

University of Groningen

## Drivers of internationalization success

Kraus, Sascha ; Mitter, Christine; Eggers, Felix; Stieg, Philipp

*Published in:*  
Review of Managerial Science

*DOI:*  
[10.1007/s11846-016-0201-4](https://doi.org/10.1007/s11846-016-0201-4)

**IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.**

*Document Version*  
Publisher's PDF, also known as Version of record

*Publication date:*  
2017

[Link to publication in University of Groningen/UMCG research database](#)

### *Citation for published version (APA):*

Kraus, S., Mitter, C., Eggers, F., & Stieg, P. (2017). Drivers of internationalization success: a conjoint choice experiment on German SME managers. *Review of Managerial Science*, 11(3), 691-716. <https://doi.org/10.1007/s11846-016-0201-4>

### **Copyright**

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

### **Take-down policy**

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

*Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.*

# Drivers of internationalization success: a conjoint choice experiment on German SME managers

Sascha Kraus<sup>1</sup> · Christine Mitter<sup>2</sup> · Felix Eggers<sup>3</sup> · Philipp Stieg<sup>1</sup>

Received: 1 January 2016 / Accepted: 6 June 2016 / Published online: 30 June 2016  
© Springer-Verlag Berlin Heidelberg 2016

**Abstract** Internationalization is a common growth strategy for small and medium-sized enterprises (SMEs). However, SMEs face several challenges within the internationalization process. As SMEs are characterized by limited resources, managers are constantly involved in a decision-making process concerning the allocation of the SMEs' resources. Therefore, internationalization can be understood as a complex, multidimensional decision process. Based on a set of 2244 internationalization decisions made by German SME managers, the present study examines how eight strategic and structural factors drive the perceived international success of SMEs. When applying conjoint choice analysis, the results suggest that especially equity financing in the internationalization process, an appropriate market selection as well as proactive motives, and a long-term scope can drive SMEs' international success. Moreover, it becomes evident that strategic factors are more relevant for successful internationalization than structural factors.

**Keywords** Internationalization · SME · Conjoint analysis · Choice experiment · International success

---

✉ Sascha Kraus  
sascha.kraus@unisg.ch

Christine Mitter  
christine.mitter@fh-salzburg.ac.at

Felix Eggers  
f.eggers@rug.nl

Philipp Stieg  
philipp.stieg@uni.li

<sup>1</sup> University of Liechtenstein, Fürst-Franz-Josef-Strasse, 9490 Vaduz, Liechtenstein

<sup>2</sup> Salzburg University of Applied Sciences, Urstein Sued 1, 5412 Puch/Salzburg, Austria

<sup>3</sup> University of Groningen, PO Box 800, 9700 AV Groningen, The Netherlands

**JEL Classification** F20 · L25**1 Introduction**

Internationalization is one of the most common strategies for growth (Cerrato and Piva 2012). Globalization makes it inevitable for SMEs to internationalize their business activities (Fabian et al. 2009; Raymond et al. 2014); they may do so in response to small, mature, or highly competitive domestic markets, or because they perceive greater opportunities in foreign markets (Fletcher 2004; Evangelista 2005). For SMEs, being active on international markets can bring both opportunities as well as challenges (Xie and Suh 2014). The major challenge SMEs are facing when going international is to allocate specific resources (Peng 2001). These (required) resources, however, tend to be restricted or non-existent in SMEs, which are per se characterized by limited resources (Buckley 1989; Etamad 2004). Research on the internationalization of SMEs has outlined the importance of SMEs' resources for successful internationalization (Zhou et al. 2012). Financial resources are particularly crucial for the implementation of internationalization strategies (McNaughton and Bell 2004) as well as building up advanced technologies to produce superior products for highly competitive markets (Kuivalainen et al. 2010); therefore, SMEs have to overcome financial straits to go international (Bellone et al. 2010).

However, internationalization decisions have many facets and are characterized by a complex decision process. Furthermore, key decision-makers are likely to perceive the same opportunity differently based on the individual circumstances they face (Crick and Barr 2007). Thus, internationalization can be seen as a multidimensional decision problem that requires a joint assessment of multiple choices. Although numerous studies have been conducted over recent years (Stieg et al. 2014), today, however, there is no clear picture which factors and in particular which combinations of strategic as well as structural aspects are keys for international success. This article tackles this research gap and addresses the multi-dimensionality of the internationalization decision; it analyzes how German SME managers perceive the importance of different factors on internationalization success and, moreover, which combinations of factors are perceived as particularly promising and thus crucial for SMEs' international success.

Drawing from previous research, we were able to identify the following six strategic and two structural factors that may drive international success. The strategic internationalization factors we analyzed differed according to the form of (1) market entry, (2) target region, (3) motives for going abroad, (4) degree of internationalization, (5) speed of implementation and (6) financing. Addressing structural factors we chose (7) the family firm status of the internationalizing firm, and (8) the firm's age.

We used a conjoint choice experiment to decompose the effect of the eight factors and applied a state-of-the-art individual-level hierarchical Bayes estimation to account for individual differences among decision-makers. Our results suggest that internationalization success is more affected by strategic factors than structural variables. We found that for SME managers, financing is the most important factor

for internationalization, and SMEs that finance their international endeavors with equity are considered to be more successful than SMEs that rely on debt. The second most important factor is an appropriate foreign market selection. Interestingly, which foreign market is considered attractive is subject to substantial heterogeneity among managers. Furthermore, proactive motives for going international and a long-term scope of the internationalization process, were perceived as being important for SMEs' international success.

Our work contributes in many ways. First, our findings add to the understanding of SMEs' internationalization behavior by identifying decision factors and their possible combinations that affect SMEs' international success. Second, to our knowledge, the present study is the first in this research context that uses an experimental research design. By doing so, we can observe which combinations have been chosen as the most successful internationalizations and which combinations have been rejected—information that is usually not available when analyzing actual internationalization strategies of firms. This way, our findings help to better understand why certain factors appear more relevant than others in going international, and can thus offer several recommendations for decision-makers in SMEs. Consequently, we enable SME managers to make better internationalization decisions by focusing primarily on the strategic factors that have been identified as key for internationalization success, and by providing guidance on how to best allocate the SME's restricted resources.

## 2 Hypotheses development

### 2.1 Strategic factors

#### 2.1.1 Foreign entry mode

SMEs can choose from a variety of entry modes, which can be clustered by their degree of resource commitment (Agndal and Chetty 2007) as well as by the risk involved (Armario et al. 2008). Export is the market entry mode with the lowest risk compared to other internationalization strategies and involves lower levels of resource commitment than other internationalization strategies (O'Cass and Weerawerdena 2009). While internationalization strategies like contract-based agreements such as licensing, franchising, or strategic alliances (partnerships between two or more independent organizations) bond a moderate risk for the organization, foreign-direct investment strategies like joint ventures, minority stakes, and fully owned subsidiaries involve the highest risk for the organization and require the most resources. Since SMEs are usually characterized by limited resources, exporting is the most common internationalization strategy (Calia and Ferrante 2013); it is also an easier way to test and establish international business because the company does not have to deal with the complexities of establishing a foreign subsidiary (Lu and Beamish 2006a, b) and can still use existing production infrastructure. Moreover, the company is able to exit from a foreign market when

market conditions are changing. Hence, exporting is a very flexible internationalization strategy.

Besides several advantages, international business studies have identified a variety of barriers that are associated with export as an internationalization strategy (Zou and Stan 1998), which can be traced back to SMEs' lack of resources. To overcome these liabilities of smallness, SMEs can collaborate with other organizations and draw on their networks in order to gain access to foreign markets and form strategic alliances (Lu and Beamish 2001; Fernandez and Nieto 2005) enabling SMEs to benefit from external relationships in two ways. First, proven relationships with domestic key players can enhance a new firm's reputation and credibility in a foreign market and, moreover, can be seen as a sign and proof of quality of the small firm (Venkataraman et al. 1990; Stuart 2000). Second, strategic alliances could provide access to the required resources of the partner that would otherwise take years to build and thereby enable an SME to buffer its lack of resources for the internationalization process (Orengo 2012); useful knowledge about foreign markets and opportunities become available (Jaw and Cheng 2006) and the perceived uncertainty in foreign markets may be overcome by exchanging information with organizations who are more familiar with the specific local context (Acs et al. 1997; Zaheer and Mosakowski 1997). Accordingly, compared to export strategies, SMEs can form strategic alliances to access a broader array of resources than they could provide internally (Chan and Heide 1993; Ahuja 2000). As a result, SMEs can benefit from the partner firm's complementary strengths (Etemad and Wright 1999) and leverage these outside resources in new, creative ways (Mathews 2002). Recent studies have shown that network activities can have a positive impact on a company's internationalization (Schweizer 2012; D'Angelo et al. 2013).

According to that, a strategic alliance with a partner with complementary competences should have a positive impact on a company's international performance and should be perceived so. Therefore, we hypothesize:

**H1** SMEs that rely on a strategic alliance in their internationalization are perceived to be more successful than SMEs that rely on exporting.

### 2.1.2 Target market

Research on international market selection (IMS) and its impact on a firm's performance has emerged to an extensive size in the past decades (Nocco et al. 2014). There is evidence in research that targeting the right foreign market can have a crucial impact on SMEs' internationalization performance (Efrat and Shoham 2012). In international business research, the construct of cultural distance (Minkov and Hofstede 2012) has been established to explain the market selection process of a firm. It includes six cultural dimensions (Hofstede 2011) that helped to distinguish one culture from another.

Traditional internationalization models follow a stage-theory approach (e.g., Johanson and Vahlne's 1977 Uppsala model) and assume that companies tend to start their international activities in foreign countries with a lower cultural distance. The more international experience the company gains over time, the more it will

access foreign countries with a higher cultural distance in later stages of its internationalization process.

As the world keeps changing, new markets in Africa, Asia, Eastern Europe, and Latin America are emerging and both political and technological progress enable firms to access these so-called emerging markets. More recent studies have therefore challenged IMS models by identifying companies that start their international activities in foreign countries with a high cultural distance, where greater opportunities for growth are more likely (Freeman et al. 2012). Studies have shown that in particular, the potential of a foreign market plays a decisive role in the decision for a foreign market entry (Khanna et al. 2005; Malhotra and Sivakumar 2011) and could be described as the sum of a variety of variables from socio-cultural to geographic factors (Douglas et al. 1982). Thus, companies have to trade off between two options: The first option is targeting saturated markets with similar cultures and business habits that allow the leverage of their domestic competencies in foreign markets more easily (Gomes and Ramaswamy 1999) reducing the company's risk. The second option is targeting more distant emerging markets that promise higher growth rates, but can go along with additional transaction costs that arise from the company's unfamiliarity with the foreign market conditions (Kuo et al. 2012; Trudgen and Freeman 2014). German managers perceive Asia as an evolving and emerging region that has a high dynamic economic growth rate (d'Artis 2010) as well as a promising market potential but shows on the other hand, a high cultural and geographic distance compared to more closer and developed markets in Europe. Recent studies have shown that the internationalization to more distant countries is perceived as very risky by SMEs (Kraus et al. 2015). Consequently, we hypothesize that SME managers value the risk even higher than the expected payoff resulting from higher growth rates. Hence, we propose the following hypothesis:

**H2** SMEs that target a European market are perceived to be more successful than SMEs that target a market in Asia.

### 2.1.3 *Motives for going international*

Ever since research on the internationalization of firms emerged, the motivation for going international has also been of scholarly interest. A common classification for internationalization motives is the differentiation between *passive-reactive* (push) and *proactive* (pull) motives (Gankema et al. 2000; Tatoglu et al. 2003). Passive-reactive motives mean that the company is 'pushed' to go international by external factors that arise from unfavorable conditions and limited domestic market growth opportunities such as market maturity, saturation and dominance, increased competition, exhausted or unsuitable diversification possibilities, and excessive regulations or passive requests from foreign customers (Gibson 1989; Thompson and Knox 1991). In contrast, companies with proactive internationalization motives are driven by internal (pull) factors, for example, the perception of potential in foreign markets or, in general, a positive attitude towards internationalization; these companies internationalize as a result of their own goals and strategies, and they do

so with a higher resource commitment than passive-reactive internationalizers (Leonidou 1995; Tan et al. 2007). Moreover, proactive SMEs are characterized by forward-looking behavior, the realization of first mover advantages to shape the environment by new products ahead of their competitors (Lyon et al. 2000). This refers to the firm's response to market opportunities and implies an opportunity-seeking perspective (Lumpkin and Dess 2001; Kreiser et al. 2002). Hence, proactively motivated SMEs try to shape their environment to realize a competitive advantage and to anticipate competitor movements and market needs (Ripollés-Meliá et al. 2007). Accordingly, by realizing first mover advantages, proactive SMEs are able to gain high profits from new markets in the absence of competitors (Lieberman and Montgomery 1998). Moreover, proactiveness reflects the firm's ability to undertake a continuous search for opportunities (De Clercq et al. 2005). Therefore, a proactive SME regularly observes foreign markets and their developments, especially in markets in which it is not yet active. If foreign market conditions change for the benefit of SMEs, proactive SMEs are able to quickly exploit foreign opportunities because of their existing internationalization knowledge. Frishammer and Andersson (2009) have shown a positive association between proactiveness and international performance. Thus, we believe that due to the characteristics of proactively motivated SMEs, they are perceived as more promising to gain international success than reactive SMEs and suggest:

**H3** SMEs that go international due to proactive reasons are perceived to be more successful than reactive SMEs.

#### *2.1.4 Degree of internationalization*

As internationalization is an important process for the growth and development of SMEs, research efforts also focused on measuring the degree of a firm's internationalization and the effects on the performance of a firm. Internationalization can be understood as the process of adapting a firm's operations (strategy, structure, resources etc.) to international environments (Calof and Beamish 1995); one can argue that a firm needs to have a high degree of internationalization (DOI) to successfully realize the advantage of being international (Kafouros et al. 2008). Therefore, over the last two decades there has been abundant scholarly work on how to measure a firm's DOI (e.g., Dunning 1996; Ietto-Gillies 1998; Ietto-Gillies and London 2009). Although a wild bunch of variables has been applied to measure the DOI, two general approaches have become generally accepted. The first approach measures the DOI based on an index, including the number of regions and countries (e.g. Rugman and Oh 2011), foreign direct investments (e.g. UNCTAD 2007), international activities within a firm's value chain (Asmussen et al. 2007), or percentage of international sales and profits (Hassel et al. 2003). The second approach as Sommer (2009) has pointed out, applies a typology to describe different levels of internationalization and considers elements such as structure, performance, behavior, environment, strategy and resources. It can be assumed that a high degree of international activities enables the organization to develop firm-specific core competencies such as technological know-how as well as managerial and

organizational capabilities (Caves 1971; Dunning 1988) and, furthermore, strengthens the deployed core competencies by speeding up the progress along the learning curve (Vernon 1971). In this regard, a higher DOI can trigger enhanced profitability (Rugman 1981). The higher the DOI, the more entrepreneurs and managers are forced to learn about the foreign market and how to change and adapt their international activities to be congruent with the new foreign market (McDougall and Oviatt 1996). Therefore, when a firm adopts a greater DOI, it needs to learn about multiple new markets, maintain awareness and respond to changes occurring in those multiple markets (e.g., Liesch and Knight 1999; Hennart 2007; Kafourous et al. 2008). Besides learning effects, a greater DOI can especially help SMEs to overcome their restraints in resources by leveraging their international networks, which may diminishes the cultural distance and accelerate international activities (Zuchella and Scabini 2007).

Consequently, we believe that SMEs that are willing to make international learning efforts and consider internationalization a strategic priority—which reflects a higher DOI—are more successful internationalizers. Therefore, we hypothesize:

**H4** SMEs that target a higher degree of internationalization are perceived to be more successful than SMEs that target a lower degree of internationalization.

#### 2.1.5 Implementation speed of internationalization

Due to limited resources, accessing foreign markets is risky for SMEs (Cuervo-Cazurra et al. 2007). The SME's core resources are required and bounded during internationalization and are therefore not available elsewhere. Hence, if internationalization fails, the SME not only suffers a short-term financial loss but can also jeopardize the continued existence of the company in the long term (Sapienza et al. 2006). Since SMEs are described as rather risk averse in traditional internationalization research, it is likely that internationalization takes place slowly and deliberately. Therefore, SMEs select internationalization forms that require fewer resources and reduce risk (Calof and Viviers 1995), thereby enabling them to take sequential steps forward (Johanson and Vahlne 1990; Leonidou and Katsikeas 1996). More recent research has challenged this stage-theory approach by identifying companies that show a more rapid internationalization behavior (e.g., Moen and Servais 2002; Knight and Cavusgil 2004). So called *born globals* internationalize very early after inception (Oviatt and McDougall 1994).

However, for successful internationalization, it is crucial that the SME is able to learn from the experiences that it collects during internationalization and, hence, is able to use this knowledge for future entries into foreign markets (Johanson and Vahlne 2009). Since there are only limited resources available in SMEs for internationalization, it is assumed that the process of learning takes longer until this knowledge can be applied to new markets. Therefore, we believe that SMEs that implement their internationalization strategy in the long-term are perceived to be more successful than SMEs that internationalize in the short-term. Moreover, SMEs seeking a rapid implementation of their internationalization strategy also have to provide a higher proportion of their limited resources for internationalization which



in turn, may increase the risk of failure. Subsequently, we postulate the following hypothesis:

**H5** SMEs that implement their internationalization strategy in the long-term are perceived to be more successful than SMEs that internationalize in the short-term.

### 2.1.6 *Financing of internationalization*

One of the resources that is essential for internationalization is funding (McNaughton and Bell 2004). However, internationalization means higher agency costs for investors (Chen et al. 1997). The reasons are twofold: first, it increases complexity due to a higher variety of external conditions (Sanders and Carpenter 1998); and secondly, internationalization relates to higher risks because of the uncertainty associated with it (Abor et al. 2014). Firms can rely on several options to finance their international activities, ranging from retained earnings over debt (mostly bank loans) to external equity. Since retained earnings will generally not suffice in SMEs to finance international endeavors—especially the resource-intensive ones—they have to draw on external sources of financing.

Generally, it is more difficult for SMEs than for larger companies to raise debt (e.g., Chittenden et al. 1996) because they have less sophisticated reporting systems and are therefore less able to provide their debt providers with information to reduce information asymmetries (McNaughton and Bell 2004). Moreover, (highly) leveraged firms forego investments that would increase the overall value of the company because these investments would mostly benefit debtholders, resulting in an “underinvestment” problem (Myers 1977). As internationalization is related to higher agency costs, the higher agency costs of debt that go along with it (e.g., Burgman 1996; Doukas and Pantzalis 2003) should be even more severe in internationally active SMEs because of their opaqueness. Therefore, even if SMEs are able to raise debt, leverage is supposed to negatively impact (international) investments (e.g., Aivazian et al. 2005; Park et al. 2013). Furthermore, several financing theories such as the trade-off theory (e.g., Bradley et al. 1984) and the pecking-order theory (e.g., Fama and French 2002) suggest that higher volatility and therefore increased risk should go along with higher equity ratios in order to not endanger the firm’s growth opportunities (Chen et al. 1997; Park et al. 2013).

While redemption and interest payments associated with debt put a strain on a firm’s liquid funds (McNaughton and Bell 2004), external equity can increase a firm’s resource pool. Such external investors will not only provide the much-needed financial capital for internationalization but can also contribute expertise, knowledge about foreign markets and valuable international business contacts. This way, they can spur the internationalization of SMEs (Fernandez and Nieto 2005; Cerrato and Piva 2012) and increase their chances of success in international markets.

Accordingly, financing international endeavors with equity seems advantageous compared to debt financing and should thus relate to higher internationalization success. Hence, SMEs that fund their internationalization predominantly with equity should also be perceived to be more successful. Therefore, we propose:

**H6** SMEs that rely predominantly on equity financing in their internationalization are perceived to be more successful than SMEs that rely predominantly on debt financing.

## 2.2 Structural factors

### 2.2.1 *Family firm status*

The majority of SMEs in German-speaking countries are family firms (Mandl 2008). Although the literature has not yet agreed on a generally accepted definition of the term “family firm”, the recent extensive overview article by Xi et al. (2015) reveals that the most influential delineation attempts are centered on the family’s involvement in the business (interpreted predominantly as involvement in ownership as well as governance and/or management), the intention of sustainability over generations, and the distinctive goals and behaviors that result from this involvement and intention (Chua et al. 1999; Cesinger et al. 2016). Examples for such distinct characteristics are risk aversion and conservativeness that are often attributed to family firms (Fernandez and Nieto 2005; Naldi et al. 2007). Their wish to maintain control and ownership within the family can make them reluctant to accept external investors (Poutziouris 2001; Romano et al. 2001) or non-family executives (Sirmon and Hitt 2003), resulting in severe resource constraints (Claver et al. 2009; Muñoz-Bullón and Sánchez-Bueno 2012) and missed investment opportunities (Mishra and McConaughy 1999; Thomsen and Pedersen 2000). Hence, family firms are considered to be less internationally active (Fernandez and Nieto 2005; Bhaumik et al. 2010) and to internationalize less aggressively and more slowly (Graves and Thomas 2008; Cesinger et al. 2014). This should apply even more so to family firms that exhibit a high degree of family ownership and involvement and are led by family members. Taking into account the heterogeneity among family firms, recent studies revealed an inverted U-shaped relationship between family influence and internationalization, demonstrating that the only family firms that are less internationally active are characterized by a high level of family ownership (Sciascia et al. 2012) or family influence (Mitter et al. 2014). Consequently, non-family owners seem to spur internationalization in family firms (Arregle et al. 2012; Dick et al. 2016). Although previous research on the impact of non-family executives is inconclusive, external managers appear to impact internationalization rather positively (Naldi and Nordqvist 2008; Claver et al. 2009; Banalieva and Eddleston 2011; Kraus et al. 2016b).

On the other hand, family firms exhibit more commitment to chosen strategies (Mustakallio et al. 2002; Arregle et al. 2007) and exhibit longer investment horizons (Dreux 1990; Sirmon and Hitt 2003). This allows them to be more patient in waiting for returns and to display more stamina and patience in their internationalization (Mitter and Emprechtlinger 2016). Thus, while their internationalization appears to take longer, it eventually pays off and materializes as a success and/or better performance (Zahra 2003; Graves and Thomas 2008; Graves and Shan 2014). Because of these characteristics, we expect family firms to be perceived as more

successful in going international than non-family firms, resulting in the following hypothesis:

**H7** Family SMEs are perceived to be more successful in their internationalization than non-family SMEs.

### 2.2.2 Firm age

Earlier research has shown that the age of a company influences international success (Bilkey and Tesar 1977; Nakos et al. 1998). Following traditional internationalization models (Johanson and Vahlne 1977), gradual and stepwise internationalization is explained with a firm's need to develop knowledge of foreign markets before they can enter or allocate more resources to them. This can be a time-consuming, lengthy, and gradual process comprising of an understanding of new cultures, languages, institutional frameworks and the development of certain routines as well as skills and legitimacy (Andersson et al. 2004), so that they can overcome the liability of newness (Stinchcombe 1965) and foreignness (Zaheer 1995).

It is assumed that internal resources accumulate in steps within the organization over time (McNaughton and Bell 2004). Therefore, a firm's age can serve as a proxy for the availability of resources the firm can draw on (Ali and Camp 1993) and can be associated with firm experience (Cavusgil 1984a; Verwaal and Donkers 2002) as well as learning effects. Following this argumentation, firm age is regarded as an important driver in the internationalization of small firms. While the degree of internationalization may be one reason for the accumulation of knowledge, firm age can be another such factor. The older the SME, the more internationalization knowledge has been developed over time, and the more advanced a firm's skills are in managing international activities. Hence, we expect older SMEs to be perceived as more successful in their internationalization. This leads us to the following hypothesis:

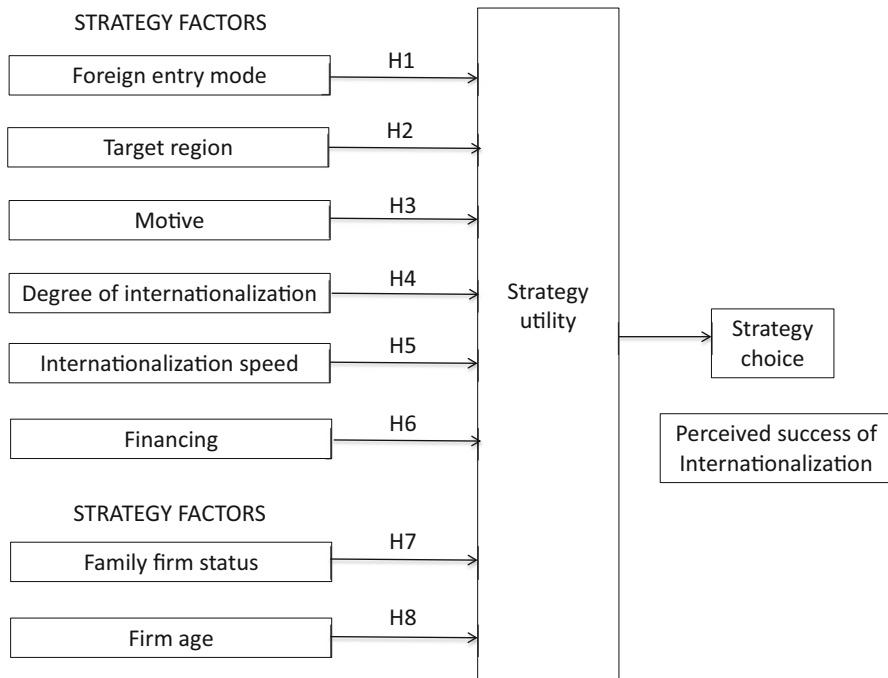
**H8** Older SMEs are perceived to be more successful in their internationalization than younger SMEs.

The hypotheses are summarized in Fig. 1, illustrating our conceptual model.

## 3 Experimental study

### 3.1 Method: conjoint choice experiment

In this study, we explore managers' internationalization decisions within a conjoint choice experiment (Louviere et al. 2000). In this experiment, we considered the internationalization strategies as a combination of the eight previously described factors, as is common for conjoint measurement. In the experiment, managers were asked to choose the internationalization strategy they perceived as *most successful* from consecutive choice sets. The decisions in the experiment allow us to



**Fig. 1** Conceptual model

decompose the managers' preferences for each of these factors. The preferences, in turn, give insight about how decision makers trade off the importance of competing factors and give an overview of preference heterogeneity. By using a conjoint choice experiment, we account for the fact that internationalization can be seen as a multidimensional decision problem that requires a joint assessment—and trade-off—of multiple criteria.

These conjoint choice experiments are a standard procedure for measuring preferences in many disciplines, e.g., marketing or transportation (Eggers and Sattler 2011). However, there is a gap of such choice experiments in managerial decision-making (see Lohrke et al. 2010 for a review), with the exception of Buckley et al. (2007), Eggers et al. (2016), Kraus et al. (2015), Mensching et al. (2016) and Kraus et al. (2016a). Apart from the managerial implications of our results, this experiment therefore also closes a methodological void in this research context.

### 3.2 Model

Random utility theory constitutes the theoretical basis for our model (e.g., Manski 1977). Accordingly, we assume that manager  $m$  chooses an internationalization strategy  $i$  that yields the highest expected utility  $U$ . Utility is a latent construct that can be partitioned into a systematic component  $V$ , and a random error component  $\varepsilon$ , such that,  $U_{mi} = V_{mi} + \varepsilon_{mi}$ . Applied to our research context, we assume that the

manager's overall utility perception of an internationalization strategy is affected systematically by his or her part-worth utilities  $\beta$  (preference) for each of our  $r$  experimental factors, i.e.,  $V_{mi} = \sum_r \beta_{mr} x_{ri}$ . The error term,  $\varepsilon_{mi}$ , captures factors that affect the utility but are not included in  $V_{mi}$ , such as unobserved internationalization factors, context effects, or measurement error.

According to the theory, a manager chooses internationalization strategy  $i$  instead of strategy  $j$  if  $U_{mi} > U_{mj}$ . Assuming an extreme-value type distribution for the error term, these decisions can then be modeled in terms of choice probabilities with the multinomial logit (MNL) model (Louviere et al. 2000). The MNL model represents manager  $m$ 's choice of strategy  $i$  from a set of  $J$  internationalization options as:

$$prob_m(i|J) = \frac{\exp(V_{mi})}{\sum_j \exp(V_{mj})} \quad (1)$$

### 3.3 Experimental design

The factors that were identified in the second chapter serve as the independent variables in order to explain the internationalization decision: *Foreign entry mode, target region, motives, degree of internationalization, implementation speed, financing, family firm status, and firm age*. Although more factors are potentially relevant to account for the heterogeneity of an internationalization decision, a maximum of eight factors were set to avoid cognitive complexity for the respondents. For the same reason, there are only two representative levels per factor so that each factor can be represented by one dummy variable (see Table 1). The factor levels were selected so that they relate to the tested hypotheses or represent common distinctions, e.g., six years for rapidly internationalizing ventures (firm age; Cesinger et al. 2012) and 40 % foreign revenue of total revenue (degree; Cavusgil 1984b; Riahi-Belkaoui 1998).

The full factorial of the independent variables contains  $2^8$  potential internationalization options. This factorial was reduced to a strength-two orthogonal fraction with twelve stimuli. We created choice sets with two alternatives per set by coupling each entry in the fractional factorial with its fold-over. The structure of the choice

**Table 1** Factors and levels of the conjoint choice experiment

Factor	Level 1	Level 0 (Reference)
Foreign entry mode	Export	Strategic alliance/cooperation
Target country	Attractive market in Europe	Attractive market in Asia
Motive	Proactive: market opportunities	Reactive: competitive pressure
Degree	More than 40 % revenue via international markets	Maximum of 40 % revenue via international markets
Speed	Short-term implementation	Long-term implementation
Financing	Predominantly equity-financed	Predominantly debt-financed
Family firm status	Family-managed business	Non-family business
Firm age	Younger than 6 years	Older than 6 years

sets is depicted in Table 2, in which the stimuli are represented as combinations of the eight dummy-coded, space-separated factors. The resulting choice design with twelve choice sets is balanced and orthogonal, and contains minimal overlap, i.e., is efficient (Kuhfeld et al. 1994; Huber and Zwerina 1996). The order of choice sets and the order of alternatives within a choice set were randomized. Moreover, the levels of the template factorial were shuffled across respondents, i.e., switching the levels of each factor randomly but keeping the structure of the factorial intact in order to cover a broad range of potential template factorials.

In addition to the twelve choice sets, another ‘holdout’ choice set was included that was not used for estimation, and remained constant across respondents. The purpose of this set was to assess the predictive validity of the estimates by correctly replicating the observed holdout choices.

In each choice set, the managers were requested to indicate what they perceive as the most successful internationalization strategy. Successful internationalization is measured in a general way, with indicators such as higher international sales, profit, employment, and market share compared to competitors (according to Cesinger et al. 2014). In order to put the choice context into perspective, managers should assume for their decisions that the companies presented in the experiment were based in Germany, operate in the same industry as the respondent’s company, and are currently only active in national markets. Also, to expand their sales market internationally, each company has different internationalization strategies.

Subsequent to each choice, the managers had to indicate whether the chosen company should pursue internationalization or, alternatively, should concentrate on

**Table 2** Choice design

Set#	Fractional factorial	Fold-over
1	0 0 0 1 0 0 1 0	1 1 1 0 1 1 0 1
2	0 0 1 0 0 1 0 1	1 1 0 1 1 0 1 0
3	0 0 1 0 1 1 1 0	1 1 0 1 0 0 0 1
4	0 1 0 0 1 0 1 1	1 0 1 1 0 1 0 0
5	0 1 0 1 1 1 0 0	1 0 1 0 0 0 1 1
6	0 1 1 1 0 0 0 1	1 0 0 0 1 1 1 0
7	1 0 0 0 1 0 0 1	0 1 1 1 0 1 1 0
8	1 0 0 1 0 1 1 1	0 1 1 0 1 0 0 0
9	1 0 1 1 1 0 0 0	0 1 0 0 0 1 1 1
10	1 1 0 0 0 1 0 0	0 0 1 1 1 0 1 1
11	1 1 1 0 0 0 1 0	0 0 0 1 1 1 0 1
12	1 1 1 1 1 1 1 1	0 0 0 0 0 0 0 0

Factors are space-separated: 0 and 1 represent the two specific levels of the factor, i.e., the dummy variable. For instance, the alternative “1 1 1 0 1 1 0 1” represents an internationalization option with the reference level for factors 4 and 7 and level 1 otherwise, i.e., an export strategy for an attractive market in Europe which is proactive and has a maximum of 40 % international revenue, short-term implementation, predominantly equity-financed by a non-family business that is younger than 6 years

the national market. This sequential question replaces a no-choice option similar to a dual-response choice design, and allows the absolute attractiveness of internationalization to be assessed (Brazell et al. 2006; Wlömert and Eggers 2016). Figure 2 depicts an exemplary choice set.

### 3.4 Sample

A sample of German managers was recruited by a professional panel provider and was invited to support the online experiment. Respondents had to pass two filter criteria in the questionnaire to qualify as a target group: First, the respondent had to be the CEO or a manager of the company who would be involved with internationalization decisions; and second, the company was required to have at least 10 and a maximum of 250 employees. Over a 1-week period, 195 persons completed the survey. Eight respondents were eliminated because they finished the questionnaire in <3 min—an unrealistically short time. Thus, a total of 187 managers and 2244 internationalization decisions remain for the analysis. The sample consists of 49 % incorporated and 51 % non-incorporated companies from which 55 % employ 9–49 employees and 45 % 50–250 employees; a total of 51 % (49 %) represent (non) family-owned businesses. We strived for a balanced sample instead of focusing on representativeness in order to analyze subsamples.

Which of these companies will be more successful in its internationalization strategy?

	Company 1	Company 2
Market entry:	Export	Strategic alliance / cooperation
Target country:	Attractive market in Asia	Attractive market in Europe
Motive:	Proactive: Market opportunities	Reactive: Competitive pressure
Degree:	Maximum of 40% revenue via international markets	More than 40% revenue via international markets
Speed of the implementation:	Short-term	Long-term
Age of the company:	Older than 6 years	Younger than 6 years
Type of company:	Family-managed business	Non-family business
Financing:	Predominantly debt-financed	Predominantly equity-financed

Should the chosen company pursue the internationalization?

Yes  
 No, it should concentrate on the national market

**Fig. 2** Exemplary choice set (translated from German into English)

## 4 Results

### 4.1 Estimation results

The MNL model was estimated using a hierarchical Bayes procedure, which generates preference estimates at the individual level, i.e., for each manager (Rossi and Allenby 1993). In the prior distribution of the hierarchical procedure we assumed that the estimates were distributed normally. A total of 20,000 estimates were drawn from the prior distribution with the first half being discarded to allow for the procedure to converge. The mean across the remaining 10,000 draws was then taken as a point-estimate for each manager’s preference following standard procedures.

Prior to analyzing the preferences we checked the predictive validity of the estimates by comparing the observed choices of the holdout set with the choice prediction based on the estimates. 64 % of the managers’ decisions in this holdout set were predicted correctly. Given the complexity of the decision scenario, the estimation results can be considered acceptable.

Figure 3 depicts a summary of the preference distribution across managers. It can be seen that using equity for the funding opposed to debt, is most likely to lead to successful internationalization. Moreover, this factor also exhibits the highest variance across managers so that some decision makers consider equity essential for a successful strategy, while others attach less importance to it.

Table 3 additionally summarizes the relative importance of the factors. The importance was measured as the range of preferences within a factor relative to the

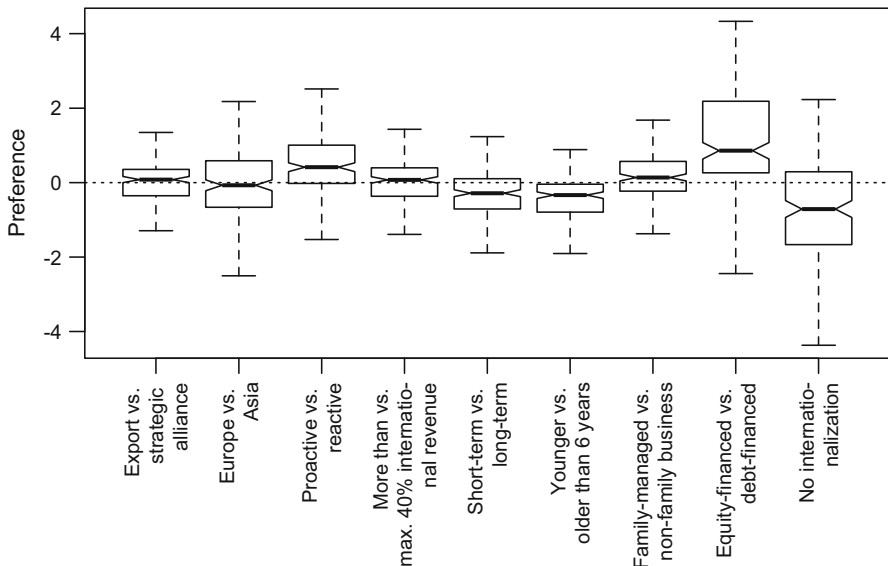


Fig. 3 Boxplots of preference estimates



range across all factors. To consider heterogeneity, we calculated this measure for each manager and summarized the mean for the whole sample. The most important factor for internationalization success is financing which exhibits a relative importance of 24.2 %, and is significantly different from zero ( $p < .001$ ). The second most important criterion for a decision is the location of the target country, i.e., targeting a European or an Asian market (14.1 %). Interestingly, the mean preference for this factor is not significantly different from zero ( $p = .30$ ) indicating that there is a large amount of heterogeneity in preferences for these different markets, e.g., two opposing segments that either prefer Asia or Europe. Less heterogeneity can be observed in the preferences for the motive; most managers think that internationalizing proactively is more important for success than reacting to competitive pressure ( $p < .001$ ). The same can be concluded for the factors implementation speed and age of the company; there seems to be consensus among the sample that a short-term perspective ( $p < .001$ ) and internationalizations of younger companies ( $p < .001$ ) are strategies that are less likely to be successful. Being a family-managed versus non-family business leads to a higher probability that managers perceive internationalization to be successful ( $p < .001$ ). The difference in the remaining factors—export versus strategic alliance ( $p = .71$ ) and more than versus a maximum of 40 % international revenue ( $p = .10$ )—are of lesser importance for perceived internationalization success. These results support hypotheses H3 and H5 to H8; H1, H2, and H4 are not supported.

The estimate for the sequential decision, i.e., whether the internationalization strategy should be pursued or not, exhibits a negative value. This estimate ('no internationalization') reflects the relative share of negative decisions by the respondents: in 30.7 % of all decisions, respondents considered a national strategy to be more successful than internationalization. Thus, although this factor contains a large amount of heterogeneity, in general, internationalization is perceived to lead to more success: a domestic strategy would be preferred only if there is an adverse combination of factors, in which the sum of preferences does not exceed the

**Table 3** Summary statistics of preference estimates

Factor	Median	Mean	Relative importance (mean) (%)	$p$ value	Hypothesis
Export versus strategic alliance	.081	.016	8.7	.71	H1 n.s.
Europe versus Asia	-.070	-.078	14.1	.30	H2 n.s.
Proactive versus Reactive	.412	.519	13.3	<.001	H3 ✓
More than versus max. 40 % international revenue	.073	.080	9.3	.10	H4 n.s.
Short-term versus long-term	-.283	-.320	10.7	<.001	H5 ✓
Equity-financed versus debt-financed	.857	1.098	24.2	<.001	H6 ✓
Family-managed versus non-family business	.139	.168	9.2	<.001	H7 ✓
Younger versus older than 6 years	-.337	-.424	10.6	<.001	H8 ✓
No internationalization	-.710	-.772		<.001	

n.s. not supported

threshold of the no-internationalization estimate ( $-.710$ ). Stated differently, an internationalization financed with equity is (on average) most likely to be perceived successful even if the remaining characteristics are less favorable. Foreign entry mode and degree of internationalization do not play a substantial role in the perceived success, and are more likely to be subordinate decision parameters. It is likely that managers first decide which market to target and how to finance the internationalization, and then determine the entry mode and DOI.

## 4.2 Controls

The estimation results show a considerable amount of heterogeneity among managers' perception. In order to explore this heterogeneity further, we checked if the characteristics of the managers and of their firms could explain differences in preferences.

In our analysis, we find significant differences in internationalization preferences between managers who are older ( $n = 97$ ) and younger than 42 years ( $n = 90$ ). Older managers show higher preferences for equity-financed strategies ( $p = .022$ ). This increase in relevance makes the distinction between short- or long-term strategies less important ( $p = .018$ ). Managers who have experience working in a foreign country ( $n = 90$ ) attach higher preferences for exporting strategies than managers who have no such experience ( $n = 97$ ;  $p = .038$ ). Moreover, financing becomes less relevant ( $p = .012$ ). In total, they are also more likely to internationalize as the preference for 'no internationalization' is significantly lower ( $p = .008$ ). If managers have a larger international network, i.e., more than ten persons ( $n = 109$ ), they show higher preferences for proactive strategies ( $p = .042$ ), and less importance for the need for funding with equity ( $p = .013$ ) than managers with a smaller international network ( $n = 78$ ). The position within the firm, i.e., whether being the CEO ( $n = 59$ ) or a manager ( $n = 128$ ), influences the importance of financing ( $p = .016$ ) and the implementation speed of internationalization ( $p = .034$ ). This signifies that CEOs place more importance on equity financing and less importance on implementation speed. Regarding company characteristics, we find that high performance companies ( $n = 104$ ) are more sensitive to proactive strategies ( $p = .018$ ) than companies who perform lower than the median ( $n = 83$ ). There are no significant differences based on whether the company is a family business or not, or on the number of foreign countries the manager's company is serving.

Despite these shifts in preferences and relative importance, the overall preferences generally stay consistent. Note that for each characteristic we compared, we tested nine parameters (eight factors plus the no internationalization effect), i.e., a total of 54 tests. The relatively low number of significant differences should therefore be put into perspective accordingly.

## 5 Discussion

To our knowledge, this study is the first to analyze the drivers of internationalization success in SMEs using an experimental research approach and, therefore, is able to present an overview of possible combinations of promising factors for internationalization success. Consequently, the results provide significant contributions to research and implications for practice.

Following our results, the most important factors for the international success of SMEs are (a) the financing of their international activities, (b) the choice of an appropriate target market, (c) proactive motives, and (d) a long-term scope of the internationalization process. Given that these four factors are all strategic variables, our results suggest that strategic parameters are perceived as most important for international success. The type of funding an international endeavor executes appeared to be the most crucial success factor. As mentioned, SMEs are per se characterized by limited resources including financial constraints. Thus, it seems obvious that they have to overcome these financial constraints in order to be successful in the international arena. In line with most financing theories (see development of H6), our findings add to the importance of equity funding for international growth. Given that debt financing adds more risk and constrains a firm's liquidity, SME managers perceive an equity-financed internationalization to be most successful. This goes hand in hand with our findings regarding the implementation speed of internationalization. SMEs that follow a long-term oriented internationalization strategy probably allocate their resources more cautiously and try to reduce the risk of financial loss. Moreover, internationalization is a complex process that requires a variety of capabilities (Armario et al. 2008). Following this assumption, SMEs may have to develop capabilities for internationalization over time, and this development may take some time before internationalization starts. From this perspective, it seems consistent that SMEs older than 6 years, are perceived as more successful internationalizers. Furthermore, by demonstrating that SMEs with a long-term oriented internationalization strategy and matured age—both of which are reflections of gradual and step-wise internationalization—are perceived as more successful. Our findings lend support to the stage-model of internationalization.

Interestingly, both a high degree of internationalization with more than 40 % of foreign sales and a higher age are considered proxies for the accumulation of learning effects and international knowledge. Thus, a richer resource pool is available for internationalization; only firm age turned out to be a significant criterion. Hence, it seems that among SMEs, learning and resource accumulation happen more over time and less over the DOI.

At first glance, the triad of equity financing, long-term orientation, and matured SMEs seems challenging in the light of the younger born-global findings. The exploitation of international business opportunities is a fundamental element in born-globals' business models right from inception. However, our results add further evidence on this ongoing debate and support recent findings, stating that incremental internationalization continues to be relevant and important in

understanding the international expansion of SMEs (e.g., Zahra 2005; Johanson and Vahlne 2009; Schweizer et al. 2010). Moreover, as only one-fifth of all internationally active companies can be identified as born-globals in German-speaking areas (Mandl and Celikel-Esser 2012), we assume that the concept of being a successful born-global has not yet been established broadly in the mind-sets of German SMEs.

Additionally, our results show that the selection of the right target market is vital. Although our results have not shown a clear preference for neither Europe nor Asia, we have identified that preferences for these markets are distributed heterogeneously among managers, i.e., the choice of the international market is very individual and specific for each SME. This adds evidence to McDougall and Oviatt's (1996) assumption that a firm, when it expands internationally, must learn how to adapt its export strategy to be congruent with the new market conditions. Subsequently, for successful internationalization, it does not seem relevant which foreign market to enter as long as the firm is able to adapt itself to the new setup.

Furthermore, we add empirical evidence on the motives for internationalization. Our results are in line with recent findings that prove that SMEs which are involved in international activities due to proactive reasons, are more successful than reactive SMEs (e.g., Lieberman and Montgomery 1998; Frishammar and Andersson 2009).

Our results also provide further evidence to prior findings that family businesses show a better international performance than non-family businesses (Graves and Shan 2014), are based on a solid financial base (Heck and Stafford 2001; Astrachan and Shanker 2003; Sharma 2004) and exhibit long-term commitment (Miller and Le Breton-Miller 2005). As our results indicate that both equity-financed internationalization as well as a long-term orientation—factors that are more prevalent in family firms—are perceived as important factors for SMEs' international success; this could explain why family businesses are regarded as more successful internationalizers than non-family businesses.

The results of the study also have some practical implications for SME managers who are active in international business or are thinking about starting the first international activities. The findings regarding the combination of factors that could enhance international success can be easily transferred into practical advice. First, a business opportunity has to be perceived in a foreign market, then evaluated and funded. Subsequently, decisions regarding the entry mode and the DOI have to be made. Both decisions are closely tied to how internationalization is funded. Once the international opportunity is evaluated as very promising, the SME has to assess the extent of resources that will be committed to internationalization. Hence, our study demonstrates the importance of funding—especially equity financing—for the SME's international development. SME managers should therefore pay attention to capital structure management in order to seize the full potential of internationalization strategies and to ensure internationalization success.

Besides practical implications, there are also some possible lines of future research. As we found heterogeneity in our sample, it seems appropriate to take a closer look on what the drivers of preference differences among SME managers are. Especially among younger and older executives as well as managers with varying degrees of international experience and networks, we have found different

preferences. Thus, focusing on the individual managers' characteristics that could influence the decision making process appears a promising avenue for future research, which could add further evidence to this ongoing debate.

Our study has several limitations. A first limitation might be that our results are only based on a non-representative sample of German SMEs, and therefore, cannot be generalized to other contexts. Furthermore, the number of factors tested is limited, which also might represent a limitation. Knowing that internationalization has many facets, we have carefully evaluated the most important factors by screening existing literature, but there is still some room for discussion regarding the choice of factors. In this context, it seems noteworthy that also the factor levels tested might be limited. In this regard, we just asked for one dimension of internationalization (percentage of international sales), ignoring the ongoing debate on how to measure the DOI (Chiao et al. 2006). However, due to the methodological approach of applying a conjoint analysis, we had to determine one dimension for the choice set being aware that results may be affected. Moreover, our results reflect the managers' perception of success, which can only be considered a proxy for the actual internationalization success. Finally, although major strategic decisions in SMEs are made typically by the owner or top manager (Lieberman-Yaconi et al. 2010), discussions might not always be taken alone—as was the case in our experiment—but discussed within the management team (Shoham and Albaum 1995). Hence, future studies should address this shortcoming and analyze the differences between individual decisions and joint managerial decision-making.

**Acknowledgments** The project is supported by the International University of Lake Constance (IBH). The International University of Lake Constance is a network of 30 universities and colleges located in Austria, Germany, the Principality of Liechtenstein and Switzerland.

## References

- Abor JY, Agbloyor EK, Kuipo R (2014) Bank finance and export activities of Small and Medium Enterprises. *Rev Dev Finance* 4(2):97–103
- Acs ZJ, Morck R, Shaver JM, Yeung B (1997) The internationalization of small and medium-sized enterprises: a policy perspective. *Small Bus Econ* 9(1):7–20
- Agndal H, Chetty S (2007) The impact of relationship on changes in internationalization strategies of SMEs. *Eur J Mark* 41(4):1449–1474
- Ahuja G (2000) The duality of collaboration. Inducements and opportunities in the formation of interfirm linkages. *Strateg Manag J* 21(3):317–344
- Aivazian VA, Ge Y, Qiu J (2005) The impact of leverage on firm investment: Canadian evidence. *J Corp Finance* 11(2):277–291
- Ali AJ, Camp RC (1993) The relevance of firm size and international business experience to market entry strategies. *J Glob Mark* 6(4):91–108
- Andersson S, Gabrielsson J, Wictor I (2004) International activities in small firms: examining factors influencing the internationalisation and export growth of small firms. *Can J Adm Sci* 21(1):22–34
- Armario JM, Ruiz DM, Armario EM (2008) Market orientation and internationalization in small and medium-sized enterprises. *J Small Bus Manage* 46(4):485–511
- Arregle J, Hitt M, Sirmon D, Very P (2007) The development of organizational social capital: attributes of family firms. *J Manage Stud* 44(1):73–95
- Arregle J-L, Naldi L, Nordqvist M, Hitt MA (2012) Internationalization of family-controlled firms: a study of the effects of external involvement in governance. *Entrep Theory Pract* 36(6):1115–1143

- Asmussen CG, Pedersen T, Petersen B (2007) How do we capture 'global specialization' when measuring firm's degree of globalization? *Manag Int Rev* 47:791–813
- Astrachan J, Shanker M (2003) Family businesses' contribution to the US economy: a closer look. *Fam Bus Rev* 16(3):211–219
- Banalieva ER, Eddleston KA (2011) Home-region focus and performance of family firms: the role of family vs non-family leaders. *J Int Bus Stud* 42(8):1060–1072
- Bellone F, Musso P, Nesta L, Schiavo S (2010) Financial constraints and firm export behaviour. *World Econ* 33(3):347–373
- Bhaumik SK, Driffield N, Pal S (2010) 'Does ownership structure of emerging-market firms affect their outward FDI? The case of the Indian automotive and pharmaceutical sectors. *J Int Bus Stud* 41(4):437–450
- Bilkey WJ, Tesar G (1977) The export behavior of smaller Wisconsin manufacturing firms. *J Int Bus Stud* 9:93–98
- Bradley M, Jarrell GA, Kim EH (1984) On the existence of an optimal capital structure: theory and evidence. *J Finance* 39(3):857–878
- Brazell JD, Diener CG, Karniouchina E, Moore WL, Séverin V, Uldry P-F (2006) The no-choice option and dual response choice designs. *Mark Lett* 17(4):255–268
- Buckley PJ (1989) Foreign direct investment by small and medium sized enterprises: the theoretical background. *Small Bus Econ* 9(2):89–100
- Buckley PJ, Devinney T, Louviere J (2007) 'Do managers behave the way theory suggests? A choice-theoretic examination of foreign direct investment location decision-making. *J Int Bus Stud* 38(7):1069–1094
- Burgman TA (1996) An empirical examination of multinational corporate capital structure. *J Int Bus Stud* 27(3):553–570
- Calia P, Ferrante MR (2013) How do firms combine different internationalisation modes? A multivariate probit approach. *Rev World Econ* 149(4):663–696
- Calof J, Beamish P (1995) Adapting to foreign markets: explaining internationalization. *Int Bus Rev* 4(2):115–131
- Calof JL, Viviers W (1995) Internationalization of small and medium sized South African enterprises. *J Small Bus Manage* 33(4):71–79
- Caves RE (1971) International corporations: the industrial economics of foreign investment. *Economica* 38(149):38
- Cavusgil ST (1984a) Organizational characteristics associated with export activities. *J Manage Stud* 21(1):322
- Cavusgil ST (1984b) Differences among exporting firms based on their degree of internationalization. *J Bus Res* 12(2):195–208
- Cerrato D, Piva M (2012) The internationalization of small and medium-sized enterprises: the effect of family management, human capital and foreign ownership. *J Manage Gov* 16(4):617–644
- Cesinger B, Fink M, Madsen TK, Kraus S (2012) Rapidly internationalizing ventures: how definitions can bridge the gap across contexts. *Manag Decis* 50(10):1816–1842
- Cesinger B, Bouncken R, Fredrich V, Kraus S (2014) The alchemy of family enterprises' internationalisation: dexterous movers or prodigal laggards? *Eur J Int Manag* 8(6):671–696
- Cesinger B, Hughes M, Mensching H, Bouncken R, Fredrich V, Kraus S (2016) A socioemotional wealth perspective on how collaboration intensity, trust, and international market knowledge affect family firms' multinationality. *J World Bus* 51(4):586–599
- Chan PS, Heide D (1993) Strategic alliances in technology: key competitive weapon. *Adv Manag J* 58(4):9–17
- Chen JP, Cheng A, Jia H, Jawon K (1997) An investigation of the relationship between international activities and capital structure. *J Int Bus Stud* 28(3):563–577
- Chiao Y-C, Yang K-P, Yu C-MJ (2006) Performance, internationalization, and firm-specific advantages of SMEs in a newly-industrialized economy. *Small Bus Econ* 26(5):475–492
- Chittenden F, Hall G, Hutchinson P (1996) Small firm growth, access to capital markets and financial structure: review of issues and an empirical investigation. *Small Bus Econ* 8(1):59–67
- Chua JH, Chrisman JJ, Sharma P (1999) Defining family business by behavior. *Entrep Theory Pract* 24(4):19–39
- Claver E, Rienda L, Quer D (2009) Family firms' international commitment: the influence of family-related factors. *Fam Bus Rev* 22(2):125–135

- Crick D, Barr P (2007) SMEs' barriers towards internationalization and assistance requirements in the UK: differences between exporters and firms employing multiple modes of market entry. *J Small Bus Entrep* 20(3):233–243
- Cuervo-Cazurra A, Maloney MM, Manrakhan S (2007) Causes of the difficulties in internationalisation. *J Int Bus Stud* 38(6):709–725
- d' Artis K (2010) Structural estimation of variety gains from trade integration in Asia. *Aust Econ Rev* 43(3):270–288
- D'Angelo A, Majocchi A, Zucchella A, Buck T (2013) Geographical pathways for SME internationalization: insights from an Italian sample. *Int Mark Rev* 30(2):80–105
- De Clercq D, Sapienza HJ, Crijns H (2005) The internationalization of small and medium-sized firms. *Small Bus Econ* 24(4):409–419
- Dick M, Mitter C, Feldbauer-Durstmüller B, Pernsteiner H (2016) The impact of finance and governance on the internationalisation modes of family firms. *Eur Int Manag* (forthcoming)
- Douglas SP, Craig CS, Keegan WJ (1982) Approaches to assessing international marketing opportunities for small and medium-sized companies. *Columbia J World Bus* 17(3):26–32
- Doukas JA, Pantzalis C (2003) Geographic diversification and agency costs of debt of multinational firms. *J Corp Finance* 9(1):59–92
- Dreux DRI (1990) financing family business: alternatives to selling out or going public. *Fam Bus Rev* 3(3):225–243
- Dunning JH (1988) The eclectic paradigm of international production: a restatement and some possible extensions. *J Int Bus Stud* 19(1):1–31
- Dunning JH (1996) The geographical sources of the competitiveness of firms: some results of a new survey. *Transnatl Corp* 5(3):1–29
- Efrat K, Shoham A (2012) Born global firms: the differences between their short- and long-term performance drivers. *J World Bus* 47(4):675–685
- Eggers F, Sattler H (2011) Preference measurement with conjoint analysis. Overview of state-of-the-art approaches and recent developments. *GfK Mark Intell Rev* 3(1):36–47
- Eggers F, Eggers F, Kraus S (2016) Entrepreneurial branding: measuring consumer preferences through choice-based conjoint analysis. *Int Entrep Manag J* 12(2):427–444
- Etemad H (2004) Internationalization of small and medium-sized enterprises: a grounded theoretical framework and an overview. *Can J Adm Sci* 21(1):1–21
- Etemad H, Wright RW (1999) Internationalization of SMEs: management responses to a changing environment. *J Int Mark* 7(4):4–10
- Evangelista F (2005) Qualitative insights into the international new venture creation process. *J Int Entrep* 3(3):179–198
- Fabian F, Molina H, Labianca G (2009) Understanding decisions to internationalize by small and medium-sized firms located in an emerging market. *Manag Int Rev* 49(5):537–563
- Fama EF, French KR (2002) Testing trade-off and pecking order predictions about dividends and debt. *Rev Financial Stud* 15(1):1–33
- Fernandez Z, Nieto MJ (2005) Internationalization strategy of small and medium-sized family businesses. *Fam Bus Rev* 18(1):77–89
- Fletcher D (2004) International entrepreneurship and the small business. *Entrep Reg Dev* 16(4):289–305
- Freeman J, Styles C, Lawley M (2012) Does firm location make a difference to the export performance of SMEs? *Int Mark Rev* 29(1):88–113
- Frishammar J, Andersson S (2009) The overestimated role of strategic orientations for international performance in smaller firms. *J Int Entrep* 7(1):57–77
- Gankema HGJ, Snuif HR, Zwart PS (2000) The internationalization process of small and medium-sized enterprises: an evaluation of stage theory. *J Small Bus Manage* 38(4):15–27
- Gibson C (1989) Consumer trends in the EC: how can retailers respond?. Longman Group, Harlow
- Gomes L, Ramaswamy K (1999) An empirical examination of the form of the relationship between multinationality and performance. *J Int Bus* 30:173–188
- Graves C, Thomas J (2008) Determinants of the internationalization pathways of family firms: an examination of family influence. *Fam Bus Rev* 21(2):151–167
- Graves C, Shan YC (2014) An empirical analysis of the effect of internationalization on the performance of unlisted family and nonfamily firms in Australia. *Fam Bus Rev* 27(2):142–160
- Hassel A, Höpner M, Kurdelbusch A, Rehder B, Zugehör R (2003) Two dimensions of the internationalization of firms. *J Manag Stud* 40(3):701–719

- Heck RKZ, Stafford K (2001) The vital institution of family business: economic benefits hidden in plain sight. In: McCann GK, Upton N (eds) *Destroying myths and creating value in family business*. Stetson University Press, Deland, pp 9–17
- Hennart J-F (2007) The theoretical rationale for a multinationality/performance relationship. *Manag Int Rev* 47(3):423–452
- Hofstede G (2011) Dimensionalizing cultures: the Hofstede model in context. *Online Read Psychol Cult* 2(1). doi:[10.9707/2307-0919.1014](https://doi.org/10.9707/2307-0919.1014)
- Huber J, Zwerina K (1996) The importance of utility balance in efficient choice designs. *J Mark Res* 33(3):307–317
- Itto-Gillies G (1998) Different conceptual frameworks for the assessment of the degree of internationalisation: an empirical analysis of various indices for the top 100 transnational corporations. *Transnatl Corp* 7(1):17–39
- Itto-Gillies G, London SE (2009) Conceptual issues behind the assessment of the degree of internationalization. *Transnatl Corp* 18(3):59–83
- Jaw Y-L, Cheng C-L (2006) The influence of the Internet in the internationalization of SMEs in Taiwan. *Hum Syst Manag* 25(3):167–183
- Johanson J, Vahlne J-E (1977) The internationalization process of the firm: a model of knowledge development and increasing foreign market commitments. *J Int Bus Stud* 18(1):23–32
- Johanson J, Vahlne J-E (1990) The mechanisms of internationalization. *Int Mark Rev* 7(4):11–24
- Johanson J, Vahlne J-E (2009) The Uppsala internationalization process model revisited: from liability of foreignness to liability of outsidership. *J Int Bus Stud* 40(9):1411–1431
- Kafourous M, Buckley PJ, Sharp JA, Wang C (2008) The role of internationalization in explaining innovation performance. *Technovation* 28:63–74
- Khanna T, Palepu K, Sinha J (2005) Strategies that fit emerging markets. *Harvard Bus Rev* 83(6):63–76
- Knight GA, Cavusgil ST (2004) Innovation, organizational capabilities, and the born-global firm. *J Int Bus Stud* 35(2):124–141
- Kraus S, Ambos CT, Eggers F, Cesinger B (2015) Distance and perceptions of risk in internationalization decisions. *J Bus Res* 68(7):1501–1505
- Kraus S, Meier F, Eggers F, Bouncken R, Schuessler F (2016a) Standardisation vs. adaption: a conjoint experiment on the influence of psychic, cultural and geographical distance on international marketing mix decisions. *Eur J Int Manag* 10(2):127–156
- Kraus S, Mensching H, Calabrò A, Cheng CF, Filser M (2016b) Family firm internationalization: a configurational approach. *J Bus Res*. doi:[10.1016/j.jbusres.2016.04.158](https://doi.org/10.1016/j.jbusres.2016.04.158)
- Kreiser PM, Marino LD, Weaver KM (2002) Assessing the psychometric properties of the entrepreneurial orientation scale: a multi-country analysis. *Entrep: Theory Pract* 26(4):71–95
- Kuhfeld WF, Tobias RD, Garratt M (1994) Efficient experimental design with marketing research applications. *J Mark Res* 31(4):545–557
- Kuivalainen O, Puimalainen K, Sintonen S, Kyläheiko K (2010) Organisational capabilities and internationalisation of the small and medium-sized information and communication technology firms. *J Int Entrep* 8(2):135–155
- Kuo A, Kao M-S, Chang Y-C, Chiu C-F (2012) The influence of international experience on entry mode choice: difference between family and non-family firms. *Eur Manag J* 30(3):248–263
- Leonidou LC (1995) Export stimulation research: review, evaluation and integration. *Int Bus Rev* 4(2):133–156
- Leonidou LC, Katsikeas CS (1996) The export development process: an integrative review of empirical models. *J Int Bus Stud* 27(3):517–551
- Lieberman M, Montgomery D (1998) First-mover (dis)advantages: retrospective and link with the resource-based view. *Strateg Manag J* 19(12):1111–1125
- Lieberman-Yaconi L, Hooper T, Hutchings K (2010) Toward a model of understanding strategic decision-making in micro-firms: exploring the Australian information technology sector. *J Small Bus Manage* 48(1):70–95
- Liesch PW, Knight GA (1999) Information internalization and hurdle rates in small and medium enterprise internationalization. *J Int Bus Stud* 30(1):383–394
- Lohrke FT, Holloway BB, Woolley TW (2010) Conjoint analysis in entrepreneurship research. *Organ Res Methods* 13(1):16–30
- Louviere JJ, Hensher DA, Swait JD (2000) *Stated choice methods: analysis and application*. Cambridge University Press, New York



- Lu JW, Beamish PW (2001) The internationalization and performance of SMEs. *Strateg Manag J* 22(6/7):565–586
- Lu JW, Beamish P (2006a) SME internationalization and performance: growth vs. profitability. *J Int Entrep* 4(1):27–48
- Lu JW, Beamish PW (2006b) Partnering strategies and performance of SMEs international joint ventures. *J Bus Ventur* 21(4):285–307
- Lumpkin GT, Dess GG (2001) Linking two dimensions of entrepreneurial orientation to firm performance: the moderating role of environment and industry life cycle. *J Bus Ventur* 16(5):429–451
- Lyon DW, Lumpkin GT, Dess GG (2000) Enhancing entrepreneurial orientation research: operationalizing and measuring a key strategic decision making process. *J Manag* 26(5):1055–1085
- Malhotra S, Sivakumar K (2011) Simultaneous determination of optimal cultural distance and market potential in international market entry. *Int Mark Rev* 28(6):601–626
- Mandl I (2008) Overview of family business relevant issues. Final report, project on behalf of the European commission. Austrian Institute for SME Research, Vienna
- Mandl I, Celikel-Esser F (2012) Born global: the potential of job creation in new international businesses. Publications Office of the European Union, Luxembourg
- Manski C (1977) The structure of random utility models. *Theory Decis* 8(3):229–254
- Mathews JA (2002) A resource-based view of schumpeterian economic dynamics. *J Evolut Econ* 12(1):29–54
- McDougall P, Oviatt BM (1996) New venture internationalization, strategic change, and performance: a follow-up study. *J Bus Ventur* 11(1):23–40
- McNaughton R, Bell J (2004) Capital structure and the pace of SME internationalisation. In: Etemad H (ed) *International entrepreneurship in small and medium size enterprises: orientation, environment and strategy*. Edward Elgar Publishers, Cheltenham, pp 57–71
- Mensching H, Calabrò A, Eggers F, Kraus S (2016) Internationalization of family and non-family firms: a conjoint experiment among CEOs. *Eur J Int Manag* (in press)
- Miller D, Le Breton-Miller I (2005) *Managing for the long run: lessons in competitive advantage from great family businesses*. Harvard Business School Press, Boston
- Minkov M, Hofstede G (2012) Is national culture a meaningful concept? Cultural values delineate homogeneous national clusters of in-county regions. *Cross Cult Res* 46(2):133–159
- Mishra CS, McConaughy DL (1999) Founding family control and capital structure: the risk of loss of control and the aversion to debt. *Entrep Theory Pract* 23(4):53–64
- Mitter C, Emprechtlinger S (2016) The role of stewardship in the internationalisation of family firms. *Int J Entrep Ventur* (forthcoming)
- Mitter C, Duller C, Feldbauer-Durstmüller B, Kraus S (2014) Internationalization of family firms: the effect of ownership and governance. *RMS* 8(1):1–28
- Moen O, Servais P (2002) Born global or gradual global? Examining the behavior of small and medium-sized enterprises. *J Int Mark* 10(3):49–72
- Muñoz-Bullón F, Sánchez-Bueno MJ (2012) Do family ties shape the performance consequences of diversification? Evidence from the European Union. *J World Bus* 47(3):469–477
- Mustakallio M, Autio E, Zahra SA (2002) Relational and contractual governance in family firms: effects on strategic decision making. *Fam Bus Rev* 15(3):205–222
- Myers SC (1977) Determinants of corporate borrowing. *J Financ Econ* 5(2):147–175
- Nakos G, Brouthers KD, Brouthers LE (1998) The impact of firm and managerial characteristics on small and medium-sized Greek firms' export performance. *J Glob Mark* 11(4):23–47
- Naldi L, Nordqvist M (2008) Family firms venturing into international markets: a resource dependence perspective. *Frontiers of Entrepreneurship Research*, pp 395–413. MA: Babson College, Wellesley
- Naldi L, Nordqvist M, Sjoeborg K, Wiklund J (2007) Entrepreneurial orientation. Risk taking and performance in family firms. *Fam Bus Rev* 20(1):33–47
- Nocco A, Ottaviano GIP, Salto M (2014) Monopolistic competition and optimum product selection. *Am Econ Rev* 104(5):304–309
- O'Cass A, Weerawerdena J (2009) Examining the role of international entrepreneurship, innovation and international market performance in SME internationalisation. *Eur J Mark* 43(11/12):1325–1349
- Orengo KM (2012) Internationalization and entrepreneurial orientation. A network perspective: four cases of Puerto Rican SMEs'. *AD-Minister* 21:55–69
- Oviatt BM, McDougall PP (1994) Toward a theory of international new ventures. *J Int Bus Stud* 25(1):45–64

- Park SH, Suh J, Yeung B (2013) Do multinational and domestic corporations differ in their leverage policies? *J Corp Finance* 20:115–139
- Peng MW (2001) The resource-based view and international business. *J Manag* 27(6):803–829
- Poutziouris PZ (2001) The views of family companies on venture capital: empirical evidence from the UK small to medium-size enterprising economy. *Fam Bus Rev* 14(3):277–291
- Raymond L, St-Pierre J, Uwizeyemungu S, Dinh TL (2014) Internationalization capabilities of SMEs: a comparative study of the manufacturing and industrial service sectors. *J Int Entrep* 12(3):230–253
- Riahi-Belkaoui A (1998) The effects of the degree of internationalization on firm performance. *Int Bus Rev* 7(3):315–321
- Ripollés-Meliá M, Menguzzato-Boulard M, Sánchez-Peinado L (2007) Entrepreneurial orientation and international commitment. *J Int Entrep* 5(1):65–83
- Romano CA, Tanewski GA, Smyrniotou KX (2001) Capital structure decision making: a model for family businesses. *J Bus Ventur* 16(3):285–310
- Rossi PE, Allenby GM (1993) A Bayesian approach to estimating household parameters. *J Mark Res* 30(2):171–182
- Rugman AM (1981) Inside the multinationals: the economics of internal markets. Columbia University Press, New York
- Rugman AM, Oh CH (2011) Multinational enterprises and regional economic integration: rethinking key metrics in international business. In: International handbook on the economics of integration, vol III. Edward Elgar Publishing
- Sanders G, Carpenter MA (1998) Internationalization and firm governance: the roles of CEO compensation, top team composition and board structure. *Acad Manag J* 41(2):158–178
- Sapienza HJ, Autio E, George G, Zahra SA (2006) A capabilities perspective on the effects of early internationalization on firm survival and growth. *Acad Manag Rev* 31(4):914–933
- Schweizer R (2012) SMEs and networks: overcoming the liability of outsidership. *J Int Entrep* 11(1):80–103
- Schweizer R, Vahlne JE, Johanson J (2010) Internationalization as an entrepreneurial process. *J Int Entrep* 8(4):343–370. doi:10.1007/s10843-010-0064-8
- Sciascia S, Mazzola P, Astrachan J, Pieper T (2012) The role of family ownership in international entrepreneurship: exploring nonlinear effects. *Small Bus Econ* 38(1):15–31
- Sharma P (2004) An overview of the field of family business studies: current status and directions for the future. *Fam Bus Rev* 17(1):1–36
- Shoham A, Albaum G (1995) Reducing the impact of barriers to exporting: a managerial perspective. *J Int Mark* 3(4):85–106
- Sirmon D, Hitt MA (2003) Managing resources: linking unique resources, management and wealth creation in family firms. *Entrep Theory Pract* 27(4):339–359
- Sommer L (2009) Degree of internationalization – a multidimensional challenge. *J Appl Bus Res* 25(3):93–106
- Stieg P, Kraus S, Bouncken RB (2014) Assessing the landscape of SME internationalization: a review of existing literature. *J Int Bus* 14(3):173–180
- Stinchcombe AL (1965) Social structure and organizations. In: March JG (ed) *Handbook of organizations*. Rand McNally, Chicago, pp 142–193
- Stuart TE (2000) Interorganizational alliances and the performance of firms: a study of growth and innovation rates in a high-technology industry. *Strateg Manag J* 21(8):791–811
- Tan A, Brewer P, Liesch PW (2007) Before the first export decision: internationalisation readiness in the pre-export phase. *Int Bus Rev* 16(3):294–309
- Tatoglu E, Demirbag M, Kaplan G (2003) Motives for retailer internationalization to Central and Eastern Europe. *Emerging Markets Finance and Trade* 39(4):40–57
- Thompson K, Knox S (1991) The single European grocery market: prospects for channel crossing. *Eur Manag J* 9(1):65–72
- Thomsen S, Pedersen T (2000) Ownership structure and economic performance in the largest European companies. *Strateg Manag J* 21(6):689–705
- Trudgen R, Freeman S (2014) Measuring the performance of born-global firms throughout their development process: the roles of initial market selection and internationalisation speed. *Manag Int Rev* 54(4):551–579
- United Nations Conference on Trade and development (UNCTAD) (2007) The Universe of the largest transnational corporations. UNCTAD current studies on FDI and development, no 3. United Nations, Geneva

- Venkataraman S, Van de Ven AH, Buckeye J, Hudson R (1990) Starting up in a turbulent environment: a process model of failure among firms with high customer dependence. *J Bus Ventur* 5(5):277–295
- Vernon R (1971) *Sovereignty at bay: the multinational spread of US enterprise*. Basic Books, New York
- Verwaal E, Donkers B (2002) Firm size and export intensity: solving an empirical puzzle. *J Int Bus Stud* 33(3):603–613
- Wlömert N, Eggers F (2016) Predicting new service adoption with conjoint analysis: external validity of BDM-based incentive-aligned and dual-response choice designs. *Mark Lett* 27(1):195–210
- Xi JM, Kraus S, Filser M, Kellermanns FW (2015) Mapping the field of family business research: past trends and future directions. *Int Entrep Manag J* 11(1):113–132
- Xie YH, Suh T (2014) Perceived resource deficiency and internationalization of small- and medium-sized firms. *J Int Entrepr* 12(3):207–229
- Zaheer S (1995) Overcoming the liability of foreignness. *Acad Manag J* 38(2):341–363
- Zaheer S, Mosakowski E (1997) The dynamics of the liability of foreignness: a global study of survival in financial services. *Strateg Manag J* 18(6):439–463
- Zahra SA (2003) International expansion of U.S. manufacturing family businesses: the effect of ownership and involvement. *J Bus Ventur* 18(4):495–512
- Zahra S (2005) A theory of international new ventures: a decade of research. *J Int Bus Stud* 36(1):20–29
- Zhou L, Wu A, Barnes BR (2012) The effects of early internationalization on performance outcomes in young international ventures: the mediating role of marketing capabilities. *J Int Mark* 20(4):882–905
- Zou S, Stan S (1998) The determinants of export performance: a review of the empirical literature between 1987 and 1997. *Int Mark Rev* 15(5):333–356
- Zuchella A, Scabini P (2007) *International entrepreneurship, theoretical foundations and practices*. Palgrave Macmillan, London