

Open access • Journal Article • DOI:10.1007/S11187-010-9264-9

## The role of family ownership in international entrepreneurship: exploring nonlinear effects — Source link ☑

Salvatore Sciascia, Pietro Mazzola, Joseph H. Astrachan, Torsten M. Pieper Institutions: IULM University of Milan, Kennesaw State University Published on: 01 Jan 2012 - Small Business Economics (Springer US) Topics: Entrepreneurship

Related papers:

- · International expansion of U.S. manufacturing family businesses: the effect of ownership and involvement
- · Socioemotional Wealth and Business Risks in Family-controlled Firms: Evidence from Spanish Olive Oil Mills
- · Impact of ownership on the international involvement of SMEs
- · Diversification Decisions in Family-Controlled Firms
- The internationalization of family businesses: A review of extant research



#### Kennesaw State University DigitalCommons@Kennesaw State University

#### **Faculty Publications**

1-2012

# The Role of Family Ownership in International Entrepreneurship: Exploring Nonlinear Effects

Salvatore Sciascia *IULM University, Italy* 

Pietro Mazzola *IULM University, Italy* 

Joseph H. Astrachan Kennesaw State University, jastrach@kennesaw.edu

Torsten M. Pieper Kennesaw State University, tpieper@kennesaw.edu

Follow this and additional works at: http://digitalcommons.kennesaw.edu/facpubs Part of the <u>Entrepreneurial and Small Business Operations Commons</u>, and the <u>International</u> <u>Business Commons</u>

#### **Recommended** Citation

Sciascia, Salvatore, et al. "The Role of Family Ownership in International Entrepreneurship: Exploring Nonlinear Effects." Small Business Economics 38.1 (2012): 15-31. Print.

This Article is brought to you for free and open access by DigitalCommons@Kennesaw State University. It has been accepted for inclusion in Faculty Publications by an authorized administrator of DigitalCommons@Kennesaw State University. For more information, please contact digitalcommons@kennesaw.edu.

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

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

Accepted: 25 January 2010 © Springer Science+Business Media, LLC. 2010

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

S. Sciascia (⊠) · P. Mazzola Economics and Marketing Department, IULM University, Via Carlo Bo, 8, 20143 Milan, Italy e-mail: salvatore.sciascia@iulm.it

P. Mazzola e-mail: pietro.mazzola@iulm.it

J. H. Astrachan · T. M. Pieper Coles College of Business, Kennesaw State University, 1000 Chastain Road, #0408, Kennesaw, GA 30144-5591, USA e-mail: jastrach@kennesaw.edu

e-man. Jastrach@Kennesaw.edu

T. M. Pieper e-mail: tpieper@kennesaw.edu findings for theory and practice and indicate avenues for future research.

**Keywords** Family ownership · International entrepreneurship · Stewardship · Stagnation

JEL Classifications  $M16 \cdot L26 \cdot F20 \cdot L25$ 

#### **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 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

(McDougall and Oviatt 2000). For instance, two recent books, "Researching Entrepreneurship" by Davidsson (2005) and "Corporate Entrepreneurship" by Sathe (2003), advance definitions of entrepreneurship that include components of internationalization. The former defines entrepreneurship as "the competitive behaviors that drive the market process (Kirzner 1973)" (Davidsson 2005, p. 6), or as "the introduction of new economic activity that leads to change in the market place (cf. Herbert Simon in Sarasvathy 2000, p. 2, 11)" (Davidsson 2005, p. 8). The latter defines corporate entrepreneurship as "new business creation, that means introducing a new product, entering a new market or both" (Sathe 2003, p. 5). In a similar vein, Lu and Beamish (2001, p. 567) argue that "internationalization is an act of entrepreneurship, because it is a strategy in search of opportunities for firm growth and wealth by expanding into new markets". The convergence of entrepreneurship and international management led to the emergence of a research interface labeled "international entrepreneurship". Since the mid 1990s, international entrepreneurship includes the study of established yet small firms (Coviello and Munro 1995). In 1994, Wright and Ricks included comparative studies of entrepreneurial activities in different countries (Thomas and Mueller 2000) and entrepreneurial behaviors of established firms abroad-better known as international corporate entrepreneurship (Zahra and Garvis 2000). As the definition of entrepreneurship has changed over time, so has the definition of international entrepreneurship. Since the former is now stated as the process of discovery, evaluation and exploitation of entrepreneurial opportunities (Shane and Venkataraman 2000), the latter can be stated as "the discovery, enactment, evaluation and exploitation of opportunities-across national boarders-to create future goods and services" (Oviatt and McDougall 2005, p. 540). With this definition, the domain of international entrepreneurship moves beyond the study of young, small, innovative firms, to any kind of business. Internationalization is thus seen as an entrepreneurial process as described by Oviatt and McDougall (2005). The present study adopts this definition of international entrepreneurship.

#### 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 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, familyowned 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 non-financial goals (e.g., increasing revenues vs. securing family employment) and family objectives may conflict with business objectives (e.g., controlling firm destiny vs. global growth). Their negative effects are important especially when ownership is dispersed across generations and there is intense information and expectation sharing among family members (Eddleston and Kellermanns 2007). Share-holder conflicts can paralyze the process of international entrepreneurship, from the identification of the internationalization opportunities, thus impeding internationalization.

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.<sup>1</sup> 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 question-naires 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 entrepreneurship*. 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.

<sup>&</sup>lt;sup>1</sup> 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

Mean         Sid, Dev.         1         2         3           Age (years) $26.72$ $20.40$ 1         2         3           Professional Services $0.19$ $0.39$ $-0.78*$ $-0.03$ 1           Professional Services $0.19$ $0.13$ $0.11$ $0.10$ $-0.04$ $-0.05$ Retail $0.11$ $0.13$ $0.11$ $0.00$ $-0.02$ $-0.13**$ Communications $0.11$ $0.13$ $0.11$ $0.00$ $-0.02$ $-0.13**$ Tavel And Transportation $0.07$ $0.25$ $0.04$ $-0.03$ $0.13**$ Tavel And Transportation $0.07$ $0.17$ $0.08$ $-0.02$ $-0.13**$ Tavel And Transportation $0.06$ $0.23$ $0.11$ $0.00$ $-0.01$ $-0.08*$ Tavel And Transportation $0.03$ $0.11$ $0.01$ $0.01$ $-0.03*$ $-0.01$ Tavel And Transportation $0.03$ $0.11$ $0.03$ $-0.04$ $-0.01$ Teno	Tal	<b>Table 1</b> Descriptive statistics and correlations ( $N = 1,035$ ; * $p < 0.05$ ; ** $p < 0.01$ ; *** $p < 0.001$ )	elations $(N =$	1,035; * p < 0.	05; ** $p < 0$ .	01; *** p	< 0.001)							
Age (years)         26.72         20.40         1           Size (Million USD sales)         28.69         251.93         0.16***         1           Professional Services         0.19         0.39 $-0.78**$ $-0.03$ 1           Retail         0.15         0.36         0.04 $-0.01$ $-0.05$ 1           Wholesale         0.11         0.12         0.13         0.11         0.00 $-0.03$ 1           Communications         0.11         0.13         0.11         0.00 $-0.01$ $-0.05$ Energy         0.01         0.03         0.11         0.00 $-0.01$ $-0.05$ Fandy         0.01         0.03         0.11         0.00 $-0.04$ $-0.04$ Utilities         0.01         0.03         0.11         0.03 $-0.01$ $-0.05$ Fandy         0.01         0.03         0.11 $-0.03$ $-0.01$ $-0.04$ Utilities         0.01         0.03         0.11 $-0.02$ $-0.01$ $-0.05$ Tarecholdgy         0.02         0.01 $-0.03$ $-0.$			Mean	Std. Dev.	1	2	3	4	5	9	7	8	9	10
Size (Million USD sales)         28.69         251.93 $0.16^{+*}$ 1           Professional Services         0.19         0.39 $-0.78^{+*}$ $-0.03$ 1           Retail         0.11         0.11         0.10 $0.04$ $-0.01$ $-0.05$ Wolessional Services         0.11         0.11 $0.10$ $-0.02$ $-0.12^{+*}$ Wolesale         0.01         0.03 $0.11$ $0.01$ $-0.02$ $-0.12^{+*}$ Wolesale         0.01 $0.03$ $0.11$ $0.00$ $-0.01$ $-0.05^{+*}$ Wolesale $0.03$ $0.11$ $0.02$ $-0.01$ $-0.05^{+*}$ Wolesale $0.03$ $0.17$ $0.02$ $-0.01$ $-0.06^{+*}$ Tarebrommications and $0.01$ $0.03$ $0.11$ $0.00$ $-0.01$ $-0.08^{+*}$ Telecommunications and $0.01$ $0.03$ $0.01$ $-0.03$ $-0.01^{+*}$ $-0.01^{+*}$ Technology $0.023$ $0.01$ $0.03$ $0.01$ $-0.03$ $-0.01^{+*}$	1	Age (years)	26.72	20.40	1									
Professional Services         0.19         0.39 $-0.78^{**}$ $-0.03$ 1           Retail         0.15         0.36         0.04 $-0.04$ $-0.03$ $-0.03^{**}$ Communications         0.11         0.10         0.13         0.11         0.010 $-0.03$ $-0.13^{**}$ Wholesale         0.07         0.23         0.01 $-0.02$ $-0.13^{**}$ Tarvel And Transportation         0.06         0.23 $-0.01$ $-0.03$ Insurance         0.01         0.03         0.11         0.00 $-0.01$ $-0.03$ Insurance         0.03         0.17         0.03 $-0.01$ $-0.03$ Insurance         0.03         0.17 $0.03$ $-0.01$ $-0.03$ Insurance         0.03         0.01 $-0.03$ $-0.01$	0	Size (Million USD sales)	28.69	251.93	$0.16^{**}$	1								
Retail         0.15         0.36         0.04 $-0.04$ $-0.03$ Communications         0.11         0.10         0.04 $-0.01$ $-0.05$ Wholesale         0.07         0.25         0.00 $-0.01$ $-0.05$ Tarvel And Transportation         0.03         0.11         0.00 $-0.01$ $-0.05$ Tarvel And Transportation         0.03         0.17         0.05 $-0.01$ $-0.05$ Insurance         0.03         0.17         0.05 $-0.01$ $-0.08^{++}$ Insurance         0.03         0.17         0.03 $-0.01$ $-0.08^{++}$ Techonology         0.03         0.17 $0.03$ $-0.01$ $-0.08^{++}$ Techonology         0.07 $0.02$ $0.01$ $-0.02$ $-0.01$ Manufacturing $0.07$ $0.21$ $0.03$ $-0.01$ $-0.08$ Techonology $0.01$ $0.02$ $0.01$ $0.02$ $-0.01$ $-0.02$ Manufacturing $0.07$ $0.02$ $0.01$ $-0.02$ $-0.01$ <td>б</td> <td>Professional Services</td> <td>0.19</td> <td>0.39</td> <td><math>-0.78^{**}</math></td> <td>-0.03</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	б	Professional Services	0.19	0.39	$-0.78^{**}$	-0.03	1							
Communications         0.11         0.10         0.04         -0.01         -0.05           Wholesale         0.07         0.25         0.00         -0.02         -0.13**           Energy         0.11         0.06         0.02         -0.01         -0.05           Tavel And Transportation         0.06         0.03         0.17         0.00         -0.01         -0.08*           Insurance         0.01         0.03         0.17         0.05         -0.01         -0.08*           Insurance         0.01         0.03         0.17         0.05         -0.01         -0.08*           Utilities         0.01         0.03         0.11         0.05         -0.01         -0.08*           Utilities         0.02         0.13         0.11         0.03         -0.01         -0.08*           Utilities         0.01         0.03         0.01         -0.03         -0.01         -0.08*           Insurance         0.02         0.13         0.03         -0.01         -0.08*           Manufacturing         0.02         0.11         0.03         -0.01         -0.08*           Government         -         0.03         0.04         -0.01         -0.08*	4	Retail	0.15	0.36	0.04	-0.04	$-0.20^{**}$	1						
Wholesale         0.07         0.25         0.00 $-0.02$ $-0.13$ Energy         0.11         0.00 $-0.01$ $-0.05$ Tavel And Transportation         0.06         0.03 $-0.02$ $-0.02$ $-0.02$ Insurance         0.01         0.08 $0.17$ $0.05$ $-0.01$ $-0.08$ Tavel And Transportation         0.01 $0.03$ $0.17$ $0.05$ $-0.01$ $-0.08$ Telecommunications and $0.01$ $0.03$ $0.17$ $0.03$ $-0.01$ $-0.08$ Utilities $0.02$ $0.03$ $0.11$ $0.03$ $-0.01$ $-0.08$ Technology $0.02$ $0.11$ $0.03$ $0.01$ $-0.03$ Mantfacturing $0.01$ $0.12$ $0.11$ $-0.02$ $-0.01$ $-0.08$ Mantfacturing $0.01$ $0.11$ $0.02$ $0.01$ $-0.02$ $-0.01$ $-0.08$ Healthcare $0.03$ $0.11$ $0.11$ $-0.02$ $-0.01$ $-0.08$	5	Communications	0.11	0.10	0.04	-0.01	-0.05	-0.04	1					
Energy         0.13         0.11         0.00 $-0.01$ $-0.05$ Travel And Transportation         0.06         0.23 $-0.02$ $-0.02$ $-0.02$ Insurance         0.03         0.17         0.05 $-0.01$ $-0.08^{**}$ Tavel And Transportation         0.01         0.03         0.17 $0.05$ $-0.01$ $-0.08^{**}$ Telecommunications and         0.01         0.03 $0.17$ $0.03$ $-0.01$ $-0.08^{**}$ Utilities         0.07 $0.02$ $0.01$ $0.08$ $-0.01$ $-0.08^{**}$ Technology $0.07$ $0.02$ $0.11$ $0.02$ $-0.01$ $-0.08^{**}$ Manufacturing $0.07$ $0.22$ $0.11$ $0.02$ $-0.11^{**}$ Government $ 0.03$ $0.24$ $0.07$ $0.02$ $-0.02$ Healthcare $0.03$ $0.23$ $0.23$ $0.24$ $-0.02$ $-0.01$ Keal Estate $0.03$ $0.24$ $0.04$ $-0.02$ $-0.04$	9	Wholesale	0.07	0.25	0.00	-0.02	$-0.13^{**}$	-0.11*	-0.03	1				
Travel And Transportation         0.06         0.23 $-0.02$ $-0.02$ $-0.03$ $-0.04$ $-0.04$ Insurance         0.01         0.03         0.17         0.05 $-0.01$ $-0.08^{**}$ Telecommunications and         0.01         0.03         0.17         0.03 $-0.01$ $-0.08^{**}$ Telecommunications and         0.01         0.03         0.17         0.03 $-0.01$ $-0.08^{**}$ Telecommunications and         0.01         0.03         0.17         0.03 $-0.01$ $-0.08^{**}$ Technology         0.07         0.02         0.17         0.03 $-0.01$ $-0.08^{**}$ Manufacturing         0.07         0.26         0.11 $-0.02$ $-0.11^{***}$ Government $-$ 0.04 $-0.02$ $-0.11^{***}$ $-0.02$ Healtbrace         0.06         0.23         0.24 $-0.04$ $-0.02$ $-0.11^{***}$ Kortinent         0.23         0.42 $-0.04$ $-0.02$ $-0.01$ $-0.02$ Pauly ownership         93.75         33.00	٢	Energy	0.13	0.11	0.00	-0.01	-0.05	-0.05	-0.01	-0.03	1			
Insurance $0.03$ $0.17$ $0.05$ $-0.01$ $-0.08^{++}$ Telecommunications and $0.01$ $0.03$ $0.17$ $0.03$ $-0.01$ $-0.08^{++}$ Finance And Securities $0.03$ $0.17$ $0.03$ $-0.01$ $-0.08^{++}$ Technology $0.02$ $0.02$ $0.17$ $0.03$ $-0.01$ $-0.08^{++}$ Technology $0.07$ $0.26$ $0.13^{++}$ $0.04^{+-}$ $-0.01^{++}$ Manufacturing $0.07$ $0.26$ $0.13^{++}$ $0.02^{+-}$ $-0.01^{}$ $-0.08^{++}$ Manufacturing $0.01$ $0.01$ $0.11$ $-0.02^{}$ $-0.14^{+++}$ Government $0.02$ $0.01$ $0.11$ $-0.02^{}$ $-0.14^{+++}$ Education $0.01$ $0.11$ $-0.02^{}$ $-0.01^{}$ $-0.02^{}$ Real Estate $0.02$ $0.21$ $0.11^{}$ $-0.02^{}$ $-0.01^{}$ $-0.02^{}$ Pathoresition $0.01^{}$ $0.23^{}$ $0.24$	8	Travel And Transportation	0.06	0.23	-0.02	-0.02	$-0.12^{**}$	$-0.10^{**}$	-0.03	-0.07*	-0.03	1		
Telecommunications and Utilities0.010.08 $-0.03$ 0.04 $-0.04$ Finance And Securities0.030.170.03 $-0.01$ $-0.08**$ Technology0.020.160.000.01 $-0.08**$ Technology0.070.260.13** $0.07*$ $-0.08**$ Manufacturing0.070.260.13** $0.07*$ $-0.14**$ Government $-$ 0.040.00 $-0.01$ $-0.08*$ Healthcare0.050.210.00 $-0.01$ $-0.02$ Education0.010.11 $-0.02$ $-0.11**$ Conternment0.010.11 $-0.02$ $-0.12**$ Healthcare0.060.24 $-0.04$ $-0.02$ Real Estate0.230.42 $-0.04$ $-0.02$ Other Industries0.230.42 $-0.04$ $-0.02$ Past Performance4.45 $1.75$ $0.03$ $0.04$ Other Industries0.230.24 $-0.04$ $-0.02$ Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ Past Performance $4.45$ $1.75$ $0.02$ $-0.12**$ Age (years) $28.69$ $251.93$ $251.93$ $26.72$ $20.40$ Size (Million USD sales) $28.69$ $251.93$ $251.93$ $251.93$ Professional Services $0.19$ $0.10$ $0.10$ $0.01$ Wholesale $0.11$ $0.12$ $0.11$ $12$ $13$ Tavel And Transportation $0.01$	6	Insurance	0.03	0.17	0.05	-0.01	$-0.08^{**}$	-0.07*	-0.02	-0.05	-0.02	-0.04	1	
Finance And Securities $0.03$ $0.17$ $0.03$ $-0.01$ $-0.08*$ Technology $0.07$ $0.26$ $0.13**$ $0.01$ $-0.08*$ Manufacturing $ 0.07$ $0.26$ $0.11**$ $-0.14**$ Government $ 0.04$ $0.00$ $-0.01$ $-0.08*$ Government $ 0.04$ $0.00$ $-0.11**$ $-0.02$ Healthcare $0.05$ $0.21$ $0.00$ $-0.01$ $-0.02$ Education $0.01$ $0.01$ $-0.02$ $-0.11**$ Education $0.01$ $0.04$ $-0.02$ $-0.11**$ Real Estate $0.06$ $0.24$ $-0.04$ $0.07*$ $-0.12**$ Other Industries $0.23$ $0.24$ $-0.04$ $0.07$ $-0.12**$ Other Industries $0.3375$ $33.00$ $-0.02$ $-0.01$ $-0.02$ Past Performance $4.45$ $1.75$ $0.03$ $0.04$ $-0.02$ Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ $-0.06$ Family involvement $30.75$ $33.00$ $-0.02$ $0.01$ $-0.02$ Family involvement $30.75$ $33.00$ $-0.02$ $0.01$ $-0.02$ Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ $-0.02$ Family involvement $30.75$ $20.40$ $8.17$ $0.02$ $-0.01$ Age (years) $26.72$ $20.40$ $8.14$ $11$ $12$ $13$ $1$ Age (years) $0.19$ $0.19$ $0.0$	10	Telecommunications and Utilities	0.01	0.08	-0.03	0.04	-0.04	-0.04	-0.01	-0.02	-0.01	-0.02	-0.01	1
Technology $0.02$ $0.16$ $0.00$ $0.01$ $-0.08^{*}$ Manufacturing $0.07$ $0.26$ $0.13^{**}$ $0.07^{*}$ $-0.14^{**}$ Government $ 0.05$ $0.21$ $0.00$ $-0.01$ $-0.02$ Healthcare $0.05$ $0.21$ $0.00$ $-0.01$ $-0.02$ Education $0.01$ $0.01$ $-0.02$ $-0.11^{**}$ Education $0.01$ $0.01$ $-0.02$ $-0.11^{**}$ Education $0.01$ $0.01$ $-0.02$ $-0.01$ $-0.02$ Real Estate $0.23$ $0.24$ $-0.04$ $0.07^{*}$ $-0.12^{**}$ Other Industries $0.23$ $0.42$ $-0.04$ $0.07^{*}$ $-0.12^{**}$ Other Industries $0.23$ $0.42$ $-0.04$ $0.07^{*}$ $-0.12^{**}$ Dest Performance $4.45$ $1.75$ $0.03$ $0.04$ $-0.06$ Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ $-0.06$ Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ $-0.06$ Age (years) $26.72$ $20.40$ $21.3$ $1$ Age (years) $28.69$ $251.93$ $9.01$ $-0.01$ $-0.01$ Size (Million USD sales) $28.69$ $251.93$ $26.72$ $0.36$ Professional Services $0.19$ $0.10$ $0.07$ $0.25$ Retail $0.11$ $0.10$ $0.07$ $0.13$ Wholesale $0.01$ $0.03$ $0.11$ $0.01$ Wholesale <td< td=""><td>11</td><td>Finance And Securities</td><td>0.03</td><td>0.17</td><td>0.03</td><td>-0.01</td><td><math>-0.08^{**}</math></td><td>-0.07*</td><td>-0.02</td><td>-0.04</td><td>-0.02</td><td>-0.04</td><td>-0.03</td><td>-0.02</td></td<>	11	Finance And Securities	0.03	0.17	0.03	-0.01	$-0.08^{**}$	-0.07*	-0.02	-0.04	-0.02	-0.04	-0.03	-0.02
Manufacturing $0.07$ $0.26$ $0.13**$ $0.07*$ $-0.14^{***}$ Government- $0.04$ $0.00$ $-0.01$ $-0.02$ Healthcare $0.05$ $0.21$ $0.00$ $-0.01$ $-0.02$ Education $0.01$ $0.11$ $-0.02$ $-0.011$ $-0.02$ Education $0.01$ $0.11$ $-0.02$ $-0.011$ $-0.02$ Real Estate $0.06$ $0.24$ $-0.04$ $0.07*$ $-0.14^{**}$ Other Industries $0.23$ $0.42$ $-0.04$ $0.07*$ $-0.12^{**}$ Other Industries $0.23$ $0.24$ $-0.04$ $0.07*$ $-0.12^{**}$ Past Performance $4.45$ $1.75$ $0.03$ $0.04$ $-0.06$ Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ $-0.06$ Family ownership $93.34$ $18.17$ $0.02$ $-0.04$ $-0.06$ Family ownership $93.34$ $18.17$ $0.02$ $-0.12$ $-0.06$ Family ownership $93.34$ $18.17$ $0.02$ $0.01$ $-0.06$ Age (years) $26.72$ $20.40$ $251.93$ $11$ $12$ $13$ $1$ Age (years) $26.72$ $20.40$ $251.93$ $14$ $10.12$ $13$ $1$ Size (Million USD sales) $28.69$ $251.93$ $251.93$ $12$ $13$ $1$ Professional Services $0.19$ $0.19$ $0.26$ $0.01$ $10$ $10$ Wholesale $0.01$ $0.06$ $0.25$ $0.03$ </td <td>12</td> <td>Technology</td> <td>0.02</td> <td>0.16</td> <td>0.00</td> <td>0.01</td> <td>-0.08*</td> <td>-0.07*</td> <td>-0.02</td> <td>-0.04</td> <td>-0.02</td> <td>-0.04</td> <td>-0.03</td> <td>-0.01</td>	12	Technology	0.02	0.16	0.00	0.01	-0.08*	-0.07*	-0.02	-0.04	-0.02	-0.04	-0.03	-0.01
Government         - $0.04$ $0.00$ $-0.01$ $-0.02$ $-0.11^{**}$ Healthcare $0.05$ $0.21$ $0.00$ $-0.02$ $-0.11^{**}$ Education $0.01$ $0.11$ $-0.02$ $-0.11^{**}$ Education $0.01$ $0.11$ $-0.02$ $-0.01$ $-0.05$ Real Estate $0.06$ $0.23$ $0.24$ $-0.04$ $0.07^{*}$ $-0.12^{**}$ Other Industries $0.23$ $0.23$ $0.42$ $-0.04$ $0.02$ $-0.12^{**}$ Other Industries $0.23$ $0.42$ $-0.04$ $0.02$ $-0.12^{**}$ Past Performance $4.45$ $1.75$ $0.03$ $0.04$ $-0.02$ Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ $-0.02$ Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ $-0.02$ Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ $-0.06$ Family involvement $3$	13	Manufacturing	0.07	0.26	$0.13^{**}$	0.07*	$-0.14^{**}$	$-0.12^{**}$	-0.03	-0.07*	-0.03	-0.07*	-0.05	-0.03
Healthcare $0.05$ $0.21$ $0.00$ $-0.02$ $-0.11^{++}$ Education $0.01$ $0.11$ $-0.02$ $-0.01$ $-0.05$ Real Estate $0.06$ $0.24$ $-0.04$ $0.07^{+}$ $-0.12^{++}$ Other Industries $0.23$ $0.42$ $-0.04$ $0.02$ $-0.26^{++}$ Past Performance $4.45$ $1.75$ $0.03$ $0.04$ $-0.06$ Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ $-0.06$ Family ownership $93.34$ $18.17$ $0.02$ $-0.16^{+}$ $-0.06$ Family ownership $93.34$ $18.17$ $0.02$ $0.01$ $-0.06$ Age (years) $26.72$ $20.40$ $251.93$ $1$ $1$ Age (years) $26.72$ $20.40$ $0.36$ $1$ $1$ Size (Million USD sales) $28.69$ $251.93$ $1$ $1$ $12$ $13$ $1$ Professional Services $0.19$ $0.10$ $0.03$ $0.74$ $0.07$ $0.01$ $0.00$ Wholesale $0.01$ $0.07$ $0.25$ $0.03$ $0.04$ $0.01$ $10$ Wholesale $0.11$ $0.13$ $0.11$ $0.12$ $13$ $11$ Travel And Transportation $0.03$ $0.23$ <td>14</td> <td>Government</td> <td>I</td> <td>0.04</td> <td>0.00</td> <td>-0.01</td> <td>-0.02</td> <td>-0.02</td> <td>-0.01</td> <td>-0.01</td> <td>-0.01</td> <td>-0.01</td> <td>-0.01</td> <td>0</td>	14	Government	I	0.04	0.00	-0.01	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	0
Education $0.01$ $0.11$ $-0.02$ $-0.01$ $-0.05$ Real Estate $0.06$ $0.24$ $-0.04$ $0.07*$ $-0.12^{**}$ Other Industries $0.23$ $0.42$ $-0.04$ $0.07*$ $-0.12^{**}$ Past Performance $4.45$ $1.75$ $0.03$ $0.04$ $-0.02$ Past Performance $4.45$ $1.75$ $0.02$ $0.06$ $-0.01$ Past Performance $4.45$ $1.75$ $0.02$ $0.04$ $-0.02$ Past Performance $4.45$ $1.75$ $0.02$ $0.02$ $-0.06$ Past Performance $30.75$ $33.00$ $-0.06$ $0.01$ $-0.06$ Past Performance $0.11$ $1.17$ $12$ $13$ $14$ Age (years) $26.72$ $20.40$ $50.11$ $12$ $13$ $14$ Age (years) $26.72$ $20.40$ $50.36$ $0.01$ $-0.01$ $0.01$ Size (Million USD sales) $28.69$ $251.93$ $9.36$ $7$ $14$ $12$ $13$ $14$ Age (years) $0.19$ $0.19$ $0.36$ $0.36$ $11$ $12$ $13$ $14$ Age (years) $0.19$ $0.10$ $0.23$ $0.11$ $12$ $13$ $11$ $12$ $13$ $14$ Age (yea	15	Healthcare	0.05	0.21	0.00	-0.02	$-0.11^{**}$	$-0.09^{**}$	-0.02	-0.06	-0.02	-0.05	-0.04	-0.02
Real Estate $0.06$ $0.24$ $-0.04$ $0.07*$ $-0.12**$ Other Industries $0.23$ $0.42$ $-0.04$ $0.07$ $-0.26**$ Past Performance $4.45$ $1.75$ $0.03$ $0.04$ $-0.02$ Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ $-0.06$ Family ownership $93.34$ $18.17$ $0.02$ $0.01$ $-0.06$ Family ownership $93.34$ $18.17$ $0.02$ $0.01$ $-0.06$ Family ownership $23.24$ $18.17$ $0.02$ $0.01$ $-0.06$ Family ownership $23.34$ $18.17$ $0.02$ $0.01$ $-0.06$ Family ownership $23.24$ $18.17$ $0.02$ $0.01$ $-0.06$ Family ownership $26.72$ $20.40$ $21.93$ $14$ Age (years) $26.72$ $20.40$ $21.93$ $14$ Age (years) $26.72$ $20.40$ $251.93$ $14$ Age (years) $0.19$ $0.39$ $0.36$ $0.36$ Frofessional Services $0.19$ $0.36$ $0.36$ $0.10$ Wholesale $0.01$ $0.25$ $0.03$ $0.11$ Travel And Transportation $0.03$ $0.23$ $0.17$ Hormono $0.06$ $0.23$ $0.17$	16	Education	0.01	0.11	-0.02	-0.01	-0.05	-0.05	-0.01	-0.03	-0.01	-0.03	-0.02	-0.01
Other Industries $0.23$ $0.42$ $-0.04$ $0.02$ $-0.26^{**}$ Past Performance $4.45$ $1.75$ $0.03$ $0.04$ $-0.02$ Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ $-0.05$ Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ $-0.05$ Family ownership $93.34$ $18.17$ $0.02$ $0.01$ $-0.05$ Family ownership $93.34$ $18.17$ $0.02$ $0.01$ $-0.05$ Age (years) $26.72$ $20.40$ $51.193$ $14$ Age (years) $26.72$ $20.40$ $3.9$ $14$ Size (Million USD sales) $28.69$ $251.93$ $14$ Professional Services $0.19$ $0.36$ $0.36$ <td>17</td> <td>Real Estate</td> <td>0.06</td> <td>0.24</td> <td>-0.04</td> <td>0.07*</td> <td><math>-0.12^{**}</math></td> <td><math>-0.11^{**}</math></td> <td>-0.03</td> <td>-0.07*</td> <td>-0.03</td> <td>-0.06*</td> <td>-0.04</td> <td>-0.02</td>	17	Real Estate	0.06	0.24	-0.04	0.07*	$-0.12^{**}$	$-0.11^{**}$	-0.03	-0.07*	-0.03	-0.06*	-0.04	-0.02
Past Performance $4.45$ $1.75$ $0.03$ $0.04$ $-0.02$ Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ $-0.06$ Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ $-0.06$ Family ownership $93.34$ $18.17$ $0.02$ $0.01$ $-0.06$ Family ownership $93.34$ $18.17$ $0.02$ $0.01$ $-0.06$ Age (years) $26.72$ $26.40$ $51d$ $12$ $13$ $14$ Age (years) $26.72$ $20.40$ $51d$ $12$ $13$ $14$ Age (years) $26.72$ $20.40$ $51d$ $12$ $13$ $14$ Age (years) $26.72$ $20.40$ $51d$ $12$ $13$ $14$ Age (years) $2869$ $251.93$ $9.36$ $9.36$ $8.46$ $9.36$ $8.46$ $9.36$ $8.46$ $9.36$ $8.46$ $9.36$ $8.46$ $9.36$ $8.46$ $9.36$ $8.46$ $9.36$ $8.46$ $9.36$ $8.46$ $8.46$ <	18	Other Industries	0.23	0.42	-0.04	0.02	$-0.26^{**}$	$-0.23^{**}$	-0.06	$-0.14^{**}$	-0.06*	$-0.13^{**}$	-0.09**	-0.05
Family involvement $30.75$ $33.00$ $-0.06$ $0.01$ $-0.06$ Family ownership $93.34$ $18.17$ $0.02$ $0.01$ $-0.01$ Age (years)MeanStd. Dev. $11$ $12$ $13$ Age (years) $26.72$ $20.40$ $21.93$ $13$ Age (years) $26.72$ $20.40$ $251.93$ $12$ $13$ Age (years) $26.72$ $20.40$ $251.93$ $12$ $13$ Professional Services $0.19$ $0.39$ $251.93$ $12$ $13$ Professional Services $0.19$ $0.39$ $251.93$ $12$ $13$ Wholesale $0.11$ $0.12$ $0.36$ $251.93$ $12$ $13$ Wholesale $0.11$ $0.10$ $0.25$ $12$ $12$ $13$ Travel And Transportation $0.06$ $0.23$ $0.11$ $12$ $13$ Hormonol $0.06$ $0.23$ $0.11$ $12$ $13$ Decrements $0.12$ $0.11$ $12$ $12$ $12$ Decrements $0.13$ $0.11$ $0.12$ $12$ Decrements $0.12$ $0.11$ $12$ $12$ $12$ Decrements $0.12$ $0.11$ $0.12$ $12$ Decrements $0.11$ $0.12$ $12$ $12$ Decrements $0.12$ $0.11$ $12$ $12$ Decrements $0.12$ $0.12$ $12$ $12$ Decrements $0.12$ $0.12$ $12$ $12$ Decrements $0.12$ $0.12$ </td <td>19</td> <td>Past Performance</td> <td>4.45</td> <td>1.75</td> <td>0.03</td> <td>0.04</td> <td>-0.02</td> <td>-0.03</td> <td>-0.06</td> <td>-0.01</td> <td>-0.03</td> <td>0.02</td> <td>-0.01</td> <td>0.00</td>	19	Past Performance	4.45	1.75	0.03	0.04	-0.02	-0.03	-0.06	-0.01	-0.03	0.02	-0.01	0.00
Family ownership     93.34     18.17     0.02     0.01     -0.01       Age (years)     Mean     Std. Dev.     11     12     13       Age (years)     26.72     20.40     11     12     13       Age (years)     26.72     20.40     11     12     13       Size (Million USD sales)     26.72     20.40     11     12     13       Professional Services     0.19     0.39     13     14       Retail     0.15     0.36     10     10       Wholesale     0.11     0.10     0.10     10       Wholesale     0.07     0.25     11     11       Travel And Transportation     0.06     0.23     17	20	Family involvement	30.75	33.00	-0.06	0.01	-0.06	0.01	0.04	-0.01	0.04	00.00	0.02	-0.01
Mean     Std. Dev.     11     12     13       Age (years)     26.72     20.40     13       Size (Million USD sales)     26.72     20.40     13       Professional Services     0.19     0.39       Retail     0.15     0.36       Communications     0.11     0.10       Wholesale     0.71     0.25       Energy     0.13     0.11       Travel And Transportation     0.06     0.23	21	Family ownership	93.34	18.17	0.02	0.01	-0.01	0.00	-0.07*	$-0.08^{**}$	$-0.15^{**}$	0.02	$-0.08^{**}$	0.03
Age (years)26.722Size (Million USD sales)28.6925Professional Services0.19Retail0.15Communications0.11Wholesale0.07Energy0.13Travel And Transportation0.06Lormono0.05			Mean	Std. Dev.	11	12		14 1	15 1	16 17	7 18	19	20	21
Size (Million USD sales) 28.69 25 Professional Services 0.19 Retail 0.15 Communications 0.11 Wholesale 0.07 Energy 0.13 Travel And Transportation 0.06	1	Age (years)	26.72	20.40										
Professional Services 0.19 Retail 0.15 Communications 0.11 Wholesale 0.17 Energy 0.13 Travel And Transportation 0.06	7	Size (Million USD sales)	28.69	251.93										
Retail0.15Communications0.11Wholesale0.11Wholesale0.07Energy0.13Travel And Transportation0.06Lormonol0.05	ю	Professional Services	0.19	0.39										
Communications 0.11 Wholesale 0.07 Energy 0.13 Travel And Transportation 0.06	4	Retail	0.15	0.36										
Wholesale 0.07 Energy 0.13 Travel And Transportation 0.06	5	Communications	0.11	0.10										
Energy 0.13 Travel And Transportation 0.06	9	Wholesale	0.07	0.25										
Travel And Transportation 0.06	٢	Energy	0.13	0.11										
Inclument of 0.02	8	Travel And Transportation	0.06	0.23										
Insurance 0.00	6	Insurance	0.03	0.17										

 $\underline{\textcircled{O}}$  Springer

		Mean	Std. Dev. 11	11	12	13	14	15	16	17	18	19	20	21
10	10 Telecommunications and Utilities	0.01	0.08											
Π	11 Finance And Securities	0.03	0.17	1										
12	Technology	0.02	0.16	-0.03	1									
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	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	0.06	0.24	-0.04	-0.04	-0.07*	-0.01	-0.06	-0.03	1				
18	18 Other Industries	0.23	0.42	-0.09**	-0.08**	$-0.15^{**}$	-0.02	$-0.12^{**}$	-0.06*	$-0.14^{**}$	1			
19	Past Performance	4.45	1.75	0.06	0.04	-0.03	-0.04	0.00	-0.06	-0.04	$0.09^{**}$	1		
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*	1	
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	$0,159^{**}$	-

S. Sciascia et al.

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 <i>R</i> -square	0.153	0.173	0.187

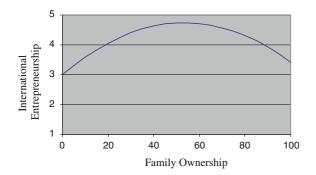


Fig. 1 The relationship between family ownership and international entrepreneurship

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 startup 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

family ownership and international entrepreneurship. Given that international entrepreneurship is a process, panel data could be used to explore the dynamic nature of these relationships over time (Keupp and Gassmann 2009).

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.

#### References

- Adams, A. F., Astrachan, J. H., & Manners, G. (2005). The cost of capital in privately held firms: Assessing the impact of 'non financial' returns. Frontiers of Entrepreneurship Research (p. 176). Wellesley, MA: Babson College.
- Aldrich, H. A., & Cliff, J. E. (2003). The pervasive effects of family on entrepreneurship: Toward a family embeddedness perspective. *Journal of Business Venturing*, 18, 573–596.
- Allio, M. (2004). Family businesses: Their virtues, vices and strategic path. *Strategy and Leadership*, *32*, 24–34.
- Allouche, J., & Amann, B. (1997). Le retour triomphant du capitalisme familial [The triumphant return of family capitalism]. L'expansion: Management Review, 85, 92–99.
- Anderson, A. R., Jack, S. L., & Dodd, S. D. (2005). The role of family members in entrepreneurial networks: Beyond the boundaries of the family firm. *Family Business Review*, 18, 135–154.
- Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500. Journal of Finance, 58, 1301–1327.
- Arregle, J.-L., Hitt, M. A., Sirmon, D. G., & Very, P. (2007). The development of organizational social capital: Attributes of family firms. *Journal of Management Studies*, 44, 73–95.
- Ashforth, B., & Mael, F. (1989). Social identity theory and the organization. Academy of Management Review, 14, 20–39.
- Astrachan, J. H., & Kolenko, T. A. (1994). A neglected factor explaining family business success: Human resource practices. *Family Business Review*, 7, 251–262.
- Autio, E., Sapienza, H. J., & Almeida, J. G. (1997). Effects of age at entry, knowledge intensity, and imitability on international growth. Academy of Management Journal, 43, 909–924.
- Beehr, T. A., Drexler, J. A., & Faulkner, S. (1997). Working in small family businesses. *Journal of Organizational Behavior*, 18, 297–312.
- Bloodgood, J., Sapienza, H. J., & Almeida, J. G. (1996). The internationalization of new high-potential U.S. ventures: Antecedents and outcomes. *Entrepreneurship: Theory and Practice*, 20, 61–76.

- Boles, J. (1996). Influences of work-family conflict on job satisfaction, life satisfaction and quitting intentions among business owners: The case of family operated businesses. *Family Business Review*, 9, 61–74.
- Burgel, O., & Murray, G. C. (1988). The international activities of British start-up companies in high-technology industries: Differences between internationalisers and non-internationalisers. In P. D. Reynolds, W. D. Bygrave, N. M. Carter, S. Manigart, C. Mason, G. Meyer, & K. Shaver (Eds.), *Frontiers of entrepreneurship research* (pp. 447– 463). Babson Park, MA: Boston College.
- Burkart, M., Panunzi, F., & Shleifer, A. (2003). Family firms. Journal of Finance, 58, 2167–2202.
- Cappuyns, K. (2004). Internationalization of family business through strategic alliances: An exploratory study. In P. Z. Poutziouris, K. X. Smyrnios, & S. B. Klein (Eds.), *Handbook of research on family business* (pp. 445–459). Cheltenham, UK: Edward Elgar.
- Carpenter, M. A., & Fredrickson, J. W. (2001). Top management teams, global strategic posture, and the moderating role of uncertainty. *Academy of Management Journal*, 44, 533–545.
- Casson, M. (1999). The economics of the family firm. *Scandinavian Economics History Review*, 47, 10–23.
- Chandler, A. D. (1990). Scale and scope: The dynamics of industrial capitalism. Cambridge, MA: Belknap Press.
- Chang, E. P. C., Memili, E., Chrisman, J. J., Kellermanns, F. W., & Chua, J. C. (2009). Family social capital, venture preparedness, and start-up decisions: A study of Hispanic entrepreneurs in New England. *Family Business Review*, 22, 279–292.
- Corbetta, G., & Salvato, C. (2004). Self-serving or self-actualizing? Models of man and agency costs in different types of family firms: A commentary on 'Comparing the agency costs of family and non-family firms: Conceptual issues and exploratory evidence'. *Entrepreneurship: Theory & Practice*, 28, 355–362.
- Coviello, N. E., & Munro, H. J. (1995). Growing the entrepreneurial firm: Networking for international market development. *European Journal of Marketing*, 29, 49–61.
- Daily, C. M., & Dollinger, M. (1992). An empirical examination of ownership structure in family and professional managed firms. *Family Business Review*, 5, 117–136.
- Dana, L. P. (2001). Introduction: Networks, internationalization and policy. Small Business Economics, 16, 57–62.
- Das, T. K., & Teng, B. S. (1998). Between trust and control: Developing confidence in partner cooperation in alliances. Academy of Management Review, 23, 491–512.
- Davidsson, P. (2005). *Researching Entrepreneurship*. New York: Springer.
- Davis, P. S., & Harveston, P. D. (1999). In the founder's shadow: Conflict in the family firm. *Family Business Review*, 12, 311-324.
- Davis, P. S., & Harveston, P. D. (2000). Internationalization and organizational growth: The impact of Internet usage and technology involvement among entrepreneur-led family businesses. *Family Business Review*, 13, 107–120.
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. Academy of Management Review, 22, 20–47.

- Donckels, R., & Fröhlich, E. (1991). Are family businesses really different? European experiences from STRATOS. *Family Business Review*, 4, 149–160.
- Eddleston, K., & Kellermanns, F. W. (2007). Destructive and productive family relationships: A stewardship theory perspective. *Journal of Business Venturing*, 22, 545–565.
- Eddleston, K., Kellermanns, F. W., & Sarathy, R. (2008). Resource configuration in family firms: Linking resources, strategic planning and technological opportunities to performance. *Journal of Management Studies*, 45, 26–50.
- Ensley, M. D., & Pearson, A. W. (2005). An exploratory comparison of the behavioral dynamics of top management teams in family and nonfamily new ventures: Cohesion, conflict, potency, and consensus. *Entrepreneurship: Theory & Practice*, 29, 267–284.
- Etemad, H., & Lee, Y. (2003). The knowledge network of international entrepreneurship: Theory and evidence. *Small Business Economics*, 20, 5–23.
- Fan, T., & Phan, P. (2007). International new ventures: Revisiting the influences behind the "born-global" firm. *Journal of International Business Studies*, 38, 1113–1131.
- Fear, J. (1997). August Thyssen and German steel. In T. McCraw (Ed.), *Creating modern capitalism* (pp. 185– 226). Cambridge, MA: Harvard University Press.
- Fernandez, Z., & Nieto, M. J. (2005). Internationalization strategy of small and medium-sized family businesses: Some influential factors. *Family Business Review*, 18, 77–90.
- Fernandez, Z., & Nieto, M. J. (2006). Impact of ownership on the international involvement of SMEs. *Journal of International Business Studies*, 37, 340–351.
- Fernhaber, S. A., Gilbert, B. A., & McDougall, P. P. (2008). International entrepreneurship and geographic location: An empirical examination of new venture internationalization. *Journal of International Business Studies*, 39, 267–290.
- Flören, R. (2001). Internationalization of family business in the Netherlands: Research results about implementation of new international strategies and barriers to growth in international markets. Breukelen, Netherlands: University of Nyenrode.
- Gallo, M. A., & Estapè, M. J. (1992). Internationalization of the family business. Research paper no. 230. Barcelona, Spain: IESE Business School.
- Gallo, M. A., & Garcia-Pont, C. (1996). Important factors in family business internationalization. *Family Business Review*, 9, 45–59.
- Gallo, M. A., & Sveen, J. (1991). Internationalizing the family business: Facilitating and restraining factors. *Family Business Review*, 4, 181–190.
- Gedajlovic, E. R., Lubatkin, M. H., & Schulze, W. S. (2004). Crossing the threshold from founder management to professional management. *Journal of Management Studies*, 41, 899–912.
- George, G., & Prabhu, G. N. (2000). Developmental financial institutions as catalysts of entrepreneurship in emerging economies. Academy of Management Review, 25, 620–629.
- George, G., Wiklund, J., & Zahra, S. A. (2005). Ownership and the internationalization of small firms. *Journal of Man*agement, 31, 210–233.

- Gersick, K. E., Davis, J. A., McCollom Hampton, M., & Lansberg, I. (1997). Generation to generation: Life cycles of the family business. Boston, MA: Harvard Business School Press.
- Goffee, R., & Scase, R. (1985). Proprietor control in family firms: Some functions of "quasi-organic" management systems. *Journal of Management Studies*, 22, 53–68.
- Gomez-Mejia, L. R. (1988). The role of human resources strategy in export performance: A longitudinal study. *Strategic Management Journal*, 9, 493–505.
- Gomez-Mejia, L. R., Haynes, K. T., Nunez-Nickel, M., Jacobson, K. J. L., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, 52, 106–137.
- Gomez-Mejia, L. R., Nunez-Nickel, M., & Gutierrez, I. (2001). The role of family ties in agency contracts. Academy of Management Journal, 44, 81–95.
- Grassby, R. (2000). *Kinship and capitalism*. Cambridge, MA: Cambridge University Press.
- Graves, C., & Thomas, J. (2006). Internationalization of Australian family businesses: A managerial capabilities perspective. *Family Business Review*, 19, 207–223.
- Guzzo, R. A., & Abbott, S. (1990). Family firms as utopian organizations. *Family Business Review*, 3, 23–33.
- Habbershon, T. G., & Williams, M. L. (1999). A resourcebased framework for assessing the strategic advantages of family firms. *Family Business Review*, 12, 1–25.
- IFERA. (2003). Family businesses dominate. *Family Business Review*, 16, 235–239.
- James, H. S. (1999). What can the family contribute to business? Examining contractual relationships. *Family Busi*ness Review, 12, 61–71.
- James, H. (2006). Family capitalism: Wendels, Haniels, Falcks and the Continental European model. Cambridge, MA: Harvard University Press.
- Jehn, K. A. (1997). A quantitative analysis of conflict types and dimensions in organizational groups. *Administrative Science Quarterly*, 42, 530–558.
- Karagozoglu, N., & Lindell, M. (1998). Internationalization of small and medium-sized technology-based firms: An exploratory study. *Journal of Small Business Management*, 36, 44–59.
- Kellermanns, F. W., & Eddleston, K. A. (2004). Feuding families: When conflict does a family firm good. *Entre*preneurship: Theory and Practice, 28, 209–228.
- Kellermanns, F. W., & Eddleston, K. A. (2006). Corporate entrepreneurship in family firms: A family perspective. *Entrepreneurship: Theory & Practice*, 30, 809–830.
- Kellermanns, F. W., & Eddleston, K. A. (2007). A family perspective on when conflict benefits family firm performance. *Journal of Business Research*, 60, 1048–1057.
- Kellermanns, F. W., Eddleston, K. A., Barnett, T., & Pearson, A. (2008). An exploratory study of family member characteristics and involvement: Effects on entrepreneurial behavior in the family firm. *Family Business Review*, 21, 1–14.
- Keupp, M. M., & Gassmann, O. (2009). The past and the future of international entrepreneurship: A review and suggestions for developing the field. *Journal of Management*, 35(3), 600–633.

- Kirzner, I. M. (1973). Competition and entrepreneurship. Chicago, IL: University of Chicago Press.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *Journal of Finance*, 54, 471–517.
- Landes, D. (1949). French entrepreneurship and industrial growth in the nineteenth century. *Journal of Economic History*, 9, 45–61.
- Lansberg, I. (1999). Succeeding generations: Realizing the dream of families in business. Boston, MA: Harvard Business School Press.
- Lee, J. (2006). Family firm performance: Further evidence. Family Business Review, 19, 103-114.
- Levinson, H. (1971). Conflicts that plague family businesses. Harvard Business Review, 49, 90–98.
- Light, I., & Bonacich, E. (1988). *Immigrant entrepreneurs: Koreans in Los Angeles, 1965–1982.* Berkeley, CA: University of California Press.
- Light, I., & Gold, S. J. (2000). *Ethnic economies*. San Diego, CA: Academic Press.
- Litz, R. A. (1995). The family business: Toward definitional clarity. *Family Business Review*, 8, 71–82.
- Lu, J. W., & Beamish, P. W. (2001). The internationalization and performance of SMEs. *Strategic Management Jour*nal, 22, 565–586.
- Lubatkin, M. H., Ling, Y., & Schulze, W. S. (2007). An organizational justice-based view of moral hazard problems in family firms. *Journal of Management Studies*, 44, 955–997.
- Lubatkin, M. H., Schulze, W. S., Ling, Y., & Dino, R. N. (2005). The effects of parental altruism on the governance of family-managed firms. *Journal of Organizational Behavior*, 26, 313–330.
- Lyman, A. R. (1991). Customer service: Does family ownership make a difference? *Family Business Review*, 4, 303–324.
- Manolova, T. S., Brush, C. G., Edelman, L. R., & Greene, P. G. (2002). Internationalization of small firms: Personal factors revisited. *International Small Business Journal*, 20, 9–31.
- MassMutual, Kennesaw State University, & Family Firm Institute. (2007). American Family Business Survey. Springfield, MA: Massachusetts Mutual Life Insurance Company and affiliates.
- McCullagh, P. (1980). Regression models for ordinal data. Journal of the Royal Statistical Society, 42, 109–142.
- McDougall, P. P., & Oviatt, B. M. (2000). International entrepreneurship: The intersection of two paths. Academy of Management Journal, 43, 902–906.
- Miller, D., & Le Breton-Miller, I. (2003). Challenge versus advantage in family business. *Strategic Organization*, *1*, 127–134.
- Miller, D., Le Breton-Miller, I., & Scholnick, B. (2008). Stewardship vs. stagnation: An empirical comparison of small family and non-family businesses. *Journal of Management Studies*, 45, 51–78.
- Miller, E. J., & Rice, A. K. (1988). The family business in contemporary society. *Family Business Review*, *1*, 193–210.
- Morck, R., & Yeung, B. A. (2003). Agency problems in large family groups. *Entrepreneurship: Theory and Practice*, 27, 367–382.

- Mustakallio, M., Autio, E., & Zahra, S. A. (2002). Relational and contractual governance in family firms: Effects on strategic decision making. *Family Business Review*, 15, 205–222.
- Naldi, L., Nordqvist, M., Sjöberg, K., & Wiklund, J. (2007). Entrepreneurial orientation, risk taking and performance in family firms. *Family Business Review*, 20, 33–48.
- Norušis, M. J. (2006). SPSS 15.0 Statistical procedures companion. Upper Saddle-River, NJ: Prentice Hall.
- Okoroafo, S. C. (1999). Internationalization of family businesses: Evidence from Northwest Ohio, USA. Family Business Review, 12, 147–158.
- Oviatt, B. M., & McDougall, P. P. (1995). Global start-ups: Entrepreneurs on a worldwide stage. Academy of Management Executive, 9, 30–43.
- Oviatt, B. M., & McDougall, P. P. (2005). Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship: Theory and Practice*, 29, 537–554.
- Palmer, D., & Barber, B. (2001). Challengers, elites and owning families: A social class theory of corporate acquisitions. *Administrative Science Quarterly*, 46, 87– 120.
- Peng, M. W. (2001). The resource-based view and international business. *Journal of Management*, 27, 803–829.
- Pieper, T. M., & Astrachan, J. H. (2008). Mechanisms to assure family business cohesion: Guidelines for family business leaders and their families. Kennesaw, GA: Cox Family Enterprise Center.
- Pistrui, D., Huang, W., Oksoy, D., Jing, Z., & Welsch, H. (2001). Entrepreneurship in China: Characteristics, attributes, and family forces shaping the emerging private sector. *Family Business Review*, 14, 141–152.
- Poza, E. J., Alfred, T., & Maheshwari, A. (1997). Stakeholder perceptions of culture and management practices in family and family firms. *Family Business Review*, 10, 135– 155.
- Pruitt, B. (1999). *Timken: From Missouri to Mars—A century* of leadership in manufacturing. Boston, MA: Harvard Business School Press.
- Reuber, R., & Fischer, E. (1997). The influence of the management team's international experience on the internationalization. *Journal of International Business*, 28, 807–825.
- Sarasvathy, S. D. (2000). Report on the seminar on research perspectives in entrepreneurship. *Journal of Business Venturing*, 15, 1–58.
- Sathe, V. (2003). Corporate entrepreneurship: Top managers and new business creation. Cambridge, UK: Cambridge University Press.
- Schulze, W. S., Lubatkin, M. H., & Dino, R. N. (2002). Altruism, agency, and the competitiveness of family firms. *Managerial and Decision Economics*, 23, 247–259.
- Schulze, W. S., Lubatkin, M. H., & Dino, R. N. (2003). Exploring the agency consequences of ownership dispersion among the directors of private family firms. *Academy* of Management Journal, 46, 179–194.
- Schulze, W. S., Lubatkin, M. H., Dino, R. N., & Buchholtz, A. K. (2001). Agency relationships in family firms: Theory and evidence. *Organization Science*, *12*, 99–116.

- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. Academy of Management Review, 25, 217–226.
- Sharma, P., Chrisman, J. J., & Chua, J. H. (1996). A review and annotated bibliography of family business studies. Boston, MA: Kluwer Academic Publishers.
- Sirmon, D. G., Arregle, J.-L., Hitt, M. A., & Webb, J. W. (2008). The role of family influence in firms' strategic responses to threat of imitation. *Entrepreneurship: Theory* & *Practice*, 32, 979–998.
- Sirmon, D. G., & Hitt, M. A. (2003). Managing resources: Linking unique resources, management, and wealth creation in family firms. *Entrepreneurship: Theory & Practice*, 27, 339–358.
- Slater, S. F., & Narver, J. C. (1995). Market orientation and the learning organization. *Journal of Marketing*, 59, 63–74.
- Steensma, K., Marino, L., Weaver, M., & Dickson, P. (2000). The influence of national culture in the formation of technology alliances by entrepreneurial firms. Academy of Management Journal, 43, 951–973.
- Swartz, S. (1989). The challenges of multidisciplinary consulting to family-owned businesses. *Family Business Review*, 2, 329–339.
- Swinth, R., & Vinton, K. (1993). Do family-owned business have a strategic advantage in international joint ventures? *Family Business Review*, 6, 19–30.
- Thomas, A. S., & Mueller, S. L. (2000). A case for comparative entrepreneurship: Assessing the relevance of culture. *Journal of International Business Studies*, 31, 287–301.
- Tsui-Auch, L. S. (2004). The professionally managed familyruled enterprise: Ethnic Chinese business in Singapore. *Journal of Management Studies*, 41, 693–723.
- Ward, J. L. (1998). Growing the family business: Special challenges and best practices. *Family Business Review*, 10, 323–337.
- Ward, J. L. (2004). Perpetuating the family business. Marietta, GA: Family Enterprise Publishers.
- Welch, L. S., & Wiedersheim-Paul, F. (1980). Initial exports: A marketing failure? *Journal of Management Studies*, 17, 333–344.
- Witkowski, T. H., & Thibodeau, E. J. (1999). Personal bonding processes in international marketing relationships. *Journal* of Business Research, 46, 315–325.
- Wright, R. W., & Ricks, D. A. (1994). Trends in international business research: Twenty-five years later. *Journal of International Business Studies*, 25, 687–701.
- Yeh, Y., Lee, T., & Woidtke, T. (2001). Family control and corporate governance: Evidence from Taiwan. *International Review of Finance*, 2, 21–48.
- Zahra, S. A. (2003). International expansion of U.S. manufacturing family business: The effect of ownership and involvement. *Journal of Business Venturing*, *18*, 495–512.
- Zahra, S. A. (2005). Entrepreneurial risk taking in family firms. Family Business Review, 18, 23–40.
- Zahra, S. A., & Garvis, S. (2000). International corporate entrepreneurship and company performance: The moderating effect of international environmental hostility. *Journal of Business Venturing*, 15, 469–492.
- Zahra, S. A., & George, G. (2002). International entrepreneurship: The current status of the field and future research agenda. In M. A. Hitt, D. R. Ireland, S. M. Camp,

& D. L. Sexton (Eds.), *Strategic entrepreneurship: Creating a new mindset* (pp. 255–288). Oxford, UK: Blackwell.

- Zahra, S. A., Hayton, J. C., & Salvato, C. (2004). Entrepreneurship in family vs. non-family firms: A resource-based analysis of the effect of organizational culture. *Entrepreneurship: Theory & Practice*, 28, 363–381.
- Zahra, S. A., Ireland, D. R., & Hitt, M. (2000). International expansion by new venture firms: International diversity, mode of market entry, technological learning and performance. Academy of Management Journal, 43, 925–950.