the linear coefficient was positive while the quadratic coefficient was negative. In other words, our data show the existence of an inverted *U*-shaped relationship between family ownership and international entrepreneurship. Thus, hypothesis 1 was supported. The percentage of family ownership at which international entrepreneurship results at a maximum is 53%. Figure 1 depicts the identified curve.

6 Discussion

The results of our analyses are consistent with our conjectures. We found a nonlinear relationship between family ownership and international entrepreneurship. While family ownership enhances international entrepreneurship at relatively low levels, it does not support it at higher levels. This relationship can be can be graphed as an inverted *U*-shaped curve, meaning that the advantages of family ownership for international entrepreneurship are higher than the disadvantages until an intermediate level of family ownership is reached. Beyond this point, which in our sample is identified at 53% family ownership, the disadvantages of family ownership prevail over the

advantages. We interpret these results according to the theoretical lenses adopted as follows. We believe that the stewardship effect that family ownership has for continuity, employees, and customers confirms the earlier findings of Zahra (2003). However, when family ownership becomes excessive, negative effects predicted by stagnation in terms of reduced resource base, risk-aversion, and conflicts among family members reduce the positive effects of family ownership predicted by stewardship. Hence, our findings reconcile the previous and conflicting results of Zahra (2003) and Fernandez and Nieto (2005, 2006).

The nonlinear relationship between family ownership and international entrepreneurship adds more evidence to the prevalence of nonlinear relationships in family businesses. Previous research has identified nonlinear relationships between family ownership and family business performance (Anderson and Reeb 2003; Yeh et al. 2001), between dispersion of ownership among directors and use of debt in family businesses (Schulze et al. 2003), and between the cultural dimension of individualism and entrepreneurship in family business (Zahra et al. 2004). The latter relationship is found to be significantly more influential on entrepreneurship in family businesses than in non-family businesses. Our study adds to this stream of research by showing that international entrepreneurship is yet another area where family influence leads to the prevalence of nonlinear relationships in family business.

Our research is consistent with extant research on family business. For instance, Sirmon and colleagues found that businesses where a family had substantial (but not unilateral) ownership and managerial presence in the firm maintained higher levels of internationalization when they faced a threat of imitation and, hence, enjoyed higher performance (Sirmon et al. 2008). In addition, this positive influence was found to disappear with increasing family ownership because it silences any voices that could counterbalance the family's perspective in strategic decision making and gives rise to the negative consequences of family influence portrayed by the stagnation perspective. Interestingly, the authors identified the level at which family influence had a positive effect on internationalization when families had less than 50% managerial presence and ownership in the business (Sirmon et al. 2008). We identified positive



Table 1 Descriptive statistics and correlations (N = 1,035; *p < 0.05; **p < 0.01; ***p < 0.001)

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Age (years) 26.72 Size (Million USD sales) 28.69 Professional Services 0.19 Retail 0.15 Communications 0.11 Wholesale 0.07 Energy 0.13 Travel And Transportation 0.06		Mean	Std. Dev.	11	12	13	14	15	16 1	17 18	19	20	21
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	1 Transportation	90.0	0.23										
		0.03	0.17										



Ē	Table 1 continued													
		Mean	Std. Dev.	11	12	13	14	15	16	17	18	19	20	21
10	10 Telecommunications and Utilities	0.01	80.0											
11	11 Finance And Securities	0.03	0.17	_										
12	12 Technology	0.02	0.16	-0.03										
13	13 Manufacturing	0.07	0.26	-0.05	-0.04	1								
14	14 Government	I	0.04	-0.01	-0.01	-0.01	1							
15	15 Healthcare	0.05	0.21	-0.04	-0.04	-0.06*	-0.01	1						
16	16 Education	0.01	0.11	-0.02	-0.02	-0.03	-0.01	-0.02	1					
17	Real Estate	90.0	0.24	-0.04	-0.04	-0.07*	-0.01	-0.06	-0.03	_				
18	18 Other Industries	0.23	0.42	-0.09**	-0.08**	-0.15**	-0.02	-0.12**	+90.0-	-0.14**	1			
19	19 Past Performance	4.45	1.75	90.0	0.04	-0.03	-0.04	0.00	-0.06	-0.04	**60.0	Т		
20	20 Family involvement	30.75	33.00	0.11**	-0.02	-0.072*	0.05	-0.056	-0.057	0.079*	0.021	-0.08*	П	
21	21 Family ownership	93.34	18.17	0.01	-0.04	0.05	0.02	0.02	-0.01	-0.01	0.11**	0.41	0,159**	1
														Ì

effects on internationalization at moderate levels of family ownership. Hence, the results from our study lend support to these findings with respect to the relationship of family ownership and international entrepreneurship.

Our results can also be interpreted through other theoretical lenses. For instance, using agency and private benefits of control theories, Anderson and Reeb (2003) found a nonlinear relationship between founding-family ownership and firm performance, such that firm performance was lowest when a family had moderate amounts of ownership. Applying their theoretical synthesis to the internationalization context, it could mean that awareness of the threat of stagnation is necessary at higher levels of family ownership. Accordingly, as large majority ownership reduces the value of private benefits of control, family members would be unlikely to take risks (such as venturing into foreign markets) at high levels of ownership because they are risking their own money only. Hence, there could be fewer international entrepreneurship activities. At moderate levels of family ownership, family members have control and can risk other people's money as well as their own (a leverage argument in a manner of speaking). This could encourage international entrepreneurship activities. Finally, at low levels of family ownership, family members have incentive, but lack the ownership control and would need to make a much stronger business case to take internationalization risk. Hence, there will likely be fewer international entrepreneurship activities.

7 Contributions and implications

The present paper is situated at the interface of the domains of international entrepreneurship and family business and makes two contributions to these literatures. First, the paper contributes to the international entrepreneurship literature as it explains how family ownership affects the scale of internationalization. Previous research identified drivers of international entrepreneurship, both at organizational and environmental levels. But the role of family as an important driver has largely been overlooked—a shortcoming that applies to the entrepreneurship literature in general, as underlined by Aldrich and Cliff (2003), Kellermanns and Eddleston (2006), and



Table 2 Regression models (* p < 0.05; *** p < 0.01; *** p < 0.001)

	Control model	Linear model	Quadratic model
Age	0.007*	0.007*	0.007*
Size	0.000	0.000	0.000
Professional services	1.286***	1.211***	1.180***
Retail	0.284	0.227	0.194
Communications	1.670*	1.535*	1.400
Wholesale	0.982**	0.928**	0.910**
Energy	3.245***	2.737***	3.083***
Travel and transportation	1.213***	1.175***	1.184***
Insurance	0.518	0.270	0.236
Telecommunications and utilities	1.559*	1.647*	1.689*
Finance and securities	1.530***	1.448***	1.498***
Technology	1.686***	1.635***	1.639***
Manufacturing	1.238***	1.254***	1.212***
Government	-17.163***	-17.138***	-17.110***
Healthcare	-0.334	-0.371	-0.439
Education	0.544	0.437	0.430
Real estate	-0.021	-0.172	-0.160
Past performance	0.221***	0.230***	0.222***
Family involvement	-0.008***	-0.007**	-0.007*
Family ownership		-0.018***	0.065**
Family ownership squared			-0.001***
Likelihood ratio test	120.644***	137.720***	149.474***
Pearson goodness of fit	3911.645***	3846.240***	3918.159***
Nagelkerke pseudo R-square	0.153	0.173	0.187

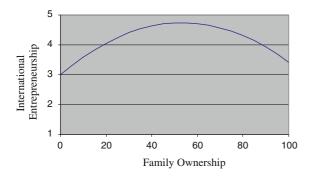


Fig. 1 The relationship between family ownership and international entrepreneurship

Kellermanns et al. (2008). Our study identifies family ownership as a variable that largely influences organizational dynamics and affects the level of international entrepreneurship. We extend the international entrepreneurship literature beyond the start-up stage by investigating the entrepreneurial behavior

of large and established family-owned businesses that are usually not in the center of interest in international entrepreneurship research (see Keupp and Gassmann 2009). Furthermore, the vast majority of all private for-profit organizations around the world are family businesses (IFERA 2003; La Porta et al. 1999). Families also represent the most enduring institutions for entrepreneurial activity in emergent economies (Pistrui et al. 2001). Hence, apart from the theoretical contribution, our study also makes an empirical contribution by looking into an important, yet neglected, segment of firms.

Second, our study reconciles conflicting results from previous research on family business internationalization. We were able to provide explanations for the conflicting results of Zahra (2003) and Fernandez and Nieto (2005, 2006) regarding positive or negative effects of family ownership on internationalization. We integrated the opposing statements in a general model which we derived from stewardship and



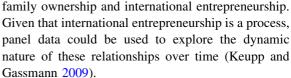
stagnation perspectives on family businesses (Miller et al. 2008). According to our model, family ownership may have both positive and negative effects on international entrepreneurship, depending on the level of ownership.

Several practical implications can be drawn from our findings which can be beneficial for family business owners, managers, and advisors in sustaining the international entrepreneurship processes of their businesses. The identified relationship between family ownership and international entrepreneurship represents a point of reference for these practitioners. First, we suggest family owners consider opening equity to non-family capital providers (e.g., venture capitalists) as one way to reduce the stagnation effects resulting from high levels of family ownership and foster international entrepreneurship. Based on our findings, we argue that moderate levels of family ownership can facilitate higher levels of internationalization and that awareness of the threat of stagnation is necessary at higher levels of family ownership.

Second, to overcome stagnation effects resulting from high family ownership and make a family firm more entrepreneurial, we support earlier suggestions (Schulze et al. 2002) that these firms should invest in governance mechanisms similar to those that widely held firms use to monitor management and resolve conflicts of interest among stakeholders through, for instance, external (non-family) ownership, independent boards of directors, carefully designed decision hierarchies, and incentive structures that encourage mutual monitoring among owner-managers. Apart from mechanisms to govern the business, attention should also be given to mechanisms to govern the family in order to create and maintain family cohesion and entrepreneurial spirit and prevent conflicts among owning and non-owning as well as employed and non-employed family members (Pieper and Astrachan 2008).

8 Limitations and future research directions

The present study is not free from limitations. There are four limitations that future research should address. First, the cross-sectional nature of the study limits the possibility to make proper causal inferences. A longitudinal research design could provide further evidence on the causal relationships among



Second, data were collected exclusively in the United States, introducing a potential bias regarding the effects of family ownership on international entrepreneurship and thereby limiting the possibility to generalize our findings to other countries. Evidence shows that the vast majority of the largest businesses in Latin America and Asia are family controlled and/ or family managed (Burkart et al. 2003). The cultural differences of these societies may have important implications for their internationalization. For instance, Chinese family businesses are driven by Confucian thinking emphasizing the importance of family and are more adequately described as business families, rather than family businesses which are more commonly found in Western societies (Lubatkin et al. 2005). Strong family relationships based on trust, reciprocal altruism, and a tendency to build long-term relationships, such as those found in Chinese family businesses, may reduce stagnation effects stemming from concentrated family ownership and allow some owning families to capitalize on these unique family attributes to promote international entrepreneurship (Anderson et al. 2005) and build a sustainable competitive advantage (Eddleston et al. 2008). Analogous investigations replicating this research should be conducted in countries other than the United States to assess the role of these family characteristics and whether they moderate the relationship between family ownership and international entrepreneurship.

Third, and due to the nature of our dataset, we can only speculate on what triggers an owning family's decision to venture into foreign markets. For instance, succeeding generations may have seen the internationalization of the business as an opportunity to innovate, to overcome stagnation, or to increase the family's wealth. Increasing family size, geographical distribution, and ownership dispersion usually coming along with generational transition (Schulze et al. 2003) could give strong incentives to pursue international entrepreneurship opportunities. In a similar vein, research on ethnic entrepreneurship (Chang et al. 2009; Light and Bonacich 1988; Light and Gold 2000) has found that ethnic entrepreneurs pursue



other, non-financial goals when internationalizing their businesses, such as maintaining relationships with relatives in their home countries. Hence, immigration status, ethnical background, kinship ties in the country of origin, as well as the number of generations owning the business and ownership dispersion could be important drivers behind the decision to take the family business international. Future research should study these factors more in-depth and include them as model variables.

Researchers should assess older family businesses with larger owning families and greater ownership and geographic dispersion. Alternatively, researchers could sample family firms from the same generation but with different levels of ownership and geographic dispersion and see how the dispersion affects internationalization. This analysis could be carried out for large and older family businesses as well as relatively young entrepreneurial ventures. Apart from the above-mentioned family demographics variables, future research should assess the level of family involvement with more traditional measures and include it as a variable (see Fernandez and Nieto 2005, 2006; Zahra 2003).

Fourth, we measured international entrepreneurship only with the scale of internationalization, ignoring its scope (i.e., numbers of countries), and without differentiating between modes of internationalization (i.e., direct and indirect) and value-chain activities involved with the process (i.e., backward and forward internationalization). Future research should apply more fine-grained measures of international entrepreneurship taking into account various aspects, such as internationalization modes and value-chain activities.

In a similar vein, and due to the nature of our dataset, we could not make any statements about the growth path of the firms studied. Some family businesses may go international from the very beginning—as "born global" firms (see, e.g., Fan and Phan 2007)—whereas others may choose to diversify in their domestic markets first before they decide to go international. Much more information about the dynamics of the owning families, their businesses, and industries would be necessary to answer this question. Future research should investigate the growth path of family businesses and their timing of internationalization relative to other strategic alternatives. A case-by-case analysis could prove useful for this purpose.

In summary, this study enhances our understanding of family business internationalization. The findings suggest that moderate levels of ownership can facilitate higher levels of internationalization. Higher levels of family ownership are detrimental to international entrepreneurship due to stagnation effects resulting from more concentrated family ownership. Globalization and its consequences for international entrepreneurship are among the most prevalent issues on the agendas of politicians, business leaders, and academics. We hope our study stimulates future research on this complex, yet important topic in entrepreneurship and management studies.

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