
KNOWLEDGE MANAGEMENT STRATEGIES AND APPLICATIONS

Edited by **Muhammad Mohiuddin, Norrin Halilem,
SM Ahasanul Kobir and Cao Yuliang**

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Knowledge Management Strategies and Applications

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Network Market Orientation, Knowledge Management and Born Globals' Competitiveness

Diego Monferrer Tirado and Marta Estrada Guillén

Additional information is available at the end of the chapter

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Abstract

This chapter studies the influence of network market orientation (NMO) on Spanish Born Globals' (BGs) competitiveness. The study analyses the contribution of a specific knowledge-based dynamic capability, namely absorptive capability, as a key mediator variable between NMO and competitiveness, finally influencing the international performance achieved by this particular type of firm. Results from testing the structural equation model proposed confirm that NMO facilitates the development of an absorptive capability in BGs and that this capability, in turn, influences the firms' capacity to exploit the new relational knowledge, thus improving their competitiveness and international performance.

Keywords: Born Globals, network market orientation, absorptive capability, competitiveness, international performance

1. Introduction

Much of the previous research on internationalisation behaviour concludes that firms become involved in international markets gradually [1]. However, in the last 20 years, a new kind of business has emerged that does not follow a gradual internationalisation pattern, but is characterised by rapid commitment to international activity. Oviatt and Dougall [2] called these businesses 'Born Globals' (BGs), and they have given rise to a new line of research known as international entrepreneurship centred on the study of how new ventures are committed to developing the processes of 'discovery, enactment, evaluation, and exploitation of opportunities across national borders to create future goods and services' ([3], p.7). Past research in this area has centred on determining the factors that might explain the exceptional speed with

which certain new ventures can internationalise [3–10]. However, several authors consider that to be able to advance our understanding of BGs, we need to analyse the factors that can affect their competitiveness after their creation, particularly from a marketing perspective [11–17].

Traditionally, lack of market knowledge has been regarded as one of the biggest impediments small businesses have to overcome in their internationalisation process [18–20] in that it constitutes a key variable for proactively seeking international opportunities [21, 22]. McNaughton [23] shows that companies concerned to expand their knowledge of foreign markets have a broader perspective and there is a greater chance that they will seize the opportunities that appear in them.

If we attempt to identify the main source of this knowledge, we observe that traditional gradualist models attribute a fundamental role in knowledge generation—and, therefore, in the internationalisation process—to the firm's experience (at home and abroad) [1]. However, in the case of BGs, knowledge based on experience cannot be considered the only source of knowledge about foreign markets that these firms use, as their experience is minimal. For this reason, it becomes necessary to investigate how BGs manage to acquire and interpret information about markets and how they translate it into specific actions that affect the development of skills that help them to remain dynamic in international markets [22, 24, 25].

Many marketing scholars argue that market orientation plays a determining role in the international success of new businesses due to its contribution to effective knowledge management [26–30]. In this line, Knight and Cavusgil [31] point out that the market orientation of new international ventures enhances their understanding of their customers' present and future needs and optimises the development of distinctive actions that can meet these needs by providing a more valuable offer than that of their rivals.

In addition, based on the social perspective, the study of entrepreneurship has also highlighted the importance of the links entrepreneurs develop with members of their networks as they facilitate rapid access to the information and knowledge associated with the latest trends in the new markets, and with certain key resources that are not initially available to these firms [32–36].

However, although from the theoretical viewpoint there seems to be a strong complementarity between market orientation and membership of business networks, as shown in certain studies [13, 37, 38], little is known about the way these factors combine. In this vein, Loane and Bell [18] highlight the need for research attention to the mechanisms and routines that enable new international ventures to generate and manage knowledge through relationships they establish in networks. In turn, Evanschitzky [38] highlights the importance of studying their influence on competitiveness and firm performance, in light of the scarce knowledge to date.

In this respect, this study covers the mutually complementary nature of both factors in a single construct known as network market orientation (NMO). Thus, although previous studies have emphasised the importance of MO in the context of relationships between firms, they have not analysed it as an inter-business phenomenon in itself, but rather as the sum of the market orientations of the various individual firms [22, 37, 39, 40]. The present work analyses

the role of NMO differently, understanding it as an orientation established jointly by the different members making up the network.

However, the effect of any organisational factor is usually subject to significant causal ambiguity regarding the way firms maintain their capacity to use the knowledge generated in order to continue seizing the market opportunities that arise [41]. Adopting an NMO that promotes a cognitive effort and collective approach to learning can help to overcome this ambiguity by improving understanding of the new and changing links between action and performance and, in this way, recognising the need to face changes in existing routines [22, 40, 42, 43]. In line with this idea, it is essential that BGs complement their adoption of an NMO with the generation of dynamic absorptive capability in order to ensure continuing commitment to construct new resources and capabilities and reconfigure existing ones, thereby adapting to new market demands [22, 44–48].

Specifically, this absorptive capability is related to the assimilation of external information into the firm's internal knowledge base [4, 49]. It is crucial for each firm to develop this capability individually, since it enables the external knowledge generated in the network context to be perfectly understood and assimilated internally by the firm and put to use successfully [50–54].

Ultimately, this study aims to contribute to the existing literature by analysing the way in which BGs start by adopting an NMO in order to access and systematically manage information from foreign markets and the way this orientation contributes to generating a dynamic absorptive capability that helps them to capitalise on the knowledge generated, thus facilitating their consolidation abroad.

In order to meet this objective, we first present the theoretical frame used to formulate hypotheses on the influence of NMO on BGs' international competitiveness and performance. The empirical study carried out to test the hypotheses is then reported, with an analysis of the results obtained and the main conclusions. Finally, limitations and future research lines associated with this study are described.

2. Theoretical development

2.1. The relevance of NMO for BGs

The international entrepreneurship literature has increasingly emphasised the role of business networks in the process of learning and knowledge generation in BGs [36, 55–57]. The relationships an entrepreneur builds with the other network members (family members, customers, distributors and providers) can be crucial in (1) generating more differential and valuable knowledge on new clients' needs and the business environment conditions, (2) knowing how to exploit the positive conditions and avoid the negative ones and (3) accessing the capabilities and resources required to do it [34]. Networks, therefore, offer BGs a way of compensating for their limitations of newness [58], smallness [59] and foreignness [60] by providing the opportunity to access valuable supplementary knowledge on aspects such as technology, distribution

channels and customer bases [61] and to improve other knowledge-related aspects such as information exchange and coordination [62] and the speed of know-how and technology transfer [63]. Thus, networks are key for BGs to develop a broader knowledge base beyond what they could achieve alone [64], abandoning the idea that the generation of new knowledge is a purely internal process [19, 25, 56, 65]. This is particularly so if we bear in mind that BGs are characterised by their lack of necessary resources.

The processes that contribute to relational information management in adopting an NMO are presented in the theoretical proposal of Helfert et al. [37]. These authors define four relational knowledge management mechanisms developed jointly by the members of a network: knowledge exchange processes, in order to satisfy clients' requirements; coordination processes, aimed at synchronising the network ties through formal and informal routines; coupling processes, necessary to adapt the particular features of a network member and conflict resolution mechanisms designed to solve unexpected contexts. The work of Helfert et al. [37] represents a significant step forward in the study of this construct. In fact, previous research was limited to considering the sum of market orientations in individual companies [66] or adapting the original market orientation models (behavioural and cultural) to the network setting.

Following the work of Helfert et al. [37], Monferrer et al. [22:p.388] defined NMO as 'a strategic orientation established jointly by the different members in the business relations network. This strategic orientation involves, in a climate of trust, collaboration and commitment, engaging in certain activities and fundamental shared behaviours (adaptation, coordination, conflict resolution and exchange) based on the generation of an extended intellectual capital'. These activities seek to increase the competitiveness of the network and its individual members in an attempt to provide superior value to end customers by satisfying their needs.

2.2. NMO and absorptive capability in BGs

Absorptive dynamic capability is related to the processes developed in the company to seek new information, internalise it and integrate it into the firm's existing knowledge base [49]. Developing this capability is vitally important for BGs' survival, since their business opportunity has not yet been consolidated. Furthermore, given that BGs compete in a global market segment [2, 3], the nature of the factors that influence the conditions of their business environment come from a greater diversity of sources. This variety of sources has the effect of increasing the complexity associated with the mechanisms BGs need to generate in order to manage and internally integrate knowledge from their external markets. For this reason, before developing new knowledge search and integrative mechanisms, firms must stimulate the use of processes that allow original knowledge from different sources to be managed efficiently [22, 48].

BGs are recently created companies and therefore they assume limited resource availability [5, 6, 8, 14, 17, 67]. In these circumstances, networks facilitate the development of absorptive capability in BGs [68]. Nahapiet and Ghoshal [69] indicate that to access the different sources of knowledge from their external markets, firms need to generate communication processes in order to guarantee the capture and integration of real and potential capabilities and resources associated to the relationships an individual unit builds through its network.

Similarly, Cohen and Levinthal [49] suggest that absorptive capability is built on communication structures that cross firm boundaries.

Belonging to a market-oriented network will therefore give BGs some relevant advantages, first by improving their capacity to develop an agreed perception of their markets based on multiple agents and sources of knowledge; and second, by incorporating coordination processes to interpret and understand that knowledge and integrate it into the internal firm's knowledge base [22, 37, 40]. In sum, a market-oriented network facilitates the development of BGs' absorptive capability. We therefore posit that:

H1: Participation of BGs in market-oriented networks stimulates their absorptive capability.

2.3. Absorptive capability and competitive advantages in BGs

To specify these competitive advantages, we are guided by the work of Porter [70], who considers that the different meanings used to refer to competitive advantages can be condensed into two general ones which cover all the rest [13, 71–73]: product differentiation-based and cost-based competitive advantages. The former refers to factors such as quality, design and other attributes that distinguish firms' offers of value from those of their rivals [70–72], as well as advantages linked to services such as delivery speed, reliability and managing additional services [40, 72, 73]. In turn, cost-based advantages lie in the domain of manufacturing, administration and commercialisation costs. They give the producer value in the form of lower costs and offer the consumer the lowest price [40, 70, 72, 73].

Regarding the influence that absorptive capability has on these advantages, Cohen and Levinthal [49] argue that establishing practices which encourage the assimilation of external knowledge creates a positive incentive to invest in R&D and thus improve the firm's possibilities of achieving superior competitive advantages. According to Ref. [74], improving the differential nature of a new company requires (1) the internal application of certain valuable knowledge-based resources and capabilities; (2) the skill to associate them with other external ones; (3) the capacity to integrate the knowledge derived from this association internally and (4) the capability to apply this knowledge to potentially successful business aims. As Laursen and Salter ([75], p.146) manifest 'the lack of openness of firms to their external environment may reflect an organizational myopia, indicating that managers may overemphasize internal sources and under emphasize external sources'. An excessively internal vision may therefore negatively influence the competitiveness of the firm [49]. To encourage firm competitiveness, ideally there should be a balance between the concentration of internal capabilities and openness to the exterior [76]. In this regard, Vinding [77] extols the role of absorptive capability, as it enables the firm's internal capability and its external collaboration to complement each other. On the basis of this capability firms manage to capture, absorb and use external knowledge, thereby facilitating the achievement of competitive advantages [22, 78–80].

BGs tend to gradually define the specifications of their products or services by taking into account the particularities of their customers and the conditions that characterise their competitive environment [22]. BGs thus need to avoid internal short-sightedness when specifying market trends in differential and low cost products or services [3, 22, 81]. Therefore, BGs use the information and knowledge generated on the basis of their absorptive capability to

introduce the valuable specifications and features required in their products or services to guarantee the feasibility of their business project. These arguments lead us to propose that:

H2: Greater absorptive capability in BGs leads to greater development of differentiation-based competitive advantages.

H3: Greater absorptive capability in BGs leads to greater development of cost-based competitive advantages.

2.4. Competitive advantages and international performance in BGs

A review of the conceptualisations of the competitive advantage concept shows that, by definition, a firm has a competitive advantage over another firm when it obtains a superior performance [82]. Therefore, the competitive advantage can be seen as a direct antecedent of a BG's international performance because the superiority arising from its attempt to provide value determines the purchasing performance of its target market [55], and consequently its performance [40, 72, 83]. When a firm achieves competitive advantages (differentiation-based and/or cost-based), it has a higher capacity to generate value for its clients and, in turn, greater levels of client satisfaction, business volume and market share and lower customer service costs [30, 84, 85]. As Snoj et al. [83] point out, sustaining competitive advantages is the basis for achieving superior business performance, survival and development. Therefore, the following hypotheses are proposed:

H4: BGs' achievement of differentiation-based competitive advantages contributes to higher levels of international performance.

H5: BGs' achievement of cost-based competitive advantages contributes to higher levels of international performance.

Figure 1 summarises the model of effects for the study.

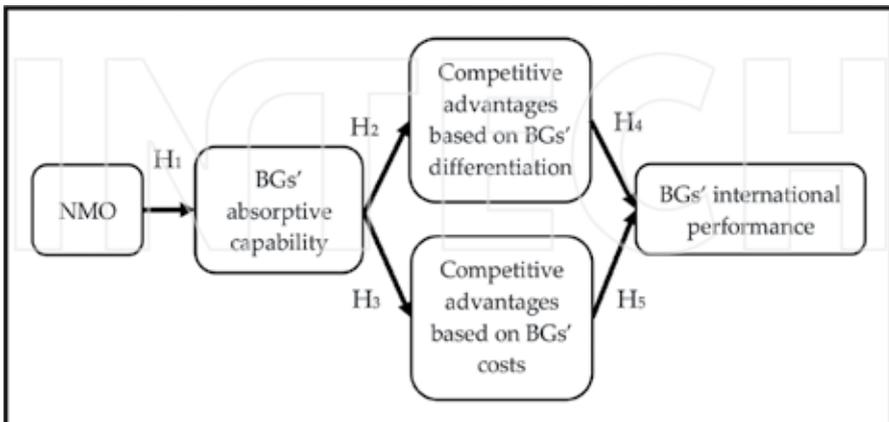


Figure 1. Model of effects.

3. Methodology

3.1. Sample selection and data collection

We started with 2012 Spanish firms, all under 7 years old and operating internationally, taken from the Dun and Bradstreet and SABI databases. To refine the sample and ensure that the firms selected were BGs, a total of six selection criteria were applied on two different occasions: prior to and during the field study. Thus, based on the filters available in the databases, the following criteria were applied: (1) the firms should be no more than 7 years old, thus guaranteeing that they are new firms; (2) they should make their own strategic decisions, thus excluding subsidiary or affiliated firms; (3) they should have a minimum of three employees and a maximum of 250, ruling out micro-firms, self-employed individuals and big firms. This process of refinement resulted in a population of 1023 firms.

The questionnaire was drawn up, based on an in-depth bibliographical review, including the three remaining selection criteria (not available without direct consultation with the firm): (4) their international activity should have started in the first three years following their creation, thus showing their immediate incorporation into foreign markets; (5) they should generate a minimum of 25% of their annual sales abroad, thus providing evidence of a consolidated international presence and (6) they should form a part of a network of firms with a minimum of three members. Regarding this last criterion, in order to ensure that interviewees focused their responses on their main business network, as an introduction the following definition was included, in which business networks are understood as *'the set of relationships that the firm maintains with other agents such as customers, suppliers, competitors, consultants, government agencies, universities, research centres, market research firms, advertising agencies and sales or distribution agents with the aim of obtaining knowledge, information, technology, resources or skills'* ([86], p.24).

The questionnaire was then pre-tested with a pilot sample of 25 firms to ensure it would be correctly understood. An electronic version was then prepared for the field work, of which 303 valid responses were returned (29.62% of the total).

An analysis of the primary data revealed the principal characteristics of the sample (**Table 1**). The firms are SMEs, mostly from the industrial sector (61.2% of the total), notably the agri-food, metal and textile sectors. Commerce is represented by 31.6%, including firms that export and import products related to the aforementioned industrial sectors. Finally, less than 7.2% of firms come from the services sector, including mostly financial, tourism and communication agencies. The firms have on average 28.55 employees, 41.50% of their commercialisation work is abroad, and their average age is 3.90 years.

Regarding the networks to which the firms belong (**Table 2**), almost all of them became part of the network on their creation (96.4% after their first year of life), they are usually networks with marketing aims (in 92.5% of cases) and are composed on average of 5.81 firms, located near the firm (62.19% of the networks have a regional scope).

Years of international experience		Total number of employees		International activities in the value chain*		Activity sector	
Years elapsed	%	Employees	%	Activity	Average%	Sector	%
0	76.6	3–5	26.4	Manufacturing process	11.58	Industrial	61.2
1	19.8	6–11	25.4	Research and development	7.40		
2	2.1	12–25	23.8	Commercialisation	41.50	Commercial	31.6
3	1.6	Over 25	24.4	Advertising and promotion	11.18		
Average years elapsed = 0.28		Average employees = 28.55		After-sales service	16.51	Services	7.2
Average international activity = 17.63							

Note: Figures expressed as a percentage of total responses.

Table 1. General characteristics of the firms.

Years since creation to entrance in the network		Network size		Geographical scope of the network ¹		Type of network		
Years elapsed	%	Firms	%	Scope	%	Type	%	
0	82.4	3	55.6	Self-governing region	62.19	Social network	2.5	
1	13.5	4–5	19.4			Technological network	14.9	
2	1.4	6–10	11.1	National	15.42	Institutional network	2.0	
3	2.7	>10	13.9			Infrastructure network	5.5	
Average years elapsed = 0.12		Average firms = 5.81		International	22.39	Marketing network	92.5	
							Market network	15.4

¹According to the location of most network members.

Table 2. General characteristics of the main networks of the studied firms.

3.2. Measurement instruments

To measure the market orientation of the network we adapted the scale proposed by Helfert et al. [37]. These authors move away from the idea defended in previous studies of measuring the network's market orientation by simply adapting the dimensions used in the seminal scales of MO. Specifically, this scale includes a total of 12 items on the four dimensions that reflect the relational processes management of NMO: coupling (2 items), coordination (3 items), conflict resolution (3 items) and exchange (4 items).

To measure absorptive capability, we use the three-item scale of Ref. [87] that evaluates the degree to which the firm's management systems encourage the ability to acquire, assimilate, transform and exploit knowledge.

Competitive advantages are measured with the scale developed by Ling-Yee and Ogunmokun [71] and the proposals made by Morgan et al. [72] and Ha-Brookshire and Dyer [73]. This scale reflects the firm's position in relation to competition in terms of differentiation and costs when adapting its offer to international market needs.

Finally, we use an adaptation of the scale proposed by Jantunen et al. [81] to measure international performance. Specifically, we asked BG managers about their degree of satisfaction with their activity in terms of turnover, profitability, market share and global satisfaction.

3.3. Validity and scale reliability

To refine the scales, a confirmatory factor analysis was performed using structural equations models. The analyses guarantee a measurement model consistent with the theoretical proposals, supported by scales that are reliable, valid and present a certain degree of unidimensionality.

Based on the recommendations of Jöreskog and Söbom [88], we first examined the estimation parameters. We removed those indicators with standardised coefficients (λ) under 0.7, significance of the Student *t* statistic under 2.58 ($P=0.01$) and R^2 under 0.49, thus ensuring that the strong and weak convergence conditions were met [89]. This process led to the removal of the indicators EXCH.3 from the NMO scale, ABS.1 from the absorption capability scale, and CACOS.3, CADIF.3 and CADIF.4 from the competitive advantages based on costs and differentiation, respectively. Several tests were then performed to verify whether or not the process of refinement of the scales had altered their level of reliability. We used Cronbach's alpha [90] to analyse internal consistency. Other complementary tests of reliability were carried out: the composite reliability of the construct and the analysis of the average variance extracted (see **Table 3**).

Finally, the convergent and discriminant validity were analysed. With reference to the former, it was sufficient to observe that the estimated value of the correlations between the dimensions configuring the scales was high and significant. The confidence interval test was performed to examine discriminant validity, verifying that '1' was not found in the intervals estimated for the correlations between each pair of dimensions (**Table 4**). The measurement model proposed is therefore reliable and valid for use in the testing of hypotheses.

Further tests were also carried out. First, we checked for signs of multicollinearity by testing the variance inflation factor (VIF) among latent variables in our proposed overall model. Values were below 10 [91], suggesting multicollinearity was not an issue in our study. Second, a *t*-test of independent means was performed on the dimensions of the variables in the proposed model. This test was conducted using the first 45 and last 45 respondents. No significant differences were found between these respondents at the 0.05 level, indicating an absence of non-response bias [92]. Third, various ANOVA were run to confirm that sample characteristics do not affect the model constructs. The following control variables were used, based on the data gathered in the questionnaire: sector of activity, international consolidation, age, international seniority, size, seniority in the network (all firm-related variables) and size of the network. Results revealed no significant differences in any of the analyses. Finally, the possibility of common method variance bias was tested with Harman's test, concluding that the bias caused by the method used was not a problem for the validity of the results obtained in the subsequent testing of the hypotheses [93, 94].

Scale	1st order								2nd order
	PERF	ABS	CACOS	CADIF	COUP	COOR	CONF	EXCH	NMO
λ	0.74–0.87	0.72–0.84	0.85–0.86	0.71–0.82	0.81–0.91	0.73–0.90	0.77–0.91	0.72–0.87	0.76–0.95
α	0.887	0.749	0.841	0.732	0.845	0.871	0.887	0.847	NP
CR	0.887	0.753	0.842	0.738	0.850	0.876	0.891	0.857	0.915
AVE	0.612	0.606	0.727	0.586	0.741	0.704	0.732	0.667	0.731
Significant loads	All $t > 2.58$				R ²		All R ² > 0.49		
χ^2/df	RMSEA	SRMR	GFI	AGFI	NFI	NNFI	IFI	CFI	
1.726	0.049	0.050	0.894	0.864	0.901	0.947	0.956	0.955	

Table 3. Summary of the results after the definitive factor analysis.

Pair of variables	CACOS-ABS	CACOS-CADIF	CACOS-NMO	ABS-CADIF	ABS-NMO
I.C.	[0.143; 0.415]	[0.145; 0.421]	[0.124; 0.376]	[0.148; 0.436]	[0.198; 0.454]
Pair of variables	CADIF-NMO	CACOS-PERF	ABS-PERF	CADIF-PERF	NMO-PERF
I.C.	[0.036; 0.312]	[0.117; 0.369]	[0.049; 0.321]	[0.154; 0.418]	[0.279; 0.503]

Table 4. Discriminant validity analysis using the confidence interval (CI) test.

4. Results

Research in business-related sciences has gradually been enriched by the introduction of more sophisticated methodologies. This greater degree of development has enabled researchers to design and test increasingly complex models addressed to explaining the business reality.

Structural equations models have emerged from the evolution of multi-equation modelling developed chiefly in econometrics and combined with the principles of measurement from psychology and sociology, aimed at overcoming the limitation shared by other multivariate techniques such as multiple regression, factor analysis, multivariate analysis of variance or discriminant analysis, all of which can examine just one relation at a time [91]. Unlike the above-mentioned techniques, a structural equations model (SEM)-based analysis is able to explore a series of dependent relations simultaneously [91]. Therefore, this technique is particularly useful when a dependent variable becomes an independent variable in subsequent dependency relations.

For this reason, as with the scale validation, SEM was used to test the hypotheses, since they have proved to be highly useful in a non-experimental situation when the study aims to uncover the causal influence from one factor to another [88].

The hypotheses that constitute the model of effects were tested using EQS 6.1 software. **Table 5** shows that none of the proposed hypotheses were refuted. First, as expected, NMO

presented a positive and significant effect on BGs' absorptive capability (H1: $\lambda = 0.355$; $t = 4.931$). Moreover, BGs' absorptive capability turned out to be a key variable in determining their achievement of competitive advantages, including differentiation-based competitive advantages (H2: $\lambda = 0.222$; $t = 2.620$) and cost-based competitive advantages (H3: $\lambda = 0.330$; $t = 4.355$). Finally each one of these variants of competitive advantage (differentiation-based and cost-based) showed a positive and significant influence on BGs' international results (H4: $\lambda = 0.208$; $t = 3.050$ and H5: $\lambda = 0.128$; $t = 2.093$, respectively).

5. Conclusions

This research was motivated by the large number of studies pointing to the important contribution BGs make to the progress of global economies. This circumstance has identified the study of the particularities that define BGs and that characterise their internationalisation process as a topic of major interest for academics and researchers [5, 6, 14, 17, 22]. Recent work in the international entrepreneurship field has urged researchers to contribute to the current understanding of firms' rapid internationalisation processes through richer empirical and theoretical studies [7, 8, 17, 25]. In this line, the Journal of International Business Studies will dedicate a special issue in 2017 to the determination of the factors that facilitate the creation and capture of entrepreneurial opportunities across national borders.

In general, our work adds to the growing support in the recent literature to the consideration of market knowledge as a key factor that determines the speed with which new companies adopt a proactive approach in crossing their national borders to seize new opportunities in

Relationship	Weight	<i>t</i>	Hyp.	Result				
NMO → BGs' absorptive capability	0.355	4.931***	H ₁	Not refused				
BGs' absorptive capability → Competitive advantages based on BGs' differentiation	0.222	2.620**	H ₂	Not refused				
BGs' absorptive capability → Competitive advantages based on BGs' costs	0.330	4.355***	H ₃	Not refused				
Competitive advantages based on BGs' differentiation → BGs' international performance	0.208	3.050**	H ₄	Not refused				
Competitive advantages based on BGs' differentiation → BGs' international costs	0.128	2.093*	H ₅	Not refused				
Measurements of quality of fit								
χ^2 (gl)	RMSEA	SRMR	GFI	AGFI	NFI	NNFI	IFI	CFI
0.569 (231)	0.043	0.062	0.919	0.895	0.926	0.967	0.972	0.972

* = $p < 0.05$.
 ** = $p < 0.01$.
 *** = $p < 0.001$.

Table 5. Results of the estimation of standardised parameters for the model of effects.

other foreign markets [19, 56, 95–98]. As Javalgi et al. [99: p.15] point out, in current dynamic contexts BGs ‘must listen to and correctly interpret the voice of the market. [...] Firms that lose touch with the market, that either ignore or misinterpret its signals, will fail in hyper-competitive environments’.

Specifically, our findings contribute to the specialised literature with various relevant theoretical and empirical implications. First, gradualist models emphasise experience as an essential factor in the firm’s internationalisation process by centring on determining the most relevant sources of external market knowledge [1]. However, the experience derived from physical presence in foreign markets is minimal in the case of BGs due to their recent creation. Experience cannot therefore be considered as the main source of knowledge BGs use in their entry into foreign markets. For this reason, a growing number of scholars highlight the role of vicarious knowledge from relations in networks as key source of external information and knowledge in BGs [56, 57]. As Lin and Chen [65: p.160] note, ‘relationships between firms in a network context constitute an inter-organisational scenario for the exchange, compilation, integration and development of resources and valuable complementary knowledge that originally come from individual agents’. The links a BG builds into its network from its creation give it access to external information, knowledge, experiences and resources that it can apply internally [22]. In line with these arguments, the construct of NMO can be seen as a reference for determining how BGs generate and manage vicarious knowledge.

Second, based on ref. [37], our research enables theoretical identification and empirical testing of the behaviours and basic mechanisms that characterise the development of a coordinated market orientation among firms in BG networks. Our study responds to previous calls emphasising the need to complete the assumptions of individual market orientation with a relational view [43, 100, 101]. These findings show that the market orientation construct must be applied at individual and also network level [101], thereby supplementing the existing literature on the importance of individual market orientation in BGs [102, 103].

Furthermore, our results show that the knowledge these firms derive from their market-oriented networks helps them to develop an absorptive dynamic capability in order to act sustainably in their international markets. Therefore, BGs’ development of absorptive capability should not be understood as a completely internal process, but as a relational process. This finding contributes to the discussion around the lack of attention paid to identifying the main variables beyond BG competitiveness [13, 71–73]. Indeed, our study responds to some authors’ remarks that, despite the growing interest shown in recent years as a result of the intense process of globalisation in the markets, the theoretical and empirical knowledge about the internal and external antecedents of the international performance of new companies remains insufficient [13, 72, 73, 104, 105]. Our study complements previous literature in which analysis of these variables has tended to adopt an individual approach, highlighting the relevance for BGs of developing a market orientation [102, 103], an entrepreneurial orientation [3, 106, 107] or specific capabilities such as marketing and managerial capabilities [7, 22, 108, 109].

In sum, it is empirically demonstrated that adopting an orientation grounded in market knowledge and social networks (NMO) promotes the development by BGs of a dynamic absorptive capability that contributes to the systematic and effective adaptation to the dynamic and changing markets in which they operate, and the exploitation of the valuable knowledge generated. Our study integrates theoretical approaches from international business and entrepreneurship, providing a new framework that improves our understanding of the central role of knowledge in the way BGs capture and create opportunities across national borders.

6. Limitations and future research

The interpretation of the conclusions derived from this study should take into account some limitations, which lead us to propose certain future lines of research.

Regarding the theoretical limitations, our study proposes one particular model of effects to which other new relationships may be added, taking into account additional variables to complete the explanation of the achievement of competitive advantages and international performance by BGs.

Additionally, considering that our study complements the results from previous works that demonstrate from an individual perspective the influence of BGs' market orientation on their competitiveness, future research could explore the relationship between an NMO and a particular market orientation.

Moreover, taking into account that BGs' main internationalisation decisions are related to the speed and the mode they enter new foreign markets, future studies could analyse the influence of an NMO on different levels of speed and modes of entry.

Methodological limitations include the use of a single nation sample, since our findings may not be generalised to other national contexts. Future research could replicate and contrast the hypotheses presented in our work in other countries. We also used a multi-sector sample. Considering that networks may differ in their behaviour, structure and performance, future research could explore sectors, facilitating a larger homogeneity of firms and networks.

Another methodological limitation concerns the use of a single interviewee response per network and firm. This raises two questions: (1) Can the manager of an individual firm respond to questions on how a network of companies works as a whole? and (2) Similarly, can a single interviewee represent an entire company in his or her responses?

Further doubts may arise on the question of who actually responded to the questionnaire, bearing in mind that it was distributed online.

Finally, to make causal inferences using cross-sectional data can limit the value of the results. New research could usefully analyse the proposed model of effects with longitudinal data.

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KNOWLEDGE MANAGEMENT STRATEGIES AND APPLICATIONS

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