

Born Globals' Risk Perception and Internationalization in Emerging Markets

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Abstract

Purpose – The purpose of this paper is to propose an integrative model of risk analysis and influencing factors regarding the propensity and speed of the born globals internationalization process. **Theoretical framework** – The research is based on the international business literature focusing on the risk in internationalization. The variables and scale used to construct the model come from that literature, supported by recent studies. **Design/methodology/approach** – The model is tested by a survey carried out on a sample of 200 Brazilian microbreweries and the data are analyzed using structural equation modeling. **Findings** – The findings indicate that the speed of internationalization, which involves the process, strategy, and networks, has a strong relationship with the risk perception. In contrast, the internationalization propensity, which involves the characteristics of the entrepreneur, is not related to the risk evaluation. **Practical & social implications of research** – This study further complements and enriches the research of risk perception in the field of international entrepreneurship, and contributes to the literature in emerging markets, discussing the characteristics of entrepreneurship and small businesses within this context. **Originality/value** – This study seeks to improve the knowledge by proposing a structural model and empirically testing the constructs of the propensity for and speed of internationalization and the impact of the evaluation and perception of risks on born globals.

Keywords: Risk perception, internationalization, born globals, emerging markets.

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1 Introduction

The emergence of a new field of study in the literature on international entrepreneurship, caused by the emergence of born global firms at the start of 1990, creates a major challenge for the dominant theories on the internationalization process (Paul & Rosado-Serrano, 2019). These new ventures adopt a global vision from the beginning of their operations and focus on a rapid internationalization process (Fan & Phan, 2018), which have been investigated by various authors, such as Choquette et al. (2017), Gabrielsson et al. (2008), Grazi and Moschella (2018), and Knight and Cavusgil (2004), focusing mainly on technology-based companies and developed countries.

Previous studies have identified that emerging market firms develop different strategies to compete and survive in the international market (Santos et al., 2021a; Stocker et al., 2021). In specific new ventures, born globals, commanded by their founders/entrepreneurs, adopt a more aggressive positioning, with a global vision and objectives and a lower aversion to and perception of risk (Bangara et al., 2012). That is why they have received considerably more attention among researchers in recent years (De Clercq et al., 2016; Llanos-Contreras et al., 2021). However, investigations into small and medium-sized international enterprises in this context of emerging markets are still scarce (Prieto-Sánchez & Merino, 2022; Urbano et al., 2019).

Specifically, in born globals, it is believed that the competencies, abilities, and the way that the risks are perceived and managed differ from other ventures, given that the internationalization process takes place in a different and non-gradual way, as discussed by the literature (Gabrielsson et al., 2008; Ughetto, 2016). However, although risk and internationalization in born globals are topics of academic and corporate interest, no models evaluate these constructs. There is also a lack of research in this field. As a result, new propositions can be offered with more in-depth studies and empirical findings (Knight & Liesch, 2016).

Given the lack of theoretical clarity in the examination of internationalization and risk perception in born globals, mainly in emerging markets, the objective of this article is to address this gap, proposing an integrative model of risk analysis and influencing factors regarding the propensity and speed of the internationalization process of born globals. The proposed model is empirically

tested in microbreweries of Brazilian origin. This industry is characterized by intense national competition and rapid growth of small enterprises focused on artisanal production and with an international positioning since their foundation – the born global microbreweries. The administration of the survey resulted in a sample of 200 microbreweries. The variables and scale used to construct the model come from the literature on born globals and risk in internationalization, supported by recent studies.

The data are analyzed employing structural equation modeling (SEM). This study presents two theoretical contributions in addition to its managerial implications. First, the study further complements and enriches the research on risk perception in the field of international entrepreneurship (Crovini et al., 2021), offering integration between the internationalization constructs (characteristics, speed, and propensity for internationalization) and the risk evaluation and perception constructs (from the viewpoint of entrepreneurs and the context of the organization). Second, this study contributes to the literature in emerging markets, discussing the characteristics of entrepreneurship and small businesses within this context, which present a more aggressive strategic positioning. At the end, we present the limitations of this research and an agenda for future studies.

2 Theoretical framework and hypotheses development

The internationalization process covers a series of commitments and projects that are planned by a company's management. However, especially in small and medium-sized firms, managers are unable to predict all the risks that will be faced during the internationalization process (Liesch et al., 2011), and sometimes this lack of perception about particular risks affects the process and increases the costs of the international operation (Guo & Jiang, 2020).

According to Cavusgil et al. (2014), the evolution in how new international ventures are organized is clear evidence of the globalization phenomenon and of the persuasive impact of new technologies. Furthermore, this phenomenon has caused disagreement between the classical explanations regarding the internationalization process of traditional companies and these new ventures, thus opening up space for new discussions and new theoretical perspectives on this new phenomenon.

2.1 Born globals

The environmental change in international trade, due to the internationalization of markets, the ever-greater presence of firms and professionals with international experience, and the strengthening of relationship networks around the world, have driven the emergence of new ventures with foreign operations and a global vision from the start, the so-called “born globals,” which have been investigated by various authors, such as Choquette et al. (2017), Gabrielsson et al. (2008), Grazzi and Moschella (2018), Oviatt and McDougall (2005), and Stocker and Abib (2019), among others.

In born globals with accelerated growth, entrepreneurs present a global mindset, long-term view, and lower risk perception (Civera et al., 2020). As a result, they adopt a more aggressive positioning in the market and take different strategic choices than those presented by the traditional literature, even when it comes to companies from emerging countries (Bangara et al., 2012; Stocker et al., 2021). Oviatt and McDougall (2005) compare born global firms and the Theory of Internationalization from Johanson and Martín Martín (2015). They consider that unlike the assumptions of the Uppsala model, whose internationalization process is gradual, for born globals it is quick. However, resources may be limited by their size and time in existence, and they may have little or no experience in any market. Nonetheless, these new ventures commit to the international market, assuming the risks of early operations in it. Moreover, the studies argue that born globals have an advantage in acquiring knowledge and experience due to exposure in the international market and develop capabilities more quickly than other traditional ventures (Gabrielsson et al., 2008; Paul & Rosado-Serrano, 2019).

There is still a misinterpretation about the concept and extent of what born globals are. According to Gabrielsson et al. (2008), there is a need to adopt a familiar concept for studying born globals to make comparisons and generalizations. This study adopts the definition of born globals presented by Gabrielsson et al. (2008), who define a born global as a company with a global vision from the start, with potentially global products and services and entrepreneurial capacity to accelerate the internationalization process. In the same way, Melén and Nordman (2009) also argue that born global companies start to operate in several foreign markets, from the

beginning or soon after, and may present multiple modes of internationalization.

Much of the research on born globals has been conducted in developed countries, such as Johanson and Martín Martín (2015) analyzing Spanish firms, Sui and Baum (2014) analyzing Canadian firms, Trudgen and Freeman (2014) analyzing Australian firms, and Braunerhjelm and Halldin (2019) analyzing Swedish start-ups. In addition, the researchers focus on high-technology companies, such as Øyna et al. (2018) with technology-based born global firms from Israel, and Brouthers et al. (2016) with ibusiness firms from Germany. In the context of research in emerging countries, there is a concentration of studies mainly in China (Lin & Si, 2019), so there is space for further studies and advances in the area regarding enterprises from different emerging market countries and more traditional and less dynamic sectors.

2.2 Internationalization propensity

Internationalization propensity in this research is considered according to the research model for born globals proposed by Madsen and Servais (1997). The authors' model is proposed based on a consolidated analysis of the research on new international ventures and defines three main variables: entrepreneurial (individual factors), organizational, and environmental.

The characteristics of the entrepreneur/founder of the business cover questions of cognition, training background and professional experience, and ease of cultural adaptation (Ughetto, 2016). The organizational characteristics of the venture include competencies, routines, the flow of internal processes, and corporate governance structure (Ughetto, 2016). Moreover, the characteristics of the external environment include the internationalization dynamic of the market itself and the technological advances influenced mainly by the globalization phenomenon (Civera et al., 2020; Madsen & Servais, 1997; Ughetto, 2016).

Entrepreneurs with a global mindset are more able to explore new business opportunities in international markets (Cahen & Borini, 2020), acting more actively and aggressively while also having a more significant adaptability potential than managers with an internal/national market orientation (Civera et al., 2020; Grazzi & Moschella, 2018; Jin et al., 2018).

The integrative model proposed tests the hypotheses of an association between the characteristics

of the entrepreneur, the organization, the environment, and the definition of born globals. Thus, the following hypotheses will be tested:

- H1. The high level of global characteristics of the entrepreneur has a positive relationship with the propensity for internationalization in born globals.
- H2. The high level of dynamic organizational characteristics has a positive relationship with the propensity for internationalization in born globals.
- H3. The high level of the market environment has a positive relationship with the propensity for internationalization in born globals.

2.3 Speed of internationalization

The speed of internationalization of born globals involves the internationalization strategy, insertion in networks, and the internationalization process (Oviatt et al., 2004). The speed of internationalization of born globals is also influenced by the propensity for internationalization, differing from traditional companies due to their international business motivation starting from the moment they are founded (Gabrielsson et al., 2008; Lin & Si, 2019).

In born globals, the propensity for internationalization and the speed of internationalization are interlinked. This interlinkage is because their expansion into the international market happens in a short timeframe, shortly after their emergence, unlike other companies whose international activities have occurred gradually, as indicated by the behavioral approach to the international business of Johanson and Martín Martín (2015).

Although there are different definitions regarding what a born global firm is, there is specific agreement among the international business researchers concerning their characteristics, whether concerning the short time in which they begin their activities abroad, their involvement and commitment to their activities in the foreign market, their orientation toward the international market, or the factors that lead to their accelerated internationalization process (Amorós et al., 2016).

Recent research in emerging markets such as that of Cahen and Borini (2020), Prieto Sánchez & Merino (2022), Stocker and Abib (2019), and Santos et al. (2021b),

has brought attention to the predisposition of small and medium enterprises from emerging countries, with scarce resources and limited organizational capabilities, to internationalize quickly. This propensity and speed of internationalization through multiple international operating strategies has challenged some theoretical models, such as the behavioral approach, on the internationalization process. Thus, the following hypothesis is proposed:

- H4. The high propensity for internationalization in born globals from emerging markets has a positive relationship with the speed of internationalization.

The construct involves rapid penetration of global segments, the global development of new products, the use of different international strategies to accelerate the internationalization process, such as joint ventures and licensing, as well as the use of international relationship networks for the learning process and stability in the market (Drewniak & Karaszewski, 2020).

Concerning networks as a strategy adopted by born global companies, Drewniak and Karaszewski (2020) state that the use of the relationship networks structure and strategic alliances facilitate the learning process and management of information regarding foreign markets and clients, reducing the risk that international operations present. Networks can have a considerable impact on internationalization, with relation to entry, expansion, and international integration (Humphrey et al., 2019; Stocker & Abib, 2019).

One of the main differences between born global companies and traditional internationalization ventures is related to the speed of internationalization, the strategies of entry into the foreign market, and the more advanced level of involvement (Paul & Rosado-Serrano, 2019; Lin & Si, 2019). Considering these arguments, the following hypotheses are proposed:

- H5. The different international strategies have a positive relationship with the speed of internationalization in born globals.
- H6. The high intensity of insertion in networks has a positive relationship with the speed of internationalization in born globals.
- H7. The high level of the internationalization process has a positive relationship with the speed of internationalization in born globals.

2.4 Evaluation and perception of risk in born globals

The vulnerability of interconnected markets, economic instabilities, and recent global crises have drawn managers' attention to topics such as the risk phenomenon in the strategic process of organizations (Frigo & Anderson, 2011). However, this risk evaluation, as well as the actions and strategies developed through a risk management process, appear to be influenced by the characteristics of the entrepreneur (Civera et al., 2020; Crovini et al., 2021), as well as the resources available to carry out the internationalization objectives and the environment in which the company operates (Guo & Jiang, 2020; Liesch et al., 2011).

According to Dimitratos and Plakoyiannaki (2003), risk perception is intimately related to the characteristics and attributes of the manager and the business and is revealed in critical decisions (i.e., internationalization). However, Guo and Jiang (2020) treated risk propensity as a personality trait of the manager and as a factor that influences decision-making but is not a determinant. According to Stocker and Abib (2019), born globals located in an emerging market face some different risk factors from international enterprises from developed countries, due to the institutional voids, the domestic market regulation, and social, economic, and political situations in these countries, issues which are also highlighted by Llanos-Contreras et al. (2021) and Santos et al. (2021a).

Cavusgil et al. (2014) state that the internationalization process involves four main types of risk: commercial risk, monetary risk, country risk, and intercultural risk. According to the authors, the risks involved in international business are not controllable and inevitable; however, by perceiving and evaluating them, managers can direct actions to mitigate their effects. In this classification, the authors listed the following as inherent to commercial risk: the weakness of partners, competitive intensity, and operational and strategic problems. Financial risks include questions about assets, foreign taxation, price, inflation, and monetary exposure. In country risk, there are governmental, social, and political questions. Finally, in cultural risk, there are ethical and cultural questions and questions regarding the decision-making and management styles of the companies present in the country.

In the initial stages of internationalization, many firms lack information and knowledge about the foreign markets, accentuating the risk perception and uncertainty

(Crovini et al., 2021; Drewniak & Karaszewski, 2020). These perceptions are important in the decision making at various levels of international activities, but especially in the involvement in new activities, such as the introduction of new markets, using different modes of operation, or a change in international strategies (Liesch et al., 2011; Santos et al., 2021b).

Regarding the propensity for internationalization, Dib et al. (2010) state that the smaller the venture, the higher the flexibility will be along with the propensity to face international risks. In the same way, Guo and Jiang (2020) state, regarding the firm's time in existence and operations, that the younger the company is, the lower its risk aversion in the international environment.

Therefore, the constructs that involve the internationalization of born globals in this study are considered to be related to the entrepreneur's evaluation, and risk perception (Crovini et al., 2021; Dib et al., 2010; Guo & Jiang, 2020; Llanos-Contreras et al., 2021), and hence the following hypotheses are proposed:

- H8. The higher propensity for internationalization in born globals is related to the lower risk perception.
- H9. The higher speed of internationalization in born globals is related to the lower risk perception.

From an integrative perspective, the different constructs – the propensity for internationalization (considered through the characteristics of the entrepreneur, the organization, and the market environment), the evaluation and perception of risk, and the speed of internationalization (observed through the strategy, internationalization process, and networks), form the structural model (Figure 1) that is proposed and tested in this research considering the aforementioned hypotheses.

3 Methods

This study aims to propose an integrative model of risk analysis and influencing factors regarding the propensity and speed of the internationalization process of born globals. The research uses a quantitative approach with primary data. This section presents both the methodological design, including the steps of the data collection and analysis techniques, and the context and definition of the variables used in the structural modeling.

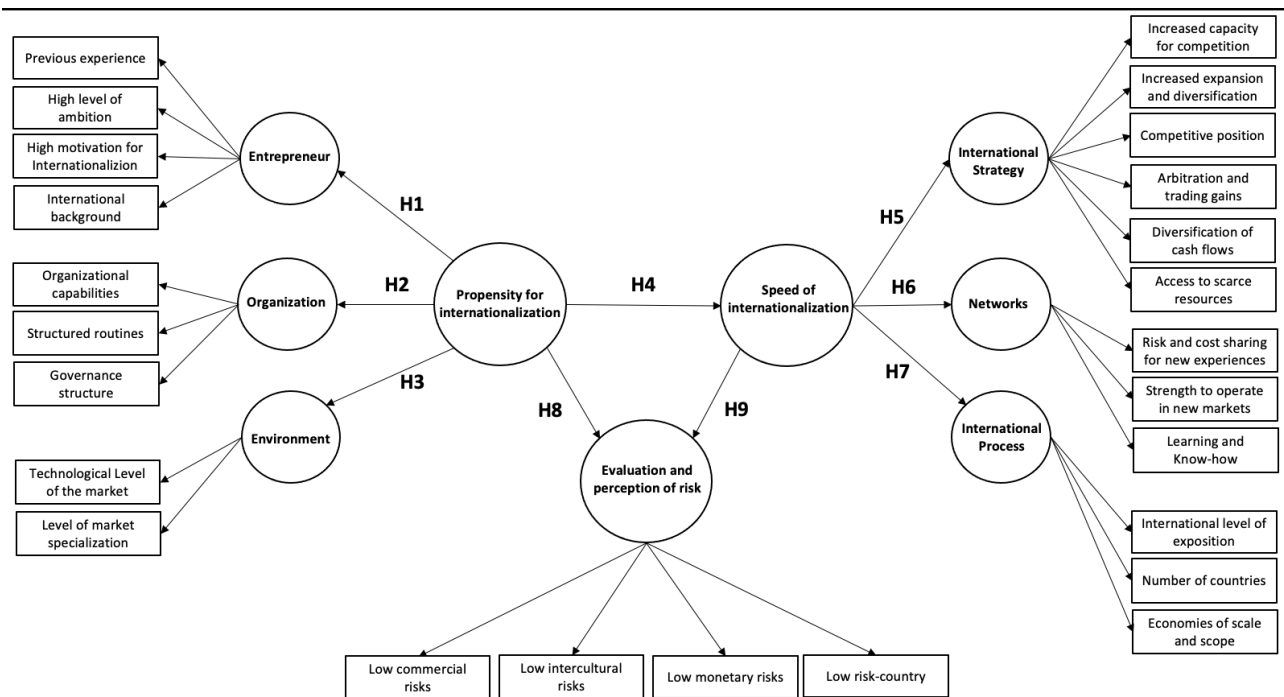


Figure 1. Structural model.

3.1 Sample and emerging market context

This study is conducted and applied in the context of micro and small Brazilian companies that are internationalized or in the process of internationalization. It seeks to emphasize the emerging market context, evidencing relevant points that impact the interpretation of the results, as well as on the contribution of the study. Proper contextualization of studies in international business, as emphasized by Teagarden et al. (2018), can improve the accuracy and relevance of the results, enabling replicability, generalization, or definition of specificities for application in different cases.

Brazil is the third biggest producer of beer globally, and only four large corporations are concentrated in the domestic market. Together these companies represent 99% of all national beer production. One of them is Ambev, which accounts for a 70% share of the beer market in the country. Although it is a highly competitive environment and dominated by large companies, recent years have seen the rise of small firms emerging as potential participants in the beer market – the so-called craft breweries.

Due to the level of national competition, these small ventures have emerged internationally, seeking

international prestige to strengthen their brand in the domestic market or even to seek greater external competitiveness. Due to this competitive scenario, we chose to focus on the beverage industry, specifically the beer market, as the object of this study.

According to the Federal Government's Ministry of Agriculture, Livestock, and Food Supply, by the end of 2019, 944 craft microbreweries had been recorded in the country (Brasil, 2020). Among these, some breweries, despite having operated in the market for less time, already have the intention or are in the process of internationalizing, through direct or indirect production, strategic partnerships and alliances for production and distribution, and the outsourcing and importing of products, among other internationalization strategies.

Although craft breweries, some of which are called microbreweries, represent roughly 1% of the total volume of the beer sector in Brazil and around 2.5% of sales revenue in the country, they have accounted for more than 91% of growth in the last three years. In addition, they are changing Brazilian beer culture, with numerous festivals, events, specialty stores, and international recognition through awards in different beer contests.

3.2 Variables of the structural model

The survey questionnaire (Appendix A) was developed using established scales that have been widely used in international business studies (Table 1). According to previous research (Fan & Phan, 2018; Grazzi & Moschella, 2018; Jin et al., 2018; Ribau et al., 2018; Stocker & Abib, 2019; Stocker et al., 2021), based on the developed scales, the structural model was built with seven constructs. The variables chosen for the modeling and data collection are based on the literature on born globals and international strategy. Constructs 1, 2, and 3 were extracted from the born global research model from Madsen and Servais (1997), considering the characteristics of the entrepreneur, the organization, and the environment. Constructs 4, 5, and 6, internationalization strategy, networks, and

internationalization process, are taken from the born global internationalization model presented by Oviatt et al. (2004). Finally, construct 7, evaluation and perception of risk, is extracted from the proposal for classifying the risks in international businesses from Cavusgil et al. (2014). The model proposed for this investigation and the hypothesized relationships are presented in Figure 1.

To better understand the construction of the structural and measurement model analyzed by this study, Table 1 identifies the unobservable latent variables and the indicators that form these variables, represented by the research questions asked during the data collection. Each item was scored on a 5-point Likert scale: 1 = ‘strongly disagree’ to 5 = ‘strongly agree.’

The model proposed in this research also aims to include multiple levels of analysis, involving factors at

Table 1
Variables measurement

Construct	Variables / Indicators	Authors and validated models
1. Environment	Q15) Technological level of the market Q16) Level of market specialization	Fan and Phan (2018), Madsen and Servais (1997)
2. Entrepreneur	Q8) Previous experience Q9) High level of ambition Q10) High motivation for internationalization Q11) International background	Freixanet and Churakova (2018), Madsen and Servais (1997), Ughetto (2016)
3. Organization	Q12) Organizational capabilities Q13) Structured routines Q14) Defined governance structure	Grazzi and Moschella (2018), Madsen and Servais (1997)
4. Internationalization Strategy	Q17) Increased capacity for competition Q18) Increased international expansion and diversification Q19) Competitive position and understanding of competition Q20) Arbitration and trading gains Q21) Diversification of cash flows Q22) Access to scarce resources and/or lower costs	Oviatt et al. (2004), Ribau et al. (2018)
5. Networks	Q23) Risk and cost sharing for new experiences Q24) Strength to operate in international markets Q25) Learning and know-how	Johanson and Martín Martín (2015), Oviatt et al. (2004) Stocker and Abib (2019)
6. Internationalization Process	Q26) International level of exposure Q27) Number of countries Q28) Efficiency improvements and economies of scale and scope	Grazzi and Moschella (2018) Oviatt et al. (2004)
7. Risk Perception	Q29) Low perception of commercial risks Q30) Low perception of intercultural risks Q31) Low perception of monetary risks Q32) Low perception of country risks	Cavusgil et al. (2014), Liesch et al. (2011)



the individual level (perception of managers), at the level of the firm (capabilities of the organization), and at the macro-level (market and environmental influence); that is, different levels of analysis are included to propose a better representation of the reality and enable application in other contexts. It is also noteworthy that for this work, the context of emerging market firms is not a moderator or predictor for explaining the results (Bidault et al., 2018). However, its contextual justification is that it is necessary to understand the phenomenon studied and the extent of generalization of the model.

3.3 Data collection

The questionnaire was structured in the Qualtrics® platform. First, the instrument was applied to a sample of 10 entrepreneurs. After that, the feedback was incorporated, and a revised version was used for the final data collection.

Data were collected from May to July of 2018. A list of the microbreweries was obtained with Abracerva (Brazilian Association of Craft Beer). The questionnaire was sent to the entire list, directed to entrepreneurs/managers/owners, with a total sample of 740 microbreweries. In addition, the snowball technique was used, in which each respondent could indicate a manager of another microbrewery, reinforcing the research and increasing the chances of answers. A total of 317 responses were obtained, but 117 were not considered for the research analysis since they do not fit the profile of the research – ventures already in the process of internationalization, international partnerships, or with a global vision since their conception, i.e. born globals. The final research sample is composed of 200 entrepreneurs from Brazilian microbreweries who answered the survey spontaneously.

The participating enterprises are relatively young; on average, they have been in business from two to four years, with 75% of the sample being in operation for less than four years, and only 4% being in operation for more than ten years. Most of the respondents are entrepreneurs, managers, and master brewers, 89% are male, and 98% have higher education, 50% to graduate and master's level, representing a high level of education. The mean age of the respondents is 39 years old, with 80% of the sample being between 30 and 49 years old. It is noteworthy that this profile does not represent the typical profile of entrepreneurs in Brazil, considering the higher education, professional experience, and personal background. The average annual revenue of these ventures

is US\$ 100,000.00, with only 5% having annual revenues above US\$ 1 million. This value represents total revenue, considering operations in the domestic and foreign markets.

3.4 Structural equation modeling

Structural equation modeling (SEM) is a multivariate analysis technique, which, based on statistical models, seeks to explain the relationships between multiple variables, simultaneously examining a set of dependence relationships (Hair et al., 2014).

The model proposed in this analysis, as revealed in Figure 1, is constituted of (unobservable) latent variables and their respective reflective indicators (observed variables). The SmartPLS v.3.2.6 software was used to estimate and measure the model.

To prepare the data and confirm the proposed model, confirmatory factor analysis (CFA) was initially used, to analyze the constructs used in the modeling. After the factor analysis, SEM was carried out to evaluate the causal processes between the variables. CFA was applied in this stage to validate the measurement model presented in Figure 1. The objective of CFA is to correlate all the factors between each other (lv1 +lv2 +lv3) and evaluate whether the model has convergent validity, discriminant validity, and reliability. After the validity criteria are met, the structural model validation process begins.

To evaluate the structural and measurement model proposed in this research, the following criteria, proposed by Hair et al. (2014), will be followed and complemented with other parameters:

- a) Convergent validity: the factor loading of the indicators is analyzed, which should be greater than 0.7, as well as the average variance extracted (AVE) (raised to the square, this is 0.49), which should be close to 0.5 (Henseler et al., 2009).
- b) Discriminant validity at the item level: the discriminant validity of the cross-loadings is analyzed subject to the lowest factor loading of their latent variable being more significant than the factor loading of the other indicators of the other latent variables (Chin, 1998).
- c) Discriminant validity at the latent variable level: the correlations between the variables should be lower than the square roots of the

AVEs. In other words, the square roots of the AVEs should be higher than the correlations of the constructs (Fornell & Larcker, 1981).

- d) Composite reliability: as a reliability criterion, this is assumed to be higher than 0.7; that is, $CR > 0.70$ (Hair et al., 2014).

4 Research results

The model proposed in this study was analyzed with the help of the SmartPLS software. As a result, the measurement model's discriminant validity, convergent validity, and reliability were analyzed.

Concerning the convergent validity, the analysis of each item reveals that all the factor loadings are close to 0.7 and highly significant. In addition, for the discriminant validity, the square roots of the AVEs were higher than the correlation between the other latent variables, so there is discriminant validity.

The convergent validity of the indicators used for the measurement was also analyzed at the latent variable level. The vast majority of the factor loadings have a loading greater than 0.7, and they were shown to be significant, with a t-value above 1.96 (information obtained using bootstrapping analysis). Also, regarding the p-value, it is observed that the indicators are significant and below 1%. Table 2 presents the evaluation of the first-order latent variables.

In the model, the six factors that would affect the evaluation and perception of risk in the internationalization process were modeled as first-order latent variables and two attributes (propensity for internationalization and

speed of internationalization) were modeled as second-order latent variables, as illustrated in Figure 1. In the evaluation of the measurement model for the first-order latent variables, it was observed that all the factor loadings are close to 0.7 and highly significant. Furthermore, the AVE was higher than 0.49, coming close to the recommended value (minimum of 0.5). Therefore, the model has convergent validity. Moreover, the square roots of the AVEs were higher than the correlation between the other first-order latent variables, so there is discriminant validity. Finally, the CR of the variables was between 0.72 and 0.93, so the values were superior to the minimum value suggested of 0.7.

In addition to evaluating the measurement model at the first-order latent variable level, an analysis and evaluation of the model at the item level is also carried out. For this, an analysis of the cross-loadings was carried out to measure the discriminant validity. The results show that all the factor loadings were higher than 0.5, which indicates convergent validity. Furthermore, all the loading factors are significant at 1%. In addition, all the items presented higher factor loadings in their factors than in any other factor, which indicates discriminant validity.

The evaluation of the measurement model for the second-order latent variables is presented in Table 3.

The results of the model for the second-order variables present convergent validity, given that all the factor loadings are higher than 0.7 and highly significant. The AVE was 0.67 for the propensity for internationalization factor and 0.65 for speed of internationalization, both higher than the recommended value (minimum of 0.5). Regarding the discriminant validity, the square root of the AVE (0.788 and 0.773 for the propensity for

Table 2
Evaluation of the measurement model at the LV level – 1st order

Variable	1	2	3	4	5	6	7
1. Network	0.682						
2. Risk perception	0.161	0.925					
3. Organization	0.112	0.698	0.719				
4. Internationalization process	0.376	0.585	0.488	0.771			
5. Entrepreneur	0.167	0.347	0.592	0.488	0.786		
6. International strategy	0.299	0.719	0.584	0.676	0.388	0.785	
7. Environment	0.271	0.434	0.471	0.305	0.371	0.433	0.877
Composite reliability	0.711	0.915	0.887	0.873	0.898	0.879	0.867
Average variance extracted – AVE	0.465	0.874	0.658	0.641	0.673	0.625	0.722

Note 1 Diagonal values are the square root of the AVE; Note 2 Correlation values higher than |0.138| are significant at 5%, and those above |0.181| are significant at 1%.



internationalization and speed of internationalization, respectively) was higher than the correlation between the second-order latent variables, that is, 0.615; so, there is discriminant validity between both second-order latent variables.

The CR was equal to 0.84 for the propensity for internationalization and 0.82 for the speed of internationalization. Both values are higher than the minimum value suggested of 0.7. Also, regarding the model's validity, it can be observed that the AVE and the CR were within the values specified. All the variables present value in their loadings. The R-squared shows that they are not strongly correlated with each other.

In order to present the evaluation of the structural model, the results are presented in Table 4, using the values identified in the path coefficient column, F^2 -values,

F^2 , VIF, and adjusted R^2 . The structural model presented in Figure 2, applied now with the factor loadings, refers to the relationships between the first-order and second-order latent variables.

The Pearson evaluation of the coefficients of determination (R^2) evaluates the portion of the variance of the endogenous variables that the structural model explains. According to Cohen (2013), for social and behavioral sciences, $R^2=2\%$ can be classified as a small effect, $R^2=13\%$ as a medium-sized effect, and $R^2=26\%$ as a significant effect. Thus, as presented in Table 4 in the Adjusted R^2 column, except for one case, the others significantly affect the structural model.

The F^2 effect evaluates how useful each construct is to the model fit. Values of 0.02, 0.15, and 0.35 are considered small, medium, and large, respectively

Table 3
Evaluation of the measurement model at the LV level – 2nd order

Variable	Propensity for internationalization	Speed of internationalization
Propensity for internationalization	0.788	
Speed of internationalization	0.615	0.773
Composite reliability	0.841	0.827
Average variance extracted	0.673	0.651

Table 4
Result of the proposed structural model

Hypotheses	Path coef.	F^2	VIF	Stand. Dev.	T stat	P value	Adj. R^2	Hypotheses Results
H1 Propensity for intern. -> Entrepreneur	0.866	3.010	1.000	0.029	29.378	0.000	0.749	Supported
H2 Propensity for intern. -> Organization	0.861	2.865	1.000	0.024	35.659	0.000	0.740	Supported
H3 Propensity for intern. -> Environment	0.644	0.708	1.000	0.054	11.887	0.000	0.412	Supported
H4 Propensity for intern.. -> Speed of intern.	0.608	0.586	1.000	0.052	11.588	0.000	0.366	Supported
H5 Speed of intern. -> Strategy	0.819	11.357	1.000	0.009	107.496	0.000	0.919	Supported
H6 Speed of intern. -> Networks	0.415	0.222	1.000	0.092	4.622	0.000	0.178	Supported
H7 Speed of intern. -> Intern. Process	0.808	2.731	1.000	0.021	40.797	0.000	0.731	Supported
H8 Propensity for Intern. -> Risk perception	0.295	0.124	1.586	0.071	4.154	0.000		Not Supported
H9 Speed of intern. -> Risk perception	0.531	0.403	1.586	0.066	7.988	0.000	0.554	Supported

Note 1 VIF values below 1.60.

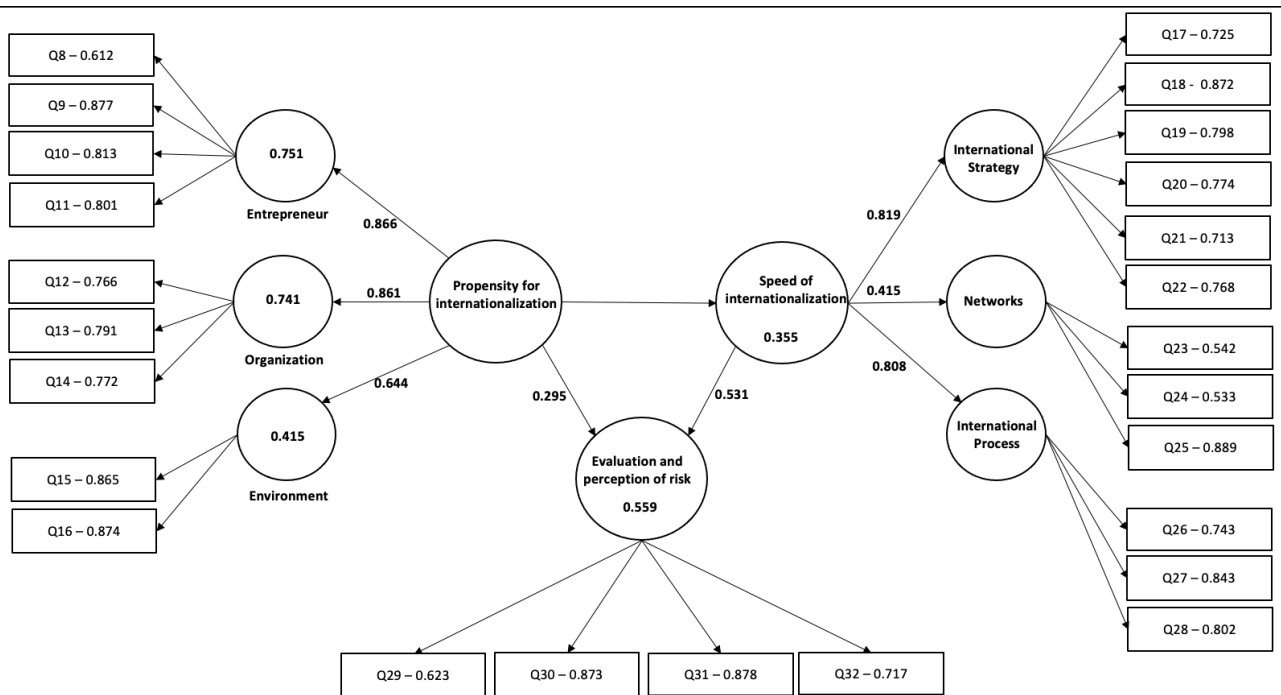


Figure 2. Structural and measurement model with factor loadings

(Hair et al., 2014). Thus, considering the values for R^2 it is concluded that we have medium and large effect constructs, as illustrated in Table 4.

Therefore, the results reveal that only the propensity for internationalization construct is not strongly related to the evaluation and perception of risk in born globals. This finding reveals that the entrepreneur’s characteristics, as already highlighted by Ughetto (2016), and the environmental characteristics influence the propensity for internationalization, but not the evaluation of the risks involved.

5 Discussion

The evidence shows that the propensity for internationalization is linked to the characteristics of the entrepreneur, related to their skills and international background, as highlighted by Ughetto (2016), and the level of ambition of the breweries’ founders, who seek to be at the cutting edge of the business. This pattern among entrepreneurs is already perceptible in the literature, as highlighted in the recent studies by Freixanet and Churakova (2018), regarding the influence of the global orientation of managers on the internationalization process of companies.

The importance given to international experience and international networking reflects the strategies adopted to start the internationalization process of these global breweries, corroborating the findings of Jin et al. (2018) and Ribau et al. (2018). The previous authors argue that social networks perform an essential role in developing born global companies, which positively influences the way the risks are perceived and evaluated by entrepreneurs.

As discussed by Fan and Phan (2018), the decision to internationalize a company is influenced by the size of the firm’s internal market and also by its initial production capacity, which for Knight and Liesch (2016) is more evident where small and saturated domestic markets lead to a higher propensity for internationalization. In the context studied, the size of the market is not small, considering the geographical dispersion of Brazil; however, the market’s saturation, as highlighted in the description of the context of the brewery business, makes small and new ventures seek entry into a different market, including international insertion.

It can also be concluded that, as already mentioned by Jin et al. (2018), the use of networks, whether through formal or informal commercial relationships, is developed in the new markets, with production partnerships, participation in international festivals, and international

missions, and this represents an increase in the propensity for internationalization. The presence of business networks also has an impact in terms of reducing the perception of risk on the part of born global firm entrepreneurs, corroborating with the studies of Grazzi and Moschella (2018), Johanson and Martín Martín (2015), Ribau et al. (2018), and Stocker and Abib (2019). In the end, we also see that the phenomenon of early internationalization, which challenges the dominant logic of learning based on a gradual process and incremental internationalization, remains an interesting puzzle (Paul & Rosado-Serrano, 2019).

The results of this study underline the propensity and speed of internationalization of Brazilian breweries – contextualized in an emerging market. In search of market positioning and balanced competition, these companies have expanded the business beyond the national competition, led by large multinational corporations, and had to manage the risk in this international entrepreneurship process.

Recent studies also emphasize the unique environment for research in Latin America (Aguinis et al., 2020; Prieto Sánchez & Merino, 2022). For example, there is a strong influence of market vulnerability and financial and social imbalances in the countries, which are factors that challenge how business is managed and that enables researchers to investigate assumptions and test theories validated in other contexts (Ronda-Pupo, 2016).

6 Contributions and implications

Our study makes several contributions to the literature. First, based on the analysis of the modeling results, this research proposes a structural model. It empirically tests the constructs of the propensity for and speed of internationalization and the impact of the evaluation and perception of risks on born globals. This study also expands the literature on international entrepreneurship in different ways. Primary, the study enriches this literature by offering an integration between the constructs of internationalization (characteristics, speed, and propensity for internationalization) and the constructs of evaluation and perception of risk (from the viewpoint of entrepreneurs and the context of the organization), which is still barely discussed in the literature and features few empirical tests.

To advance the theoretical understanding of international business, particularly the important rise of enterprises from emerging markets and developing

countries, we present and discuss the characteristics of entrepreneurship and small businesses. Within this context, SMEs have a more aggressive strategic positioning, take more intense advantage of their networks of contacts, develop their organizational capabilities, and are willing to compete in developed markets that are culturally and geographically distant, which has aroused interest from researchers in the area (Urbano et al., 2019). These features contrast with the dominant assumptions of international business literature.

The results also present some managerial implications and practical applications. A key implication for entrepreneurs is that international experience and the level of ambition positively impact the propensity for internationalization and the perception of risks during the internationalization process. Thus, managers and international entrepreneurial visionaries could seek resources and develop their skills and capacities to operationalize these ventures with rapid international insertion.

From a managerial viewpoint, the finding is that relationship networks influence internationalization strategies and the process and speed of internationalization of born globals. This highlights the strategic importance of resorting to these social structures, which can often be natural (networks formed through personal and social bonds) or artificial social structures made viable by public institutions or horizontal integration initiatives, such as clusters and other business network structures, which we indicate as a potential application for policy making.

6.1 Limitations and future studies

We are aware of the limitations of this study and take this opportunity to suggest directions for extending our research. The structural model proposed represents an illustration of the reality considering the antecedents and the variables present in the internationalization process. However, it is a simplified model, and other variables and different indicators could be included, making it more robust and able to represent the reality of these young international ventures. Although the scope of the study is international, the context analyzed is national, representing the institutional environment, common characteristics of entrepreneurs, and competitiveness in the Brazilian market. We recognize the importance of a potential contribution to the model, considering local, regional, national, and international markets, thus contributing to a more generalizable measurement model.

For a future agenda, our proposition is based on the following points: the need for studies on the internationalization of small ventures originating from emergent countries in comparison with small ventures originating from a country with a developed economy; evaluating the risk factors, the social and economic conditions, the institutional environment, the level and size of the domestic market, and the governmental influence on corporate strategies; and how all these variables can facilitate or hinder the rapid internationalization process of the ventures. Another study possibility relates to the building of global relationship networks in international ventures and how these relationships influence the degree of internationalization of born globals and the perception of risks in international activities.

References

- AGUINIS, H., VILLAMOR, I., LAZZARINI, S. G., VASSOLO, R. S., AMORÓS, J. E., & ALLEN, D. G. (2020). Conducting management research in Latin America: Why and what's in it for you? *Journal of Management*, 46(5), 615-636. <http://dx.doi.org/10.1177/0149206320901581>.
- AMORÓS, J. E., BASCO, R., & ROMANÍ, G. (2016). Determinants of early internationalization of new firms: The case of Chile. *The International Entrepreneurship and Management Journal*, 12(1), 283-307. <http://dx.doi.org/10.1007/s11365-014-0343-2>.
- BANGARA, A., FREEMAN, S., & SCHRODER, W. (2012). Legitimacy and accelerated internationalization: An Indian perspective. *Journal of World Business*, 47(4), 623-634. <http://dx.doi.org/10.1016/j.jwb.2011.09.002>.
- BIDAULT, F., DE LA TORRE, J. R., ZANAKIS, S. H., & RING, P. S. (2018). Willingness to rely on trust in global business collaborations: Context vs. demography. *Journal of World Business*, 53(3), 373-391. <http://dx.doi.org/10.1016/j.jwb.2016.08.001>.
- Brasil, Ministério da Agricultura, Pecuária e Abastecimento. (2020). *Anuário da cerveja*. Brasília. <https://www.gov.br/agricultura/pt-br/assuntos/noticias/com-crecimento-de-14-4-em-2020-numero-de-ervejarias-registradas-no-brasil-passa-de-1-3-mil/anuariocerveja2.pdf>
- BRAUNERHJELM, P., & HALLDIN, T. (2019). Born globals—presence, performance and prospects. *International Business Review*, 28(1), 60-73. <http://dx.doi.org/10.1016/j.ibusrev.2018.07.004>.
- BROUTHERS, K. D., GEISSER, K. D., & ROTHLAUF, F. (2016). Explaining the internationalization of ibusiness firms. *Journal of International Business Studies*, 47(5), 513-534. <http://dx.doi.org/10.1057/jibs.2015.20>.
- CAHEN, F., & BORINI, F. M. (2020). International digital competence. *Journal of International Management*, 26(1), 100691. <http://dx.doi.org/10.1016/j.intman.2019.100691>.
- CAVUSGIL, St., KNIGHT, G., & RIESENBERGER, J. R. (2014). *International business*. Austrália: Pearson.
- CHIN, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (Chap. 10, pp. 295-336). London: Psychology Press.
- CHOQUETTE, E., RASK, M., SALA, D., & SCHRÖDER, P. (2017). Born Globals- Is there fire behind the smoke? *International Business Review*, 26(3), 448-460. <http://dx.doi.org/10.1016/j.ibusrev.2016.10.005>.
- CIVERA, J. N., BÓ, M. P., & LÓPEZ-MUÑOZ, J. F. (2020). Do contextual factors influence entrepreneurship? Spain's regional evidences. *The International Entrepreneurship and Management Journal*, 17(1), 105-129. <http://dx.doi.org/10.1007/s11365-019-00625-1>.
- COHEN, J. (2013). *Statistical power analysis for the behavioral sciences* (2nd ed.). New York: Routledge. <http://dx.doi.org/10.4324/9780203771587>.
- CROVINI, C., SANTORO, G., & OSSOLA, G. (2021). Rethinking risk management in entrepreneurial SMEs: Towards the integration with the decision-making process. *Management Decision*, 59(5), 1085-1113. <http://dx.doi.org/10.1108/MD-10-2019-1402>.
- DE CLERCQ, D., ZHOU, L., & WU, A. (2016). Unpacking the relationship between young ventures' international learning effort and performance in the context of an emerging economy. *The International Entrepreneurship and Management Journal*, 12(1), 47-66. <http://dx.doi.org/10.1007/s11365-014-0328-1>.
- DIB, L. A., ROCHA, A., & SILVA, J. F. (2010). The internationalization process of Brazilian software firms and

- the born global phenomenon: Examining firm, network, and entrepreneur variables. *Journal of International Entrepreneurship*, 8(3), 233-253. <http://dx.doi.org/10.1007/s10843-010-0044-z>.
- DIMITRATOS, P., & PLAKOYIANNAKI, E. (2003). Theoretical foundations of an international entrepreneurial culture. *Journal of International Entrepreneurship*, 1(2), 187-215. <http://dx.doi.org/10.1023/A:1023804318244>.
- DREWNIAK, R., & KARASZEWSKI, R. (2020). Diffusion of knowledge in strategic alliance: Empirical evidence. *The International Entrepreneurship and Management Journal*, 16(2), 387-416. <http://dx.doi.org/10.1007/s11365-019-00589-2>.
- FAN, T., & PHAN, P. (2018). International new ventures: Revisiting the Influences behind the 'born-global' firm. *International Entrepreneurship*, 38(7), 131-172. http://dx.doi.org/10.1007/978-3-319-74228-1_5.
- FORNELL, C., & LARCKER, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *JMR, Journal of Marketing Research*, 18(3), 382-388. <http://dx.doi.org/10.1177/002224378101800313>.
- FREIXANET, J., & CHURAKOVA, I. (2018). Exploring the relationship between Internationalization stage, innovation, and performance: The case of spanish companies. *International Journal of Business*, 23(2), 131-150. <https://ijb.cyut.edu.tw/var/file/10/1010/img/864/V232-2.pdf>
- FRIGO, M. L., & ANDERSON, R. J. (2011). Strategic risk management: A foundation for improving enterprise risk management and governance. *Journal of Corporate Accounting & Finance*, 22(3), 81-88. <http://dx.doi.org/10.1002/jcaf.20677>.
- GABRIELSSON, M., KIRPALANI, V. M., DIMITRATOS, P., SOLBERG, C. A., & ZUCHELLA, A. (2008). Born globals: Propositions to help advance the theory. *International Business Review*, 17(4), 385-401. <http://dx.doi.org/10.1016/j.ibusrev.2008.02.015>.
- GRAZZI, M., & MOSCHELLA, D. (2018). Small, young, and exporters: New evidence on the determinants of firm growth. *Journal of Evolutionary Economics*, 28(1), 125-152. <http://dx.doi.org/10.1007/s00191-017-0523-7>.
- GUO, Z., & JIANG, W. (2020). Risk-taking for entrepreneurial new entry: Risk-taking dimensions and contingencies. *The International Entrepreneurship and Management Journal*, 16(2), 739-781. <http://dx.doi.org/10.1007/s11365-019-00567-8>.
- HAIR Jr., J. F., HULT, G. T. M., RINGLE, C. M., & SARDSTEDT, M. (2014). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks: Sage Publications.
- HENSELER, J., RINGLE, C. M., & SINKOVICS, R. R. (2009). The use of partial least squares path modeling in international marketing. In R. R. Sinkovics & P. N. Ghauri (Eds.), *New challenges to international marketing* (Advances in International Marketing, No. 20, pp. 277-319). Bingley: Emerald Group Publishing. [http://dx.doi.org/10.1108/S1474-7979\(2009\)0000020014](http://dx.doi.org/10.1108/S1474-7979(2009)0000020014).
- HUMPHREY, J., TODEVA, E., ARMANDO, E., & GIGLIO, E. (2019). Global value chains, business networks, strategy, and international business: Convergences. *Revista Brasileira de Gestão de Negócios*, 21(4), 607-627. <http://dx.doi.org/10.7819/rbgn.v21i4.4014>.
- JIN, B., JUNG, S., & JEONG, S. W. (2018). Dimensional effects of Korean SME's entrepreneurial orientation on internationalization and performance: The mediating role of marketing capability. *The International Entrepreneurship and Management Journal*, 14(1), 195-215. <http://dx.doi.org/10.1007/s11365-017-0457-4>.
- JOHANSON, M., & MARTÍN MARTÍN, O. (2015). The incremental expansion of Born Internationals: A comparison of new and old Born Internationals. *International Business Review*, 24(3), 476-496. <http://dx.doi.org/10.1016/j.ibusrev.2014.10.006>.
- KNIGHT, G., & CAVUSGIL, S. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, 35(2), 124-141. <http://dx.doi.org/10.1057/palgrave.jibs.8400071>.
- KNIGHT, G., & LIESCH, P. (2016). Internationalization: From incremental to born global. *Journal of World*

Business, 51(1), 93-102. <http://dx.doi.org/10.1016/j.jwb.2015.08.011>.

LIESCH, P., WELCH, L., & BUCKLEY, P. (2011). Risk and uncertainty in internationalization and international entrepreneurship studies. *Management International Review*, 51(6), 851-873. <http://dx.doi.org/10.1007/s11575-011-0107-y>.

LIN, S., & SI, S. (2019). The influence of exploration and exploitation on born globals' speed of internationalization. *Management Decision*, 57(1), 193-210. <http://dx.doi.org/10.1108/MD-08-2017-0735>.

LLANOS-CONTRERAS, O., ARIAS, J., & MAQUIEIRA, C. (2021). Risk taking behavior in Chilean listed family firms: A socioemotional wealth approach. *The International Entrepreneurship and Management Journal*, 17(1), 165-184. <http://dx.doi.org/10.1007/s11365-019-00628-y>.

MADSEN, T. K., & SERVAIS, P. (1997). The internationalization of *Born Global* are: An evolutionary process? *International Business Review*, 6(6), 561-583. [http://dx.doi.org/10.1016/S0969-5931\(97\)00032-2](http://dx.doi.org/10.1016/S0969-5931(97)00032-2).

MELÉN, S., & NORDMAN, E. R. (2009). The internationalisation modes of Born Globals: A longitudinal study. *European Management Journal*, 27(4), 243-254. <http://dx.doi.org/10.1016/j.emj.2008.11.004>.

OVIATT, B., & MCDUGALL, P. (2005). Toward a theory of international new ventures. *Journal of International Business Studies*, 36(1), 29-41. <http://dx.doi.org/10.1057/palgrave.jibs.8400128>.

OVIATT, B., SHRADER, R., & MCDUGALL, P. (2004). The internationalization of new ventures: The risk management model. *Advances in International Management*, 16(1), 165-185. [http://dx.doi.org/10.1016/S0747-7929\(04\)16009-5](http://dx.doi.org/10.1016/S0747-7929(04)16009-5).

ØYNA, S., ALMOR, T., ELANGO, B., & TARBA, S. Y. (2018). Maturing born globals and their acquisitive behaviour. *International Business Review*, 27(3), 714-725. <http://dx.doi.org/10.1016/j.ibusrev.2017.12.002>.

PAUL, J., & ROSADO-SERRANO, A. (2019). Gradual internationalization vs born-global/international new venture models: A review and research agenda.

International Marketing Review, 36(6), 830-858. <http://dx.doi.org/10.1108/IMR-10-2018-0280>.

RIBAU, C. P., MOREIRA, A. C., & RAPOSO, M. (2018). Categorising the internationalization of SMEs with social network analysis. *International Journal of Entrepreneurship and Small Business*, 35(1), 57-80. <http://dx.doi.org/10.1504/IJESB.2018.094264>.

PRIETO-SÁNCHEZ, C. J., & MERINO, F. (2022). Incidence of cultural, economic, and environmental factors in the emergence of born-global companies in Latin America. *Global Strategy Journal*, 12(2), 245-272. <http://dx.doi.org/10.1002/gsj.1398>.

RONDA-PUPO, G. A. (2016). Knowledge map of Latin American research on management: Trends and future advancement. *Social Sciences Information. Information Sur les Sciences Sociales*, 55(1), 3-27. <http://dx.doi.org/10.1177/0539018415610225>.

SANTOS Jr., R. O., ABIB, G., & STOCKER, F. (2021a). Business across borders: Perceptions of political risk in internationalized Brazilian companies. *International Journal of Business and Emerging Markets*, 25(23), 106-130. <https://www.ceeol.com/search/article-detail?id=1007176>

SANTOS Jr., R. O., ABIB, G., & STOCKER, F. (2021b). Risk perception in the internationalization of Brazilian companies: An analysis in different entry modes. *Organizations and Markets in Emerging Economies*, 12(1), 106-130. <http://dx.doi.org/10.15388/omee.2021.12.50>.

STOCKER, F., & ABIB, G. (2019). Risk management in born globals: The case of Brazilian craft breweries. *Brazilian Business Review*, 16(4), 334-349. <http://dx.doi.org/10.15728/bbr.2019.16.4.2>.

STOCKER, F., ABIB, G., SANTOS Jr., R. O., & IRIGARAY, H. A. R. (2021). Brazilian craft breweries and internationalization in the born global perspective. *Revista de Gestão*, 28(2), 163-178. <http://dx.doi.org/10.1108/REGE-01-2021-0014>.

SUI, S., & BAUM, M. (2014). Internationalization strategy, firm resources and the survival of SMEs in the export market. *Journal of International Business Studies*, 45(7), 821-841. <http://dx.doi.org/10.1057/jibs.2014.11>.

TEAGARDEN, M. B., VON GLINOW, M. A., & MELLAHI, K. (2018). Contextualizing international business research: Enhancing rigor and relevance. *Journal of World Business, 53*(3), 303-306. <http://dx.doi.org/10.1016/j.jwb.2017.09.001>.

TRUDGEN, R., & FREEMAN, S. (2014). Measuring the performance of born-global firms throughout development their process: The roles of initial market selection and internationalization speed. *Management International Review, 54*(4), 551-579. <http://dx.doi.org/10.1007/s11575-014-0210-y>.

UGHETTO, E. (2016). Growth of born globals: The role of the entrepreneur's personal factors and venture capital. *The International Entrepreneurship and Management Journal, 12*(3), 839-857. <http://dx.doi.org/10.1007/s11365-015-0368-1>.

URBANO, D., AUDRETSCH, D., APARICIO, S., & NOGUERA, M. (2019). Does entrepreneurial activity matter for economic growth in developing countries? The role of the institutional environment. *The International Entrepreneurship and Management Journal, 16*(3), 1065-1099. <https://doi.org/10.1007/s11365-019-00621-5>.

Appendix A - Research Questionnaire

Gender		Age		Level of education		What is your role/ job title?
o Male	o	o 21 to 29	o	o High school	o	
		o 30 to 39		o Graduate or technical education		
o Female	o	o 40 to 49	o Master's degree and postgraduate	o		o Doctoral degree
		o More than 50				
Company uptime?		International activities		Average revenue		How was the internationalization process?
o	o 0 to 1 year	o since the foundation	o	o \$ 10,000.00 annually.	o	
	o 2 to 4 years	o from 2 years		o \$ 100,000.00 annually,		
	o 5 to 10 years	o from 5 years		o \$ 500,000.00 annually.		
	o more than 10	o after 10 years		o \$ 1 million annually.		

Born Global Questions*	About the profile ...	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
8	I had previous experience	1	2	3	4	5
9	I have a high level of ambition.	1	2	3	4	5
10	I have a high motivation for internationalization.	1	2	3	4	5
11	I have international background	1	2	3	4	5
12	The company has resources and capabilities for internationalization.	1	2	3	4	5
13	The company has a structured routine.	1	2	3	4	5
14	The company has a defined governance structure.	1	2	3	4	5
15	The company has a high technological level	1	2	3	4	5
16	The company specializes in what it does	1	2	3	4	5

* Madsen and Servais (1997) Born Global Model

Internationalization Question **	About the internationalization ...	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
17	We have a strategy to increase competition capacity	1	2	3	4	5
18	We have a strategy to expand and diversify internationally	1	2	3	4	5
19	We have a strategy to position ourselves	1	2	3	4	5
20	We have a strategy to increase commercial and trading gains	1	2	3	4	5
21	We have a strategy to diversify cash flow	1	2	3	4	5
22	We have a strategy to access scarce resources and lower costs	1	2	3	4	5
23	We use networks and partnerships to share risks and costs	1	2	3	4	5
24	We use networks and partnerships to have more strength internationally	1	2	3	4	5
25	We use networks and partnerships to increase market know-how	1	2	3	4	5
26	We went international to increase the market exposure	1	2	3	4	5
27	We went international to reach a larger number of countries	1	2	3	4	5
28	We went international to improve our efficiency and gains in scale	1	2	3	4	5

**Born global internationalization model presented by Oviatt et al., (2004)



Risk Questions*	About the risk perception ...	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
29	We have a low perception of commercial risks	1	2	3	4	5
30	We have a low perception of intercultural risks	1	2	3	4	5
31	We have a low perception of monetary risks	1	2	3	4	5
32	We have a low perception of risk-country	1	2	3	4	5

***Risks in international businesses from Cavusgil et al., (2014)

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The authors have no conflict of interest to declare.

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2nd author: Definition of research problem; Development of hypotheses or research questions (empirical studies); Statistical analysis; Analysis and interpretation of data; Critical revision of the manuscript; Manuscript writing.

3rd author: Development of hypotheses or research questions (empirical studies); Development of theoretical propositions (theoretical work); Definition of methodological procedures; Data collection; Analysis and interpretation of data.

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