



# Born Global Maturity: Strategic Aspects and Performance Consequences

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## Abstract

Born global firms (BGs) contribute significantly to economic growth, but few studies have examined the post-internationalization stage of BGs. In addition, studies of the impact of changes in strategic aspects as BGs mature on BG performance and survival have yielded conflicting results. To address this gap in knowledge, the present study examines the relationships between intelligence generation and innovation orientation, and branding strategies as moderated by maturity. The data were received from 133 senior managers of BGs of various ages. The analysis shows that BG maturity negatively moderates the relationship between intelligence generation and functional branding strategy but does not influence the relationships of innovation orientation with branding strategies. Furthermore, emotional branding showed stable association with both financial and market performance indicators. This study demonstrates that maturity affects the orientations and performance of BGs and calls for a reassessment of the competitive international strategy of BGs at the post-entry stage.

**Keywords** Born global · Maturity · Intelligence generation · Innovation orientation · Branding strategies · Performance

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## 1 Introduction

Research on born global firms (BGs) has gained substantial momentum in the three decades since Rennie (1993) first coined the term. These young and rapidly internationalizing firms are significant growth engines across industries and economies (Falahat et al., 2018; Paul & Gupta, 2014; Paul & Rosado-Serrano, 2019) and account for a growing percentage of export sales in various countries. Approximately 20% of new European firms are BGs (Knight & Liesch, 2016). BGs can quickly expand internationally because they continually acquire and/or develop the necessary resources and capabilities for internationalization (e.g. Cavusgil & Knight, 2015; Hagen & Zucchella, 2014). This brisk accumulation of knowledge and expertise allows BGs to reach maturity more quickly than gradually globalizing firms (Paul & Rosado-Serrano, 2019).

Alongside the large body of knowledge on early-stage BGs and their success drivers (e.g. Huang et al., 2021), research on mature BGs had emerged and falls into three streams. The first addresses performance aspects and discusses mature BGs either individually, or in comparison with younger BGs (e.g. Agustí et al., 2023; Gabrielsson et al., 2014; Øyna et al., 2018). The second focuses on the managerial aspects of maturing BGs and includes international mindset and transnational background (Andersson et al., 2020; Liu, 2017). The third identifies strategic aspects that impact BG survival and maturation, such as international commitment/intensity, strategic positioning, newly developed competencies, exploitation-based international learning, differentiated niche products, and entry mode strategies (e.g. Almor et al., 2014; Andersson et al., 2020; Johanson & Martin, 2015). This stream of the literature also provides evidence for potential negative influences of maturity (i.e. age) on innovation and market orientation, which are drivers of BG performance (Asimakopoulos et al., 2023; Gabrielsson et al., 2014; see Table 1 for an overview of studies of mature BGs). These findings are of particular interest since both innovation and market orientation significantly positively influence the performance of early-stage BGs (e.g. Behl et al., 2023; Efrat & Asseraf, 2019; Freixanet & Federo, 2022).

There is also preliminary but alarming evidence that important BG outcomes decline with maturity, with decreases reported in sales growth, export intensity, and shareholder wealth (Agustí et al., 2023; Almor et al., 2014; Hagen & Zucchella, 2014). Given these potential differences between early-stage and mature BGs, advancing knowledge of whether and how innovation and market orientation change as BGs mature is essential. This study addresses these gaps by adopting the orientation–strategy–performance framework of Knight and Cavusgil (2004), which encompasses the relationships between the different constructs and provide a complete understanding of the changes in these relationships.

The small size, inexperience, and resource parsimony of BGs dictate a strong reliance on intangible resources nurtured by externally sourced knowledge for faster entry into foreign markets (Efrat et al., 2017; Mort & Weerawardena, 2006). Faster entry requires constant balancing of the firm's operations with changing environmental conditions (Efrat & Shoham, 2013; Hagen & Zucchella,

**Table 1** Summary of findings on the stage of maturity in born global, born international and international new ventures

Source	Research goal(s)	Examined factors	Study context	Main findings
Agustí et al., (2023)	The impact of early internationalization on short and mid-term performance of international new ventures (INVs)	Experience and age as factors impacting performance indicators: export intensity and sales growth	Panel data from 106 Spanish manufacturers reviewed over a period of 8 years	Younger firms have better sales growth and export intensity, but the effect of early internationalization diminishes at mid-term and becomes negative at the later stage
Almor et al. (2014)	Born globals' (BGs') chances of survival as independent companies and performance consequences	Strategic moves (independent/acquisition/merger) impacting BG performance indicators: sales growth, change in profitability, and change in profitability to shareholders	A survey-based study of 40 Israeli companies existing for at least a decade and traded in the stock market	Mature independent BGs are not highly successful. Acquisitions or mergers can be considered good strategic options to increase sales and foreign presence
Andersson et al., (2020)	How do BGs create customer value to secure continuous growth?	Company culture, value creation, and international growth	Case study of three Swedish mature BGs (10 years or older)	Successful implementation of an international entrepreneurial mindset by companies leads to enhanced customer value Companies should focus on differentiated niche products Both approaches enable the recruitment of new customers and the retention of existing ones, leading to better international growth
Asimakopoulou et al. (2023)	International R&D offshoring sources and BG performance under the effect of firm age	Offshore sources of R&D sales from new-to-the-market product-innovation Moderator: firm age	Panel data of 8603 Spanish firms for the period 2008–2016	International R&D sourcing has positive implications for product innovation. Moreover, this relationship is moderated negatively by firm age

Table 1 (continued)

Source	Research goal(s)	Examined factors	Study context	Main findings
Freeman et al. (2023)	Addressing strategic changes in BGs/INVs and their impact on the performance measures that they use	Strategic restructuring, subjective and objective performance measures	Conceptual paper addressing BGs and INVs	Mature BGs/INVs should focus on exploitation and objective performance measures compared to early-stage BGs and INVs
Gabriellsson et al. (2014)	Characteristics of the entrepreneurial orientation that manifest in the various phases of INVs	International entrepreneurial culture: international motivation, innovation propensity, risk attitude, market orientation and proactiveness and their impacts on firm growth	Multiple case studies of 4 Finnish firms	International motivation, innovation propensity, risk attitude, market orientation and proactiveness advance BGs in the first three stages but have a negative impact in the fourth (mature) stage. Moreover, international learning is positively associated with BG growth, but the emphasis changes from exploration in the early stages to exploitation in the later (mature) stages
Glaister et al. (2014)	HR management practices that allow for growth and success in mature BGs	Training coverage, skilled employees vs temporary employees, and firm size	Survey-based study using the World Bank's Enterprise Survey Project; 890 firms from 29 countries	As BGs mature, the number of temporary employees decreases, and the number of skilled employees increases. The more mature the firm, the more it invests in training
Hagen and Zucchella (2014)	Ongoing internationalization aspects of BGs	Internal and external environments, entrepreneur characteristics, and internationalization behavior	Longitudinal case study process with six Italian BGs complemented by secondary data	There is a strong link between the strategic positioning of the firm and its long-term growth. In addition, continuous development of new competencies improves BG survival

Table 1 (continued)

Source	Research goal(s)	Examined factors	Study context	Main findings
Johanson and Martin (2015)	Comparison of aspects of strategy and performance between new and old born international firms (BIs)	Resources, experience, international commitment, internationalization, and performance	Survey of 42 Spanish BIs ranging in age from 1 to 43 years	Older BIs have a stronger international commitment and are more internationally intense (deriving higher sales volumes from international markets). However, they do not differ in resources (except number of employees) or performance indicators
Kuivalainen et al. (2007)	Distinction between BGs and BIs	Entrepreneurial orientation: risk-taking, proactiveness and competitive aggressiveness Financial performance: sales	Survey-based study of 185 Finnish exporters	BGs have better performance than BIs. The former are more competitively aggressive, and the latter take more risks. BGs and BIs are equally proactive
Liu (2017)	Influence of transnational entrepreneurs and collaborative entry modes on BG growth	Company-level and industry-level information (primary and secondary)	In-depth interviews with 32 entrepreneurs, industry experts and researchers	The transnational background of an entrepreneur improves a BG's chances of reaching maturity by enabling better navigation of business and global complexity. Collaborative entry modes permit enhanced international growth
Øyna et al. (2018)	Impact of mergers and acquisitions on the financial performance and survival of mature BGs	R&D investments and acquisition intensity influencing financial performance and firm survival	Survey-based study of 45 BGs that conducted 108 M&A activities	The higher the R&D expenditure, the more likely that the BG will acquire a technology company. Acquisitions are positively correlated with financial performance and show a U-shaped relationship with survival

2014). In early-stage BGs, innovation orientation and market orientation provide the necessary understanding of environmental conditions to enable the exploration of opportunities and enhanced competitiveness (Cavusgil & Knight, 2015; Efrat et al., 2017; Huang et al., 2021). However, there is evidence that strategy mediates the relationships between orientations and performance (Efrat et al., 2017; Falahat et al., 2018; Knight & Cavusgil, 2004). With respect to international marketing strategy, recent research suggests that branding (functional and emotional) strategies are of critical strategic influence (Efrat & Asseraf, 2019). Branding strategies are core aspects of marketing strategy and provide links between a firm's orientation and its performance (Chung et al., 2019; Iyer et al., 2019). Moreover, branding is a crucial element of BGs' rapid internationalization (Gabrielsson, 2005). The current study therefore aims to investigate whether and how the orientation–strategy–performance sequence previously confirmed to influence young BGs acts in the context of maturing BGs. More specifically, we examine the impact of BG maturity on the relationships of innovation orientation and intelligence generation (a core component of market orientation) with BGs' branding strategies and performance. In doing so, we perceive research on mature BGs as an extension of research on BGs in general.

The contributions of this study are twofold. First, it advances knowledge on how BGs' orientations and branding strategies change as they mature. Research on the strategic aspects of BGs has discussed which orientations influence BGs' performance and survival but not whether and how these influences change over time (Huang et al., 2021). By measuring maturity on an age-based scale ranging from 3 to 29 years, we can distinguish central orientations and strategies that remain influential from those that decrease in importance over time. This differentiation is crucial for untangling conflicting findings on performance (Agustí et al., 2023), and better managing BGs throughout their life cycle. Second, adhering to Freeman et al.'s (2023) call to further investigate changes in the performance indicators used by BGs as they mature, this study incorporates two performance indicators—sales volume and profitability. Because of the unique characteristics of BGs (i.e. rapid internationalization and scarce resources), previous research has mostly addressed their strategic performance (Huang et al., 2021) and claimed that financial and market indicators are less relevant for early-stage BGs (Efrat & Shoham, 2013). Yet, as BGs mature, financial and market indicators are the exact indicators used for reporting declining performance. Therefore, by reviewing profitability and sales volume over time, this study allows a deeper understanding of the changes experienced by BGs as they mature.

The remainder of this paper is structured as follows. The next section provides a conceptual overview of the study and addresses the orientations–strategy–performance link and its relevance to mature BGs. Hypotheses addressing strategic orientations, branding strategies, and financial performance consequences moderated by BG maturity are then developed. Next, the methods and findings are presented and discussed. Finally, the concluding section offers implications, limitations, and directions for future research.

## 2 Overall Conceptual Framework

Early discussions of BGs were firmly linked to internationalization theory and, more specifically, the Uppsala model, which proposes that firms adopt an incremental, learning-based approach to internationalization (i.e. gradually globalizing firms; Johanson & Vahlne, 1977). Internationalization theory emphasizes the roles of a firm's orientations and strategy in facilitating international scope, speed, and performance (Boso et al., 2012; Schwens et al., 2018). These strategic aspects are also important in BGs (Moen & Servais, 2002; Paul & Rosado-Serrano, 2019). Research indicates that among various orientations, innovation orientation and market orientation play prominent roles in international operations and the performance of small firms in general (Colclough et al., 2019; Falahat et al., 2022) and BGs in particular (Huang et al., 2021).

Market orientation is a well-established construct in research on international business. It is defined as “the culture that (1) places the highest priority on the profitable creation and maintenance of superior customer value while considering the interests of other key stakeholders; and (2) provides norms for behavior regarding the organizational development of and responsiveness to market information” (Slater & Narver, 1995, p. 67). Intelligence generation is an indispensable element of market orientation. The collection of information on the firm's customers and competitors for intelligence generation relies on the learning principle embedded in market orientation (Slater & Narver, 1995). Intelligence generation plays a key role in identifying market shifts and is the first step in providing added value to customers (Jaworski & Kohli, 1993). In the international context, the value of intelligence generation is even more pronounced for BGs due to its centrality in advancing market understanding and fit (Efrat et al., 2017). Moreover, intelligence generation permits opportunity scouting while reducing uncertainty risks (Olejnik & Swoboda, 2012; Tarek et al., 2019), and intelligence collected via online channels serves as a vital knowledge and resource development tool (Loane, 2005).

Innovation orientation is a firm's “openness to new ideas as an aspect of [the] firm's culture” (Calantone et al., 2002, p. 517). Siguaw et al. (2006) described innovation orientation as the overarching organizational knowledge structure. As such, it incorporates elements of learning, strategic direction, leadership, and firm efficacy (Norris & Ciesielska, 2019). Although innovation can be based on aspects such as customer needs or customer engagement, the term is usually used to denote the firm's focus on technological superiority (Asseraf & Shoham, 2014). Aliasghar et al. (2022) recently confirmed that external knowledge is an important source of innovation that helps overcome the liability of outsidership. Thus, external knowledge is a common denominator of intelligence generation and innovation orientation. A culture of innovation drives BG internationalization (Knight & Cavusgil, 2004). It draws on external and internal learning to promote BG performance (Weerawardena et al., 2020). Ambidextrous innovation positively moderates the impact of marketing capabilities on BG positioning (Martin et al., 2017).

The third element of the conceptual framework is branding strategies. Definitions of branding vary and range from the firm's perspective to customers' perceptions.

Given BGs' characteristics and reinforced by their focus and differentiation strategies (Huang et al., 2021), a definition of branding that emphasizes the promise incorporated in a bundle of attributes and that is based on a collection of tangible/intangible and emotional/rational benefits is appropriate. These attributes distinguish the firm's specific offer from those of others (Wood, 2000). As stated earlier, these strategies complement BGs' intelligence generation and innovation orientation in facilitating international expansion. Studies confirm that innovation is linked to BGs' positioning, which is based firmly on aspects of branding (Martin et al., 2017). Branding incorporates both emotional (social) and functional strategies. The former manifests as customers' levels of assurance, legitimacy, risk reduction, and trust, whereas the latter is associated with the product's tangible features, quality, and performance (Leek & Christodoulides, 2012). Exploratory research has shown that BG branding incorporates elements at both the firm and product levels and integrates both functional and emotional aspects (Altshuler & Tarnovskaya, 2010). Branding strategies are crucial tools for advancing a firm's international operations (Efrat & Asseraf, 2019).

Turning to Knight and Cavusgil's (2005) framework for BG operations, orientations provide the foundation for the inception of strategies aimed at advancing the BG's competitiveness in its markets. Research has further focused on this link by identifying branding strategies as an extension of orientations that influences BG performance (Merrilees et al., 2011). In the next section, hypotheses on the relationships between the constructs and the moderation effect of maturity are developed.

### 3 Hypothesis Development

#### 3.1 Intelligence Generation, Branding Strategies, and the Moderating Effects of BG Maturity

To enhance success in the international arena, BGs often adopt internal cultures that compensate for their lack of resources and experience (Falahat et al., 2018). They also implement entrepreneurial approaches to management (Rialp-Criado et al., 2010). Both factors are linked to the flexible and efficient characteristics of BGs (Zhang et al., 2013), which allow organizational culture elements such as intelligence generation to directly impact performance through the creation of competitive edge (Efrat et al., 2017; Knight et al., 2004; Rennie, 1993). As BGs mature, their accumulated experience (i.e. age) positively impacts their international performance (Agustí et al., 2023). Simultaneously, the previously prevailing organizational culture is pushed back to make way for formalized business procedures. Established routines, processes, and capabilities subsequently prevail in shaping the firm's growth (Knight et al., 2004; Rastrollo-Horrillo & Martín-Armario, 2019). This process was substantiated in the general business context where findings showing that there is a relationship between market orientation and brand and that market orientation's relationship with firm innovativeness weakens as firms mature (Dibrell et al., 2011).



In regard with BGs, we draw on several studies that touched on similar aspects to support our hypotheses. Within this context, Gabrielsson et al. (2014) found that mature BGs develop a management style that emphasizes integrating operations (i.e. capabilities) over exploring new markets (i.e. intelligence generation). Branding, a crucial capability for advancing BGs' competitiveness (Kusi et al., 2021), is a representative manifestation of this shift. Branding is based on rapid market learning (i.e. intelligence generation; Mort et al., 2012), yet over time, the contribution of external knowledge diminishes (Altshuler & Tarnovskaya, 2010). Hence, it can be inferred that:

*H1a: BG maturity moderates the relationship between intelligence generation and emotional branding such that the relationship is less positive for more mature BGs.*

*H1b: BG maturity moderates the relationship between intelligence generation and functional branding such that the relationship is less positive for more mature BGs.*

### **3.2 Innovation Orientation, Branding Strategies, and the Moderating Effects of BG Maturity**

A firm's innovation orientation decreases with firm age due to reduced flexibility and increased processes and procedures, which constrain innovation (Kamal et al., 2016). Consequently, the innovation outcomes of younger and smaller firms (e.g. BGs) decline as they age, which indicates that innovation based on accumulated knowledge provides less value (Petruzzelli et al., 2018). These findings correspond with those of Gabrielsson et al. (2014), who found that innovation orientation negatively affects the outcomes of mature BGs, and Zhou and Wu (2014), who confirmed the negative moderating effect of maturity on the relationship between innovation and performance. Additionally, Lee et al. (2016) concluded that firms should focus their resources on either innovation or branding to secure continuous performance.

The literature also provides support for a shift in BGs' resource focus from innovation to branding with age. Martin et al. (2017) concluded that higher levels of innovation potentiate the positive influence of marketing elements, such as brand image and awareness, on BGs' positional advantage. Furthermore, Rosenbusch et al. (2011) found a strong connection between innovation culture and innovative products which emphasize functional branding and a strong focus on uniqueness and quality. Finally, Efrat and Asseraf (2019) found that innovativeness has a positive influence on BGs' functional branding. In line with this, we propose the following hypotheses:

*H2a: BG maturity moderates the relationship between innovation orientation and emotional branding such that the relationship is less positive for more mature BGs.*

*H2b: BG maturity moderates the relationship between innovation orientation and functional branding such that the relationship is less positive for more mature BGs.*

### 3.3 Branding Strategies and BG Performance

Branding strategies are central to BG internationalization because they promote the rapid expansion of firms into foreign markets (Efrat & Asseraf, 2019). Knowledge on BG branding is fragmented, but a few studies have addressed the creation and management of BG branding and its impact on performance. Gabrielson and Kirpalani (2004) concluded that regardless of whether BGs use their own brand or utilize the brand of a larger partner, branding has a positive influence on performance. This was echoed by Martin et al. (2017), who found a strong impact of branding manifestations on various aspects of BG performance. Kusi et al. (2021) discussed the development stages of brand identity. They concluded that at the unbranded stage (first stage), firms are occupied with the functional attributes of the brand; at the second stage, emotional values (brand personality) become more prominent. Mort et al. (2012) stated that the main role of branding is to assure customers of the firm’s legitimacy (i.e. emotional branding) to promote expansion and sales. Finally, Efrat and Asseraf (2019) found that emotional branding has a vital link to BGs’ strategic performance, while Knight and Cavusgil (2004) confirmed that elements of functional branding, such as quality and technology, have positive relationships with BGs’ international performance (Fig. 1). Hence,

*H3: Functional branding is positively associated with (a) BG profitability, and (b) BG sales volume.*

*H4: Emotional branding is positively associated with (a) BG profitability, and (b) BG sales volume.*

## 4 Method

### 4.1 Sampling and Data Collection

Efrat and Asseraf (2019) concluded that Israel is an ideal context for investigating different aspects of BGs for two reasons. First, Israel is a developed market country and has the second-largest number of startup companies in the world after the US. Most of these startups are BGs because Israel is a small country that is relatively

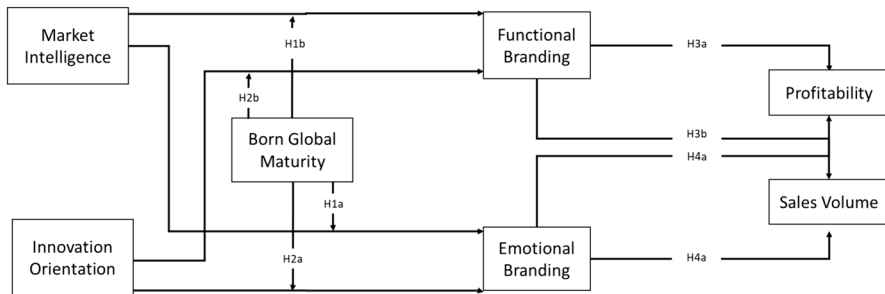


Fig. 1 Research model

isolated from its neighbors; consequently, the Israeli economy is heavily dependent on international business (Asseraf & Gnizy, 2022). Second, Israel's identity as "the startup nation" (Senor & Singer, 2010) is mainly based on technology-oriented BGs (Almor et al., 2014) which emphasize functional/product branding rather than emotional branding.

The data for this study were collected through an online survey. The questionnaire was pre-tested by administration to a mixed group of seven senior managers of internationally active hi-tech firms and three researchers involved in relevant studies. They were asked to complete the questionnaire and comment on problematic issues or unclear questions. These comments were implemented in the final version of the questionnaire. A list of BGs was obtained from Israeli Venture Capital (IVC), a private firm considered to be the leading and most up-to-date source of information on active entrepreneurial firms in Israel. The initial list included 2352 firms established between 1990 and 2017. A research assistant eliminated all research centers and ad hoc ventures of large firms, leaving 1048 valid firms. These firms were then screened to determine whether they matched the operational definition of a BG: a firm that began international expansion within the first 3 years of operations and generates at least 50% of its sales from foreign operations (Gabrielsson et al., 2008). Next, the research assistant approached the firms by telephone and obtained the contact details of the relevant manager in each firm. The managers of interest met several criteria: employment with the firm for several years and in the relevant managerial position for more than 2 years, involvement in the strategic planning of the firm, and an extended understanding of the firm's international operations (Wilson & Lilien, 1992). A link to the online questionnaire was sent to the managers using the Qualtrics platform. The initial distribution was followed by a reminder a week later. Overall, 254 responses (24% response rate) were obtained, of which 133 were full responses.

Of the BGs included in the study, 50% had up to 25 employees, and 50% were established between 1997 and 2010. A surge of firm establishment between 2005 and 2015 was observed (49%). The main foreign market was the US for 63% of the firms and European countries (e.g. UK, Germany, Italy, and France) for 12%. Approximately 40% of the respondents were marketing/sales managers, 23% were CEOs, and 15% were chiefs of business development. The rest of the respondents held diverse senior positions (e.g., CFO or CTO). We checked for nonresponse bias following Armstrong and Overton (1977) by comparing early and late responses; no significant differences in the number of employees, year of establishment, and main foreign market were observed.

## 4.2 Measurements

We used BG age as an indicator of maturity. While the literature indicates a 10-year threshold for a firm to be considered mature (Bracker & Pearson, 1986), BGs mature earlier due to their rapid internationalization, which leads to a faster growth process. Consequently, BGs are considered mature after 5 years (Efrat & Shoham, 2012).

The other constructs used in this study were sourced from the literature, based on a 1–5 Likert scale, and addressed at the firm level (see Table 2 for descriptive statistics, correlations, and AVEs). *Innovation orientation* was measured using 3 items ( $CR = .96$ ;  $AVE = .82$ ) sourced from Calantone et al. (2002). *Intelligence generation* was measured using 5 items ( $CR = .97$ ;  $AVE = .86$ ) sourced from Jaworski and Kohli (1993) and used in various studies (Mena & Chabowski, 2015). *Functional branding* and *emotional branding* were measured following Roth (1995) and related studies (Aggarwal et al., 2011; Coelho et al., 2020; Efrat & Asseraf, 2019). Specifically, the respondents were asked to allocate up to 100 points for each type of branding—functional or emotional—based on how central this factor was to their BG. Finally, two items sourced from Zou et al.'s (1998) EXPERF scale—profitability and sales volume—were used to measure international performance (Acikdilli et al., 2022). According to Katsikeas et al. (2000) both measures: profitability and sales volume are considered as economic measures as opposed to noneconomic measures such as satisfaction with export performance. Katsikeas et al. (2016) found that these two items are central for evaluating international performance. Both profitability and sales volume were used on a single-item basis following Katsikeas et al.'s (2016) call to distinguish between different aspects of performance in general and financial indicators specifically. Furthermore, single-item use is considered acceptable if the construct is concrete, narrow in scope, unambiguous, and consists of one object that is easy to understand (Diamantopoulos et al., 2012; Rossiter, 2002) (see Appendix for items and loadings). Discriminant validity was achieved for all constructs, as the square roots of the AVEs exceeded the constructs' intercorrelations (see Table 2; Fornell & Larcker, 1981).

### 4.3 Common Method Variance

To check for common method variance, we followed Podsakoff et al.'s (2003) recommendations for implementing both procedural and statistical remedies. At the data collection stage, the respondents were informed of the study goal in general terms to avoid influencing their answers. In addition, the respondents were not asked for any personal information. To prevent psychological separation, the firm-level and industry-level items were mixed together in the questionnaire. As a statistical remedy, we performed a market variable test in two steps. First, we performed an exploratory factor analysis (EFA) to assess the cohesion of the different constructs by examining the item loadings. Second, we performed confirmatory factor analyses (CFAs) with and without the marker variable. The marker variable was the target market global competition index, which bears no theoretical relevance to any of the research constructs. The results of the two CFAs (with and without the marker variable) were similar (CFA:  $\chi^2/df = 1.17$ ,  $p = .19$ ,  $TLI = .96$ ,  $CFI = .98$ ,  $RMSEA = .03$ , Marker CFA:  $\chi^2/df = 1.14$ ,  $p = .21$ ,  $TLI = .96$ ,  $CFI = .98$ ,  $RMSEA = .03$ ). Furthermore, the correlations of the research constructs with the marker variable were not significant (ranging between .02 and .09). Both results indicate that the likelihood of common method bias is low.

**Table 2** Descriptive statistics, AVEs, and correlation matrix

	CR	AVE	Mean	SD	1	2	3	4	5	6	7	8	9
1. Market intelligence	.96	.84	3.75	.71	.92								
2. Innovation orientation	.95	.87	4.07	.67	.31**	.93							
3. Functional branding	NA	NA	80.7	22.6	.22*	.03							
4. Emotional branding	NA	NA	38.85	33.5	.11	.20*	-.00						
5. Profitability	NA	NA	3.47	.98	.12	.17	.07	.30**					
6. Sales volume	NA	NA	3.40	1.18	.19*	.21*	-.02	.41**	.69**				
7. BG maturity	NA	NA	18.07	12.5	-.04	-.02	.20*	.05	.19*	.12			
8. Size (No. of employees)	NA	NA	349	856	.15	-.24	-.00	.22	-.04	.24	.17		
9. Economic development	NA	NA	10.5	.92	.17	.14	.04	.12	.04	.13	-.10	-.06	
10. Technological development	NA	NA	5.39	.57	.19	.18	.03	.08	.01	.13	-.06	.92**	

Note: Square roots of the AVEs appear on the diagonal

\* < .05; \*\* < .01

## 5 Findings

To assess the fit of the research model, we first performed CFA. The results showed a good fit of the model (see Table 3). We then tested the hypotheses using AMOS 29 to evaluate the structural model relationships. Model 1 included the control variables and the direct effects, and Model 2 added the moderating effects of BG maturity. Overall, the fit measures of both models were satisfactory (Model 1:  $\chi^2/df = .69$ ,  $p = .68$ , TLI = 1.06, CFI = 1.00, RMSEA = .00; Model 2:  $\chi^2/df = 1.04$ ,  $p = .40$ , TLI = .99, CFI = 1.00, RMSEA = .02), suggesting a good fit to the data.

The structural results are shown in Table 4. In H1a-b, we posited moderating effects of maturity on the relationships of intelligence generation with branding strategies. We found that maturity moderates the intelligence generation–functional branding association so that it becomes negative ( $\beta = .18$ ,  $p < .05$ ), confirming H1b. No moderating effect of maturity on the intelligence generation–emotional branding relationship was found, rejecting H1a.

The next two hypotheses examined the moderating effects of BG maturity on the innovation orientation–branding relationships (H2a-b). No moderating effects of maturity on the relationships between innovation orientation and emotional (H2a) and functional (H2b) branding were found; hence, these two hypotheses were rejected.

Finally, with respect to the association of branding with BGs' performance, both H4a and H4b were substantiated by the identification of positive associations of emotional branding with profitability and sales volume ( $\beta = .30$ ,  $p < .01$ ;  $\beta = .36$ ,  $p < .01$  respectively). By contrast, H3a and H3b, which proposed positive relationships of functional branding with profitability and sales volume, were rejected.

**Table 3** Fit measures

	$\chi^2$ (df)	$\chi^2/df$	P	TLI	CFI	RMSEA
CFA	64.23 (55)	1.17	.19	.96	.98	.03
Model 1— Controls and direct effects	16.74 (13)	1.29	.21	.95	.99	.05
Model 2— Moderation effects	12.79 (11)	1.16	.31	.98	.99	.04

Abbreviations: CFA confirmatory factor analysis of all measures, TLI Tucker–Lewis coefficient index, CFI comparative fit index, RMSEA root mean square error of approximation

**Table 4** Structural model results

	Model 1—Controls and direct effects				Model 2—Moderation effects			
	Performance indicators				Performance indicators			
	Functional branding (t-value)	Emotional branding (t-value)	Profitability (t-value)	Sales growth (t-value)	Functional branding (t-value)	Emotional branding (t-value)	Profitability (t-value)	Sales growth (t-value)
Market intelligence	.24** (2.70)	.05 (.54)						
Innovation orientation	-.04 (-.44)	.19* (2.11)						
Functional branding			.08 (.94)	-.02 (-.20)		.08 (.91)	-.00 (-.06)	
Emotional branding			.31** (3.71)	.38** (4.85)		.31** (3.76)	.38** (4.86)	
<i>Moderation</i>								
Market intelligence × maturity					-.21* (-2.07)			
Innovation orientation × maturity					.11 (1.07)			
<i>Control</i>								
Firm size (No. of employees)			-.11 (-.93)	.19 (1.67)		-.11 (-.91)	.19 (1.70)	
Economic development			.05 (.24)	.23 (1.12)		.04 (.19)	.23 (1.11)	
Technological stability			-.05 (-.23)	-.13 (-.60)		-.04 (-.20)	-.13 (-.60)	
R <sup>2</sup>	9%	5%	11%	20%	3%	12%	21%	

+ < .10; \* < .05; \*\* < .01

## 6 Discussion and Implications

### 6.1 Theoretical Implications

Our study advances knowledge on two theoretical issues. First, our findings indicate that while marketing intelligence is an internal resource/capability, it reflects an external view (i.e. gathering of external intelligence about customers, competitors, and technology), which is especially important for BGs in the early stage of internationalization (Efrat & Shoham, 2013). However, once BGs reach maturity, the internal view, which underlies innovation orientation, becomes more important because it influences emotional branding strategy and financial performance. This resembles the shift in firm attention from an external to an internal focus when planning for long-term competitiveness (Hult & Ketchen, 2001). This conclusion is also in line with Asseraf and Shoham's (2019) recommendation that firms begin crafting strategy for international markets based on the outside-in view—starting from the outside (competitors/customers) and then focusing on the inside (technology/products). According to this view, once a firm has developed a good sense of the market based on an understanding of its customers' needs and competitors' actions, it should focus on innovation and unique technology that will help build the BG's brand through emotional branding.

This can be further explained by acknowledging that functional branding builds on reliability, durability, effectiveness, efficiency, and reputation (Kuhn et al., 2008). Early-stage BGs invest in establishing these aspects, which are crucial drivers of rapid internationalization (Trudgen & Freeman, 2014). Frequently, this is achieved by establishing networks with various stakeholders in foreign markets (Weerawardena et al., 2019; Zhou et al., 2007). These networks allow the BGs to 'borrow' these aspects based on market information and thus provide external means for developing branding strategies. As BGs mature and gain market position, these crucial aspects are internalized (Baronchelli & Casasia, 2014). Our finding suggests that in the long run, insisting on using external sources to support functional branding will result in reduced value and a damage to the BGs' functional branding. The lack of similar evidence for a decline in intelligence generation for emotional branding indicates that the responses of functional and emotional branding to intelligence generation differ, despite previous claims of synergetic effects between the two types of branding.

Moreover, the lack of a moderating effect of maturity on the innovation orientation–branding relationship aligns with Santoro et al.'s (2019) claim that innovation has a long-lasting influence on SMEs' internationalization. In the context of BGs, the stable effects of innovation on emotional branding can be explained through the components of emotional branding—co-creation, loyalty, trust, and personalization. Co-creation, a core outcome of BGs' innovation, has been shown to enhance customer loyalty (Malodia et al., 2023). Furthermore, trust manifested through knowledge sharing is a core principle of BGs' innovation (Freeman et al., 2010; Presutti et al., 2022). Finally, Kusi et al.'s (2021) interview-based study showed that BG branding has human characteristics and personality, which are



a manifestation of BG innovation. To conclude, while maturity might shift the weight from organizational culture to branding strategies, the centrality of innovation orientation to emotional branding overcomes this trend.

The second theoretical issue addressed by this study relates to the use of two distinctive indicators—profitability and sales volume distinctively to estimate the performance of maturing BGs. We observe that emotional branding positively associated with both profitability and sales volume and that this association is stable over time. These findings extend previous evidence of the influence of emotional branding on the strategic performance of early-stage BGs (Efrat & Asseraf, 2019) by confirming the long-term contribution of emotional branding to BGs' sales and market share indicators. This may also explain the previously mixed results on the performance of mature BGs. We argue that diminished or even negative outcomes (Agustí et al., 2023; Almor et al., 2014) are the result of a continued emphasis of BGs on function/technology aspects (Øyna et al., 2018), which is assumed to boost functional branding (Altshuler & Tarnovskaya, 2010) rather than emotional branding. Our findings clearly indicate that functional branding has no influence on either profitability or sales volume, whereas emotional branding has a stable and long-lasting influence on both indicators.

Additionally, with respect to performance, profitability and sales volume produced similar outcomes across the two models, although the explanatory power of the orientations on the branding was higher in the direct effects model than in the maturity moderation model. This interesting outcome corresponds with our initial propositions that as BGs mature, the effects of organizational culture decrease, whereas the effects of strategic components strengthen (Knight et al., 2004; Rastrollo-Horrillo & Martín-Armario, 2019). This outcome provides insights to the long-debated comparison between BGs and gradually globalizing SMEs. In their extensive review, Paul and Rosado-Serrano (2019) concluded that age (i.e. maturity) does not affect the internationalization of gradually globalizing SMEs. This is a meaningful differentiator of gradually globalizing SMEs, as our findings clearly indicate that maturity drives BGs' strategic decision-making with the aim of reestablishing strategic fit. Considering the speed and scale at which BGs internationalize, it can be assumed that the process of maintaining balance and fit with the ever-changing environment burdens a BG's resources. Nonetheless, this process is the core of their competitive advantage (Martin et al., 2017). This key difference between BGs and gradually globalizing SMEs validates BGs' strategic role as growth engines of various industries, even at maturity.

## 6.2 Managerial Implications

The findings of this study support several recommendations for BG managers and other stakeholders. First, we recommend that for managers, being aware of their venture's emotional branding strategy is more important than focusing on its functional branding strategy. We recognize that this is not an easy task for technology-oriented BGs. Put simply, managers in young and mature BGs should not ignore branding or view this practice as exclusive to large firms (Kusi et al., 2021). We recommend

that BGs establish a cross-departmental “branding council” to brainstorm potential branding strategies.

Second, this study’s findings demonstrate that the emotional branding strategy can reflect the attention and resources that managers devote to innovation orientation. While the innovation orientation—functional branding seemed obvious, the current study’s finding linking the orientation to emotional branding requires deeper understanding. As such it can be viewed as an opportunity for BGs that will be wise to seize it. We suggest that BG managers build their emotional branding strategy on innovation orientation elements such as trust and personalization. This suggestion is in line with Gabriëlsson et al.’s (2014) recommendation to develop internal aspects that support brand building.

Third, although the findings of this study indicate that intelligence generation does not impact financial or market-related performance indicators directly, it is imperative for managers to understand that intelligence generation is an important driver of functional branding. Hence, managers engaged in international business should not be skeptical about the importance of intelligence generation. Given the finding that BG maturity negatively moderates the relationship between intelligence generation and functional branding, we recommend special attention to marketing intelligence in the first phases of the BG internationalization process.

Finally, this study’s overall recommendation is that BG managers recognize that building *intangible* features of their global brand (based on trust and reputation) must occur alongside investment in developing *tangible* features (based on technology and product uniqueness), which are susceptible to fast imitation. This is in line with Barney’s (2014) notion that branding can be a source of sustained competitive advantage and Efrat and Asseraf’s (2019) conclusion that emotional branding strategy represents a major asset for BGs. Furthermore, such a strategic direction will have an impact on various stakeholders throughout the BGs’ life cycle (e.g. capital providers and industry members).

## 7 Limitations and Future Research

This research has limitations that represent fertile directions for future research. First, as our data are limited to between-BG data, the results do not shed light on what the outcome of “changing” any of the constructs would be for a specific BG. For example, if a BG with very high intelligence generation were to further increase its intelligence generation, how would its performance change? A within-firm examination of changes in strategic orientations/branding strategies over time could shed light on when (or whether) such changes are helpful.

Second, it would be interesting to test our model in other countries and using other methodologies. For example, questions remain as to the qualitative nature of the functional and emotional branding strategies implemented by BGs. Future studies can use in-depth interviews to identify antecedents and consequences of BGs’ functional and emotional branding strategies across cultures.

Third, following arguments in the literature (Efrat et al., 2017), our study focused on intelligence generation as a core aspect of market orientation. However, the findings indicate that intelligence generation may harm functional branding strategy.

Future work should examine the three aspects of market orientation to capture the full role of this important strategic orientation in mature BGs.

Fourth, the number of completed surveys was smaller than the number of BGs initially approached. This discrepancy can be explained by the lack of pre-testing of the survey. Although the scales and constructs in the survey were obtained from existing studies, managers appeared to be reluctant to answer questions about firm performance. BGs are often private firms, which, coupled with the sensitivity of operations information, may have reduced managers' willingness to respond in full. Future research can overcome this hesitation by better explaining the essence of the information requested and guaranteeing full anonymity.

Finally, we used age as a proxy for BG maturity. Although several studies have adopted this indicator, we acknowledge that age and experience do not always align. Love et al. (2016) warned against using age as a proxy for international experience. Whereas international experience positively influences firm performance (Oura et al., 2016), age tends to exhibit an inverted U-shaped influence because older firms are often characterized by sclerotic thinking and inflexibility (D'Angelo et al., 2013). Future research should divorce international experience and firm age and explore their distinct influences.

## Appendix: Items, Factor Loading and Error Variance

Items and examples of items sources	Standardized loadings	Error variances
<i>Innovation orientation</i> (Calantone et al., 2002)		
Our company frequently tries out new ideas	.56	.08
Our company seeks out new ways to do things	.87	.06
Our company is creative in its methods of operation	.64	.07
<i>Market Intelligence</i> (Jaworski & Kohli, 1993)		
We are slow to detect changes in our customers' product preferences (reverse)	.64	.09
We poll end users at least once a year to assess the quality of our products/services	.64	.10
We often talk with or survey those who can influence our customers	.71	.09
We collect industry information through informal means	.61	.08
We are slow to detect shifts in our industry (reverse)	.72	.08
<i>Branding</i> (Roth, 1995)		
Please allocate up to 100 points to each of the following types of images:		
Functional Image (problem solving, problem prevention)		
Emotional Image (convey status, social approval, accreditation)		
<i>Profitability</i> (Based on Zou et al., 1998)		
Has been very profitable		
<i>Sales volume</i> (Based on Zou et al., 1998)		
Has generated a high volume of sales		

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**Data availability** Data of the study is available upon request.

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