

Financial or operational? A closer look at the measurement of international performance for born global firms

Abstract

This study examines the measurement of international performance for born global firms. While there is a growing area of literature on born globals that includes the internationalisation patterns, networks and entry strategies of these firms, there is generally a lack of research on how born global companies measure their own performance. Using a sequential mixed methods approach of exploratory interviews and a survey sample of 310 firms from New Zealand and Australia, we find that born globals tend to be significantly more international performance oriented than non-born globals. In addition, our study indicates that financial performance measures are generally viewed as more important than operational indicators. The study offers two key contributions to the literature: (1) an integrated examination of international performance measures as used in practise by born global firms, (2) a comparative perspective between born global and non-born global companies in terms of performance measurement.

Keywords: Born global firms, international performance measurement, non-born global firms, mixed methods

Financial or operational? A closer look at the measurement of international performance for born global firms

INTRODUCTION

Today's environment is shaped by increasing opportunities for small and medium-sized enterprises (SMEs) to conduct business across national borders, resulting in a growing number of SMEs entering international markets (Knight, 2001; WTO, 2010; European Commission, 2011). According to the European Commission, 25% of the SMEs in the European Union (EU) have started exporting over the last three years (European Commission, 2010). A key manifestation of the proliferation of SMEs is the phenomenon of born global firms (BGs) which progressively started to emerge in the early 1990s (Rennie, 1993; Oviatt & McDougall, 1994). These types of firms are characterised by their innovative posture and early and rapid internationalisation, thus challenging the notion of the traditional stages model that assumes an incremental, slow and risk-averse pathway to internationalisation (Johanson & Vahlne, 1977). Prime examples of BGs include Skype, Icebreaker (a New Zealand merino manufacturer), easyJet and Logitech, and BGs have been found in various country contexts ranging from large countries, such as the USA (e.g., McDougall & Oviatt, 1996) and Germany (e.g., Schwens & Kabst, 2008) to smaller markets in the Asia-Pacific, including New Zealand and Australia (e.g., Liesch, Steen, Middleton, & Weerawardena, 2007).

In the context of BGs, scholars have examined the emergence and internationalisation patterns of BGs (e.g., Madsen & Servais, 1997; Chetty & Cambell-Hunt, 2004; Zou & Ghauri, 2010), the role of networks (e.g., Freeman, Edwards & Schroder, 2006; Andersson & Wictor, 2003), entry strategies (e.g., Gabrielsson & Kirpalani, 2004), and performance determinants of BGs (e.g., Knight & Kim, 2009; Jantunen, Nummela, Puumalainen, & Saarenketo, 2008). With respect to performance, the extant literature has generally applied a set of given performance measures, such as international sales volume, international market share, international sales growth and profitability (e.g., Crick, 2009; Knight & Cavusgil, 2004).

However, these studies seem to leave two key questions largely unanswered: (1) “How do BGs measure their own performance?”, (2) “How important are specific performance measures for BGs?” Despite the multiple approaches to measuring international performance of firms, the different performance measurements may not be evaluated as equally important by BGs. It seems valid to assume that certain performance measures may be more important than others for BGs when evaluating their own performance.

The purpose of this exploratory study is to examine how BGs measure their performance. We aim to shed light on which performance dimensions are being perceived as important for BGs. In doing so, our study adopts an integrated perspective by including measures of the three dimensions of financial and operational performance and organisational effectiveness (Hult, Ketchen Jr, Griffith, Chabowski, Hamman, Dykes, Pollitte, & Cavusgil, 2008; Venkatraman & Ramanujam, 1986). This is in response to Hult et al.’s (2008) finding that only 7.3% of 96 reviewed studies in leading management journals from 1995-2005 used a combination of all three types of performance. In addition, 59.4% of all studies employed only one single type of performance (Hult et al., 2008). In order to answer our research questions, we adopt a mixed methods approach which includes exploratory interviews followed by a quantitative survey of 310 New Zealand and Australian companies. We adopt a comparative perspective with non-born globals to improve the interpretability of the findings.

The paper is structured as follows. We review the literature on performance measurement, followed by the methodology and results sections. The study concludes by discussing the findings and the limitations of the study.

LITERATURE REVIEW

In line with the study’s objective of examining performance measures of BGs, we first review the literature on general firm performance, followed by BG performance measures.

Measurement of Firm Performance

The focus in this study is on organisational performance, as considered primarily in the strategic management and international business literatures. Organisational performance has been described as a multi-faceted phenomenon that involves various viewpoints (e.g., shareholder versus employees), time periods (e.g., long-term versus short-term), and criteria (e.g., market share versus profit) (Snow & Hrebiniak, 1980). Venkatraman and Ramanujam (1986) developed a conceptualisation that illustrates various approaches to measuring organisational performance; see Figure 1. They distinguished between three different types of performance.

Figure 1 about here

The first type relates to financial performance, which is an outcome-based indicator of performance and is described as the “narrowest conception of business performance” (Venkatraman & Ramanujam, 1986, p. 803). Some examples of measures for financial performance include profitability (e.g., ROI), sales growth, and earnings per share. Financial performance indicators are assumed to reflect the achievement of economic goals of the firm. A broader conceptualisation of performance includes financial and operational performance, incorporating non-financial measures. These include, for example, product-market outcomes, such as market share, introduction of new products, and marketing effectiveness and internal process outcomes (e.g., employee satisfaction) (Venkatraman & Ramanujam, 1986; Hult et al. 2008). These operational factors may eventually lead to financial performance (Venkatraman & Ramanujam, 1986). The broadest conceptualisation of performance relates to organisational effectiveness. Some measures for organisational, or overall, effectiveness are survival of the firm, reputation, perceived overall performance, and achievement of goals (Hult et al., 2008). According to Venkatraman and Ramanujam (1986), this broad

conceptualisation has received less attention in the literature, due to the difficulty in measuring effectiveness. Instead, the focus in strategy studies has been primarily placed on financial and operational performance. Venkatraman and Ramanujam (1986) also pointed out some caveats as to the use of two conceptualisations (i.e., financial and operational indicators). In this regard, the issue of dimensionality of business performance should be considered which refers to the conflicting nature of performance dimensions, such as long-term growth and short-term profitability. As a result, Venkatraman and Ramanujam (1986) stated that these different performance dimensions should not be combined into one composite dimension when measuring performance. They suggested that each dimension should be recognised and examined distinctively, or the dimensionality of the conceptualisation of business performance should be tested explicitly.

Hult et al. (2008) included level of analysis in addition to the two dimensions of type of measurement and source of data by Venkatraman and Ramanujam (1986). Level of analysis refers to the firm-level, strategic business unit (SBU)-level, and inter-organisational level. Hult et al. (2008) reviewed the performance measurement literature in international business research from 1995-2005, identifying 96 articles from highly-rated journals in management, marketing and international business, such as *Journal of International Business Studies*, *Strategic Management Journal*, and *Academy of Management Journal*. They found that 57.3% of the studies used primary data sources, whereas 40.6% used secondary data and only 2.1% (i.e., two studies) employed both primary and secondary data sources. With regard to the types of measurement, 32.3% of the assessed studies used two types of measures. Out of these studies, 67.7% employed financial and operational performance, and 32.3% financial and overall effectiveness performance, and only 7.3% of the studies used a combination of all three types of measures. In comparison, 59.4% of all studies used only one type of performance measure. This is not in line with Venkatraman and Ramanujam (1986), who

advocated the use of combinations of types of measures and data sources for organisational performance measurement. With regard to the specific measures of performance, sales-based measures (e.g., sales volume, ratio of foreign sales to total sales, sales growth) were the predominant measure for financial performance (52% of all assessed studies), whereas market share was mostly employed for operational performance (44%), and perceived overall performance was the most frequently used measure for overall effectiveness (47%). As far as the level of analysis is concerned, 52.9% of studies looked at the firm level, followed by the inter-organisational unit (24.5%) and the strategic business unit (22.6%). The vast majority of studies measured performance at one level (92.7%), with 6.3% of the studies measuring performance at two levels, and only one study measuring performance at all three levels.

In the context of export performance, Shoham (1998) identified three dimensions of sales, profitability, and change (in sales and profitability). In the EXPERF scale, Zou, Taylor, and Osland (1998) developed the dimensions of financial export performance, strategic export performance, and satisfaction with export venture. Based on Cavusgil & Zou (1994), Styles (1998) used sales growth and profitability, achievement of strategic objectives, and perception of success as the performance measures. Sousa (2004) categorised export performance measures into sales-related, profit-related, market-related, general and miscellaneous indicators. Katsikeas, Leonidou, and Morgan (2000) differentiated between economic measures (i.e., sales-related, profit-related, and market share-related), non-economic measures (i.e., product-related, market-related, and miscellaneous), and generic measures.

Measurement of Performance of Born Global Firms

The performance of BGs has been measured in a variety of ways. The following discussion is organised according to the level of analysis, frame of reference, time frame, data collection method, and the measures themselves, following Matthyssens and Pauwels' (1996)

classification of performance measurement. Table 1 provides an overview about the measurement of born global performance.

Table 1 about here

Level of Analysis of Born Global Performance Measurement

The level or unit of analysis refers to the organisational level at which performance is measured: corporate, export venture, or product (Katsikeas et al., 2000). The corporate level examines the overall export activity of the firm, whereas research at the export venture level looks at a specific product/market combination. With the product level, an individual product or product line is investigated (Matthyssens & Pauwels, 1996; Katsikeas et al., 2000).

One of the strengths of investigating the corporate level is that it can offer insights into the sustained export performance of a firm (Matthyssens & Pauwels, 1996). Research at the export venture level provides an analysis of the success or failure of a particular product to an overseas market. Yet, it has been argued that the export venture level does not give insights to the long-term export performance of a company in that failure in a particular venture may be considered as part of a learning process for overall corporate export success (Matthyssens & Pauwels, 1996).

The majority of born global studies have used the firm as the unit of analysis when measuring performance. These include, for example, Jantunen et al. (2008), Autio, Sapienza, and Almeida (2000), Crick (2009), Kuivalainen, Sundqvist, and Servais (2007), and Kundu and Katz (2003). There are also some studies that have adopted the venture level, such as Knight and Cavusgil (2004), and Knight et al. (2004), who based their performance measurement scales on Cavusgil and Zou (1994).

Frame of Reference of Born Global Performance Measurement

The frame of reference relates to the standards against which performance is evaluated (Katsikeas et al., 2000). Five frames can be identified: domestic, industry, goal, objective, and subjective (Matthyssens & Pauwels, 1996). With the domestic frame, the performance in an export market is evaluated against the actual performance in the domestic market. Katsikeas et al. (2000) cautioned that the use of a domestic frame of reference may be problematic, due to the focus on export performance in relation to domestic performance. For example, the reasons for high export intensity may lie in poor performance in the domestic market and its small size, rather than efficient export practises. The industry-related frame assesses export performance against the performances of competitors and has, thus, an important strategic dimension, as it gives an indication of the firm's competitive advantage in the market (Chetty & Hamilton, 1993). In the goal-related frame of reference, a firm's export performance is evaluated against its own goals. This is also a suitable approach, as it recognises that each individual firm may have different internal goals in comparison to its competitors. In contrast to the domestic and industry-related frame, it has received less attention in the export literature and has been adopted in few studies (e.g., Cavusgil & Zou, 1994; Diamantopoulos & Kakkos, 2007). In an objective frame of reference, objective indicators of performance are utilised, such as market share and export/sales ratio (Beamish, Craig, & McLellan, 1993). The sample average is often used as the cut-off point between successful and non-successful firms. In a subjective frame, the assessment of performance is based on the reference point that the firms choose, so firms evaluate their export performance according to their own standards. In adopting a subjective frame of reference, Likert-scales are often used as performance indicators (Katsikeas, Piercy, & Ioannidis, 1996). However, the use of a subjective frame has its drawbacks. For example, it may be difficult to compare the results, as the same performance may be viewed as a success by one firm and as a failure by another (Matthyssens

& Pauwels, 1996). In this respect, cultural influences and other contextual factors may play a role in how performance is perceived. According to Matthyssens and Pauwels (1996), an objective frame of reference tends to have a higher reliability than subjective ones, whereas subjective frames are generally assumed to be more valid. However, it should be noted that it is very difficult to get accurate objective performance figures in particular from SMEs due to the sensitivity of the data (Sapienza, Smith, & Gannon, 1988). It has also been reported that subjective measures are correlated with objective performance indicators (Dess & Robinson, 1984). As a result, many studies have adopted a subjective frame of reference as opposed to an objective one (e.g., Robertson & Chetty, 2000; Katsikeas et al., 1996).

In terms of the frame of reference, born global performance studies have predominantly used a domestic and industry-related frame. Examples of a domestic frame include Autio et al. (2000), and Zahra, Ireland, and Hitt (2000), while Kuivalainen et al. (2007) adopted an industry-related frame. Crick (2009) adopted a goal-related frame of reference. Knight and Cavusgil (2004) and Knight et al. (2004) used a combination of a domestic-, industry-, and goal-related frame of reference. Many born global studies have employed subjective measures (e.g., Knight & Cavusgil, 2004; Jantunen et al., 2008; Crick, 2009), whereas objective indicators have been used relatively seldom (McDougall & Oviatt, 1996).

Time Frame of Born Global Performance Measurement

The temporal frame gauges a firm's performance according to a time horizon. Three time frames can be identified: historical, current, and future (Katsikeas et al., 2000). Historical performance has been used frequently in export studies, with time frames for the previous two, three, and five years. For example, Katsikeas et al. (1996) looked at export performance (export sales, market share, and profitability) over the previous three years, whereas Cavusgil and Zou (1994) examined export sales growth and export profitability over the previous five

years. The application of historical performance measures may give some indication of sustained export performance, as it can balance short-term fluctuations of export performance (Katsikeas et al., 2000); this approach has also been termed a “dynamic” orientation (Matthyssens & Pauwels, 1996). In addition, current export performance has been measured in some studies. For example, Brouthers and Nakos (2005) examined current export profitability, relative to domestic market profitability. Very few studies have examined the dimension of future performance. For instance, Robertson and Chetty (2000) asked respondents to estimate their export performance for the next three years.

With regard to the time horizon of born global performance measurement, the focus has been placed on past and current performance. Several studies have examined the international performance of previous years (ranging from one to three). For example, Kuivalainen et al. (2007) looked at profit performance over the last three years, which is consistent with the time frame adopted by Knight et al. (2004). Kundu and Katz (2003) investigated export growth as compared to the previous year. In addition, some studies used the current performance (e.g., McDougall & Oviatt, 1996). No born global performance study was found that considered anticipated future performance.

Data Collection Methods in Born Global Performance Measurement

In terms of the data collection method, two sources of data can be differentiated: primary and secondary. For primary sources, data are obtained directly from firms/organisations through, for example, questionnaires that require managers’ self-assessment of export performance, or interviews with the firms’ management. Secondary data consist of publicly available data, such as firms’ annual reports and published case studies. In terms of the empirical approach, most export studies have used primary data, generally in the form of postal questionnaires and, to a lesser extent, in-depth interviews. Zou and Stan (1998) stated that mail surveys are the

dominant form of data collection in export performance research. The preference for primary data may be attributed to the difficulty of obtaining publicly available data from small firms (Robertson & Chetty, 2000). Furthermore, it has been argued that managers are guided more by subjective measures than objective ones and, thus, perceived performance may be more important than actual performance (Madsen, 1989). In addition, objective and financial data may be difficult to compare in international business research, due to different and sometimes competing accounting standards for international firms (Hult et al., 2008).

Many born global studies have tended to use primary data sources when investigating international performance. This may be explained by the difficulty in obtaining publicly available data from small firms, such as born globals. Among primary sources, several studies used self-administered mail questionnaires (e.g., Knight & Cavusgil, 2004; Jantunen et al., 2008), whereas other researchers adopted interviews and case studies as the data collection method (Chetty & Campbell-Hunt, 2004). Knight and Cavusgil (2004) and Knight, Madsen, and Servais (2004) used a combination of qualitative and quantitative research, by developing a postal survey based on the insights from initial interviews with managers. Crick (2009) used a survey, followed by the main qualitative data collection.

Born Global Performance Measures in Empirical Studies

Export performance measures can be classified into three groups: financial, non-financial, and generic (Matthyssens & Pauwels, 1996; Katsikeas et al., 2000). Financial measures involve sales-, profit-, and market share-related measures, whereas non-financial indicators include factors, such as export market penetration, and the contribution of exporting to company reputation (Sousa, 2004). Generic measures involve, for example, perceived export success, and satisfaction with export performance (Katsikeas et al., 2000). The literature on export performance measures is scattered, as shown by the large number of performance indicators

found in reviews of the export performance literature. For example, Katsikeas et al. (2000) reported 42 different performance indicators and Sousa (2004) found 50 measures. However, there are a few key measures that have been used consistently in export studies. These pertain to financial indicators, and include export intensity (i.e., export/total sales ratio), export sales growth, export sales volume, and export profitability (Katsikeas et al., 2000). This is consistent with Sousa (2004), in a review of 43 export performance studies from 1998-2004. Other measures that were used, but rarely, include contribution of exporting to company reputation, achievement of export objectives, rate of new market entry, and number of export transactions (Sousa, 2004).

When adopting export performance measures, it is possible to use one single indicator, or multiple and composite indicators. One of the limitations of employing a single measure pertains to its inherent difficulty in capturing the multi-dimensionality of performance. In contrast, multiple measures of export performance may provide more insight into the dynamics of performance (Matthyssens & Pauwels, 1996). Similarly, Murphy, Trailer, and Hill (1996) argued that multiple measures of performance should be used. In addition, the dimensionality of performance is an important consideration, which refers to the categories of financial, operational, and organisational effectiveness performance (Venkatraman & Ramanujam, 1986). Generally, the use of performance measures from multiple dimensions is advocated (Hult et al., 2008). The use of multiple dimensions allows the examination of each dimension independently or formation of a composite measure. Venkatraman and Ramanujam (1986) called for the adoption of a multi-dimensional approach, where each performance dimension is examined independently, arguing that a “unidimensional composite of a multidimensional concept such as business performance tends to mask the underlying relationships among the different subdimensions” (p. 807). In the context of export performance, “export sales”, “export growth”, and “export profit” are common dimensions

(Matthyssens & Pauwels, 1996). Other studies have formed a composite scale, by combining different dimensions (e.g., Cavusgil & Zou, 1994).

Many born global studies have adopted financial and generic performance measures, where respondents were asked about their level of satisfaction with their firms' international performance. For example, Knight and Cavusgil (2004) investigated the level of satisfaction with product performance, in terms of market share and sales growth, and looked at the perceived success of the product in its main export market. Similarly, Jantunen et al. (2008) examined the amount of satisfaction with international activities with regard to sales volume, market share, profitability, market entry, image development, and knowledge development. Kuivalainen et al. (2007) used the degree of satisfaction with sales and profit performance. Crick (2009) adopted overseas sales growth, sales volume, profitability and market share. In addition, other economic measures have been used by several authors. For instance, Autio et al. (2000) employed growth in international sales as a percentage of total sales for the previous five years, and Zahra et al. (2000) adopted return on equity (ROE). Mort and Weerawardena (2006) argued that profit and return on investment (ROI) may not be appropriate performance measures for born globals, as these firms may have not yet achieved the stage of sustained growth, and opted to use the entry of born globals into multiple, international markets and rapid market expansion as measures for international performance. In contrast to the export performance literature, export intensity has not been used widely in the measurement of the performance of born global firms; this may be explained by the fact that this indicator is used predominantly as a criterion to define born globals. In addition, born global studies have primarily incorporated financial measures, in accordance with the export performance literature.

To conclude, we reviewed the extant literature on the measurement of born global firms. In doing so, we discussed firm and born global performance to provide an integrated

and comprehensive perspective. The study suggests that there is a wide heterogeneity in employed performance measures. Export sales, export sales growth and export profitability emerge as the most commonly used export performance measures in the literature.

Compared to export performance, the born global performance literature is rather new and is in its relative infancy. In terms of born global performance measurement, several studies have formed single, composite performance measures (e.g., Knight & Cavusgil, 2004; Jantunen et al., 2008), while others examined different types of performance (e.g., sales performance, profit performance, and sales efficiency performance) (Kuivalainen et al., 2007; Crick, 2009). The majority of born global studies tend to use subjective performance measures. While most studies incorporate financial indicators, it can be concluded that there is a wide range of different performance measures employed in born global studies, similar to the export performance literature.

METHODOLOGY

Following Tashakkori and Teddlie (1998), we employed a sequential mixed methods approach which consisted of exploratory interviews and a quantitative survey instrument. It has been argued that mixed methods are suitable for international entrepreneurship due to the integration of the quantitative focus of international business and the qualitative emphasis of entrepreneurship (Hohenthal, 2006).

We operationalised born global firms as companies that had started to internationalise within the first three years after establishment and had obtained at least 25% of total sales from foreign markets within three years. While we acknowledge that there are a multitude of different operationalisations of born globals (see Kuivalainen, Saarenketo, & Puumalainen, 2012), our definition is in line with the widely-used operationalisation of Knight and Cavusgil

(2004) and has been used by several other scholars (e.g., Mort & Weerawardena, 2006; Moen & Servais, 2002).

Qualitative interviews

We conducted eight semi-structured, in-depth interviews with senior managers of born global firms in New Zealand and Australia (five New Zealand, three Australian). The purpose of the interviews was to gain insights into the performance measures that are being adopted by born global firms. In addition, the results from the interviews were being used to operationalize the web-based survey instrument.

Following a purposive sampling approach (Miles & Huberman, 1994), we used two key criteria to select the sample firms: (1) being an exporter and (2) being a New Zealand or Australian-based company. In addition, we selected companies from various industries, including ICT, manufacturing, education, oil, food and wine to provide breadth in the analysis and help improve the generalizability of the findings. The sample firms could all be classified as born globals with an average international sales ratio of 62.9% three years after establishment and a start into internationalisation 1.75 years after formation. In addition, the sample firms had on average 38 employees and were 8.9 years old. The interviews were conducted via Skype (5) or face-to-face (3) at the companies' premises and lasted for approximately 1 hour. The interviews were audio-recorded, transcribed and further analysed using the software NVivo.

Quantitative surveys

The sampling frame for the quantitative web-based survey included 2,000 firms (1,000 from New Zealand and 1,000 from Australia). We used the Dun & Bradstreet database to develop the sampling frame by applying three criteria: (1) being a New Zealand or Australian

company, (2) being an exporter, (3) being established between 1999 and 2009. Relatively young firms were selected in order to reduce memory bias of managers.

We invited 2,000 firms to participate in the study by sending a postal letter which contained the link to the survey prior to following up with two reminder emails. In total, 310 usable responses were obtained accounting for a net response rate of 15.5%.

Measurement

Considering the multidimensionality of performance, we adopted measures on each of the three types of performance based on the influential, seminal studies by Venkatraman and Ramanujan (1986) and Hult et al. (2008): (1) financial performance (i.e., international sales volume, international sales growth, international profitability, ROI from international markets) (e.g. Knight & Cavusgil, 2004; Autio et al., 2000) (2) operational performance (market share in international markets, global reach, new product/service introduction in international markets, time to market for new products/services internationally, number of successful new products/services in international markets, gaining a foothold in international markets) (e.g., Crick, 2009; Kuivalainen et al., 2007; Vorhies, Barker, and Rao, 1999) and (3) organisational effectiveness (international reputation of the firm, overall international performance) (e.g., Jantunen et al., 2008). These performance measures were developed by the extant literature review and the exploratory interviews (see next section). The variables were multi-item factors which were derived from seven-point Likert scale survey items, where 1 means not important at all and 7 means extremely important. Exploratory factor analysis yielded two variables for performance: Financial performance (5 items) and Operational performance (7 items). The measures for organisational effectiveness (i.e., overall international performance and international reputation of the firm) loaded on the financial performance (overall international performance) and operational performance construct

(international reputation of the firm), respectively. Each of the constructs explained more than the recommended 50% of the variance.

RESULTS

The research question of this study relates to the international performance measurement of born globals. Specifically, we examined what important international performance measures are in the context of born globals. In the following section, we outline the results from the qualitative and quantitative portions of the study.

Results from Qualitative Interviews

All interviewees mentioned that they were using a combination of various international performance measures. The managers from COMP1 and COMP2 noted that international performance is generally hard and difficult to measure. The majority of firms placed strong importance on financial measures as demonstrated by the following interview excerpts:

“I guess we measure ourselves with the traditional financial measures. I think interestingly, we do a lot of planning in US dollars because most of our inputs and outputs are US dollars. The only New Zealand components are the staff here really, because we buy everything in US dollars, we sell most things in US dollars so we do a lot of planning in US dollars. We obviously measure ourselves against the competitors in terms of market share, and you know that sort of thing. But really the measurements are I’d say the traditional measurements of revenue growth, profit growth, EBITDA.” (COMP1)

“By sales predominantly and sales volume. And also by the stores that we’re in. But it’s really, it’s more to do with sales growth.” (COMP2)

The interviewee from COMP3 explained the reasons for the importance of financial-based measures:

“It’s all based around financial performance basically. We actually cut a few people out of our programme that weren’t performing. And added a few people into the programme which definitely have raised the bar of who we are and what we do. ... But it all comes down to finances. If it’s not there, we can’t buy it. If the sale hasn’t been made, we can’t move forward. ... At the end of the day, like I said, if my staff member wants a pay rise of 5,000 dollars, and then I view their targets in sales, I mean, where am I supposed to get the money from?” (COMP3)

The most common financial performance measures were international sales volume, international sales growth, return on investment (ROI), and international profit. Besides these measures, the manager from COMP1 mentioned EBITDA (i.e., earnings before interest, tax, depreciation and amortisation), and the representative from COMP4 noted that the company is using the financial value of new clients (i.e., additional revenue by new clients) as an international performance measurement.

In addition to financial measures, operational performance measures were also mentioned during the interviews. For example, the manager from COMP5 noted that the company prefers non-financial rather than financial measures:

“So we are not using any financial measurements for measuring performance, but more the non-financial stuff which is around market share and basically our global reach. So it’s really about basically for us trying to get a global presence in as many major markets as possible and then sort of growing it from there through a combination of direct export, direct investment and sales with our own entity which we have in the USA, and also through licensing.” (COMP5)

Similarly, the representative from COMP4 stated the importance of market share:

“Absolutely, this is very important. Market share is very important for us. 75% of all polytechnics and 50% of all universities in Australia use our products. And seven states in the US are using our product, which I think is a remarkable achievement if you consider that there are only 51 states in the US.” (COMP4)

The manager from COMP1 noted that the time to market for new products is an important operational performance measurement:

“It’s quickly turning prototypes into products or ideas into products, so it’s, you know, product life-cycle. Getting products to markets quickly.” (COMP1)

Market share was the most common operational performance measure adopted by the sample firms. Another important operational measure was global reach, which relates to the strategic, worldwide dispersion of international markets a company is active in. Other measures included marketing measures, such as brand awareness (COMP4), percentage of dollar spent on advertising and promotion (COMP6) and marketing promotion (COMP3); technical

measures, e.g., equipment failure rates (COMP7) and technical benchmarks (COMP8); and miscellaneous measures, such as number of visitors at trade shows and amount of follow-on business from there (COMP5), and website search engine optimisation (COMP3). The results from the interviews were used to develop the measurement items of the survey instrument which is outlined next.

Results from Quantitative Surveys

Our sample consisted of 147 born global firms (102 New Zealand, 45 Australia) and 163 non-born global firms (101 New Zealand, 62 Australia). The BG firms had, on average, 23.4 employees (Non-BG: 28.5), 71.6% (5.9%) international sales three years after establishment, and were 9.6 (11.9) years old. The industry sectors were 27.2% (31.3%) manufacturing, 38.8% (37.4%) services, and 34.0% (31.3%) other (e.g., agriculture, fishing and forestry). T-tests were undertaken to compare the means of various international performance measures between BGs and Non-BGs.

Level of Importance of International Performance Measures

Table 2 shows the T-test results for comparing the mean levels of importance of international performance measures between born global and non-born global firms.

Table 2 about here

BG firms tend to place significantly higher levels of importance on all 12 international performance measures ($p < 0.01$ or $p < 0.05$) compared to Non-BG companies. The ranks of the respective measures are for information purposes only and have not been statistically tested.

Table 3 shows the results pertaining to the comparisons of the mean levels of importance for the aggregated performance measures (i.e., financial and operational performance).

Table 3 about here

Similar to the previous Table 2, born global firms have generally significantly higher levels of importance placed on financial and operational performance ($p < 0.01$) as compared to non-born global firms. In addition, we conducted one-sample T-tests which revealed that BG firms tend to place significantly more importance on financial than operational performance. ($p < 0.01$). The same result was obtained for the one-sample T-test for the Non-BGs ($p < 0.01$).

DISCUSSION AND CONCLUSION

We began this study by asking how important the given performance measures in the literature are for born global firms and further raised the question whether the specific performance dimensions are viewed as equally important by BGs. In this paper, our review of the performance literature revealed three types of performance measures: financial performance measures (i.e., economic, accounting and market outcome-based performance indicators), operational performance measures (i.e., product-market and process outcome-based indicators), and overall organisational effectiveness (i.e., reputation, survival and perceived overall performance). Our review showed that it is advisable to use several different types of measures when investigating performance. It has been suggested to examine measures from across the three performance categories (financial, operational and overall effectiveness) to create a multi-dimensional approach, or to test hypotheses at multiple levels of performance (Hult et al., 2008).

More importantly, we extended the performance literature and examined how importantly these given performance measures were evaluated by born global firms and how born global firms *per se* measured their performance. Recent born-global perspectives offer important insights of this potential “inappropriateness” of given performance measures for born global firms. In contrast to the conventional wisdom that firms expand into foreign

markets through incremental international expansion, recent born global literature indicates that many firms are going international very rapidly from an early stage in their market expansion. In other words, pursuing international growth and opportunities is a top priority and one of the fundamental features for born global firms. We proposed this line of arguments and also found such empirical evidence that born global firms are largely different from non-born global firms in that they are more likely to put more emphasis on international performance than non-born globals. That is, BGs were generally more international performance oriented than non-BGs. In addition, we provided evidence that different performance domains, such as financial performance and operational performance, were not viewed as equally important by born global firms. The findings indicated that born global firms placed a particular importance on financial performance.

A possible explanation of the priority placed on financial performance compared to other domains such as operational performance is that BGs are usually very small and relatively young. While financial performance is often the ultimate goal for many firms, non-financial performance, such as operational performance, may be viewed as an important intermediary instrument as it can fundamentally lead to better financial performance. For instance, market share, as an important operational performance indicator, has been found to influence profitability (Buzzell & Gale, 1987; Szymanski, Bharadwau, & Varadarajan, 1993). Other operational performance measures, such as new product introduction and innovation have also been found to significantly influence company growth and profitability (Zahra, 1993). In order to survive in a hyper-competitive global market, born global firms may thus pay more attention to enhancing financial performance which seems to be a direct and more important indicator of their success due to their unique liabilities of smallness and newness (Autio et al., 2000). Findings from our interviews shed further light on this issue. As the

manager from COMP7 aptly noted “The first rule of business is to stay in business”, which highlights the importance of survival and profitability for the firm.

In sum, born global firms were found to be more international performance oriented than non-born globals. In addition, specific performance domains were not viewed as equally important. Our results indicated that born global firms pay more attention to financial performance than operational performance when going international at an early stage. The theoretical implications of these findings are two-fold. First, while research including multiple conceptualisations and measurements of performance is highly encouraged, further studies should specifically include multiple international oriented, and financial and economic outcome-based performance measures when examining firm performance in the born global context. While various performance domains have been largely studied and analysed both in the IB and born global literature, comparative studies of different performance measures between traditional international companies and born global firms have generally been under-researched. Our study sought to contribute to this advancement by examining the performance measurement evaluated by born global and non-born global firms. We found evidence that one of the novel features of born global firms is their international performance orientation.

The study is subject to some limitations. The sample firms were drawn from Australia and New Zealand which means that our results may not be applicable to other country contexts. In addition, memory bias of managers may have shaped the responses to the surveys and interviews. In conclusion, our study aimed to contribute to the literature by bridging the gap of performance measurement between the born global phenomenon and conventional firms, and thus may provide a first step towards a better understanding of the measurement of performance for born global firms.

REFERENCES

- Andersson, S., & Victor, I. (2003). Innovative internationalization in new firms: Born globals - the Swedish case. *Journal of International Entrepreneurship*, 1(3), 249-276.
- Autio, E., Sapienza, H. J., & Almeida, J. G. (2000). Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of Management Journal*, 43(5), 909-924.
- Beamish, P. W., Craig, R., & McLellan, K. (1993). The performance characteristics of Canadian versus U.K. exporters in small and medium sized firms. *Management International Review*, 33(2), 121-137.
- Brouthers, L. E., & Nakos, G. (2005). The role of systematic international market selection on small firms' export performance. *Journal of Small Business Management*, 43(4), 363-381.
- Buzzell, R.D., & Gale, B.T. (1987). *The PIMS principles: Linking strategy to performance*. New York: Free Press.
- Cavusgil, S. T., & Zou, S. M. (1994). Marketing strategy-performance relationship: An investigation of the empirical link in export ventures. *Journal of Marketing*, 58(1), 1-21.
- Chetty, S., & Campbell-Hunt, C. (2004). A strategic approach to internationalization: A traditional versus a "born-global" approach. *Journal of International Marketing*, 12(1), 57-81.
- Chetty, S., & Hamilton, R. T. (1993). The export performance of smaller firms: A multi-case study approach. *Journal of Strategic Marketing*, 1(4), 247-256.
- Crick, D. (2009). The internationalisation of born global and international new venture SMEs. *International Marketing Review*, 26(4/5), 453-476.
- Dess, G. G., & Robinson, R. B. (1984). Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit. *Strategic Management Journal*, 5(3), 265-273.
- Diamantopoulos, A., & Kakkos, N. (2007). Managerial assessments of export performance: Conceptual framework and empirical illustration. *Journal of International Marketing*, 15(3), 1-31.
- Dimitratos, P., Lioukas, S., & Carter, S. (2004). The relationship between entrepreneurship and international performance: the importance of domestic environment. *International Business Review*, 13, 19-41.
- Efrat, K., & Shoham, A. (2012). Born global firms: The differences between their short- and long-term performance drivers. *Journal of World Business*, 47, 675-685.
- European Commission (2010). *Internationalisation of European SMEs*. Brussels: European Union.
- European Commission (2011). *Opportunities for the internationalisation of European SMEs*. Brussels: European Union.
- Freeman, S., Edwards, R., & Schroder, B. (2006). How smaller born global firms use networks and alliances to overcome constraints to rapid internationalization. *Journal of International Marketing*, 14(3), 33-63.
- Gabrielsson, M., & Kirpalani, V. H. M. (2004). Born globals: How to reach new business space rapidly. *International Business Review*, 13(5), 555-571.
- Gleason, K.C., & Wiggernhorn, J. (2007). Born globals, the choice of globalization strategy, and the market's perception of performance. *Journal of World Business*, 42, 322-335.
- Hohenthal, J. (2006). Integrating qualitative and quantitative methods in research on international entrepreneurship. *Journal of International Entrepreneurship*, 4(4), 175-190.
- Hult, G. T. M., Ketchen Jr, D. J., Griffith, D. A., Chabowski, B. R., Hamman, M. K., Dykes, B. J., Pollitte, W. A., & Cavusgil, S. T. (2008). An assessment of the measurement of performance in international business research. *Journal of International Business Studies*, 39(6): 1064-1080.
- Jantunen, A., Nummela, N., Puumalainen, K., & Saarenketo, S. (2008). Strategic orientations of born globals - Do they really matter? *Journal of World Business*, 43(2), 158-170.

- Johanson, J., & Vahlne, J. E. (1977). The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8(1), 23–32.
- Katsikeas, C. S., Leonidou, L. C., & Morgan, N. A. (2000). Firm-level export performance assessment: Review, evaluation, and development. *Journal of the Academy of Marketing Science*, 28(4), 493–511.
- Katsikeas, C. S., Piercy, N. F., & Ioannidis, C. (1996). Determinants of export performance in a European context. *European Journal of Marketing*, 30(6), 6–35.
- Kim, D., Basu, C., Naidu, G.M., & Cavusgil, E. (2011). The innovativeness of Born-Globals and customer orientation: Learning from Indian Born-Globals. *Journal of Business Research*, 64, 879–886.
- Knight, G. A. (2001). Entrepreneurship and strategy in the international SME. *Journal of International Management*, 7(3): 155–171.
- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, 35(2), 121–141.
- Knight, G. A., & Kim, D. (2009). International business competence and the contemporary firm. *Journal of International Business Studies*, 40(2), 255–273.
- Knight, G. A., Madsen, T. K., & Servais, P. (2004). An inquiry into born-global firms in Europe and the USA. *International Marketing Review*, 21(6), 645–665.
- Kocak, A., & Abimbola, T. (2009). The effects of entrepreneurial marketing on born global performance. *International Marketing Review*, 26(4/5), 439–452.
- Kuivalainen, O., Sundqvist, S., & Servais, P. (2007). Firms' degree of born-globalness, international entrepreneurial orientation and export performance. *Journal of World Business*, 42(3), 253–267.
- Kuivalainen, O., Saarenketo, S., & Puumalainen, K. (2012). Start-up patterns of internationalization: A framework and its application in the context of knowledge-intensive SMEs. *European Management Journal*, 30(4), 372–385.
- Kundu, S. K., & Katz, J. A. (2003). Born-International SMEs: BI-level impacts of resources and intentions. *Small Business Economics*, 20(1), 25–47.
- Li, L., Qian, G., & Qian, Z. (2012). Early internationalization and performance of small high-tech “born-globals”. *International Marketing Review*, 29(5), 536–561.
- Liesch, P., Steen, M., Middleton, S., & Weerawardena, J. (2007). *Born to be global: A closer look at the international venturing of Australian born global firms*. Australian Business Foundation.
- Madsen, T. K. (1989). Successful export marketing management: Some empirical evidence. *International Marketing Review*, 6(4), 41–57.
- Madsen, T. K., & Servais, P. (1997). The internationalisation of born globals: An evolutionary process? *International Business Review*, 6, 561–583.
- Matthyssens, P., & Pauwels, P. (1996). Assessing export performance measurement. In S. T. Cavusgil & T. K. Madsen (Eds.), *Advances in International Marketing*. New York: JAI Press.
- McDougall, P. P., & Oviatt, B. M. (1996). New venture internationalization, strategic change, and performance: A follow-up study. *Journal of Business Venturing*, 11(1), 23–40.
- Moen, O., & Servais, P. (2002). Born global or gradual global? Examining the export behavior of small and medium-sized enterprises. *Journal of International Marketing*, 10(3), 49–72.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks: Sage.
- Mort, G. S., & Weerawardena, J. (2006). Networking capability and international entrepreneurship - How networks function in Australian born global firms. *International Marketing Review*, 23(5), 549–572.
- Murphy, G. B., Trailer, J. F., & Hill, R. C. (1996). Measuring performance in entrepreneurship research. *Journal of Business Research*, 36(1), 15–23.

- Oviatt, B. M., & McDougall, P. P. (1994). Toward a theory of international new ventures. *Journal of International Business Studies*, 25(1), 45-64.
- Park, T., & Rhee, J. (2012). Antecedents of knowledge competency and performance in born globals - The moderating effects of absorptive capacity. *Management Decision*, 50(8), 1361-1381.
- Rennie, M. W. (1993). Born global. *McKinsey Quarterly*, 4, 45-52.
- Robertson, C., & Chetty, S. K. (2000). A contingency-based approach to understanding export performance. *International Business Review*, 9(2), 211-235.
- Sapienza, H. J., Smith, K. G., & Gannon, M. J. (1988). Using subjective evaluations of organizational performance in small business research. *American Journal of Small Business*, 12(3), 45-53.
- Schwens, C., & Kabst, R. (2008). How early internationalizers venture abroad: A review. In R. Moser (Ed.), *Ausländische Direktinvestitionen: Neuere Entwicklungen, Entscheidungsinstrumente und führungsrelevante Folgen*. Wiesbaden: Gabler.
- Shoham, A. (1998). Export performance: A conceptualization and empirical assessment. *Journal of International Marketing*, 6(3), 59-81.
- Snow, C. C., & Hrebiniak, L. G. (1980). Strategy, distinctive competence and organizational performance. *Administrative Science Quarterly*, 25(2), 317-335.
- Sousa, C. M. P. (2004). Export performance measurement: An evaluation of the empirical research in the literature. *Academy of Marketing Science Review*, 4(9), 1-22.
- Styles, C. (1998). Export performance measures in Australia and the United Kingdom. *Journal of International Marketing*, 6(3), 12-36.
- Szymanski, D., Bharadwaj, S. G., & Varadarajan, P. R. (1993). An analysis of the market share-profitability relationship. *Journal of Marketing*, 57(3), 1-18.
- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Venkatraman, N., & Ramanujam, V. (1986). Measurement of business performance in strategy research: A comparison of approaches. *Academy of Management Review*, 11(4), 801-814.
- Vorhies, D. W., Harker, M., & Rao, C. P. (1999). The capabilities and performance advantages of market-driven firms. *European Journal of Marketing*, 33(11/12), 1171-1202.
- WTO (2010). *International trade statistics 2010*. Geneva: WTO.
- Zahra, S. A. (1993). Environment, corporate entrepreneurship, and financial performance: A taxonomic approach. *Journal of Business Venturing*, 8(4), 319-340.
- Zahra, S. A., Ireland, R. D., & Hitt, M. (2000). International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of Management Journal*, 43(5), 925-950.
- Zhang, M., Tansuhaj, P., & McCullough, J. (2012). International entrepreneurial capability: The measurement and a comparison between born global firms and traditional exporters in China. *Journal of International Entrepreneurship*, 7(4), 292-322.
- Zhou, L., Wu, W., & Luo, X. (2007). Internationalization and the performance of born-global SMEs: the mediating role of social networks. *Journal of International Business Studies*, 38, 673-690.
- Zou, H., & Ghauri, P. N. (2010). Internationalizing by learning: the case of Chinese high-tech new ventures. *International Marketing Review*, 27(2), 223-244.
- Zou, S., & Stan, S. (1998). The determinants of export performance: A review of the empirical literature between 1987 and 1997. *International Marketing Review*, 15(5), 333-356.
- Zou, S., Taylor, C. R., & Osland, G. E. (1998). The EXPERF scale: A cross-national generalized export performance measure. *Journal of International Marketing*, 6(3), 37-58.

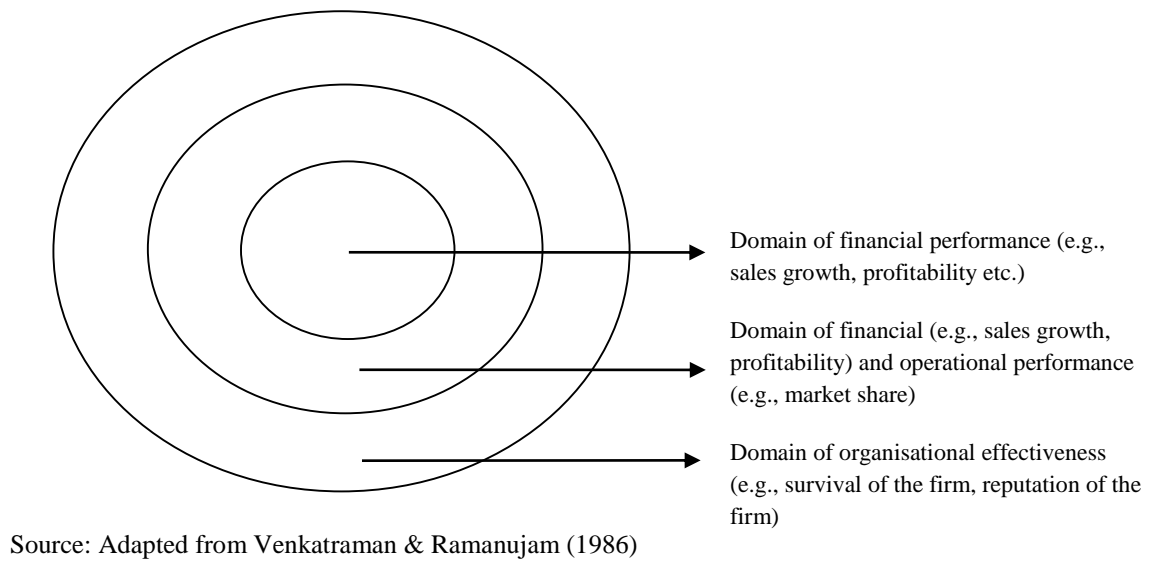
Figure 1: Domains of Business Performance

Table 1. Measurement of Performance for Born Global Firms

Authors	Type of performance measure	Types of data	Level of analysis	Industry	Country	Journal ¹
McDougall & Oviatt (1996)	Financial performance: International sales ratio, return on investment (ROI)	Primary: Survey	Firm	Manufacturing	US	JBV
Autio, Sapienza, & Almeida (2000)	Financial performance: International sales growth	Secondary: Panel data	Firm	Electronics	Finland	AMJ
Kundu & Katz (2003)	Financial performance: Export growth, exports as a percentage of total sales	Primary: Survey	Firm	Software	India	Small Business Economics
Dimitratos, Lioukas, & Carter (2004)	Financial performance: Foreign country sales ratio	Primary: Survey	Firm	Food, beverages, garments, footwear, software	Greece	IBR
Knight & Cavusgil (2004)	Sales growth, pre-tax profitability, ROI, market share, perceived success of venture	Primary: Interviews and surveys	Export venture	Manufacturing	US	JIBS
Knight, Madsen, & Servais (2004)	Financial performance: Sales growth, pre-tax profitability, ROI, market share	Primary: Interviews and surveys	Export venture	Manufacturing	Denmark, US	IMR
Mort & Weerawardena (2006)	International market performance: Entry into multiple markets, rapid market expansion	Primary: Case studies	Firm	Hi-tech and low-tech industry	Australia	IMR
Kuivalainen, Sundqvist, & Servais (2007)	<i>Export sales</i> : Export sales growth, satisfaction with export volume, market share, and rate of new market entry; <i>Export profits</i> : Satisfaction with export profits, overall profitability; <i>Sales efficiency performance</i> : Ratio of firm's total annual export sales turnover to the total number of employees, ratio of total annual export sales turnover to the total number of countries exported to	Primary: Survey	Firm	Not specified	Finland	JWB

Authors	Type of performance measure	Types of data	Level of analysis	Industry	Country	Journal ¹
Gleason & Wiggenhom (2007)	Financial performance: Profitability (ROA, ROE)	Secondary	Firm	Not specified	US	JWB
Zhou, Wu, & Luo (2007)	Financial performance: Export, profitability, and total sales growth	Primary: Survey	Firm	Manufacturing	China	JIBS
Jantunen, Nummela, Puumalainen, & Saarenketo (2008)	Sales volume, market share, profitability, market entry, image development, knowledge development, overall performance	Primary: Survey	Firm	Industrial sectors	Finland	JWB
Crick (2009)	Overseas sales growth, overseas sales volume, overseas profitability, overseas market share	Primary: Survey and case studies	Firm	Technology	UK	IMR
Kocak & Abimbola (2009)	Not specified	Primary: Interviews	Firm	Various industries	Turkey	IMR
Kim, Basu, Naidu, & Cavusgil (2011)	Financial performance	Primary: Survey	Firm	Not specified	India	IBR
Efrat & Shoham (2012)	Strategic performance	Primary: Interviews and survey	Firm	High-tech	Israel	JWB
Li, Qian, & Qian (2012)	Financial performance: Profit margin/ return on sales	Primary: Survey	Firm	High-tech	US	IMR
Park & Rhee (2012)	Financial performance: International sales ratio	Primary: Survey	Firm	Various industries	South Korea	Management Decision
Zhang, Tansuhaj, & McCullough (2012)	Financial performance Strategic performance	Primary: Survey	Firm	Manufacturing	China	Journal of International Entrepreneurship

¹JBV: Journal of Business Venturing, AMJ: Academy of Management Journal, IBR: International Business Review, JIBS: Journal of International Business Studies, IMR: International Marketing Review, JWB: Journal of World Business.

Table 2: T-test Results for Level of Importance of International Performance Measures¹

Classification	Variable		BG firms	Rank	Non-BG firms	Rank	Sig.
Financial performance	International sales volume	Mean	6.61	1	5.60	3	***
		Std. Deviation	0.74		1.36		
		N	147		161		
Financial performance	International sales growth	Mean	6.52	2	5.52	=4	**
		Std. Deviation	0.82		1.37		
		N	147		160		
Financial performance	International profitability	Mean	6.36	3	5.77	2	**
		Std. Deviation	0.94		1.18		
		N	146		159		
Financial performance	Overall international performance	Mean	6.32	4	5.52	=4	**
		Std. Deviation	0.95		1.34		
		N	146		161		
Operational performance	International reputation of the firm	Mean	6.19	5	5.91	1	*
		Std. Deviation	1.07		1.18		
		N	147		159		
Financial performance	Return on investment (ROI) from international business	Mean	6.04	6	5.50	6	**
		Std. Deviation	1.08		1.34		
		N	147		160		
Operational performance	Gaining a foothold in international markets	Mean	5.94	7	5.36	7	**
		Std. Deviation	1.22		1.43		
		N	147		160		
Operational performance	New product/service introduction in international markets	Mean	5.67	8	4.99	8	**
		Std. Deviation	1.23		1.51		
		N	146		161		
Operational performance	Global reach (i.e. presence in strategically located countries worldwide)	Mean	5.37	9	4.62	9	**
		Std. Deviation	1.52		1.70		
		N	147		160		
Operational performance	Number of successful new products/services in international markets	Mean	5.30	10	4.58	11	**
		Std. Deviation	1.36		1.52		
		N	145		158		
Operational performance	Time to market for new products/services internationally	Mean	5.29	11	4.60	10	**
		Std. Deviation	1.39		1.70		
		N	145		159		
Operational performance	Market share in international markets	Mean	5.05	12	4.21	12	**
		Std. Deviation	1.55		1.77		
		N	146		160		

* $p < 0.05$; ** $p < 0.01$ ¹ Scale of 1 (Not important at all) to 7 (Extremely important)

Table 3. T-test Results for Level of Importance of International Performance Measures (by Types of Performance) ¹

Variable		BG firms	Non-BG firms	Sig.
Financial performance	Mean	6.38	5.58	**
	Std. Deviation	0.70	1.08	
	N	145	157	
Operational performance	Mean	5.52	4.91	**
	Std. Deviation	1.00	1.19	
	N	142	155	

* $p < 0.05$; ** $p < 0.01$

¹ Scale of 1 (Not important at all) to 7 (Extremely important)