May 4, 2017

Born Globals and Accidental Internationalists: Has Hennart (2014) Opened a Can of Worms?

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Accepted for publication in the Review of International Business and Strategy – 4 May 2017

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Has Hennart (2014) Opened a Can of Worms?

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ABSTRACT

Purpose: This paper is a response to Hennart's (2014) challenge to the existing born global literature. In his challenge, Hennart proposes a simpler explanation of why some firms internationalize earlier and more aggressively than others. However, such a parsimonious model of born global firms raises the awkward question of whether born global firms are indeed any different from firms that internationalize more gradually.

Design: Using two extensive surveys of Australian exporters, this paper first explores the degree to which a set of six 'facilitating factors' that Hennart puts forward are different across born global and non-born global firms. Next, it tests the second aspect of the debate highlighted above – i.e. whether born global firms behave differently from non-born global firms. This is done by testing for differences in the patterns of early market selection for born global and non-born global firms.

Findings: Support is found for both the role of facilitating factors, and for the view that born global firms behave differently from non-born global firms. As a result it is proposed that the Hennart and the RBV-oriented explanations of born global firms need to be viewed as complementary, rather than competing. Each may represent a necessary but not sufficient condition with respect to born global firms.

Originality: A systematic testing for differences in facilitating factors and market selection patterns across born global and non-born global firms are both issues that have major implications for the born global literature, and yet have been left largely unexplored to date.

Keywords: Born Global, International New Ventures, market selection

1. INTRODUCTION

Whether you describe the research as international entrepreneurship (IE), the investigation of born global firms (Knight and Cavusgil, 1996), the investigation of International New Ventures (McDougall et al., 1994), or the investigation of early and rapidly internationalizing ventures (Madsen, 2013), researchers in these related fields could not be blamed for feeling self-satisfied in recent years. Research on this novel cohort of small firms that internationalize at an extraordinarily young age, and to an extraordinarily high degree is flourishing. With the 2014 JIBS Decade Award going to Cavusgil and Knight (2015), these related fields have now reached an undeniable level of maturity and respect. Indeed, this is the second JIBS Decade Award given to work in this field in the past 10 years (Oviatt and McDougall, 2005), and at the most recent AIB conferences, the track relating to these topics regularly out draw other tracks in terms of the number of paper submissions. In essence, while there are still substantial opportunities for future work (Cavusgil and Knight, 2015) and some differences in terminology (Coviello, 2015), the literature has gradually begun to coalesce around a common set of constructs and models to the extent that Zander et al. (2015: 29) suggest that "the field already harbours the main ingredients of an overarching and integrative entrepreneurship perspective". However, a recent paper by Hennart (2014), evoking the concept of an '*accidental internationalist'*, may possibly have opened a 'can of worms' in this respect. As will be discussed in further detail in the literature review, Hennart (2014) boldly challenges the core assumptions concerning why born global (BG) firms exist, suggesting that they may be nothing more than firms rationally responding to their environment and intrinsic aspects of the opportunities that they are trying to exploit. This challenge is provocative because it brings to the forefront an even more fundamental question of whether BG firms are truly a distinct type of firm. This is a critical point given that a great deal of the existing BG literature[1] studies BG firms in isolation (Zander et al., 2015). Such studies are predicated on the assumption that BG firms are a distinct form of organization and thus warrant separate investigation. If that assumption is incorrect, then the entire basis of those studies is called into question.

Using two pre-existing surveys of Australian exporters, this paper sets out to empirically explore two related issues raised by Hennart (2014). The first is a direct implication of his 'accidental internationalist' thesis. Are the factors put forward by Hennart (2014), such as low transportation and adaptation costs, and a focus on niche products that are highly differentiated based on innovation, strongly related to BG firms? Hennart (2014) is by no means the first to mention such factors in connection with BG firms, but few papers to my knowledge have systematically compared BG firms with firms that follow a more gradual internationalization path (i.e. non-BG firms) with respect to these dimensions. The second issue is an implicit implication of Hennart's thesis. Do BG firms represent a distinct type of organisation? I.e. do BG firms behave differently than firms that internationalize in a more traditional manner? This later and indirect implication of Hennart (2014) is arguably the more critical issue as it is an underlying assumption of virtually all the work in this field, and yet to my knowledge no work has systematically addressed it.

As a result, this paper is significant for two main reasons. First, as mentioned above, it is one of the first papers to empirically explore the propositions put forward by Hennart (2014) in his 'accidental internationalist' thesis in a systematic manner (i.e. comparing and contrasting BG and non-BG firms from a common population along each of the dimensions). Second, it is one of the first papers to empirically test whether BG firms truly do behave in a manner different from non-BG firms; and thus, test whether it is justified to view them a distinct type of firm and worthy of independent investigation. This latter issue is not a trivial exercise given that BG firms are typically identified based on their behaviours; thus one needs to identify a second, independent, but related type of behaviour in which to test this proposition. In addition to that, this paper is noteworthy in a historical sense as one of the two data sets employed here is the original Australia Manufacturing Council (AMC) dataset that Rennie (1993) was investigating when he first coined the term 'born global'. Thus the data set itself is of historical interest.

The next section, the literature review, briefly covers the early history of this stream of literature, and then focuses on the literature directly relevant to the propositions put forward by Hennart (2014).

The hypotheses are then developed, and the methodology employed to test them is then explained. Finally, the results are presented, followed by some concluding remarks.

2. LITERATURE REVIEW

The Origins of the Concept

The first reference to the term born global was made by Rennie (1993). During an investigation into 'emerging' Australian exporters on behalf of the Australian Manufacturing Council, the McKinsey & Co consultants observed that approximately one quarter of the firms began exporting in substantial quantities very early in their organizational lifespan. Regardless of whether one subscribes to the Uppsala internationalization model (Johanson and Wiedersheim-Paul, 1975) or the innovation-based internationalization model (Bilkey and Tesar, 1977), both models observe and/or predict that firms will first develop a strong domestic base; and then gradually expand internationally in discrete stages. Thus, the Australian data seemed to indicate that a substantial number of firms did not conform to 'traditional theory'. This observation was quickly picked up by Cavusgil (1994) and a formal definition for BG firms was soon developed (Knight and Cavusgil, 1996).

In parallel to this, similar observations and conclusions were emerging from the 'entrepreneurship' literature (Jolly et al., 1992, Oviatt and McDougall, 1994); however McDougall, et al (1994) referred to these firms as 'international new ventures' (INV). While there are some distinctions between the two constructs (Coviello, 2015), there is also a great deal of overlap. Indeed Cavusgil and Knight (2015) argue that BG firms can be viewed as a subset of INVs; echoing Oviatt and McDougall's (1994: 59) earlier claim that a BG "… is the most radical manifestation of the international new venture ...". For the purposes of this paper, the term born global (or BG) will be used largely because that is the context within which Hennart (2014) framed his arguments, and because both papers from which the data sets for this paper are drawn (Dow, 2001, Rennie, 1993) used the born global terminology.

As an aside, it should be noted that while the concept of a BG or INV firm only came to the forefront of IB theory in the mid-1990s, multiple authors (e.g. Oviatt and McDougall, 1994, Knight and Cavusgil, 1996, Zahra, 2004) have argued that such firms existed well before the current wave of globalization. Examples of this include many of the works on internationalization a decade earlier (e.g. Cavusgil, 1984a, Cavusgil, 1984b, Denis and Depelteau, 1985).

Methodologically, the BG literature followed a fairly typical development path. After the initial pioneering articles (Rennie, 1993, Knight and Cavusgil, 1996, McDougall et al., 1994), the literature was dominated by numerous case studies (e.g. Jones, 1999, Bell et al., 2001, Chetty and Campbell-Hunt, 2004, Bengtsson, 2004), attempting to reconcile these observations with existing internationalisation theories, and exploring them more deeply. This is a methodological approach which still represents a large portion of the BG literature to this day (e.g. Zucchella et al., 2016, Hewerdine and Welch, 2012). In parallel, numerous theory and review articles (e.g. Madsen and Servais, 1997, Coviello and Jones, 2004, Zahra, 2005) have also appeared - attempting to explain the phenomena and reconcile the results.

In terms of quantitative investigations into BG firms, there has been a relatively steady flow of work since 2000; however, led by Knight and Cavusgil (2004), the majority of these studies have focused on explaining the performance of BG firms (e.g. Hilmersson and Johanson, 2016, Mudambi and Zahra, 2007, Gerschewski et al., 2015, Zahra et al., 2000). Only a very limited number of the investigations have focussed on empirically confirming the differences between BG firms and firms which internationalize in a more gradual fashion; and the majority of these have tended to focus on factors that Baum et al. (2015) argue is consistent with the resource-based view (RBV) approach – e.g. firm-specific resources and capabilities, and characteristics of the founding entrepreneur and/or the top management team. Foremost among what is grouped together as RBV-related factors are the concepts such as international entrepreneurial orientation (Knight and Cavusgil, 2004), the global orientation of the firm (Moen, 2002), the prior international experience of the entrepreneurial founders (Baum et al., 2015, Zucchella et al., 2007, Reuber and Fischer, 1997, Bloodgood et al., 1996), and the

strength of their networks (Zucchella et al., 2007, Cannone and Ughetto, 2014). These factors all implicitly or explicitly assume that the key distinguishing feature between BG and non-BG firms are factors internal to the firms.

This slant of the BG literature (i.e. a heavy emphasis on qualitative methodologies, plus a focus within the quantitative literature on a) firm performance as the dependent variable, and b) RBV-related factors as the explanatory variables) is critical in light of Hennart (2014) arguments about '*accidental internationalists'*. Hennart (2014) argues that the explanation of why one firm follows a BG path, while another firm follows a non-BG path is in fact attributable to a much simpler set of factors which in fact do not require any dramatic new theories, nor a new type of firm. One group of such factors is what I will be referred to as 'push factors' – for example the suggestion that BG firms tend to originate from home markets with smaller economies. This set of factors is not new and has already been supported by the findings of Fan and Phan (2007), Cannone and Ughetto (2014), Moen (2002). The arguments here build on the age old proposition that, given the constraints on a start-up firm, both in terms of available capital and managerial capacity (Penrose, 1959), they will tend to exploit the most convenient opportunities first - i.e. their home market (Hirsch and Adar, 1974). However, in the case of countries with small domestic economies, firms may tend to exhaust their domestic opportunities much earlier. Thus firms from smaller economies are 'pushed' into the international arena earlier.

The second set of factors that Hennart (2014) focusses on is what I will be call 'facilitating factors'. These are factors which may encourage a firm to internationalize much earlier and more intensely not because the firm has superior capabilities or a different mind-set, nor because the firm was pushed into the international arena earlier, but rather because the nature of some opportunities in foreign markets present less barriers and require less resources (Kahiya, 2013). Hennart (2014: 126) categorizes these factors into three groups: a) selling highly differentiated niche products and services to internationally dispersed customers, b) selling products and services which require less adaptation, and c) selling products and services which are inherently cheaper in terms of communication and

transportation costs. While each of these factors has been previously acknowledged conceptually, particularly by the early scholars in the field (e.g. Oviatt and McDougall, 1994, Madsen and Servais, 1997, Knight and Cavusgil, 1996); it would appear that only limited aspects of Hennart's first group of factors - 'a niche focus' and 'strong product differentiation' - have received any attention in the empirical literature discriminating between BG firms and traditional internationalizing firms (Cannone and Ughetto, 2014, Zucchella et al., 2007, Moen, 2002, Aspelund and Moen, 2001).

In my mind, the limited amount of empirical investigation into why some firms become BG and others do not; and within that, the lack of focus on 'push factors' and 'facilitating factors' represents a significant gap in the BG literature. The majority of researchers in the field would appear to at least acknowledge that such factors are potentially relevant, and yet minimal effort has been invested in empirically confirming whether that is true or not. Instead the vast majority of the research effort has focussed on RBV-related factors.

In addition to this, Hennart's thesis has potentially broader implications. If, as Hennart (2014) suggests, firms that internationalize early and more intensely are merely rationally responding to the nature of their environment and the nature of opportunities that they are attempting to exploit, then we may not need any new theory to explain the phenomena. Indeed, it may call into question whether BG firms actually are a distinct type of organisation. It is for this reason I suggest that Hennart (2014) may have 'opened a can of worms'. If he is correct, the commonly–practiced approach of studying BG firm in isolation may not be justified.

In some respects this aspect of Hennart's thesis is not entirely new. Moen and Servais (2002: 49) raise the issue more than a decade earlier when they question "whether this actuality [the observation that some firms appear to internationalize very early and aggressively] indicates simply a reduced time factor in the pre-export phase or an important change in the export behaviour of firms?" More recently Fan and Phan (2007:1113) echo similar sentiments when they suggest that "[born global firms] need not be a distinct breed of firms." Moen and Servais (2002) address this issue empirically by comparing BG firms with firms that internationalize more gradually in terms of other

internationalization behaviours. Specifically they explore whether the two types of firms different in terms of market selection – i.e. following the 'psychic distance postulate' (Petersen and Pedersen, 1997) of exporting to more psychically proximate markets first - and in terms of their entry mode choices[2]. Unfortunately, the Moen and Servais (2002) results are somewhat ambiguous in that they find significant differences in market selection patterns for Norwegian firms, but not for Danish, nor French firms, and no significant differences in terms of entry mode choices. The work of Madsen et al. (2000) addresses a similar set of topics and appears to reflect similar findings, although the paper is purely descriptive and does not supply any statistical tests. Beyond that, to my knowledge, the only paper which explores differences in firm behaviours between BG and non-BG firms is a research note by Lopez et al. (2009)[3]. Lopez et al. (2009) contrast the market selection patterns of Costa Rican software companies and observe that the firms they classify as BG do focus to a greater extent on 'global customers'. Unfortunately, given that their sample only includes six BG firms, they are unable to conduct formal statistical tests.

The net result is that i) in terms of exploring the extent to which 'push factors' and 'facilitating factors' explain whether a firm follows a BG or non-BG path, and ii) whether BG firms actually behave any differently than non-BG firms in dimensions other than the ones used to define them, the BG literature in general has not extensively explored and tested either issue, and the results to date remain ambiguous. However, in putting forward these arguments, it is not my intention to deny the existence of rigorous empirical research concerning BG firms. There have been many excellent studies, particularly concerning the antecedents of performance amongst BG firms (Zahra et al., 2000, McDougall and Oviatt, 1996, Autio et al., 2000, Knight and Cavusgil, 2004), but to a large extent these articles are predicated on a particular assumption – that the BG firm represents a truly distinct type of organisation. I.e. do they act in a sufficiently distinct manner such that we require separate models, theories and investigations in order to explain their performance and behaviour? Indeed is it appropriate and necessary when conducting research, to identify them and treat them as a separate sample population, as Knight and Cavusgil (2004) does?

In light of these issues, a specific set of hypotheses are developed to both test the role of 'facilitating factors' in terms of determining whether a firm follows a BG or non-BG path, and whether BG firms do behave in a distinct manner from non-BG firms.

3. HYPOTHESES

Transportation Cost Intensity

From amongst the various 'facilitating factors' that have been mentioned, the idea that BG firms are likely to be more prevalent in industries and market segments where transportation costs are inherently lower is arguably one of the more obvious explanations, and is one that has been acknowledged in the BG literature from the earliest days (e.g. Oviatt and McDougall, 1994, Chetty and Campbell-Hunt, 2004, Knight, 1997, Madsen and Servais, 1997). In effect, businesses that have a lower transportation cost intensity, whether it arises from a higher value to weight ratio or other aspects of the transportation process, will have lower marginal costs for their international sales. This will increase the attractiveness of international sales relative to domestic sales, and raise the likelihood that the firm will follow a born global approach to internationalization. Thus it is not surprizing that Hennart (2014) includes lower transportation costs as one of his explanatory factors; however, what is surprising is that exceptional few studies have included it in their empirical analyses.[4] Thus it is proposed that:

H1: The transportation cost intensity (i.e. transportation costs for a given distance) will be lower for born global firms than it is for non-born global firms.

A Focus Strategy & the Concentration of Customers

Another frequent observation with respect to BG firms is their preference for focussing on market niches (e.g. Moen, 2002, Knight and Cavusgil, 1996, Zucchella et al., 2016, Cannone and Ughetto, 2014). In his discussions, Hennart (2014) tends to link this narrow focus with high levels of product differentiation (e.g. advanced technology, superior design and craftsmanship, and high quality);

however, for the purposes of developing the hypotheses the two concepts will be separated. In addition to that, the issue of a narrow focus will be linked with a related factor: the concentration of potential customers – as the two will often overlap both empirically (e.g. as a firm narrows its focus, this will often coincide with a decrease in the number of potential customers) and in terms of the underlying theoretical explanations.

The main argument here is that a narrower focus and/or a smaller number of potential customers, may change, and simplify the selling process (Hennart, 2014). Under such circumstances the customers may be easier to identify, and the communication process would tend not to involve mass media techniques, which would inherently favour larger firms. The narrow range of customers may also result in a more homogeneous set of customers, once again lowering the cost to serve them (Hennart, 2014).

There may also be a 'path dependency' factor at work here as well. Many of the entrepreneurs who start up BG firms come into possession of a monopolistic advantage through their previous employment. This is more likely to be the case if that advantage pertains to a niche market. The entrepreneur's previous institution (employer or otherwise) is less likely to dispute the ownership rights of an innovation if the potential market for the innovation is small. But by the same token, if the potential demand in any one country is small, exploiting multiple markets becomes more critical in order to achieve breakeven. Thus, if the monopolistic advantage does pertain to a niche product, then the new firm is more likely to internationalise early.

As a result two related hypotheses are proposed. The first simply echoes the predictions and pronouncements of numerous scholars as recounted above, and has been tested and confirmed by a modest number of researchers (Cannone and Ughetto, 2014, Zucchella et al., 2007, Moen, 2002, Aspelund and Moen, 2001).

H2a: Born global firms will tend to have a narrower customer/product focus, relative to their competitors, than non-born global firms.

The second hypothesis within this set concerns the concentration of the potential customers. While in many circumstances these two factors (i.e. focus and concentration of customers) will coincide, the concept of focus is often used in a relative sense - i.e. 'my firm is more focussed than other firms in the same market'. However, most of the preceding arguments are equally applicable to situations where the customer base for the entire industry is very concentrated. This is an aspect that to my knowledge has not been explored and empirically tested within the available literature. Thus it is also propose that:

H2b: Born global firms will tend to have a more concentrated set of potential customers, than non-born global firms.

Differences in Customer Preferences

A third type of facilitating factor which Hennart (2014) highlights is the degree of homogeneity in customer preferences across nations; and thus, the extent to which internationalizing firms need to adapt their products, services, marketing and communication as they go abroad. This is a factor that in contrast with the issue of focus, has received minimal empirical investigation, although it is commonly cited in passing in relation to why the proportion of BG firms may be increasing (e.g. Chetty and Campbell-Hunt, 2004, Knight and Liesch, 2016, Oviatt and McDougall, 1997).

As with transportation costs, a lower need for adaptation will positively influence the magnitude and attractiveness of the 'foreign opportunities'. This may in turn make the 'born global' path more attractive, particularly if there is a limited time horizon within which the firm is able to exploit its monopolistic advantage. As a result one would expect BG firms to be systematically more prevalent in industries and market segments with a higher degree of homogeneity in customer preferences across countries. Thus, it is proposed that:

H3: Differences in customer preferences across markets will be lower for born global firms than it is for non-born global firms.

An Emphasis on High Technology & Product Innovation

The final set of 'facilitating factor' hypotheses concerns two common observations with respect to BG firms. The first is a contentious linkage between BG firms and high technology and/or knowledge-based industries. A potential link between BG firms and high technology is quite frequently mentioned in the early literature (e.g. Rennie, 1993, Knight, 1997, Oviatt and McDougall, 1994); and yet the same authors are very quick to argue that BG firms may be found in a broad range of industries. Nevertheless, the assumption is so strong that Rialp-Criado et al. (2005) found a significant proportion of all empirical studies in the field only investigated high technology firms.

The second and less contentious observation is that BG firms tend to associated with a differentiation strategy that emphasizes unique product attributes, high quality, and innovation (Knight and Cavusgil, 2004, Madsen and Servais, 1997, McDougall et al., 2003, Rennie, 1993, Zander et al., 2015, Cavusgil and Knight, 2015). To some extent this observation is less controversial in that it casts a broader net that both includes high technology firms, and yet allows for innovative firms with high quality products and services in other industries. As a result Hennart (2014)'s predictions have tended to focus on the latter, but arguable encompass both.

The underlying arguments as to why high technology and a focus on unique products, innovation and quality are so strongly linked with BG firms are three fold. In the first instance, as Autio, et al (2000, 913) point out: "knowledge … is a mobile resource". In effect, the aforementioned criterion may be acting as surrogate measure for low transportation cost intensity. The more highly differentiated products are likely to be sold for a price premium, since the main value is the embedded knowledge. This will result in a higher value to weight ratio and a lower transportation cost intensity. Second, the high technology bias may in fact be a surrogate indicator of more standardized preferences across markets (Hennart, 2014). Technological break-throughs are typically based on mechanical and physical aspects of the product. The physics underlying these characteristics will not change across national boundaries, and thus, high technology may also be acting as a surrogate for greater homogeneity of customer preferences. The third argument is that a highly differentiated

product will tend to have less substitutes (Hennart, 2014) and potential customers are more likely to already be aware of the product; thus the customers may be seeking out the supplier, rather than the supplier seeking out and trying to convince the buyers. This may dramatically reduce the cost of selling.

The combination of the preceding arguments imply that firms that operate in high technology industries are more likely to follow a BG path. Thus it is proposed that:

H4a: Born global firms will tend to be more prevalent in high technology industries than in low technology industries.

In addition to that, as has been emphasized by numerous authors including Hennart (2014), the same arguments can potentially be applied firms in any industry, provided they are following a strategy of focussing on unique products or services, quality and/or innovation. For example, one BG firm in Australia is using and refining advanced refrigeration techniques to deliver high value seafood to selected customers in Asian markets. By classic industry definition, the firm would be classified in a low technology industry, yet the firm is clearly pursuing an 'innovation' strategy. Thus it is also propose that:

H4b: Born global firms will tend to be more prevalent amongst firms which compete on an innovation-based and/or high product quality strategy, than amongst firms which compete on other bases.

Do Born Global Firms Behave Differently?

We now move on to the final hypothesis, which is fundamentally different in nature. All of the preceding hypotheses concern facilitating factors that may help to explain why some firms follow a BG path while others do not. These facilitating factors are qualitatively different from what could be describe as the 'dominant logic' in the current BG literature, which has tended to focus on RBV-related factors, such as characteristics of the founding entrepreneur and particular attributes of the

firm (e.g. an international entrepreneurial orientation). This distinction is critical because if the primary difference between BG and non-BG firms is the former (i.e. facilitating factors), then the one must question whether BGs are truly a distinct type of firm, or are they simply a firm rationally responding to their environment? As Moen and Servais (2002) suggest, the numerous observations of firms moving international at a 'surprisingly' young age may be nothing more than symptoms of an acceleration of the pre-export phase in response to a changing environment. To resolve this dilemma we need to shift focus and test whether BG firms do indeed behave in a different manner from other internationalizing firms, given the same environment.

Exploring this issue is more difficult than it first appears. Since BG firms have traditionally been identified by a combination of their behaviours: i.e. their age at first internationalization and degree of internationalization, then those dimensions cannot be used to prove that they behave differently. As a result, an approach similar to Moen and Servais (2002) is employed, which builds upon another aspect of internationalization: the pattern of early market selection predicted in the Uppsala internationalization process model (Johanson and Vahlne, 1977), and which Petersen and Pedersen (1997) subsequently termed the 'psychic distance postulate'. This postulate, or pattern of market selection, is a core element of the Uppsala model. It predicts that large psychic distances between markets – i.e. cross national differences in factors such as language, religion, culture, education, political systems and industrial development – will disrupt the communication across markets. This in turn will create uncertainty and perceptions of risk about psychically distant markets; and as a result, firms will initially avoid this risk by preferring to enter more proximate markets. However, as firms gain more international experience, they will both become more knowledgeable about foreign markets, and more confident about their ability to manage their operations in foreign markets; and thus they eventually will exploit more psychically distant markets. This linkage between psychic distance and early market selection has been tested and confirmed for both foreign direct investment (Davidson, 1985) and export market selection (Dow, 2000).

If firms that internationalize earlier and more extensively are only doing so in response to their environment and the nature of the opportunity, then there may be a credible argument that they are not a distinct type of firm compared to firms that internationalize more gradually. In such instances one would expect that the uncertainty arising due to psychic distance should still influence which markets they go to first. Thus in terms of the pattern of market selection there should be no difference between BG firms and non-BG firms.

Conversely, if the primary reasons why some firms follow a BG path while other do not are factors internal to the firm, such as those proposed by Oviatt and McDougall (1994) and Knight and Cavusgil (1996, 2004), then there may be a credible argument that these internal factors may also influence the firm's response or sensitivity to psychic distance. For example, the prior experience of the founding entrepreneur is often cited as a key attribute of BG firms (e.g. McDougall et al., 1994, Autio and Sapienza, 2000); however within the Uppsala model, gaining international experience is also the process by which firms gradually lose their aversion to psychic distance. As a result, if prior international experience is a critical factor in a firm becoming BG, then one would also expect BG firms to be less influenced by psychic distance than non-BG firms in their early market selection.

In the case of Knight and Cavusgil (1996, 2004), they place greater emphasis on a construct they refer to as 'international entrepreneurial orientation' (IEO) when explaining the formation of BG firms; however the same arguments hold. Indeed the prior international experience of the top management is a key indicator of IEO. Similarly a high IEO also implies a "proclivity for high risk projects" (Knight and Cavusgil, 2004: 139); thus even if the top management team does perceive a higher risk for more psychically distant markets, they are more likely to take on that challenge rather than avoid it.

As a result, for the final hypothesis it is propose that:

H6: The pattern of foreign markets that a firm enters in the early stages of internationalisation will be different for born global firms, when compared to non-born global firms. Specifically, in the early

stages of their internationalisation, a born global firm's pattern of market selection will tend to be less affected by psychical distance than is the case for non-born global firms.

3. METHODOLOGY

The aforementioned hypotheses are tested on two separate data sets which have both played a role in prior publications. The first data set is two-stage survey of Australian exporters, and formed the basis of three related publications (Dow, 2001, Dow, 2006, Dow, 1997). This data set will be referred to as Data Set #1. The second data set is even older, but is of historical significance. It is the comprehensive survey of small and medium sized Australia exporters which prompted McKinsey & Company (1993) to coin the term 'born global'. This data set was also augmented with additional information in order to form the basis of the investigations in Dow (2000). It shall be referred to as Data Set #2.

Data Set #1 is a random sample of the top 500 Australian exporters collected in 1995. The survey questions were pilot tested on several exporting firms, and the final questionnaire was administered to key informants via telephone and in-person interviews. The key informants were in general the most senior managers responsible for each firm's export activities. Guidelines recommended by Venkatraman (1990) were employed to ensure the key respondents were knowledgeable, and that respondent bias was minimised. Of the 200 companies approached, a total of 109 firms provided useable responses (a 54.5% response rate). The majority of respondents provided information on their two most important export markets, yielding a total of 207 host market entries; however, the analyses in this paper will focus on firm level variables. This data set has been tested for violations of normal distribution assumptions, non-respondent bias, respondent position bias, and non-independence of observations. No major violations were detected, except for a slight non-respondent bias towards larger firms. As is common in most BG research, firms exporting primary industry goods have been excluded. This reduces the size for Data Set #1 to 79 companies. Tables 1, 2 and 4 provide summary statistics for this data set.

Data Set #2 was a mail survey of 700 small to medium-sized Australian high value-added manufacturing exporters in 1992. A total of 282 firms completed the survey, which yielded a 40% response rate. The original survey included eight pages of questions (see McKinsey, 1993, pages 73 - 81) covering a broad range of issues, but only eight of those questions are of relevance to this investigation – three relate to identifying whether a firm is 'born global', and the other five identify the first five export markets of the firm. This data is used to test hypothesis H6. Tables 3 and 4 provide summary statistics for this data set. More details on the collection procedures for this data set are available from McKinsey (1993), Rennie (1993) and Dow (2000).

*** Insert Tables 1 2, 3 and 4 approximately here ***

In order to distinguish between BG and non-BG firms in both data sets, the dual criteria of the firm exporting within three years of being founded and exporting at least 25% of its total sales has been adopted. While there is some variance across the literature on this issue, the three years and 25% criterion appear to be the standard around which experts in the field, such as Knight and Cavusgil (2004), are coalescing. In Data Set #1, 17 of the 79 firms (21.5%) fulfil this BG criteria; and in Data Set #2, 63 of 282 firms (22.3%) fulfil this BG criteria.

The following six independent variables are all taken from Data Set #1 and are measured at the level of the firm.

The transportation cost intensity for each firm - **Tpt Cost Intensity (ln)** - is calculated from the average of the transportation costs as a percentage of landed cost for each firm, which is then adjusted to a standard distance of 10,000 km. This adjustment to control for distance is based on Conlon's (1985) observed relationship between transportation costs and distance. This variable is then subjected to a natural logarithm transformation to reduce the skew.

The concentration of customers for each customer - **# of Cust (ln)** - is measured as an estimate of the mean number of potential customers in the firm's home market provided by the key respondent(s). This variable is also subjected to a natural logarithm transformation to reduce the skew.

The breadth of product-customer focus of the firm - **Focus -** is measured using three 5 point Lickert-type items (Dow, 2001). These three items were adapted from Buzzell and Gale (1987) and reflect the breadth of the firm's home market focus relative to competitors, in terms of the range of products, the types of customers and the number of customers. The three items are collapsed into a single factor (Cronbach alpha of 0.83). The resulting factor represents the degree of focus relative to the firm's major competitors. A positive score indicates a broad focus.

Differences in customer preferences - **Cust Pref** $_{adj}$ - are initially measured for each host-home market pair. An average for each firm is then calculated for each firm. The instrument used is based on three 5 point Lickert type scales as reported in Dow (1997) and Dow (2001); however the three scales are actually a modification of scales used by Cavusgil and Zou (1994). They reflect the degree of adaptation that managers felt was necessary, in term of the actual product features, the packaging, and the labelling, in order to meet the needs of the foreign market. The three scales are combined into a single factor score (Cronbach alpha of 0.52) and subjected to a natural logarithm transformation to reduce the skew. During the analyses, the customer preference factor was found to be positively correlated with the measure of psychic distance (please see below) to a statistically significant degree. As a result, the customer preference factor was then adjusted to a constant psychic distance (the mean of the sample). The empirical results for both the adjusted and unadjusted forms of this variable are similar. Thus, only the results of the adjusted form of the customer preference factor are reported here, but the remaining results are available on request from the author. The final reported figures are z-scores, with a positive number indicating higher than average differences in customer preferences. The reported mean for this scale is mildly negative due to the exclusion of the primary industry firms.

Whether the industry is classified as high technology - **Hi Tech** - is measured using a simple 0-1 dummy variable. If the firm was competing in an industry identified as high or medium-high technology by the National Science Foundation (2004), then it was coded as 1.

Whether a firm is following a strategy that emphasizes innovation and/or product quality – **Innov & Qlty** - is measured using six 5 point Lickert-type items. These six items were adapted from

Robinson and Pearce's (1988) 'product innovation' factor and Roth and Morrison's (1992) 'complex innovation' factor, and are explained in more detail in Dow (1997). Managers were asked to indicate the strength of their firm in their home market relative to competitors on six aspects: product features, new product development & innovation, patents & proprietary product technology, product performance, specialty products and developing & refining existing products. The six indicators have been collapsed into a single factor (Cronbach alpha of 0.83). A positive score indicates higher levels of innovation and product quality.

The seventh and final independent variable, psychic distance, relates to Data Set #2 and is measured at the market entry level, as opposed to the firm level. The psychic distance between each host country and Australia - **Psy Dist** - was measured on a perceptual basis using a panel of eight independent experts, as reported in Dow (2000). This approach was adopted in preference over the more commonly employed surrogate for psychic distance – Kogut and Singh's composite index of Hofstede's national culture dimensions (Kogut and Singh, 1988) in light of the remarkably weak predictive ability of the later metric (Tihanya et al., 2005). The experts were experienced Australian Trade Commissioners who were extensively familiar with foreign markets from an Australian perspective. Each expert was provided with a description of the psychic distance construct, and was then asked to rate 25 countries on a 1 to 10 scale. The estimates of the experts were highly correlated with a Cronbach alpha of 0.97. A mean score of the eight judges was used as the final estimate.

From this base data, a second psychic distance variable - **Δ_Psy Dist -** is then created. Delta psychic distance is the psychic distance score (from an Australian perspective) of the actual market selected, minus the mean psychic distance (from an Australia perspective) of the markets the firm had 'to choose from'. In this case, the population of markets 'to choose from' represented the 25 countries that companies within the Data Set #2 exported to. Thus a positive value represents a firm selecting a more 'distant' market than average of possible alternatives, and a negative value indicates a firm selecting a 'closer' market than average.

4. RESULTS

The bivariate analyses reported in Table 5 indicate that for Data set #1 there are statistically significant differences between BG and non-BG firms, in the directions predicted, for five of the six 'facilitating factors' tested. Specifically a lower transportation cost intensity, the higher concentration of customers, the higher degree of focus, being in a high technology industry, and whether a firm has a stronger advantage in innovation and product quality are all significantly associated with being a BG firm. These results provide support for hypotheses H1, H2a, H2b, H4a and H4b. Only hypothesis H3, concerning differences in customer preferences, is not supported. As a result there does appear to be support for Hennart's thesis; however these tests do not take into account any overlap amongst the six factors, and do not preclude other factors.

*** Insert Tables 5 and 6 approximately here ***

In order to assess this latter issue, a logistic regression was also conducted incorporating the same six factors (Table 6). The resulting model is statistically significant with a $\psi^2 = 34.4$, df = 6, $p < 0.001$. Overall the model correctly predicts the firm classification (BG vs non-BG) 88.6% of the time; although this must be tempered by the fact that even a naïve model classifying all firms as non-BG would be correct 78.5% of the time. Nevertheless, the model does account for roughly half of the classifications not accounted for by the 'naïve' model (10.1% out of 21.5%). In terms of specific factors, a one unit increase in the emphasis on innovation and product quality will increase the odds of a firm being BG by 320% (H4b), and a similar increase in natural logarithm of the number of customers (H2b) or the transportation cost intensity (H1) will increase odds of a firm being non-BG by 36.5% and 56.1% respectively. Conversely, it is interesting to note that the coefficients for the degree of focus (H2b) and high technology (H4a) both fall away to statistically non-significant levels. In the case of high technology this may be due to high technology simply being a surrogate indicator for low transportation cost intensity, the concentration of customers, and whether the firm has an advantage in innovation and product quality. All three of which are moderately correlated with high technology. In the case of focus, it again appears be its correlation with the concentration of

customers, and the innovation and product quality factor that are causing the loading to drop off. Supplementary step-wise analyses were conducted to confirm this and are available from the author on request. Collinearity diagnostics were also conducted and all variance inflation factors were below 1.3, well within accepted norms (Hair et al., 1998).

Next we turn to Data Set #2 in order to test the final hypothesis: H6. The first step is a simple comparison of the distribution of early market selection (i.e. the frequency with which a country is one of the first five markets entered by a firm) for BG and non-BG firms in the data set. The results in Table 7 that there is a statistically significantly different between BG firms and non-BG firms (ψ^2 = 83.69, df = 23, $p < 0.001$). However, when conducting this test, it is also important to control for industry effects. In particular, the main variable of interest in hypothesis 4a - whether the firm is operating in a high technology industry, may be simultaneously driving both early internationalisation and market selection. As a result, all the firms were categorized in terms of the technology intensity of their industry - high, medium-high, medium-low and low based the National Science Foundation (2004) classifications. The aforementioned chi squared test was then repeated for each of the four groupings of industries. The differences in early market selection patterns between BG firms and non-born-global firms remain statistically significant for all four types of industries:

- high technology industries – $\psi^2 = 34.4$, df = 22, $p < .05$;
- medium - high technology industries – $\psi^2 = 58.6$, df = 23, $p < .001$;
- medium – low technology industries – $\psi^2 = 35.9$, df = 22, $p < .05$; and
- low technology industries – $\psi^2 = 31.6$, df = 22, $p < .05$).

Thus, the observed effect appears to persist across a wide variety of industries. Even in low technology industries, the early market selection patterns of BG firms are significantly different from non-BG firms. This result strongly supports the first half of the sixth hypothesis, and confirms that BG firms do appear to behave in a different manner, even after controlling for industry effects; however it does not take into account 'how' the two groups differ.

In order to confirm the second half of hypothesis 6, and test how the two groups of firms behave differently, an analysis done in Dow (2000: 60 Table 4) is replicated; however, this time the analysis is done with BG and non-BG firms treated as separate populations. In this analysis **Δ_Psy Dist** represents the difference between the psychic distance of the selected market, and the psychic distance of the available markets. In most circumstances this variable is available for each of the first five foreign export markets for each firm. A negative value indicates that firms are systematically selecting more psychically proximate markets; and thus, psychic distance is influencing their market selection process, consistent with the Uppsala Internationalization Process Model. The fact that in Table 8 each of the five values for **Δ_Psy Dist** (i.e. one value for each of the first five market entries) is negative and statistically different from zero indicates that even for BG firms, psychic distance is influencing their market selection choices. However, the critical test for hypothesis 6 is whether the values are for BG firms are smaller than for non-BG firms. This is tested in the last column of Table 8, and for each of the first four market selections the difference is significant. In other words, BG firms are systematically selecting more psychically distance countries than non-BG firms in their early market selection decisions. Thus, the sixth hypothesis is also confirmed.

5. DISCUSSION & CONCLUSIONS

The first major conclusion of this paper is that in terms of discriminating between BG and non-BG firms, Hennart's (2014) suggestion that BG firms may simply be '*accidental internationalists'* has some merit. A simple set of 'facilitating factors', such as lower transportation cost intensity, a more concentrated set of customers, whether a firm is in a high technology industry, and the fact that a firm has a narrower focus and relies to a greater degree on innovation and product quality, are all strongly related to firms that internationalize earlier and more aggressively. As the Nagelkerke R Sq of 0.546 for the logistic regression in Table 6 indicates, they go a long way to discriminating between BG and non-BG firms. However, it also appears that there is a strong degree of overlap between some of the factors. For example, whether a firm is in a high technology industry is highly correlated with low

transportation costs, a more concentrated set of customers and a greater emphasis on innovation and product quality, making the discrimination between these factors problematic.

From amongst the ‘facilitating factor’ analyses, one of the unexpected results is the non-significance of the ‘differences in customer preference’ construct. The actual difference between BG firms and non-BG firms is in the predicted direction (i.e. BG firms appear to face less differences), but the result is not statistically significant. This may in part due to an interaction with the concentration of the customer base. The average number of customers for the BG firms is approximately 30, as opposed to more than 3,500 for the non-BG firms. With such a concentrated customer base, it is possible that the BG firms are using this as an opportunity to customise their products and services for each customer. With such an emphasis on customisation, differences in preferences across countries may become less relevant. Knight and Cavusgil (1996, 22) similarly suggest that “small … exporters are more flexible and quicker to adapt to foreign tastes and international standards”. Thus, despite underlying ‘appeal’ of industries and markets with uniform global preferences, focussing on segments with greater differences in customer preferences may be one way small BG firms are able to avoid head on competition with much larger global competitors.

As discussed earlier in this paper, this empirical support for Hennart's (2014) proposed explanation of early and aggressively internationalizing firms raises the possibility that BG firms are not a different and unique type of firm. They might be no different from firms that internationalize more gradually except for the fact that their specific circumstances (i.e. stronger facilitating factors) simply make early and rapid internationalization more viable. This has serious implications for whether it is even valid or appropriate to examine such firms in isolation. This is why the metaphor of 'opening a can of worms' is evoked and, of course, leads to the second major contribution of this study.

Despite the strong relationship found between 'facilitating factors' and BG firms, the results of this paper also confirm that BG firms do still behave differently from non-BG firms in aspects above and beyond the behaviours typically used to identify them. As measured by their pattern of early market selection, BG firms behave differently, even after controlling for industry effects. While it appears

that the BG firms are not immune to psychic distance (i.e. the early markets that they select are psychically closer to their home than the average of the available markets), there are also strong indications that they are not as significantly influenced by psychic distance as non-BG firms. I.e. BG firms do appear to systematically enter more psychically distance markets than non-BG firms. This result is consistent with the view put forward by many, such as Oviatt & McDougall (1994), Knight & Cavusgil (2004) and Madsen & Servais (1997), that the previous international experience and international entrepreneurial orientation of the BG firm's management team may be a major factor in the firm's development. However, there is an interesting additional insight emerging from these results. While the BG firms do consistently pick more distant markets for their first four foreign market entries, it would appear that the difference in behaviour disappears by the fifth market selection. It appears that the founding entrepreneur's prior international experience may initially cause a firm to behave differently, but once the firm has entered the first four foreign market, the experience gap has closed - at least in terms of its impact on market selection. Unfortunately, the data sets employed here do not allow any investigation of differences beyond the fifth market entry.

In some respects these two major findings - i.e. support for facilitating factors, and support for the idea that BG firms do behave differently - might seem contradictory; however, this is not necessarily true. First of all, while the facilitating factors are statistically significant predictors of BG firms, they still only explain approximately half of the unexplained variance above and beyond the 'naïve model'. Secondly, at a conceptual level, the facilitating factors only explain the circumstances under which early and rapid internationalization might be possible (i.e. the presence of an opportunity). This is a perspective highlighted by Chandra et al. (2012). However this does not explain which firms and/or individuals are likely to seize upon those opportunities, nor which firms and/or individuals are likely to excel at exploiting those opportunities. As a result, the Hennart (2014) perspective, and the more RBV-oriented perspective that currently dominates the BG literature, can be viewed as complementary rather than contradictory. Strong facilitating factors are arguably a necessary but not sufficient requirement for a firm to internationalize early and aggressively. Without those factors in place, it is very had for a firm to follow a BG path, even if the founding entrepreneur has prior

internationalization experience, an international entrepreneurial orientation, an international marketing orientation, and strong networks. However, when a BG opportunity does arise, firms without such prior experience, orientations and networks are unlikely to be the ones to grasp it, and are less likely to succeed in exploiting the opportunity if they do try. Perhaps to practitioners, and particularly venture capitalists, this duality might not be surprizing, but it is under-emphasized in the existing literature. It is important to note that this latter issue also dovetails with the seminal work of Knight and Cavusgil (2004), where they are primarily exploring the attributes that influence the success of BG firms, rather than exploring which firms will internationalize early and rapidly.

The major implication of this research for practitioners and policy makers primarily relates a combination of the preceding comments. In part, the environment creates opportunities for firms to internationalize earlier and more rapidly, and there are sound arguments that these opportunities are arising more frequently. Practitioners need to keep a sharp eye for these factors. Not every international business opportunity necessarily lends itself to rapid exploitation. Conversely, policy makers need to be aware that, at times, their actions may influence these opportunities, and given the reputed job creation benefits of BG firms (Mandl and Celikel-Esser, 2012), a more proactive approach may be beneficial. On the other hand, both practitioner and policy makers need to be aware that there are key attributes of both the firms and the founding entrepreneurs, such as prior international experience and an international entrepreneurial orientation, that are critical to a firm successfully exploiting a BG opportunity. For practitioners, they need to keep this in mind when recruiting staff and promoting individuals to leadership positions. The background and attitudes of the top management team can have major influence on both what opportunities the firm choses to exploit, and their success in exploiting them.

In terms of limitations, one must keep in mind the fact that both data sets used in this paper are confined entirely to Australian-based exporters. This imposes limits on the generalizability of the findings with respect to both the country of origin and the entry mode. With respect to the latter, some firms may internationalize rapidly through direct foreign investment rather than by exporting; and

thus, the generalization of the findings to such firms needs to be done with caution. Both data sets are also relatively old; and thus, numerous advances in areas such as transportation, digital communication, and the globalization of many economies may influence the results. The logical response to this situation is further research expanding both the breadth of originating countries, and including BG firms employing alternative entry modes. Another limitation of this paper is that for the 'facilitating factor' analyses, the data sets used here did not include any measures of RBV-related factors. Thus a useful extension would be to simultaneously explore the facilitating factors found in this paper, and a selection of the attitudes, orientations and past international experiences of the founding entrepreneurs and the firms and some measures of strength of their networks. Similarly, the other potential barriers such as those explored by Kahiya (2013) may help to explain the remaining unexplained variance in analysis presented in Table 6. A final limitation concerns the market selection analyses relating to H6. Data Set # 2 only contains information concerning each firm's first five market entries. Unfortunately, the analyses indicate that the market selection patterns seem to converge precisely at that point (i.e. the fifth market entry). While obtaining such data is challenging, an analysis that explores market selection patterns after the fifth entry may be instructive in determining whether the market selection patterns of BG and non-BG firms do remain indistinguishable after that point.

In closing, it is useful to reiterate the main contributions of this paper. First of all, this paper responds to the call of Hennart (2014) and re-examines in a more comprehensive manner than previous work: to what extent do facilitating factors determine whether a firm internationalizes rapidly? This addresses one side of what could be characterized as two divergent views of the origins of BG firms: a more structural view, as espoused by Hennart (2014), and the more RBV-oriented view that currently dominates the literature (e.g. Cavusgil and Knight, 2015). Although, as mentioned in the limitations, a broader data set including RBV-related factors would have addressed this issue more comprehensively. Second, exploring a potential implication of the first issue, this paper is one of the first to empirically confirm that BG firms do behave in a distinct fashion, and that this ‘distinct’ behaviour is not simply an artefact of the industry they are competing in; and thus, deserve separate

treatment in international research. After the somewhat surprising results – i.e. empirical support for both perspectives – this paper proposes a reconciliation between the two views. What Hennart (2014) is effectively describing is the characteristics of a born global opportunity. Conversely, the RBV-oriented BG literature is largely addressing the attributes of the people and firms who are most likely to seize upon those opportunities, and who are most likely to be successful in exploiting such opportunities. Each is a necessary, but not sufficient a condition in order to explain BG firms.

Table 1. Descriptive Statistics – Data Set #1

	n	Min	Max	Mean	s.d.
1. Age 1st Intl	79	0	132	25.5	29.1
2. Export Int	79	0.1	100	42.2	33.0
3. Tpt Cost Intensity (ln)	79	-1.70	3.55	1.64	0.98
4. Focus	79	-2.68	1.94	-0.01	1.04
5. # of Cust (ln)	79	0	16.65	7.18	4.95
6. Cust Pref $_{adj}$	79	-1.62	1.33	-0.30	0.76
7. Hi Tech	79	0	1	.18	.38
8. Innov & Qlty	79	-2.79	1.81	-0.16	1.03

Table 2. Correlation Matrix – Data Set #1

	1.	2.	3.	4.	5.	6.	7.	8.
1. Age 1st Intl	1.000							
2. Export Int	-0.482	1.000						
3. Tpt Cost Intensity (ln)	0.166	-0.303	1.000					
4. Focus	0.269	-0.132	0.034	1.000				
5. # of Cust (ln)	0.319	-0.643	0.161	0.176	1.000			
6. Cust Pref $_{adj}$	-0.101	0.142	-0.207	0.024	-0.084	1.000		
7. Hi Tech	-0.259	0.295	-0.415	0.042	-0.131	0.047	1.000	
8. Innov & Qlty	-0.133	-0.031	0.026	-0.200	0.195	-0.092	0.111	1.000

Table 3. Descriptive Statistics and Correlation Matrix – Data Set #2

	n*	Min	Max	Mean	s.d.	1	2	3
1. Age 1st Intl	282	0	90	16.4	19.4	1.000		
2. Export Int	282	0	99	31.5	29.3	-.404	1.000	
3. Δ Psy Dist$_n$	1004	-3.48	3.31	-1.07	1.35	-.045	.169	1.000

* The sample includes 282 companies, but each company reported information concerning up to five markets; thus a total of 1,121 market entries were recorded. However, since the Δ_Psy Dist calculation requires knowledge of the previous market entry, missing data limits the sample size for the bottom row of the table to 1,004.

Table 4. Other Sample Characteristics (both data sets)

	Data Set #1	Data Set #2
Annual revenue (A$m)		
Mean	197.7	64.7
Standard deviation	405.0	80.4
Minimum	10	2
Maximum	2048	402
# of Employees		
Mean	785	377
Standard deviation	1373	702
Minimum	5	3
Maximum	7000	6421
Age of firm (years)		
Mean	46.9	36.7
Standard deviation	35.3	28.6
Minimum	6	2
Maximum	152	161
Number of firms classified as:		
Born Global	17 (21.4%)	63 (22.3%)
Non-Born Global	62 (78.6%)	219 (77.7%)
Industry mix		
Food, beverage & tobacco	18 (23%)	36 (13%)
Textiles, clothing & footwear	3 (4%)	11 (4%)
Wood, furniture & paper	0 (0%)	11 (4%)
Pharmaceuticals	2 (3%)	18 (6%)
Chemicals & petroleum	3 (4%)	20 (7%)
Non-metalic mineral products	5 (6%)	16 (6%)
Basic metal products	3 (4%)	12 (4%)
Fabricated metal products	11 (14%)	10 (4%)
Motor vehicles & parts	5 (6%)	16 (6%)
Other transport equipment	2 (3%)	8 (3%)
Photographic, prof. & scientific equipment	1 (1%)	22 (8%)
Electronic equipment	5 (6%)	17 (6%)
Appliances & electrical equipment	4 (5%)	7 (3%)
Industrial machinery & equipment	10 (13%)	36 (13%)
Leather Products	0 (0%)	2 (1%)
Rubber & plastic products	3 (4%)	11 (4%)
Other NEC	4 (5%)	29 (10%)
Total	79 (100%)	282 (100%)

Table 5 Tests of Differences in Facilitating Factors Between Born Global and Non-Born Global Firms – Data Set #1 [a]

	Born Global [BG] Firms	Non-Born Global [NBG] Firms	Difference [a] [BG-NBG]
H1 - Tpt Cost Intensity (ln)	1.09	1.80	-0.71 **
H2a - Focus	-0.45	0.11	-0.56 *
H2b - # of Cust (ln)	3.51	8.18	-4.67 **
H3 - Cust Pref $_{adj}$	-0.35	-0.29	-0.05
H4a - Hi Tech	0.35	0.13	0.22 *t*
H4b – Innov & Qlty	0.34	-0.30	0.64 *

t p < .10, * p < .05 ** p < .01 (all statistical tests are reported as two-tailed)

a For most of the differences, an ANOVA test (assuming unequal or equal variances as appropriate) was used to test for two-tailed statistical significance. For H4a, both variables are categorical; and thus, Fisher's exact test was employed.

Table 6. Predicting Born Global Firms Using Facilitating Factors: Logistic Regression – Data Set #1

	B	Wald	Stat. signif.	Exp(B)	Exp(%)
H1 - Tpt Cost Intensity (ln)	-0.822	3.42	*t*	*.439*	*56.1*
H2a - Focus	-0.373	0.90		.689	31.1
H2b - # of Cust (ln)	-0.454	7.17	**	.635	36.5
H3 - Cust Pref $_{adj}$	-0.814	1.90		.443	55.7
H4a - Hi Tech	-0.046	0.00		*.955*	*4.5*
H4b – Innov & Qlty	1.435	7.72	**	4.198	320
Chi Sq – 34.4 (6), p <.001; Nagelkerke R Sq – 0.546					

t p < .10, * p < .05 ** p < .01 (all statistical tests are reported as two-tailed)

Table 7. Differences in Early Market Selection – Data Set #2

	Born Global [BG] Firms		Non-Born Global [NBG] Firms		All Firms	
NZ	15	6.2%	118	13.4%	133	11.9%
Singapore	14	5.8%	94	10.7%	108	9.6%
USA	28	11.6%	66	7.5%	94	8.4%
Hong Kong	14	5.8%	72	8.2%	86	7.7%
Malaysia	14	5.8%	71	8.1%	85	7.6%
Japan	26	10.8%	59	6.7%	85	7.6%
UK	28	11.6%	52	5.9%	80	7.1%
Indonesia	9	3.7%	59	6.7%	68	6.1%
PNG	4	1.7%	47	5.3%	51	4.5%
Thailand	5	2.1%	37	4.2%	42	3.7%
Taiwan	10	4.1%	29	3.3%	39	3.5%
Philippines	7	2.9%	28	3.2%	35	3.1%
Germany	13	5.4%	21	2.4%	34	3.0%
Canada	8	3.3%	20	2.3%	28	2.5%
Fiji	1	0.4%	23	2.6%	24	2.1%
South Korea	10	4.1%	14	1.6%	24	2.1%
China	6	2.5%	16	1.8%	22	2.0%
France	10	4.1%	9	1.0%	19	1.7%
South Africa	4	1.7%	14	1.6%	18	1.6%
India	4	1.7%	8	0.9%	12	1.1%
Italy	6	2.5%	4	0.5%	10	0.9%
Iran	3	1.2%	6	0.7%	9	0.8%
Sweden	2	0.8%	6	0.7%	8	0.7%
Saudi Arabia	0	0.0%	7	0.8%	7	0.6%
Total	241	100.0%	880	100.0%	1,121	100.0%

$\psi^2 = 83.69$, df = 23, $p < .001$

Table 8. Testing for the Differential Influence of Psychic Distance on Early Market Selection – Data Set #2

Δ_Psy Dist	Born Global [BG] Firms [a]	Non-Born Global [NBG] Firms [a]	Difference [b] [BG-NBG]
1st Market Entered	-0.99 **	-1.48 **	0.49 *
2nd Market Entered	-0.75 **	-1.09 **	0.34 *
3rd Market Entered	-0.74 **	-1.12 **	0.38 *t*
4th Market Entered	-0.40 *t*	-1.02 **	0.62 **
5th Market Entered	-0.85 **	-0.79 **	-0.06

t $p < .10$, * $p < .05$ ** $p < .01$

a For each market entry decision and type of firm, a two-tailed t-test was conducted to confirm that the values for **Δ_Psy Dist** are significantly different from zero.

b For the differences between BG firms and non-BG firms for each market entry decision, a two-tail ANOVA test (assuming unequal variances) is used to test for statistical significance.

4. REFERENCES

ASPELUND, A. & MOEN, O. 2001. A Generation Perspective on Small Firms' Internationalization: From Traditional Exporters and Flexible Specialist to 'Born Globals'. *In:* AXINN, C. N. & MATTHYSSENS, P. (eds.) *Reassessing the Internationalization of the Firm: Advances in International Marketing.* Amsterdam: Elsevier Science Ltd.

AUTIO, E. & SAPIENZA, H. J. 2000. Comparing Process and Born Global Perspectives in the International Growth of Technology-Based New Firms. *Frontiers for Entrepreneurial Research.* Babson Park, MA: Centre for Entrepreneurial Studies, Babson College.

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**,** 909-924.

BAUM, M., SCHWENS, C. & KABST, R. 2015. A Latent Class Analysis of Small Firms' Internationalization Patterns. *Journal of World Business,* 50**,** 754-768.

BELL, J., MCNAUGHTON, R. & YOUNG, S. 2001. Born Again Global Firms: An Extension to the Born Global Phenomenon. *Journal of International Management,* 7**,** 173-189.

BENGTSSON, L. 2004. Explaining Born Globals: An Organisational Learning Perspective on the Internationalisation Process. *International Journal of Globalisation and Small Business,* 1**,** 28-41.

BILKEY, W. J. & TESAR, G. 1977. The Export Behaviour of Smaller Sized Wisconsin Manufacturing Firms. *Journal of International Business Studies,* 8**,** 93-98.

BLOODGOOD, J., SAPIENZA, H. J. & ALMEIDA, J. G. 1996. The Internationalization of New High-Potential U.S. Ventures: Antecendents and Outcomes. *Entrepreneurship: Theory and Practice,* 20**,** 61-76.

BUZZELL, R. D. & GALE, B. T. 1987. *The PIMS Principles: Linking Strategy to Performance,* New York, Free Press.

CANNONE, G. & UGHETTO, E. 2014. Born Globals: A Cross-Country Survey on High-Tech Start-Ups. *International Business Review,* 23**,** 272-283.

CAVUSGIL, S. T. 1994. Born Globals: A Quiet Revolution Among Australian Exporters (Editorial). *Journal of International Marketing,* 2**,** 3.

CAVUSGIL, S. T. & ZOU, S. 1994. Marketing Strategy-Performance Relationship: An Investigation of the Empirical Link in Export Market Ventures. *Journal of Marketing,* 58**,** 1-21.

CAVUSGIL, T. S. & KNIGHT, G. 2015. The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *Journal of International Business Studies,* 46**,** 3-16.

CHETTY, S. & CAMPBELL-HUNT, C. 2004. A Strategic Approach to Internationalization: A Traditional Versus a "Born Global" Approach. *Journal of International Marketing,* 12**,** 57-81.

CONLON, R. M. 1985. *Distance and Duties: Determinants of Manufacturing in Australia and Canada,* Ottawa, Carlton University Press.

COVIELLO, N. E. 2015. Re-Thinking Research on Born Globals. *Journal of International Business Studies,* 46**,** 17-26.

COVIELLO, N. E. & JONES, M. V. 2004. Methodological Issues in International Entrepreneurship Research. *Journal of Business Venturing,* 19**,** 485-508.

DOW, D. 1997. *How Exporters Adapt Their Positioning Strategies in Foreign Markets: Empirical Evidence from Australia.* Unpublished doctoral dissertation, The University of Melbourne.

DOW, D. 2000. A Note on Psychological Distance and Export Market Selection. *Journal of International Marketing,* 8**,** 51-64.

DOW, D. 2001. The Adaptation of Host Market Positioning Strategies: Empirical Evidence from Australia. *Journal of International Marketing,* 9**,** 41-62.

DOW, D. 2006. Adaptation and Performance in Foreign Markets: Evidence of Systematic Under-Adaptation. *Journal of International Business Studies,* 37**,** 212-226.

FAN, T. & PHAN, P. 2007. International New Ventures: Revisiting the Influences Behind the 'Born Global' Firm. *Journal of International Business Studies,* 38**,** 1113-1131.

GERSCHEWSKI, S., ROSE, E. L. & LINDSAY, V. J. 2015. Understanding the Drivers of International Performance for Born Global Firms: An Integrated Perspective. *Journal of World Business,* 50**,** 558-575.

HAIR, J. F. J., ANDERSON, R. E., TATHAM, R. L. & BLACK, W. C. 1998. *Multivariate Data Analysis,* Upper Saddle River, N.J., Prentice-Hall.

HENNART, J. F. 2014. The Accidental Internationalists: A Theory of Born Globals. *Entrepreneurship Theory and Practice,* 38**,** 117-135.

HEWERDINE, L. & WELCH, C. L. 2012. Are International New Ventures Really New? A Process Study of Organizational Emergence and Internationalization. *Journal of World Business,* 48**,** 466-477.

HILMERSSON, M. & JOHANSON, M. 2016. Speed of SME Internationalization and Performance. *Management International Review,* 56**,** 67-94.

HIRSCH, S. & ADAR, Z. 1974. Firm Size and Export Performance. *World Development,* 2**,** 41-46.

JOHANSON, J. & VAHLNE, J.-E. 1977. The Internationalization Process of the Firm-A Model of Knowledge Development and Increasing Foreign Commitments. *Journal of International Business Studies,* 8**,** 23-32.

JOHANSON, J. & WIEDERSHEIM-PAUL, F. 1975. The Internationalization of the Firm: Four Swedish Cases. *Journal of Management Studies,* 12**,** 305-322.

JOLLY, V. K., ALAHUHTA, M. & JEANNET, J.-P. 1992. Challenging the Incumbents: How High Technology Start-Ups Compete Globally. *Journal of Strategic Change,* 1**,** 71-82.

JONES, M. V. 1999. The Internationalisation of Small High-Technology Firms. *Journal of International Marketing,* 7**,** 15-41.

KAHIYA, E. T. 2013. Export Barriers and Path to Internationalization: A Comparison of Conventional Enterprises and International New Ventures. *Journal of International Entrepreneurship,* 11**,** 3-29.

KNIGHT, G. A. 1997. *Emerging Paradigm for International Marketing: Born Global Firm.* PhD dissertation, Michigan State University.

KNIGHT, G. A. & CAVUSGIL, S. T. 1996. The Born Global Firm: A Challenge to Traditional Internationalization Theory. *In:* MADSEN, T. K. (ed.) *Advances in International Marketing.* JAI Press Inc.

KNIGHT, G. A. & CAVUSGIL, S. T. 2004. Innovation, Organizational Capabilities, and the Born-Global Firm. *Journal of International Business Studies,* 35**,** 124-141.

KNIGHT, G. A. & LIESCH, P. W. 2016. Internationalization: From Incremental to Born Global. *Journal of World Business,* 51**,** 93-102.

KOGUT, B. & SINGH, H. 1988. The Effect of National Culture on the Choice of Entry Mode. *Journal of International Business Studies,* 19**,** 411-432.

LOPEZ, L. E., KUNDU, S. K. & CIRAVEGNA, L. 2009. Born Global or Born Regional? Evidence from an Exploratory Study in the Costa Rican Software Industry. *Journal of International Business Studies,* 40**,** 1228-1238.

MADSEN, T. K. 2013. Early and Rapidly Internationalizing Ventures: Similarities and Differences between Classifications Based on the Original International New Venture and Born Global Literatures. *Journal of International Entrepreneurship,* 11**,** 65-79.

MADSEN, T. K., RASMUSSEN, E. & SERVAIS, P. 2000. Differences and Similarities Between Born Globals and Other Types of Exporters. *In:* CAVUSGIL, S. T. (ed.) *Advances in International Marketing.* Greenwich, CT: JAI Press Inc.

MADSEN, T. K. & SERVAIS, P. 1997. The Internationalization of Born Globals: an Evolutionary Process. *International Business Review,* 6**,** 561-583.

MANDL, I. & CELIKEL-ESSER, F. 2012. Born Global: The Potential of Job Creation in New International Businesses. *Eurofound.* Luxembourg: Publications Office of the European Union.

MCDOUGALL, P. P. & OVIATT, B. M. 1996. New Venture Internationalization, Strategic Change and Performance: a Follow-Up Study. *Journal of Business Venturing,* 11**,** 23-40.

MCDOUGALL, P. P., OVIATT, B. M. & SHRADER, R. C. 2003. A Comparison of International and Domestic New Ventures. *Journal of International Entrepreneurship,* 1**,** 59-82.

MCDOUGALL, P. P., SHANE, S. & OVIATT, B. M. 1994. Explaining the Formation of International New Ventures: The Limits of the Theories from International Business Research. *Journal of Business Venturing,* 9**,** 469-487.

MCKINSEY 1993. *Emerging Exporters: Australia's High Value-Added Manufacturing Exporters,* Melbourne, Australian Manufacturing Council.

MOEN, O. 2002. The Born Globals: A New Generation of Small European Exporters. *International Marketing Review,* 19**,** 156-175.

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**,** 49-72.

MUDAMBI, R. & ZAHRA, S. A. 2007. The Survival of International New Ventures. *Journal of International Business Studies,* 38**,** 333-352.

NSF. 2004. *Science and Engineering Indicators Report* [Online]. Arlington, VA: National Science Foundation. Available: http://www.nsf.gov/ [Accessed 8 December].

OVIATT, B. M. & MCDOUGALL, P. P. 1994. Toward a Theory of International New Ventures. *Journal of International Business Studies,* 25**,** 45-63.

OVIATT, B. M. & MCDOUGALL, P. P. 1997. Challenges for Internationalization Process Theory: The Case of International New Ventures. *Management International Review,* 37**,** 85-99.

OVIATT, B. M. & MCDOUGALL, P. P. 2005. The Internationalization of Entrepreneurship. *Journal of International Business Studies,* 36**,** 2-8.

PENROSE, E. 1959. *The Theory of the Growth of the Firm,* London, Basil Blackwell.

PETERSEN, B. & PEDERSEN, T. 1997. Twenty Years After - Support and Critique of the Uppsala Internationalisation Model. *In:* BJORKMAN, I. & FORSGREN, M. (eds.) *The Nature of the International Firm.* Copenhagen: Copenhagen Business School Press.

RENNIE, M. W. 1993. Global Competitiveness: Born Global. *The McKinsey Quarterly,* 4**,** 45-52.

REUBER, A. R. & FISCHER, E. 1997. The Influence of the Management Team's International Experience on the Internationalization Behaviors of SMEs. *Journal of International Business Studies,* 28**,** 807-825.

RIALP-CRIADO, A., RIALP-CRIADO, J. & KNIGHT, G. 2005. The Phenomenon of Early Internationalizing Firms: What Do We Know After a Decade (1993-2003) of Scientific Inquiry? *International Business Review,* 14**,** 147-166.

ROBINSON, R. & PEARCE, J. 1988. Planned Patterns of Strategic Behaviour and Their Relationship to Business Unit Performance. *Strategic Management Journal,* 9**,** 43-60.

ROTH, K. & MORRISON, A. J. 1992. Business-Level Competitive Strategy: A Contingency Link to Internationalization. *Journal of Management,* 18**,** 473-487.

TIHANYA, L., GRIFFITH, D. A. & RUSSELL, C. J. 2005. The Effect of Cultural Distance on Entry Mode Choice, International Diversification, and MNE Performance: A Meta-Analysis. *Journal of International Business Studies,* 36**,** 270-283.

VENKATRAMAN, N. 1990. Performance Implications of Strategic Coalignment: A Methodological Perspective. *Journal of Management Studies,* 27**,** 19-41.

ZAHRA, S. A. 2005. A Theory of International New Ventures: A Decade of Research. *Journal of International Business Studies,* 36**,** 20-28.

ZAHRA, S. A., IRELAND, D. R. & HITT, M. A. 2000. International Expansion by New Venture Firms: International Diversity, Mode of Entry, Technological Learning, and Performance. *Academy of Management Journal,* 43**,** 925-950.

ZANDER, I., MCDOUGALL-COVIN, P. & L ROSE, E. 2015. Born Globals and International Business: Evolution of a Field of Research. *Journal of International Business Studies,* 46**,** 27-35.

ZUCCHELLA, A., HAGEN, B., DENICOLAI, S. & MASUCCI, M. 2016. Early and Accelerated Internationalisation: The Role of the Niche Strategy in a New Generation of Exporters. *International Journal of Export Marketing,* 1**,** 27-47.

ZUCCHELLA, A., PALAMARA, G. & DENICOLAI, S. 2007. The Drivers of the Early Internationalization of the Firm. *Journal of World Business,* 42**,** 268-280.

[1] From this point onwards when referring to the BG literature, this paper will implicitly include the literature concerning INVs and the IE literature. It is acknowledged that there are significant distinctions but the literature within one stream is often relevant to the other related streams.

[2] Moen and Servais (2002) also explore differences in export intensity and 'global orientation' between BG and non-BG firms; however with respect to the former, this a problematic dimension given that many research papers use export intensity as a criterion for defining BG firms. With respect to 'global orientation', it is arguably more appropriate to classify it as an attribute of the firm, rather than a behaviour, and as such should be grouped with the RBV-related factors.

[3] Kahiya (2013) examines differences between BG firms and conventional exporters in New Zealand; however this paper focusses on differences in the perceptions of export barriers, as opposed to actual firm behaviours.

[4] In the literature review process for this article I was unable to identify any article in a major IB journal which included transportation costs or transportation cost intensity in relation to BG firms.