



## Micro-multinational or not? International entrepreneurship, networking and learning effects



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### ABSTRACT

Micro-multinational enterprises (mMNEs) represent a new breed of smaller firms in the field of international entrepreneurship. This study investigates the effects of the three sets of variables, namely international entrepreneurship (which encompasses innovativeness, proactiveness and risk-taking propensity), networking and learning on the probability that a firm will become a MNE. Drawing upon a survey of the activities of 116 Chilean internationalized small- and medium-sized firms and utilizing a logistic regression analysis, this study suggests that risk-taking propensity and networking with domestic and international partners increase the likelihood that the firm will become a mMNE. Our findings confirm the predictive validity of the international entrepreneurship and networking perspectives. Because of the positive association between mMNEs and international performance, the suggestions for management of internationalized firms are to nurture a risk-taking propensity and cultivate a networking orientation.

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### 1. Introduction

A recent *Foreign Policy* special report posits that “if the late 20th century was the age of the multinational company, the early 21st will be the age of the micromultinational... You have never heard of most micro-multinationals and likely never will; like other small firms, most will go out of business or be acquired by larger organizations. But some, like Skype (from Estonia) or Rovio, the maker of the popular mobile-device game Angry Birds (from Finland), have become household names” (Varian, 2011).

Which firms are micro-multinational enterprises (mMNEs), and why do they matter for international entrepreneurship research and management practice? Dimitratos, Johnson, Slow, and Young (2003, p. 165) define the mMNE as a “small- and medium-sized firm that controls and manages value-added activities through constellation and investment modes in more than one country”. Thus, mMNEs are smaller firms that employ advanced (non-exporting) foreign market servicing modes to tap into opportunities abroad. mMNEs are entrepreneurial firms that understand that international expansion through advanced (non-exporting) modes may offer them advantages to exploit, such as

by providing superior international customer service and collecting exceptional feedback on market conditions (Lu & Beamish, 2001; Prashantham, 2011). These firms are different from the “born globals” or “international new ventures” that go abroad from their inception (whose internationalization refers to the “time to internationalization” criterion). The activities of mMNEs focus on the criterion of mode of servicing the foreign market, which has remained rather under-explored in the international entrepreneurship literature (Zahra, Ireland, & Hitt, 2000). Researchers are challenging the traditional notion that smaller firms are best suited to focus exclusively on exporting because of their resource constraints and are making pleas for study into alternative modes of expanding abroad (Crick & Jones, 2000; Prashantham, 2011). Addressing this point, Jones, Coviello, and Tang (2011) in a recent review of the international entrepreneurship area posit that the evidence regarding this emerging breed of internationalized smaller firms is very limited. This contention is surprising because mMNEs are able to achieve higher control levels on international activities and superior performance (Prashantham, 2011), which also has considerable implications for management.

The current study aims to fill this knowledge gap by offering evidence regarding the activities of mMNEs. The research question under investigation is to determine which organizational attributes influence internationalized smaller firms to become mMNEs instead of being exporters only. To answer this question, this research employs perspectives from international entrepreneurship, networking and learning. The resources and capabilities that internationalized smaller firms require to attain a competitive advantage abroad are closely linked to

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these perspectives (Keupp & Gassmann, 2009). The three perspectives receive a significant share of attention from studies on international entrepreneurship.

Consistent with these perspectives, the resources and capabilities examined in the current study involve international entrepreneurship, networking and learning. Dissimilar levels of innovativeness, proactiveness, risk-taking propensity, networking and learning in internationalized smaller firms may be conducive to different engagements in modes of servicing foreign markets; these are major strategic and long-term choices for the firms concerned and are conducive to dissimilar pathways of exploiting international opportunities. The present investigation uses evidence from the international activities of 116 small- and medium-sized firms located in Chile, an emerging economy.

Chile is an interesting study setting because it presents the highest rates of “opportunity-driven” new venture creation among Latin American economies (Amorós, Fernández, & Tapia, 2012; Amorós & Poblete, 2011). The Chilean economy exhibits a recognized track record of sustained growth, strong policy leadership, solid institutions and international orientation (International Monetary Fund [IMF], 2011). In addition, smaller firms in Chile represent 99% of all firms in the country and generate 75% of the employment. Their scarce resources and the limited access they have to financial services and sources of innovation render it difficult to meet the challenges of global competitiveness (Organisation for Economic Co-operation and Development [OECD], 2009). Nevertheless, small firms in Chile increasingly exhibit high levels of international activity (Felzensztein, Gimmon, & Aqueveque, 2013).

This study contributes to the international entrepreneurship and management literature by suggesting, first, that an international risk-taking propensity is the differentiating entrepreneurial attribute of mMNEs; and, secondly, that active networking distinguishes the activities of mMNEs from those of exporting firms. Thus, the importance of the international entrepreneurship and networking perspectives is strengthened, which also has considerable managerial implications. These contributions occur in a research setting of entrepreneurial firms in the Latin American context whose national and international activities are essentially under-investigated (Nicholls-Nixon, Davila-Castilla, Sanchez-Garcia, & Rivera-Pesquera, 2011).

This paper is structured as follows. The next section discusses the research background of mMNEs and international entrepreneurship, in addition to the hypotheses associated with the conduct of this study. Following this, the paper explores methodological aspects of sampling, data-collection and measurement of variables. The subsequent section discusses the findings of the statistical analysis of this investigation. The concluding section outlines implications for research and management, in addition to the limitations of the study and future research directions.

## 2. Literature review and hypotheses

### 2.1. mMNEs and international entrepreneurship

Studying mMNEs is important because the choice of mode made by internationalized smaller firms affects the extent to which a firm controls its foreign activities and, potentially, its performance (Dhanaraj & Beamish, 2003). An mMNE may not always own foreign assets but may instead control important foreign assets (Dimitratos et al., 2003). This reflects the liability of the small size encountered by mMNEs, which relates to the limited resources and capabilities that smaller firms are able to commit to internationalization (Lu & Beamish, 2001). Exporting is the simplest and first option for smaller firms to internationalize, but it provides little control over international activities, and such firms may thus achieve suboptimal international performance when they restrict themselves to exporting modes (Crick & Jones, 2000). Mathews and Zander (2007, p. 390) assert that mMNEs are “the new species of multinational enterprises in the global economy”;

therefore, finding evidence that distinguishes them from exporting firms is critical.

The investigation of the foreign market servicing mode is an important theme of study in the international business literature (Brouthers & Hennart, 2007), which includes research on smaller firms (Brouthers & Nakos, 2004). Surprisingly, the international entrepreneurship literature deals almost exclusively with the dimension of “time to internationalization”. This refers to the time lag between the founding of the firm and the initiation of international activities (Zucchella, Palamara, & Denicolai, 2007). The investigation of the activities of international new ventures and the manner in which they achieve enhanced performance in the international marketplace play a critical role in the study of international entrepreneurship (Keupp & Gassmann, 2009). This literature indicates that the founder of the firm and the organizational processes she undertakes will likely have a significant impact on whether the firm will become a new international venture (Madsen & Servais, 1997).

These firms operate in a unique innovative culture that allows them to succeed in diverse international markets (Knight & Cavusgil, 2004). They internationalize primarily because they rely on their social capital both at home and abroad (Coviello, 2006). Recent evidence suggests further that such social ties may help international new ventures recognize new opportunities abroad (Ellis, 2011), which is the starting point for effective idea generation (Ardichvili, Cardozo, & Ray, 2003). International new ventures may also enjoy learning advantages that result from their newness because they do encounter fewer learning impediments to their rapid international growth (Autio, Sapienza, & Almeida, 2000). It appears that the international entrepreneurship, networking and learning attitudinal aspects are critical to the internationalization of such new ventures, and a significant share of the international entrepreneurship literature addresses these topics.

Nevertheless, the theme of the foreign market mode remains surprisingly under-investigated (Jones et al., 2011). Because of the increasing significance of mMNEs in the global arena, evidence regarding their activities and the features that distinguish them from exporting firms is an issue that merits further investigation. In other words, international entrepreneurship research might benefit from study of the mode rather than simply the time to internationalization; this investigation is the aim of the present research. This study examines mMNE entrepreneurial, networking and learning propensities, which are significant research themes in the field of international entrepreneurship.

### 2.2. A multidisciplinary approach on mMNE activities

Existing evidence suggests that international entrepreneurial firms employ advanced modes internationally at their inception (Allison & Browning, 2006) and that this practice may also be an effective competitive strategy for these firms (Zahra et al., 2000). Investigation into the behavior of these firms has gained momentum in the literature lately (da Rocha, de Mello, Pacheco, & de Abreu, 2012; Ripolles & Blesa, 2012), but research evidence on mMNE activities remains scarce.

This research evidence suggests that mMNEs attempt to exploit opportunities abroad and follow a different internationalization pathway through advanced modes than exporting firms (Ibeh, Borchert, & Wheeler, 2009). mMNEs are found in both knowledge-intensive and traditional sectors. Interestingly, they are likely to favor subsidiaries over contractual modes of business structure, such as licensing and joint ventures (Ibeh, Johnson, Dimitratos, & Slow, 2004). These same authors provide evidence that Scottish mMNEs do not go abroad in neighboring countries or in those that are psychologically close; they further rely on market- or knowledge-seeking motives to expand.

Recently, Prashantham (2011) compares the activities of mMNEs to those of exporting firms. He finds that mMNEs employ higher stocks of cross-border co-ethnic social capital that enable them to identify opportunities abroad easier. Prashantham corroborates the importance of the networking theory to explain the activities of

Indian mMNEs. Nevertheless, the selection of entry modes by a firm “is too complex and too broad in scope to be accommodated by any one model or any one perspective” (Coviello & Jones, 2004, p. 497). In a similar vein, Keupp and Gassmann (2009) assert in a review of the literature that international entrepreneurship studies should involve more theory-driven, organizational-level aspects that account for the international behavior of entrepreneurial firms. These are the reasons why this study employs a more holistic framework that incorporates the theoretical approaches based on international entrepreneurship, networking and learning.

### 2.2.1. International entrepreneurship

The international entrepreneurship perspective espouses the rationale that the combination of innovativeness, proactiveness and risk attitude of the firm in the marketplace is critical to the pursuit and exploitation of opportunities abroad (Oviatt & McDougall, 2005). It follows that internationalized smaller firms that are distinguished by higher levels of innovativeness, proactiveness and risk attitude might pursue novel pathways of internationalization compared to their “conservative” counterparts. This is further supported by recent research evidence on smaller firms in emerging economies (Javalgi & Todd, 2011). Allison and Browning (2006) also report the importance of these entrepreneurial attributes across all hierarchical levels of mMNEs.

Innovativeness involves the ability of the firm to promote new and creative ideas, products and processes designed to service the market (Lumpkin & Dess, 1996). Compared to exporting firms, mMNEs are closer to their international customers because of their advanced foreign market servicing modes. They have a better grasp of the needs of foreign markets and work closely with clients (Dimitratos et al., 2003; Prashantham, 2011). Consequently, mMNEs are likely to learn to co-innovate with customers offering original products. Similarly, exporting may promote firm learning, and thus, enhance innovative performance (Golovko & Valentini, 2011). Nevertheless, exporting firms rely on export agents or intermediaries, which might be a barrier to intimate international collaboration. Therefore, they are comparatively less likely to come up with innovative products and processes because of their inability to work closely with foreign customers.

Proactiveness has to do with the extent to which the firm initiates moves with competitors as opposed to following them. Proactive firms are able to acquire, exchange and utilize related knowledge intensively (Sapienza, De Clercq, & Sandberg, 2005). mMNEs commit a higher level of resources through advanced modes abroad, and this practice may enable them to monitor competitive trends more closely. Although the relevant evidence is scarce, it is likely that mMNEs adopt a more assertive and forward-looking perspective than their competitors, which can assist them in capturing opportunities faster than exporting firms (Ibeh et al., 2009).

The propensity for risk-taking embraces an attitude that enables firms to undertake significant and risky resource commitments in the marketplace (Miller & Friesen, 1978). Risk-taking firms operate in a culture of information sharing and co-learning; thus, they are able to nurture knowledge capabilities and identify opportunities more rapidly than their rivals (Fosfuri & Tribó, 2008). mMNEs expend a higher level of human, financial and production resources abroad than exporting firms; they are willing to assume the associated risk because they believe that it will enable them to work better with customers, to learn more from competitors, and to cooperate more efficiently with suppliers, distributors and government agencies abroad (Dimitratos et al., 2003; Prashantham, 2011). Hence:

**H1a.** Higher levels of innovativeness of the internationalized firm correlate to a higher probability of being an mMNE.

**H1b.** Higher levels of proactiveness of the internationalized firm correlate to a higher probability of being an mMNE.

**H1c.** Higher levels of propensity for risk-taking of the internationalized firm correlate to a higher probability of being an mMNE.

### 2.2.2. International networking

The networking perspective favors resource pooling and sharing through alliances and social embeddedness with domestic and host organizations to foster expansion in international markets (Prashantham & Young, 2011). This important role for networking in internationalization is also critical for firms originating in emerging economies (Acquaah, 2007; Mesquita & Lazzarini, 2008; Zhou, Wu, & Luo, 2007). Entrepreneurial firms that seek and exploit learning opportunities through networks enjoy significant international growth (Prashantham & Dhanaraj, 2010). Firms that actively acquire knowledge from alliance partners and disseminate such knowledge within their organizations are more capable of engaging in successful alliance relationships (Liu, Ghauri, & Sinkovics, 2010).

Networking with both domestic and international partners is the organization-related variable that receives the most attention in the emerging mMNE literature. Allison and Browning (2006) note that embeddedness in clusters is key for the success of mMNEs. Likewise, Prashantham (2011) attests to the importance of social capital for mMNE growth. “Network seeker” mMNEs may benefit from accessing core competencies – such as marketing or technological know-how – of collaborating firms (Dimitratos et al., 2003). Compared to exporters, mMNEs are likely to exhibit a higher degree and stronger quality of collaboration with alliance firms because exporting firms are predominantly located in the domestic country and lack the advantage of proximity that mMNEs enjoy. Therefore:

**H2.** Higher levels of networking of the internationalized firm correlate to a higher probability of being an mMNE.

### 2.2.3. International learning

The learning theory adopts the view that firms may be active learners and can constructively obtain and use intelligence on foreign markets to their advantage (Voudouris, Dimitratos, & Salavou, 2011). Mahoney (1995) refers to organizational learning as a “metacompetence” that engages knowledge acquisition, processing, storage and recovery. Cohen and Levinthal (1990) further propose that the greater the effort made to absorb knowledge, the more effective the related learning will be. Innovations may also stem from learning interactions with both organizational and environmental sources (Bhuian, Bulent, & Simon, 2005). Further, there is a positive relationship between learning and entrepreneurialism for firms in emerging economies (Zhao, Li, Lee, & Chen, 2011). These arguments are consistent with the rationale of the crucial role played by experiential learning in the international business literature (Eriksson, Johanson, Majkgård, & Sharma, 1997).

The role of knowledge and learning has drawn attention in the exporting literature. The more frequently that smaller exporting firms utilize important export-related information sources to acquire knowledge, the more competitive their export strategy will be (Wheeler, Ibeh, & Dimitratos, 2008). Exporting may help smaller firms innovate but does not make them more innovation intensive (Love & Ganotakis, 2013). However, it is likely that mMNEs may possess greater stocks of those learning processes, routines and systems that collect, disseminate and use information for their international activities (Allison & Browning, 2006).

The transmission of such marketing or technological know-how across borders implies significant transaction costs because of high dissemination risk. From a transaction-cost analysis, firms are more likely to choose entry modes that involve stronger commitments in foreign markets when transferring this tacit know-how (Madhok, 1998). In this light, firms that have developed complex and sophisticated learning mechanisms prefer the use of entry modes that encompass

advanced resource commitments in foreign markets (Ripolles & Blesa, 2012; Zahra et al., 2000). Consequently:

**H3.** Higher levels of learning of the internationalized firm correlate to a higher probability of being an mMNE.

**3. Method**

*3.1. Sample, data collection and checks for common method variance*

This study investigates Chilean firms. Chile ranks 26th out of 71 countries in the Global Entrepreneurship and Development Index (Acs & Szerb, 2010) and is a rapidly growing emerging economy in Latin America that ranks low in terms of income equality. The database utilized in this study is the National Direction of Export Promotion, notably *ProChile*, that includes 7005 internationalized firms. This is the most comprehensive directory of internationalized firms in Chile because it includes firms that use both exporting and advanced modes. This study employed the on-line survey method and avoided interviewer interaction with respondents to eliminate interviewer bias; this also facilitated a wide geographic coverage throughout Chile among responding firms. Wide geographic coverage is a significant consideration because the unique geography of Chile extends 4500 km from north to south and its core regions are in the center of the country. A large number of research organizations across the globe increasingly employ the on-line method (Evans & Mathur, 2005).

This study investigates selected independent internationalized firms of Chilean ownership that employ up to 249 employees and have at least one e-mail account. The number of employees is the criterion used to classify a firm as small- or medium-sized because this method is consistent with international classifications. The researchers sent a total of 4559 email invitations to firms to participate in the study. Following this first round of email invitations, 1103 e-mail accounts were returned as undeliverable. The researchers sent a second email to the remaining firms three weeks later. In total, this study collected 446 responses, which provides a response rate of 12.9%. Eliminating incomplete questionnaires yielded 116 usable questionnaires.

Student t-tests for potential differences between early and late respondents do not yield any statistically significant differences between the two groups in terms of the age, size and international sales ratios of the firms. Comparing responding and non-responding firms for the same variables similarly does not present any statistically significant differences. Furthermore, there are no statistically significant differences for age, size and international sales ratios between respondent firms and those in the entire database, which attests to the representativeness of the sample investigated. To conduct this study, the investigation followed a multiple-step protocol (Dillman, Smyth, & Christian, 2009) that included an initial pre-test on six key informants composed of two scholars, two business owners and two international business professionals. This feedback was then incorporated into the questionnaire, which led to its improvement and simplification. Following this step, 100 small businesses pilot-tested this survey to assess the on-line platform that facilitated the conduct of the study. After this pilot test, researchers refined certain questions again.

The potential threat of common method variance bias to the survey approach (Hair, Anderson, Tatham, & Black, 1995) does not appear to posit a serious challenge to this study because of several measures that were implemented. At the outset, the researchers provided respondents assurances of anonymity and confidentiality during the survey.

Further, the six key informants checked the questionnaire items, and the researchers reversed several item anchors in the questionnaire. In addition, following Podsakoff, Mackenzie, Lee, and Podsakoff (2003), the investigators placed the independent and dependent variables in different sections and web pages of the questionnaire and employed Harman's one-factor test (Podsakoff & Organ, 1986) to examine the possibility of common method variance. If only one factor emerged

from all the variables of interest or if one factor accounted for the majority of covariance between these variables, it might have raised concerns for common method variance. Nevertheless, the results suggest that seven factors are extracted from the variables, and the largest factor accounted for only 19.42% of the total variance.

*3.2. Variables and measures*

Appendix A presents the questions used to measure the variables in this study. The dependent variable is a dichotomous measure that captures whether the firm is a mMNE. This variable takes the value of 0 if the firm utilizes only exporting modes and 1 if the firm utilizes advanced modes, such as licensing/franchising, joint venture/strategic alliance or subsidiaries (drawn from Dimitratos et al., 2003).

The first independent variable in this study is international entrepreneurship. To measure this variable, the study employs an eight-item five-point Likert scale, consistent with Runyan, Dong, and Swinney (2012). These authors propose the use of a three-factor model with eight measurement items, which is perfectly validated by the results of the present study. The researchers performed a principal component analysis to explore the three-factors of international entrepreneurship, that is innovativeness, proactiveness and risk-taking propensity in the international marketplace. Table 1 presents the principal component matrix results. The Cronbach's alphas are 0.74 for innovativeness, 0.71 for proactiveness and 0.79 for risk-taking propensity.

Second, international networking was measured utilizing an eight-item scale that refers to whether the firm has collaborated with and/or sought support from organizations such as public agencies, international companies or national companies (drawn from Styles & Ambler, 1994). Third, this study captures international learning through the use of a three-item five-point Likert scale with a Cronbach's alpha of 0.92. It assesses the extent to which the firm actively obtains, disseminates and uses its intelligence advantage in international markets (drawn from Moorman, 1995).

The researchers employ five control variables in this study. The first is the sector of the firm because it can be important in internationalized small-firms. This variable is dichotomous and captures whether the firm is a manufacturing or service enterprise (1 or 0, accordingly). Next, geographic distance, which plays an important role in the internationalization of the firm (Clark & Pugh, 2001), captures the percentage of the firm's sales outside the Latin-American region. In addition, the international sales ratio, which is a proxy for international performance, captures the percentage of foreign sales in the total sales of the firm. Finally, there is one control each for age (number of years) and size (total employees) of the firm. The natural logarithms of these measures are employed to assess the three last variables.

**Table 1**  
Principal component analysis matrix.

	Innovativeness	Proactiveness	Risk-taking
Careful behavior vs. bold behavior	0.106	0.053	<b>0.900</b>
Low-risk projects vs. high-risk projects	0.253	0.151	<b>0.827</b>
Pre-approved vs. innovative products	<b>0.674</b>	-0.119	0.337
Minor vs. dramatic changes in products	<b>0.842</b>	0.333	0.100
Similar lines of products vs. new ones	<b>0.767</b>	0.454	0.080
Seeks to avoid confrontation vs. very competitive position	0.027	<b>0.698</b>	0.397
Very rare to introduce new products vs. be the first firm to introduce them	0.330	<b>0.766</b>	0.046
Respond to actions initiated by competitors vs. usually initiate actions	0.118	<b>0.805</b>	-0.031

Extraction: Principal component analysis, *n* = 116. Values in bold refer to highest factor loadings.  
Rotation: Varimax normalization with Kaiser (six interactions).

#### 4. Findings and discussion

Table 2 reports the descriptive statistics and Spearman correlation coefficients for the variables utilized in this study. There are 43 (37%) mMNEs in the sample. Investigated firms are almost equally split between the manufacturing (59) and service (57) sectors. Their average ratio of international to total sales to countries outside the Latin American region is 29.7%. In addition, the average international sales ratio of the enterprises investigated is 44.6%, their average age is 12.1 years and their average size is almost 37 employees. There are strong correlation patterns between the variables of the study, with the highest being 0.72. The variance inflation factors for the regression variables are close to 1, which suggests that multicollinearity does not pose a problem to the results of the analysis (Netter, Kutner, Nachtsheim, & Wassermann, 1996).

The results of the binary logistic regression models are found in Table 3. The findings suggest that the sole coefficient of the international entrepreneurship variables that presents statistically significant results is that for risk-taking propensity. Therefore, the findings support H1c. Notably, the results regarding both innovativeness and proactiveness are not statistically significant and, therefore, do not support either H1a or H1b. With respect to innovativeness, the intensity of international customer relationships of mMNEs does not seem to promote the generation of innovative products or processes (cf. Perks & Hughes, 2008). This may be linked to the idiosyncrasies of the specific group of investigated firms. Chilean mMNEs have (relatively) recently begun to invade foreign markets (the average number of years of international activities of the firms investigated is 3.7).

Thus, the interaction of Chilean mMNEs with international stakeholders may not be sophisticated enough to lead to the generation of innovative products and processes. With respect to proactiveness, it appears that firms originating from emerging markets may approach competitors cautiously and avoid aggressive moves directed at them, which corroborates the findings of Runyan et al. (2012). mMNEs from these countries may view competition as a source of information that enables them to learn and enhance their dynamic organizational processes (Bierly & Daly, 2007).

In addition, networking exerts a positive effect on the likelihood that the internationalized firm will become a mMNE, which supports H2. This finding is contrary to recent assertions that mMNEs may not engage in intensive networking because they already possess a sufficient level of resources in international markets (da Rocha et al., 2012); however, this finding is consistent with other studies in the mMNE literature (Prashantham, 2011). It is also consistent with the significance of networking in the activities of firms in Latin America (Sanz & Jones, 2013). However, learning does not emerge as a statistically significant variable; consequently, the evidence of the present study does not support H3. Valuable knowledge and learning of foreign market opportunities are likely acquired through existing personal networks (Ellis, 2011)

instead of the systematic market search that more formal mMNE learning processes may render. This can be the case for internationalized smaller firms from emerging markets, in particular. These firms are likely to lack the leverage or sophistication of complex learning routines that enterprises from developed economies might possess.

The evidence related to the control variables of the regression analysis indicates three additional notable findings. First, mMNEs prefer countries that are geographically close to perform their international activities. This finding contrasts with that of Ibeh et al. (2004) who do not find such a geographic pattern in their examination of Scottish mMNEs. However, in the research context of the current investigation, this may be expected because the majority of international business transactions of Chilean firms occur in South America. Other findings corroborate this perspective (Geldres, Etchebarne, & Bustos, 2011).

Second, larger enterprises are more likely to be mMNEs than exporters because of the large scale and leverage that these firms must have to compete abroad effectively – in spite of the fact that all the firms investigated are small- and medium-sized companies. Third, the international sales ratios of mMNEs are higher than those of exporting firms. This finding corroborates the scant evidence on this issue (Prashantham, 2011) and indicates the superiority that advanced foreign modes have over exporting modes insofar as fostering enhanced international performance.

#### 5. Conclusions

##### 5.1. Implications

MNEs attest to the importance of advanced foreign market servicing modes for the competitiveness of the internationalized smaller firm. These internationalized firms are a new breed in the international entrepreneurship literature and suggest that mode matters (in addition to “time to internationalization”). Nevertheless, the evidence on their activities is limited. Because such entry mode investigations should receive more attention in the international entrepreneurship literature (Jones et al., 2011), this current study seeks to fill this research void by drawing on the activities of 116 internationalized Chilean firms. The implications of this investigation are significant for research and management practice.

The evidence corroborates the proposition that the international entrepreneurship perspective may partially explain mMNE activities. Risk attitude emerges as a major attitudinal variable that accounts for the behavior of these enterprises. In other words, mMNEs are international entrepreneurial firms that reflect this characteristic in their risk-taking propensity. In addition, the predictive power of the networking perspective is important in illuminating the international activities of mMNEs. This theoretical approach most consistently enlightens the activities of mMNEs (Prashantham, 2011).

**Table 2**  
Correlations and descriptive statistics.

	1	2	3	4	5	6	7	8	9	10	11	Mean	S.D.
1 mMNE	1.000											0.370	0.485
2 Proactiveness	0.044	1.000										3.443	0.972
3 Innovativeness	0.072	0.055	1.000									3.081	1.205
4 Risk-taking	0.245 <sup>a</sup>	0.079	0.019	1.000								2.849	1.109
5 Networking	0.452 <sup>a</sup>	−0.018	0.072	−0.010	1.000							1.784	1.228
6 Learning	0.071	0.169 <sup>b</sup>	0.047	0.165 <sup>b</sup>	0.220 <sup>b</sup>	1.000						3.844	1.064
7 Manufacturing sector	0.238 <sup>a</sup>	0.03	−0.114	−0.181 <sup>b</sup>	0.438 <sup>a</sup>	0.027	1.000					0.508	0.502
8 Geogr. distance	0.299 <sup>a</sup>	−0.083	0.038	0.017	0.558 <sup>a</sup>	0.230 <sup>a</sup>	0.417 <sup>a</sup>	1.000				29.741	39.529
9 Intl sales ratio (Ln)	0.495	−0.053	−0.059	0.018	0.700	0.370 <sup>a</sup>	0.559 <sup>a</sup>	0.686 <sup>a</sup>	1.000			2.824	1.688
10 Age (Ln)	−0.016	0.095	0.019	−0.215 <sup>b</sup>	0.059	−0.053	0.136 <sup>b</sup>	0.051	0.066	1.000		2.258	0.927
11 Size (Ln)	0.513 <sup>a</sup>	0.186 <sup>b</sup>	−0.024	−0.198 <sup>b</sup>	0.618 <sup>a</sup>	−0.04	0.641 <sup>a</sup>	0.523 <sup>a</sup>	0.724 <sup>a</sup>	0.313 <sup>a</sup>	1.000	2.807	1.462

Spearman's coefficients are shown;  $n = 116$ .

<sup>a</sup> Significant correlation at 0.01 (two-tailed).

<sup>b</sup> Significant correlation at 0.05 (two-tailed).

**Table 3**  
Binary logistic regression models.

	Predictors			Controls			Full model		
	B	E.T.	Wald	B	E.T.	Wald	B	E.T.	Wald
Proactiveness	.035	.204	.029				-.096	.236	.166
Innovativeness	.101	.208	.234				.133	.236	.314
Risk-taking	.617 <sup>a</sup>	.227	7.372				.751 <sup>a</sup>	.266	7.946
Networking	.369 <sup>b</sup>	.178	4.284				.473 <sup>b</sup>	.215	4.845
Learning	-.036	.210	.029				-.183	.268	.463
Geogr. Distance				-.012 <sup>c</sup>	.006	3.809	-.022 <sup>a</sup>	.009	6.858
Manufacturing sector				-.796 <sup>b</sup>	.378	4.432	-.425	.484	.770
Int sales ratio (Ln)				.269 <sup>b</sup>	.137	3.829	.447 <sup>b</sup>	.212	4.463
Age (Ln)				-.313	.208	2.259	-.425	.279	2.317
Size (Ln)				.414 <sup>a</sup>	.144	8.221	.424 <sup>b</sup>	.188	5.098
Cox and Snell R <sup>2</sup>	.107			.130			.263		
Nagelkerke R <sup>2</sup>	.146			.178			.359		
n	116			116			116		

<sup>a</sup> Significant at 0.01.

<sup>b</sup> Significant at 0.05.

<sup>c</sup> Significant at 0.1 (one-tailed).

Although international entrepreneurship research regularly uses the networking approach (Jones et al., 2011; Keupp & Gassmann, 2009), the findings of the present study corroborate its importance for the activities of this emerging type of internationalized smaller firms. Additionally, it is somewhat surprising that the learning perspective does not receive support as a framework that justifies mMNE behavior. Because they are smaller firms, mMNEs apparently lack the sophisticated learning processes that would enable them to collect and exploit knowledge to their advantage. This evidence is different than that evidence that confirms the significance of the learning theory in international new ventures (Autio et al., 2000; Sapienza et al., 2005).

With respect to internationalized firm management practice, the findings corroborate the association between mMNEs and international sales ratios. Because of this association becoming a mMNE can enhance sales abroad, and so, internationalized smaller firm managers may take risks and engage in higher-level resource commitments. Managers can further cultivate a networking orientation that forges links with domestic and international organizations to facilitate international expansion.

The results highlight the need to generate instruments of public export promotion targeting different types of internationalized firms (Geldres et al., 2011). mMNEs can require different support than that of exporting firms that have traditionally received export promotion policy support measures, such as is the case in Chile. Inspiring a risk-taking propensity and attempting to mitigate uncertainty by stimulating networking activities with domestic and international partners appear to be valuable mechanisms for policy-makers to pursue in supporting the initiation of mMNE activities. Furthermore, intervening to establish links among successful international entrepreneurs from Chile internationally is a prudent course of action for Chilean public-policy makers to follow for their internationalized firms. This practice is consistent with the initiatives that the Chilean government has recently developed that support the internationalization of smaller firms and the conversion of the country into an entrepreneurial hub in Latin America (cf. Felzensztein et al., 2013).

## 5.2. Limitations and future research directions

This study faces limitations that may lead to future research avenues. First, this study excludes other organizational and environmental variables because it emphasizes only the application of the three theoretical perspectives discussed above in predicting the likelihood of the firm to be a MNE. Thus, the parsimonious nature of this research does not include other variables such as customer orientation, internal

rewards and motivation, leadership styles, environmental uncertainty and munificence. Further investigations on mMNEs might incorporate these variables. Second, the cause-and-effect relationship between the investigated variables merits further investigation. For example, it may be that being a mMNE increases its risk propensity because the firm has to assume a higher level of risk-taking activities that are associated with managing its subsidiaries in international markets. Additionally, being an mMNE may enhance a networking orientation because, to a great extent, the firm has to collaborate with organizations at home and abroad to survive and grow. With this in mind, process studies involving case examinations of mMNEs might also be illuminating.

Third, the Chilean setting of this study can challenge the generalizability of the findings of this study. The investigation of mMNE activities in different countries may try to extrapolate the findings of this research in other national settings. Fourth, future research can analyze the behavior of both mMNEs and international new ventures. Future studies in international entrepreneurship may highlight the similarities and differences of the two categories of internationalized smaller firms that pursue different roads to achieve competitiveness and growth abroad.

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## Appendix A. Questions related to the variables of the study

mMNEs vs. exporters

1) Check all forms of international business the firm uses

- Export
- Licensing/franchising
- Joint venture/strategic alliance
- Production subsidiary
- Sales subsidiary
- Other subsidiary

International entrepreneurship (1 = not at all–5 = very much)

- 1) Please rate the following statements based on the following scales:  
We encourage the commercialization of products/tested or pre-approved vs. we encourage R & D, technological leadership and innovation  
We encourage low-risk projects (with normal and certain rates of return) vs. we encourage high-risk projects (with very high return opportunities)
  - 2) In general, we believe that because of the nature of the business environment, the best way to achieve the objectives of the firm in the international market is through  
Careful behavior vs. bold and very different behavior
  - 3) In relation to competitors in the international market, my firm:  
Usually responds to actions initiated by competitors vs. usually initiates actions to which competitors respond  
It is very rare that my firm introduces new products/services, operations management techniques and technology vs. it is widely held to be the first firm to introduce new products  
Generally my firm seeks to avoid confrontation preferring a position of “live and let live” vs. generally it assumes a very competitive posture of “beat the rival”
  - 4) Regarding the product lines/services, your firm has marketed  
They are same lines of products or services vs. they are new lines of products or services  
Changes in product/service lines have been small vs. changes in product/service lines have been dramatic
- Networking
- 1) In the process of the internationalization of the firm, check all the bodies/institutions that have been relevant to its foreign growth:  
 Chilean Free Trade Agreements  
 Support from public institutions  
 Support from private institutions  
 Support from universities  
 Alliance with international companies  
 Alliance with national (Chilean) companies  
 Support from incubators  
 Other
- Learning
- 1) To what extent do decision makers of your firm look for relevant information (with respect to competition, industry trends, customers, suppliers and working at home or abroad) in decision-making abroad?  
Not at all 1 2 3 4 5 Very much
  - 2) To what extent do decision makers in your firm disseminate relevant information (with respect to competition, industry trends, customers, suppliers and working at home or abroad) to organizational participants concerning decision-making abroad?  
Not at all 1 2 3 4 5 Very much
  - 3) To what extent do decision makers in your firm analyze relevant information (with respect to competition, industry trends, customers, suppliers and working at home or abroad) concerning decision-making abroad?  
Not at all 1 2 3 4 5 Very much

## References

Acquaah, M. (2007). Managerial social capital, strategic orientation, and organizational performance in an emerging economy. *Strategic Management Journal*, 28(12), 1235–1255.

- Acs, Z., & Szerb, L. (2010). *Global entrepreneurship and the United States (contract number SBAHQ-09-M-0288)*. Maryland, USA: Small Business Administration, Office of Advocacy.
- Allison, M. A., & Browning, S. (2006). Competing in the cauldron of global economy: Tools, processes, case studies, and theory supporting economic development. *International Journal of Technology Management*, 33(2/3), 130–143.
- Amorós, J. E., Fernández, C., & Tapia, J. (2012). Quantifying the relationship between entrepreneurship and competitiveness development stages in Latin America. *International Entrepreneurship and Management Journal*, 8(2), 249–270.
- Amorós, J. E., & Poblete, C. (2011). *Global entrepreneurship monitor reporte Nacional de Chile 2010*. Santiago de Chile: Ediciones Universidad del Desarrollo.
- Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business Venturing*, 18(1), 105–123.
- Autio, E., Sapienza, H. J., & Almeida, J. G. (2000). Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of Management Journal*, 43(5), 909–924.
- Bhuian, S. N., Bulent, M., & Simon, J. B. (2005). Just entrepreneurial enough: The moderating effect of entrepreneurship on the relationship between market orientation and performance. *Journal of Business Research*, 58(1), 9–17.
- Bierly, P. B., III, & Daly, P. (2007). Sources of external organizational learning in small manufacturing firms. *International Journal of Technology Management*, 38(1/2), 45–68.
- Brouthers, K., & Hennart, J. F. (2007). Boundaries of the firm: Insights from international entry mode research. *Journal of Management*, 33(3), 395–425.
- Brouthers, K. D., & Nakos, G. (2004). SME entry mode choice and performance: A transaction cost perspective. *Entrepreneurship: Theory and Practice*, 28(3), 229–247.
- Clark, T., & Pugh, D. S. (2001). Foreign country priorities in the internationalization process: A measure and an exploratory test on British firms. *International Business Review*, 10(2), 285–303.
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35(1), 128–152.
- Coviello, N. E. (2006). The network dynamics of international new ventures. *Journal of International Business Studies*, 37, 713–731.
- Coviello, N., & Jones, M. V. (2004). Methodological issues in international entrepreneurship research. *Journal of Business Venturing*, 19(4), 485–508.
- Crick, D., & Jones, M. V. (2000). Small high-technology firms and international high-technology markets. *Journal of International Marketing*, 8(2), 63–85.
- da Rocha, A., de Mello, R. C., Pacheco, H., & de Abreu, F. I. (2012). The international commitment of late-internationalizing Brazilian entrepreneurial firms. *International Marketing Review*, 29(3), 228–252.
- Dhanaraj, C., & Beamish, P. W. (2003). A resource based approach to the study of export performance. *Journal of Small Business Management*, 41(3), 242–261.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3rd ed.). Hoboken: Wiley.
- Dimitratos, P., Johnson, J. E., Slow, J., & Young, S. (2003). Micro-multinationals: New types of firms for the global competitive landscape. *European Management Journal*, 21(2), 164–174.
- Ellis, P. D. (2011). Social ties and international entrepreneurship: Opportunities and constraints affecting firm internationalization. *Journal of International Business Studies*, 42, 99–127.
- Eriksson, K., Johanson, J., Majkgård, A., & Sharma, D. (1997). Experiential knowledge and cost in the internationalization process. *Journal of International Business Studies*, 28(2), 337–360.
- Evans, J. R., & Mathur, A. (2005). The value of online surveys. *Internet Research*, 15(2), 195–219.
- Felzensztein, C., Gimmon, E., & Aqueveque, C. (2013). Entrepreneurship at the periphery: Exploring framework conditions in core and peripheral locations. *Entrepreneurship: Theory and Practice*, 37(4), 815–835.
- Fosfuri, A., & Tribó, J. (2008). Exploring the determinants of potential absorptive capacity and its impact on innovation performance. *Omega*, 36(2), 173–187.
- Geldres, V. V., Etchebarne, M. S., & Bustos, L. (2011). The impact of governmental export promotion on the firm's export performance. *Academia, Revista Latinoamericana de Administración*, 47, 1–17.
- Golovko, E., & Valentini, G. (2011). Exploring the complementarity between innovation and export for SMEs' growth. *Journal of International Business Studies*, 42(3), 362–380.
- Hair, J. F. J., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate data analysis: With readings* (4th ed.). New Jersey: Prentice Hall.
- Ibeh, K. I. N., Borchert, O., & Wheeler, C. (2009). Micro-multinationals: Transcending resource challenges in international business. In K. I. N. Ibeh, & S. Davies (Eds.), *Contemporary challenges to international business* (pp. 85–105). London: Palgrave.
- Ibeh, K. I. N., Johnson, J. E., Dimitratos, P., & Slow, J. (2004). Micro-multinationals: Some preliminary evidence on an emergent star of the international entrepreneurship field. *Journal of International Entrepreneurship*, 2(4), 289–303.
- International Monetary Fund (2011). *World economic outlook, April*. Washington D.C.: IMF World Economic and Financial Surveys.
- Javalgi, R., & Todd, P. R. (2011). Entrepreneurial orientation, management commitment, and human capital: The internationalization of SMEs in India. *Journal of Business Research*, 64(9), 1004–1010.
- Jones, M. V., Coviello, N., & Tang, Y. K. (2011). International entrepreneurship research (1989–2009): A domain ontology and thematic analysis. *Journal of Business Venturing*, 26(6), 632–659.
- 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.
- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, 35(2), 124–141.

- Liu, C. L., Ghauri, P., & Sinkovics, R. R. (2010). Understanding the impact of relational capital and organizational learning on alliance outcomes. *Journal of World Business*, 45(3), 237–249.
- Love, J. H., & Ganotakis, P. (2013). Learning by exporting: Lessons from high-technology SMEs. *International Business Review*, 22(1), 1–17.
- Lu, J. W., & Beamish, P. W. (2001). The internationalization and performance of SMEs. *Strategic Management Journal*, 22(6/7), 565–586.
- Lumpkin, G. T., & Dess, G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135–172.
- Madhok, A. (1998). The nature of multinational firm boundaries: Transaction costs, firm capabilities and foreign market entry mode. *International Business Review*, 7(3), 259–290.
- Madsen, T. K., & Servais, P. (1997). The internationalization of born globals: An evolutionary process. *International Business Review*, 6(6), 561–583.
- Mahoney, J. T. (1995). The management of resources and the resource of management. *Journal of Business Research*, 33(2), 91–101.
- Mathews, J. A., & Zander, I. (2007). The international entrepreneurial dynamics of accelerated internationalisation. *Journal of International Business Studies*, 38(3), 387–403.
- Mesquita, L., & Lazzarini, S. G. (2008). Horizontal and vertical relationships in developing economies: Implications for SMEs' access to global markets. *Academy of Management Journal*, 51(2), 359–380.
- Miller, D., & Friesen, P. H. (1978). Archetypes of strategy formulation. *Management Science*, 24(9), 921–933.
- Moorman, C. (1995). Organizational market information processes: Cultural antecedents and new product outcomes. *Journal of Marketing Research*, 32(3), 318–336.
- Netter, J., Kutner, M. H., Nachtsheim, C. J., & Wassermann, W. (1996). *Applied linear statistical models* (4th ed.) Chicago: Irwin.
- Nicholls-Nixon, C. L., Davila-Castilla, J. A., Sanchez-Garcia, J., & Rivera-Pesquera, M. (2011). Latin American management research: Review, synthesis, and extension. *Journal of Management*, 37(4), 1178–1227.
- Organisation for Economic Co-operation and Development (2009). *Estudios territoriales de la OECD-Chile*. Paris: OECD.
- Oviatt, B., & McDougall, P. (2005). Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship: Theory and Practice*, 29(5), 537–554.
- Perks, K., & Hughes, H. (2008). Entrepreneurial decision-making in internationalization: Propositions from mid-size firms. *International Business Review*, 17(3), 310–330.
- Podsakoff, P. M., Mackenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4), 531–544.
- Prashantham, S. (2011). Social capital and Indian micro-multinationals. *British Journal of Management*, 22(1), 4–20.
- Prashantham, S., & Dhanaraj, C. (2010). The dynamic influence of social capital on the international growth of new ventures. *Journal of Management Studies*, 47(6), 967–994.
- Prashantham, S., & Young, S. (2011). Post-entry speed of international new ventures. *Entrepreneurship: Theory and Practice*, 35(2), 275–292.
- Ripolles, M., & Blesa, A. (2012). International new ventures as small multinationals: The importance of marketing capabilities. *Journal of World Business*, 47(2), 277–287.
- Runyan, R. C. G. B., Dong, B., & Swinney, J. L. (2012). Entrepreneurial orientation in cross-cultural research: Assessing measurement invariance in the construct. *Entrepreneurship: Theory and Practice*, 36(4), 819–836.
- Sanz, L., & Jones, V. (2013). Advances in business research in Latin American studies. *Journal of Business Research*, 66(3), 397–400.
- Sapienza, H. J., De Clercq, D., & Sandberg, W. R. (2005). Antecedents of international and domestic learning effort. *Journal of Business Venturing*, 20(4), 437–457.
- Styles, C., & Ambler, T. (1994). Successful export practice: The U.K. experience. *International Marketing Review*, 11(6), 23–47.
- Varian, H. (2011). Micro-multinationals will run the world. Foreign policy, Sept/October. Retrieved from [http://www.foreignpolicy.com/articles/2011/08/15/micro-multinationals\\_will\\_run\\_the\\_world?page=0,0](http://www.foreignpolicy.com/articles/2011/08/15/micro-multinationals_will_run_the_world?page=0,0)
- Voudouris, I., Dimitratos, P., & Salavou, H. (2011). Entrepreneurial learning in the international new high-technology venture. *International Small Business Journal*, 29(3), 238–258.
- Wheeler, C., Ibeh, K., & Dimitratos, P. (2008). UK export performance research: Review and implications. *International Small Business Journal*, 26(2), 207–239.
- Zahra, S. A., Ireland, R. D., & Hitt, M. A. (2000). International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of Management Journal*, 43(5), 925–950.
- Zhao, Y., Li, L., Lee, S. H., & Chen, L. B. (2011). Entrepreneurial orientation, organizational learning, and performance: Evidence from China. *Entrepreneurship: Theory and Practice*, 35(2), 293–317.
- Zhou, L., Wu, W., & Luo, X. (2007). Internationalization and the performance of born-global SMEs: The mediating role of social networks. *Journal of International Business Studies*, 38, 673–690.
- Zucchella, A., Palamara, G., & Denicolai, S. (2007). The drivers of the early internationalization of the firm. *Journal of World Business*, 42(3), 268–280.