



Open

The born global and international new venture revisited: An alternative explanation for early and rapid internationalization

Maria Rumyantseva¹ and Catherine Welch²

¹Discipline of Strategy, Innovation and Entrepreneurship, The University of Sydney Business School, The University of Sydney, Sydney, NSW 2006, Australia; ²Trinity Business School, Trinity College Dublin, University of Dublin, Dublin 2, Ireland

Correspondence:
C Welch, Trinity Business School, Trinity College Dublin, University of Dublin, Dublin 2, Ireland
e-mail: welchc@tcd.ie

Abstract

We revisit the empirical origins of a popular research topic: the phenomenon of early and rapid internationalization. By means of a qualitative case study, we re-examine the samples of firms used in two of the seminal studies on 'born globals' and 'international new ventures'. A dominant pattern characterizing both samples, but not reported by the original authors, was that incumbent organizations were involved in the founding of the new ventures. Given this unexpected finding, we empirically investigate how being reproduced from pre-existing organizations affected the internationalization pathways of the new ventures, collecting data that extend beyond the scope and time period examined in the original studies. Our analysis shows how the evolution of the relationship between old and new generations of organizations is critical to explaining how new venture internationalization proceeded. Although the incumbent's presence prior to foundation enabled early and possibly even rapid internationalization, it was also the source of discontinuity and instability. Based on these findings, we offer a relational perspective on the incumbent's involvement in founding and internationalizing new ventures. Our study illustrates how applying the methodology of a case study revisit can generate new theoretical insights in existing research fields.

Journal of International Business Studies (2023) **54**, 1193–1221.
<https://doi.org/10.1057/s41267-023-00613-2>

Keywords: internationalization theory; relational view; case study revisit; born global; international new venture

The online version of this article is available Open Access

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1057/s41267-023-00613-2>.

Received: 9 January 2020

Revised: 18 December 2022

Accepted: 26 December 2022

Online publication date: 12 May 2023

INTRODUCTION

The venture that internationalizes soon after foundation – most often referred to as the international new venture (INV) or born global (BG) – has attracted considerable attention from international entrepreneurship (IE) and international business (IB) scholars (Jones, Coviello, & Tang, 2011; Knight & Liesch, 2016; Verbeke & Ciravegna, 2018; Verbeke, Zargarzadeh, & Osiyevskyy, 2014). This research interest was popularized by a number of seminal studies whose conclusions were derived from two data sources: a survey of Australian manufacturing firms undertaken by the

McKinsey consultants who coined the born global term (used by Knight & Cavusgil, 1996); and a cross-national pool of case studies used as empirical evidence for the INV by McDougall, Shane, and Oviatt (1994c) and Oviatt and McDougall (1994). These studies profiled a seemingly novel phenomenon: a firm that, despite its 'liability of newness', competes internationally soon after its establishment. Early and rapid internationalization seemed to contradict the established wisdom that firms internationalize incrementally. The key focus for these studies, and many that followed, was to understand the antecedents for this behavior (Keupp & Gassmann, 2009).

We returned to investigate the same firms used in these seminal studies, and found a dominant pattern that had not been noted by the original researchers: most of the firms had been reproduced from pre-existing organizations and this was the reason for the early timing of their internationalization. By organizational reproduction, we mean that for a period of time a pre-existing organization (or organizations) supports the foundation of a new business venture through the transfer of resources, contacts, and knowledge. Governance arrangements are set up for the transfer that may, but do not necessarily, include partial or full ownership of the venture (e.g., Chesbrough, 2002; Wang, 2021; Woolley, 2017).

For example, Cochlear, the exemplary case of the born global from the McKinsey study (Rennie, 1993), was a subsidiary company of a well-established multinational. Cochlear's early and rapid internationalization following establishment was possible only because of support from its corporate parent, as well as a 5-year national interest project prior to foundation that brought together the parent, government and university researchers to prepare the technology for commercialization (Hewerdine & Welch, 2008). As this example illustrates, early and rapid internationalization was not so much a straightforward indicator of a founding team's entrepreneurial orientation as an indicator of the extent of support received from pre-existing organizations. Nor does the involvement of incumbent organizations necessarily cease upon foundation – Cochlear was not spun out from its parent company until 12 years following establishment.

As a result of this unexpected finding, our empirical restudy of the original BG and INV samples was guided by the following question: how does the process of organizational

reproduction affect the internationalization of the new venture? Addressing this question required the collection of additional data on the cases included in both original studies. The data covered the pre-foundation period and beyond, tracing the development of the ventures for as long as they survived. This is a longer timespan than was possible at the time of the original studies, but was necessary to identify all the organizations involved in founding the new venture, as well as their impact over time.

In developing an explanation for the impact of the incumbent's involvement, we take a relational view of organizational reproduction. That is, we conceptualize organizational reproduction as an evolving relationship between two generations of organizations: the incumbent and the new venture it reproduces. The characteristics and dynamics of this inter-generational relationship are consequential to new venture internationalization – not just the timing of its first international step, but also its subsequent pathway. While the support of a pre-existing organization might provide a promising beginning and a secure basis for rapid growth – as in the Cochlear case – we also show how the evolving relationship creates potential vulnerabilities, pressure points and discontinuities in the internationalization trajectory of the new venture. Destabilizing actions of the incumbent may lead to failure during the period when the new venture is still in the process of commercializing its product.

The contributions of our paper are severalfold. Our first contribution lies in identifying an antecedent of early and rapid internationalization omitted from previous accounts – reproduction from a pre-existing organization – and delineating the types of roles that incumbents may play in founding new ventures. Our second contribution is to develop a theoretical framing of organizational reproduction as an evolving inter-generational relationship, which allows us to explain how these relational dynamics then impact on new venture internationalization. Our third contribution is methodological in nature. We utilize the potential of a hitherto little used research design in IB – the case study revisit – to reenergize a research stream by offering an alternative interpretation of the same empirical cases.

We commence our paper by providing an overview of the original explanation for early and rapid internationalization, and its ongoing influence on subsequent research. We then outline our conceptual grounding and research process: our methodology for the case study revisit and the analytical



steps we took. In the following section, we present our case findings on the inter-generational relationships we found in the dataset. In the discussion section, we present a typology delineating how the characteristics and evolution of inter-generational relationships impacts on new venture internationalization. We complete our revisit by contrasting the inter-generational explanation we develop to that provided by the original studies. We conclude by elaborating on the contribution of our revisit and the agenda for future research it provides.

THEORETICAL FRAMING

In this section, we commence by tracing how the explanation for early and rapid internationalization proposed in the original studies on the phenomenon (e.g., Knight & Cavusgil, 1996; McDougall, Oviatt, Shrader, & Simon, 1994a, 1994b; McDougall et al., 1994c) has become entrenched over time, determining the subsequent trajectory of IE research. This stream of research is mostly silent on the process that our pilot case study of Cochlear uncovered: the role of existing organizations in bringing about the establishment and internationalization of a new venture. In contrast, the origins of new firms in existing organizations have been the subject of considerable interest in other areas of management. In the second part of this section, we turn to this literature to develop a conceptual framing for the current study. This takes the form of a relational view of how new organizations are reproduced from pre-existing ones.

Explaining the BG/INV Phenomenon

The explanation offered for the BG/INV in the original studies can be summarized as follows: Although typically resource constrained (Cavusgil & Knight, 2015), early internationalizing ventures possess other advantages that compensate for their lack of financial capacity and domestic track record. Some advantages are exogenous – notably a favorable environment of increasing global interconnectedness that makes internationalization feasible even for small firms (Knight & Cavusgil, 1996). This is seen as a recent phenomenon explained by technological progress (such as customized manufacturing capabilities and improvements in information and communication technologies) and maturation of developed markets (Knight & Cavusgil, 1996; Oviatt & McDougall, 1995). The other advantages all relate to characteristics of the founder and the venture, and their linkages with

external parties. We will consider these advantages – founder, organization and networks – in turn, showing how they have remained the focus of the subsequent research agenda (for a recent example, see Zucchella, 2021).

Founder attributes and resources

Knight and Cavusgil (1996: 12) characterize BC founders as ‘entrepreneurial visionaries who view the world as a single, borderless marketplace from the time of the firm’s founding.’ Oviatt and McDougall (1995: 34–35) similarly point to the ability of the founder ‘to communicate compellingly a global vision’. They emphasize the role of the founder’s previous international experience (be it through their previous employment and contacts with international customers, overseas trips, education abroad or ethnic background) and ability to accumulate competencies in the form of networks and knowledge (McDougall et al., 1994c). It is this experience that enables the founder to identify international opportunities not yet visible to others and employ related competencies to pursue them.

In subsequent research, these personal characteristics and assets of the founder – and also of the top management team (e.g., Zahra & George, 2002) – have continued to dominate findings. The entrepreneurial attributes highlighted in the original studies have been supplemented and expanded upon (Jiang, Kotabe, Zhang, Hao, Paul, & Wang, 2020); for example, decision-makers’ entrepreneurial proclivity (i.e., proactiveness, risk-taking and innovativeness; Zhou, Barnes, & Lu, 2010), possession of personal social capital (Lindstrand & Hånell, 2017) and knowledge (e.g., Bruneel, Clarysse, & Autio, 2018; Karra, Phillips, & Tracey, 2008). Nonetheless, these subsequent findings are broadly consistent with the original studies.

Firm-level capabilities and resources

The authors of the original studies emphasize the possession by the firm of particular resources that may provide the basis for competitive advantage. Oviatt and McDougall (1995: 37) draw on the resource-based view of the firm when emphasizing the importance of ‘intangible assets’, notably the uniqueness and innovativeness of the new venture’s proprietary knowledge and products (often associated with high-technology industries). Knight and Cavusgil’s (1996) study does not have

an explicit theoretical framing, but in later work they draw explicitly on the resource-based view (Knight & Cavusgil, 2004).

A more diverse range of theories has been utilized in subsequent research (Jiang et al., 2020). The most influential of these include dynamic capabilities (e.g., Sapienza, Autio, George, & Zahra, 2006; Weerawardena & Mort, 2006), organizational learning theories of different kinds (de Clercq, Sapienza, Yavuz, & Zhou, 2012) and social capital theory (e.g., Prashantham & Dhanaraj, 2010; Yli-Renko, Autio, & Sapienza, 2001). Importantly, these theoretical perspectives are complementary to the resource-based view, in that they are focused on identifying the superior capabilities that make early and rapid internationalization possible (e.g., Rialp, Rialp, & Knight, 2005).

Inter-organizational relationships and networks

As Oviatt and McDougall (1994) note in their seminal paper, the INV is able to compensate for its own lack of resources by leveraging those of others through the use of alternative governance structures. These can take various forms, including contractual alliances such as licensing (i.e., formalized inter-organizational relationships) and trust-based, social networks (i.e., informal inter-personal relationships). Knight and Cavusgil (1996) explain the role of long-term international alliances as critical to the emergence of BG firms. While they expose new ventures to opportunism by partners, the advantage of such governance structures is that they enable complementarity of assets 'for mutual benefit' (Oviatt & McDougall, 1994: 54; Knight & Cavusgil, 1996: 22).

The role of inter-organizational collaborations between independent parties has remained a popular topic, with a recent review (Sedzinauskienė, Sekliuckienė, & Zucchella, 2019) identifying 73 papers on the effects of networks on early internationalization (see also Bembom & Schwens, 2018). Most of these studies have examined formal (i.e., contractual) ties, such as with suppliers, customers and distributors. Only a minority of studies examines informal, social ties or relationships with intermediary organizations such as government trade agencies (Sedzinauskienė et al., 2019). Consistent with the seminal work, relationships and networks are regarded as 'unique organizational assets' (Zahra & George, 2002: 265) and 'social capital' in possession of the firm. As Sedzinauskienė et al. (2019) observe, the 'dark side' of networks, including the exercise of power by

network partners, has rarely been addressed in this research. Yet, as Child, Karmowska and Shenkar (2022: 14) caution, the starting point for any research on small firms should be to acknowledge the 'asymmetric power and dependence' that they face.

In sum, these personal, firm-level and inter-firm resources and capabilities overturn the assumption that newness necessarily constitutes a liability. Oviatt and McDougall point to the inertia that established firms may face if they internationalize after an extensive period of operating solely in the domestic market. In contrast, firms that are international from inception are able to form organizational structures and routines that are globally oriented. Knight and Cavusgil (1996) similarly argue for the benefits of a global vision from the time of foundation. The advantages of newness have continued to resonate in subsequent studies (e.g., Autio et al., 2000's well-cited term, 'the learning advantages of newness'). That studies find advantages and superior capabilities to be so significant is perhaps not a surprise, given the survivor bias inherent to the samples on which they are based. One-shot study designs predominate, with research concentrating on the earliest phase of internationalization. This means an under-representation of studies following the dynamics of firm evolution (Reuber, 2018), including their post-entry phase (for exceptions, see Ibeh, Jones, & Kuivalainen, 2018; Johanson & Kalinic, 2016).

There are a few exceptions to the consensus in the literature (e.g., Argyrou, 2000). A notable exception is Hennart (2014; Hennart, Majocchi, & Forlani, 2021), who not only critiques the dominant explanation but also provides an alternative. He advances the argument that early and rapid internationalization can be attributed to a venture's business model targeting a global niche market, rather than its distinctive resources and capabilities. He illustrates this with the example of Logitech, a firm also included in McDougall et al. (1994c) study. This new venture was successful so long as it adhered to its initial niche strategy of selling to OEMs; its internationalization faltered when it tried to expand into the retail market 5 years after foundation. However, as we shall detail later in the paper, Hennart's reanalysis of the Logitech case misses other details crucial to early internationalization – details that were equally overlooked by McDougall, Shane and Oviatt (1994c). The founding, product development



and early OEM sales of Logitech were only possible due to the involvement of three incumbent organizations. These were two prior ventures of the founders, and the Japanese multinational firm, Ricoh, which they were able to attract because of this track record.

Research on the impact of the role of pre-existing organizations has, however, received little attention from scholars studying the early internationalization of new ventures. Few researchers mention whether or not the firms they investigated were independent when founded, and how this independence is defined. Welch, Nummela and Liesch (2016) find that only 18% of international entrepreneurship studies use independence as a sampling criterion to select BGs/INVs (for examples, see Fernhaber & Li, 2013; Gabrielsson, Kirpalani, Dimitratos, Solberg, & Zucchella, 2008). This suggests that many samples used in IE studies may well include firms with a mix of origins. Yet the commitment of existing organizations to founding a venture is rarely considered explicitly as a factor when explaining early and rapid internationalization (Zahra, Ireland, & Hitt, 2000). In contrast, in other areas of management there has been sustained interest in 'organization-producing organizations' (Stinchcombe, 1965), providing us with a conceptual starting point for the current study.

A Relational View of Organizational Reproduction

Organizational reproduction¹ occurs when a new entity is formed from a pre-existing organization (Drori, Ellis, & Shapira, 2013; Stinchcombe, 1965; Woolley, 2017). That is, the pre-existing or incumbent organization supports the establishment of a new legal entity.² For this reason, the relationship between incumbent and new firm goes beyond market-based exchange relationships such as those between supplier and customer, or between a bank and its borrower. This makes them distinct from the industrial relationships between independent firms that, as we have seen, are studied in existing BG/INV literature. There is considerable evidence in management research that incumbents are decisive for the prospects of the firms that they establish (Wang, 2021; Woolley, 2017). The impact of the incumbent organization is not confined to the pre-founding period, but continues to affect the evolution of the new venture following foundation (Eriksson & Kuhn, 2006; Klepper, 2016).

Increased scholarly interest in the origins of new ventures has revealed organizational reproduction to be ubiquitous (Agarwal, Echambadi, Franco, &

Sarkar, 2004). There is evidence that in some industries, particularly high-tech ones, the involvement of incumbents in new firm founding may be the norm due to the complexity of bringing innovations to market – making it an undertaking that is often beyond the resources available to young ventures (Lindholm-Dahlstrand, 1997; Wallin & Dahlstrand, 2006). As research into the origins of new ventures has advanced, there is increasing recognition of the diversity of incumbents that can be involved in organizational reproduction (Drori et al., 2013), including corporate parents (Bergh & Sharp, 2015; Seward & Walsh, 1996); universities or public research institutes (Grimaldi, Kenney, Siegel, & Wright, 2011; Lockett, Siegel, Wright, & Ensley, 2005; Rothaermel, Agung, & Jiang, 2007); governments and state-owned enterprises (Cuervo-Cazurra, Grosman, & Megginson, 2022); and start-ups whose founding is backed by venture capital (Baum & Silverman, 2004; Chesbrough, 2003; De Bettignies & Brander, 2007). Firms founded by habitual (i.e., portfolio and serial) entrepreneurs may also benefit from resource transfers and reputation spillovers from other firms previously founded by the same entrepreneur (e.g., McGaughey, 2007).

Despite the frequent use of biological metaphors in this literature (e.g., Klepper, 2016; Uzunca, 2018), there is recognition that organizational reproduction is not analogous to a process of genetic inheritance, in which there is a replication of features from one generation to the next. Rather, it consists of a path dependent and evolving interaction between the two organizations, with the nature of the relationship then shaping the future of the new venture (e.g., Bolzani, Rasmussen, & Fini, 2021; Treibich, Konrad, & Truffer, 2013). Accordingly, we will adopt a relational approach in our study. In doing so, we avoid determinism by allowing for the impact of managerial choices, firm-level strategies and environmental dynamism on the evolution of the relationship over time. Inter-generational relationships can be analyzed using relational concepts familiar to the study of other inter-organizational relationships (e.g., Dyer & Singh, 1998; Ford, 1990; Håkansson, 1982). That is, the parties to the relationship are connected for a period of time through exchange activities – involving resource transfers and knowledge sharing – and arrangements for governing these activities.

However, inter-generational relationships are distinct from other relationships between organizations, as one party (the incumbent organization)



gives rise to the other (the new venture), meaning the two are interrelated from the outset rather than entering into the relationship as independent entities. Moreover, the resource exchange between the two parties is largely unidirectional, with the incumbent resourcing the new venture. A variety of assets can be transferred, ranging from IP, technology, management and technical expertise, capital and industry connections. The new venture is highly exposed to the power differentials that are inherent to inter-generational relationships. The incumbent's relationship with the new firm may range from highly committed to hostile (Cusmano, Morrison, & Pandolfo, 2015; Walter, Heinrichs, & Walter, 2014), meaning that the benefits of a well-resourced incumbent do not inevitably transfer to the new venture.

Incumbents transfer resources to support the establishment of a new venture, but they differ in terms of how they do so (i.e., relationship governance) and for how long (relationship duration). Resourcing the venture provides the incumbent with some degree of control, which it exercises by selecting governance mechanisms to oversee its interests in the new venture. For example, governance may be hierarchical and ownership based (e.g. establishing a subsidiary or a joint venture); or contractual (e.g., technology development and commercialization partnerships) (Chesbrough, 2003; Clarysse, Wright, & Van de Velde, 2011). If the incumbent continues its involvement, these governance arrangements may endure beyond the establishment of the new entity.

Existing literature therefore sensitizes us to the distinctiveness and variety of inter-generational relationships between incumbent organizations and the firms they reproduce. We will use this relational view to distinguish the ways in which incumbents resourced the BGs and INVs in the seminal studies – both in terms of relationship governance and duration – and how this impacted on the internationalization of these new ventures. Factoring in inter-generational relationships prompts a reassessment of how and why new ventures may internationalize early and rapidly. In the next section, we explain how we went about doing so in a revisit of the original studies.

METHODOLOGY

Research Process

An unexpected finding from fieldwork can be the foundation for reworking theory (Timmermans &

Tavory, 2012); and this was the trigger for the present study. In the course of a pilot case study (Hewerdine & Welch, 2008) we uncovered the complex reproductive origins of the Australian firm, Cochlear, as introduced above (see also Appendix 1 in Supplementary Material for details). We also came across a study by an Australian public policy expert that uncovered serious methodological concerns about the McKinsey study (Argyrous, 1993). Sparked by these discoveries, we decided to re-examine all 39 born global firms included in the McKinsey study (relied on by Knight & Cavusgil, 1996), as well as the 24 international new ventures used as empirical evidence by McDougall et al. (1994c). Given that the original studies contained few details on the foundation process of these 63 firms, and did not follow their subsequent internationalization pathways, additional data collection was required.

To do so, we made use of the methodology of a qualitative 'revisit' (a term popularized by Burawoy, 2003). Qualitative revisits have an established place in anthropology, business history and sociology (Heaton, 2004; for examples, see Kipping & Usdiken, 2014) but to date have rarely been used in the IB field.³ A revisit is a distinct research design: it does not aim to reproduce an original study, or simply to reanalyze the data from a previous study. Instead, the researcher returns to the same sample as in the original study, collecting and analyzing additional data. The goal is to use these additional data to generate new research questions and theoretical insights. The additional data we collected in our revisit established the prevalence of inter-generational relationships in the original samples. At this point our theoretical purpose became explaining how they affected the case firms' internationalization.

A revisit offers numerous empirical and theoretical strengths that we make use of in the current study. Its first advantage lies in the potential for theoretical novelty, by making visible what was obscured or omitted in the original study (Savage, 2005). In our study, we were seeking information about events and organizations not systematically included in the original studies. Second, we were able to enrich the empirical base by collecting additional data, as the original studies relied heavily on second-hand reports rather than data collected by the authors themselves (for a comparison of the original and our approaches to data collection and analysis, see Table 1).⁴ A third advantage of a revisit is that it allows the researcher to trace



changes over time – an important consideration for our study given that investigating the internationalization process requires data from a more extended time period than was possible to include in the original studies.⁵ As Jones and Khanna (2006) note, ‘longer-run’ studies of this kind allow researchers to understand processes and impacts not discernible using research designs with more restricted timeframes.

Case Selection

On the basis of an initial round of secondary data collection, we eliminated 16 out of the 63 firms used in the original studies: two because they had seemingly been mistakenly classified (ANCA, Camarao Brasiliensis);⁶ four on the grounds they were traditional trading companies,⁷ a distinct type of firm (i.e., intermediaries) well known to IB scholars; and ten for which very scant information was available, either because they had remained very small and/or had a short lifespan. For the remaining 47 firms, we were able to establish when they were founded and if an incumbent was involved. This was the case for 44 of the 47 firms. The three exceptions were a specialized food ingredients company that was a regional (not global) exporter, a software firm that only ever had one multinational customer, and a producer and exporter of natural oils (Appendix 3 in Supplementary Material).

In order to obtain a richer understanding of the dynamics of inter-generational relationships and

their implications for new venture internationalization, we selected a smaller group of cases from these 44 cases to investigate in greater depth. As befits a qualitative study, our selection of these in-depth cases was theoretically driven: the aim was to provide richer material for our analytical (not statistical) generalizations. This means we selected cases for in-depth study that, as a set, covered the main internationalization pathways and outcomes that we had found in our main sample, so that we could trace in more detail the implications of different incumbent origins and industry conditions. As our study proceeded, we expanded the number of cases in order to probe our emerging theoretical categories (Figure 1).⁸ We ultimately selected nine firms, including our original case of Cochlear, for the in-depth analysis presented in this paper.

Data Collection

The secondary data collection with which our empirical revisit commenced consisted of assembling all relevant and available secondary data on the founding and internationalization of each firm. The 1800+ sources comprised items in newspapers, press releases, trade publications, prospectuses and annual reports (if the firm was listed), published case studies, company histories, analysts’ reports, PhD theses and video or oral history recordings of company founders (for more details on the primary and secondary sources for each case, see Appendix 2 in Supplementary Material). We also had the

Table 1 Comparison of data collection and analysis strategies

	Original BG/INV studies	Revisit study
Original sample of companies	McDougall et al. (1994c) and Oviatt and McDougall (1994) – 24 companies; McKinsey (1993) and Knight and Cavusgil (1996) – 39 companies	
Data collection	1988–1993	2014–2021
Methodology	Mixed – case study, survey	Historically informed methodology – case study revisit
Sample	63 empirical cases 39 cases not analyzed by academic scholars 12 cases studied by at least one author (McDougall et al., 1994c) 12 cases sourced from third parties (academic publications)	63 empirical cases 63 cases analyzed by the authors 17 in-depth case studies ^a 20 interviews Newspaper articles, books, recordings and other secondary sources
Data analysis	Not available	Written case histories of 47 companies (16 companies eliminated from the sample) 17 in-depth case histories with chronology of firm’s origins and analysis of its development in the local and international contexts

^a The 9 in-depth case studies featured in this paper were selected from this sample

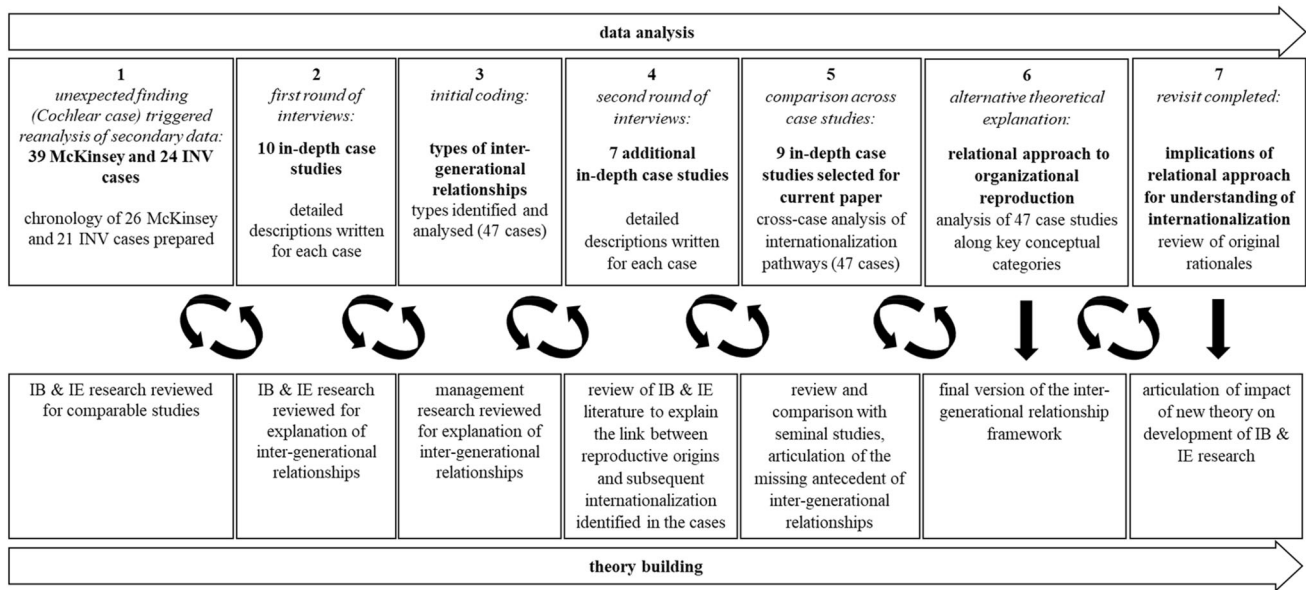


Figure 1 Analytical process for the revisit.

advantage of being able to access detailed retrospective accounts that some participants had placed on the public record subsequent to the original studies, as well as business histories.⁹

For each of the cases we studied in depth, we approached the founder(s) and/or a former managing director if available, as well as other knowledgeable informants. Given the passage of time, the 20 interviews we conducted could best be characterized as a form of oral history (see Appendix 2 in Supplementary Material for a list of informants). As recommended by oral historians (e.g., Ritchie, 2015) we encouraged better recall by providing memory aids for the interviewee ahead of the interview, in the form of a chronology we had constructed of the firm from secondary data. We also conducted follow-up correspondence with key informants to expand on and clarify key issues raised in the interviews, including instances in which further information was needed to supplement inadequate recall. Informants also read and commented on the case histories we prepared, providing an additional verification check. As oral historians would lead us to expect (Ritchie, 2015; Yow, 2015), interviewees had strong recollections of the key events associated with the case firms, as this had been a pivotal time in their careers, but they were less sure about exact dates and figures, or issues in which they had not been directly involved.

While the problem of memory loss is a well-known downside of retrospective interviews, this type of data source also has potential strengths. At the time of our study, the informants were well established in their careers or (semi-)retired. They had the time, inclination and emotional distance to reflect on and share their experiences and learnings. They were also more open than would have been possible while the events were still ongoing. They were prepared to discuss sensitive issues, such as failure, and to share with us selected contents of their personal files, allowing us to triangulate this material with the other documentary sources we had collected. Hindsight provided additional insights not possible at the time the events were occurring. In particular, the ability to compare the industry environment of today with the conditions which prevailed when their firms were founded enabled them to provide holistic accounts. As Burawoy (2009) points out, context is easily taken for granted so its impact may be overlooked by both informants and researchers at the time events are taking place. The retrospective nature of the interviews overcame this limitation.

Analytical Process

Building our alternative explanation for early and rapid internationalization entailed a series of iterative cycles of data collection and analysis. The key analytical stages for the current study are depicted



in Figure 1. As is appropriate for a process-based and theory-building study, analysis consisted of mapping out sequences of events, probing key themes, identifying an appropriate theoretical framing and refining the emerging theoretical categories (Langley, Smallman, Tsoukas, & Ven Van de, 2013).

Triggered by the unexpected findings in the Cochlear case (Appendix 1 in Supplementary Material), we started our analysis by preparing chronologies for other firms in the McKinsey and INV samples, also tracing the role of the incumbents that were directly involved in founding the cases (stage 1). As already discussed, the chronologies informed our first round of interviews (stage 2). The next analytical move was to develop an initial typology to compare firms on the basis of their inter-generational relationships (stage 3; see Appendix 3 in Supplementary Material for the results of all 47 ventures). To do so, we iterated between coding of the full sample and categories in the existing literature on organizational reproduction. We used this to inform our selection of additional in-depth cases that could enrich our understanding of each type and to guide cross-case analysis (stage 4).

The next analytical challenge was to develop an explanation for how inter-generational relationships affected new venture internationalization over time. Although a cross-case analysis of the in-depth cases was the main focus in this phase (stage 5), we also compared these cases to the pathways of the other firms in the sample for which we had sufficient data. As is appropriate for a process-based analysis, the focus was on the sequence of events. Our next analytical step (stage 6) was to return to the literature one more time as we searched for the conceptual resources to assist us in explaining the linkages we found between organizational reproduction and internationalization. It was at this point we identified the relational view of organizational reproduction as the most promising basis for explaining the empirical patterns in our data. The last step was to articulate the contrasts between the established explanation and our alternative, thereby completing our revisit (stage 7). We now turn to the findings from the in-depth cases on which our inter-generational explanation is based.

FINDINGS

In this section, we report the inter-generational relationships that we found in the featured cases. Our cross-case comparisons revealed different types of relationships, which – guided by our conceptual framing – we classified on the basis of how the incumbent resourced the new venture, namely: (1) whether the incumbent injected equity as part of the venture founding process (i.e., relationship governance) and (2) whether the incumbent's commitment was intended to cease upon foundation, or envisaged to be ongoing (i.e., expected relationship duration). This categorization results in four types of relationships: parent–subsidiary, sibling, alliance, and foster relationships (see Figure 2).

We now present our case findings for each type of inter-generational relationship. We show that the impact of these relationships was systematically downplayed in the original BG/INV accounts, or even not mentioned at all. We contrast this with our findings, which show their role to be decisive. We trace the relationships from their pre-foundation origins and detail how they were consequential to each case firm's internationalization pathway. The relationships with incumbents might have made early internationalization possible, but this does not mean they provided a solid basis for expansion.

Parent–Subsidiary Relationships: Ownership, Ongoing Commitment

This type consists of the relationship between corporate parents and the subsidiaries or joint ventures they establish. Two out of the three cases we use to illustrate this type from the original studies are wholly owned subsidiaries: Cochlear, founded as part of a multinational corporation, Nucleus, and AC Rochester, an Australian firm established by GM. The third case is a joint venture, Fact International, co-founded by existing New Zealand company Trigon Plastics.

BG/INV account

The two examples of subsidiaries that we feature – Cochlear and AC Rochester – are taken from the McKinsey BG sample. As we have already discussed, Cochlear became the prototypical case of the born global, portrayed as the swift ascent of a young, small company to a position of global niche leadership (Cavusgil & Knight, 2009; Nguyen & Mort, 2021; Rennie, 1993). AC Rochester also fits the definition of the born global to the extent that

		EXPECTED RELATIONSHIP DURATION	
		ongoing	time-bound
RELATIONSHIP GOVERNANCE	ownership	(1) Parent-subsidiary relationships <i>Cochlear, AC Rochester, Fact International</i>	(2) Sibling relationships <i>Austal, Betatene</i>
	non-ownership	(4) Foster relationships <i>Oxford Instruments, Heartware</i>	(3) Alliance relationships <i>Logitech, Femcare</i>

Figure 2 Types of inter-generational relationships found.

its internationalization commenced within a year of foundation. Fact International, our example of a joint venture, is taken from the INV sample (see also Coviello & Munro, 1997). It too began selling to international customers soon following foundation.

Inter-generational account

Cochlear When Cochlear was established as a wholly owned subsidiary of the Australian-based multinational corporation Nucleus, the ‘bionic ear’ it was set up to commercialize was the outcome of 16 years of R&D (Figure 3). The last 4 years of this pre-foundation process consisted of an extensive

R&D collaboration – bringing together Nucleus, the university where the inventor was employed and the basic research conducted, and the government which funded and steered the project – to prepare the scientific prototype for full-scale commercialization. The commitment to the collaboration shown by the CEO and founder of Nucleus, entrepreneur Paul Trainor, was critical to the successful delivery of a market-ready product and strategic plan for internationalization. Trainor and his Nucleus team had already amassed a track record of developing and commercializing novel medical devices.

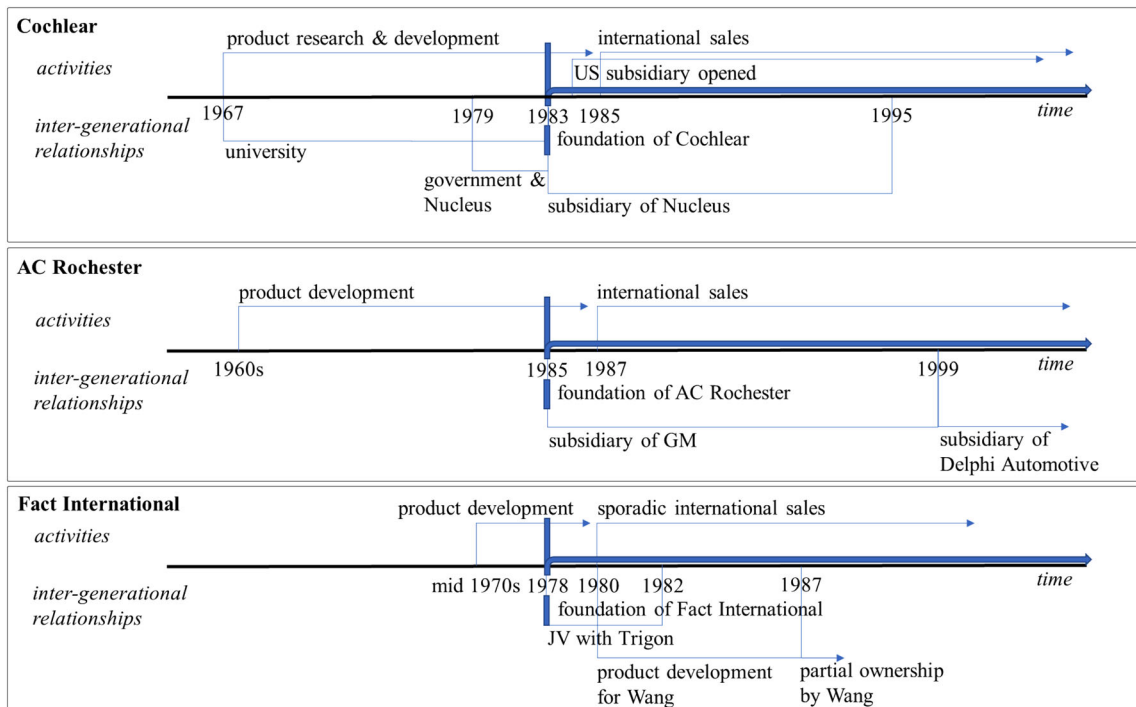


Figure 3 Parent–subsidiary relationships.



Once regulatory approvals, including by the US Food and Drug Administration, were obtained under the guidance of Nucleus, Cochlear's international growth was fast and sustained. Its US subsidiary was opened a year after foundation, and subsidiaries in Europe and Asia established within 5 years. But even after becoming a significant international player, backed by its experienced parent, Cochlear's position in the global market remained uncertain for many years, given it faced better-resourced competitors (e.g., 3M). Nucleus continued to nurture its Cochlear subsidiary until, 12 years subsequent to foundation, it was spun off and listed on the Australian stock exchange. The experience of its parent, Nucleus, in creating global markets for medical devices was critical to Cochlear's formative period prior to spinoff. Trainor was able to staff the subsidiary with experienced managers who were backed by the parent's existing network of offshore subsidiaries.

AC Rochester At its foundation in 1985, AC Rochester obtained an established management team, a product innovation that was already being sold in key international markets, and finance from its corporate parent, GM. GM's decision to locate AC Rochester in Australia was a response to favorable regulatory changes by the government at the time. Government grants and export subsidies to support greater international competitiveness increased the attractiveness of the location. This was coupled with the presence of a local automotive cluster, enabling AC Rochester to access a contract manufacturer. The integration of AC Rochester into the global internal market of GM subsidiaries allowed for accelerated international growth at the same time as expanding in the domestic market. As the former managing director of AC Rochester recalled in an interview for this study, the first international customers of the company were Opel/GM in Germany, Daewoo/GM in Korea and Suzuki/GM in Japan. Within 2 years from foundation AC Rochester expanded its exports to USA and France, selling almost exclusively to other GM subsidiaries.

But for the 15 years it was a GM subsidiary (Figure 3), AC Rochester was subordinated to its powerful multinational parent and outside contacts with GM's competitors had to be approved. Within these constraints, its managerial team exhibited entrepreneurial acumen in exploiting what flexibility it had to pursue local opportunities and leverage its position within GM's complex

structure. Over time, AC Rochester faced an increasing number of challenges to its survival, including a series of corporate restructurings of the group, declining competitiveness and therefore reduced attractiveness of its location, and constraints in expanding its customer base beyond GM's internal market. Although some constraints were removed in 1999 when AC Rochester became independent of GM by being spun off as part of a larger group, Delphi Automotive, it continued to face the challenges of being a subsidiary.

Fact International When the founder of Trigon Plastics made an investment unrelated to the company's main business by co-founding Fact International – a software joint venture with two former employees of the company that supplied Trigon's software – his motivation was to become the new venture's first customer. Beyond this, Trigon was also able to act as a reference site, opening doors to other prospective customers; give access to its mainframes for product development and provide office space; and offer mentoring to the other two founders, neither of whom had prior entrepreneurial experience (interview with co-founders of Fact International, 2016). But Trigon had no experience in the software industry and was itself a relatively young firm with limited resources to spare. As a result, it was restricted in its capacity to open up global markets for the new venture.

Fact needed to expand geographically because its potential domestic market of mainframe users in New Zealand was too small. But Fact's constrained resources and limited support from Trigon meant that its internationalization was mostly confined to opportunistic sales to neighboring Australia in the first 5 years of its existence. In order to grow further, Fact worked to enter into a close cooperation with Wang Laboratories, one of the world's leading computer manufacturers at the time.¹⁰ Wang saw the potential of Fact's software to offer more functionality to its mainframe customers.

Two years into its collaboration with Wang, Fact parted ways with Trigon to focus exclusively on the new partnership. It was only by upgrading its relationships in this way that Fact was able to move beyond sporadic sales to the Australian market. The remaining co-founders skillfully grew the venture's international sales by investing considerable effort to deepen Fact's integration into Wang's global value chain. Seven years after the initial product development agreement between the two companies, this process culminated in



Wang acquiring a 17.9% shareholding in Fact (Figure 3). But the global niche in which Fact operated – software programs for mainframe computers – was rapidly closing. Both Wang and Fact were on the wrong side of the industry-wide technological shift from mainframes to PCs. Soon after increasing its investment stake in Fact, Wang filed for bankruptcy protection and Fact never recovered from the lock-in effect of its relationship choice.

The common feature shared across three cases is the defining role parent companies played throughout their development. These incumbents varied in terms of the resourcing they provided and the mandates they assigned to the new ventures. But even generous resourcing could be problematic, as the incumbents' interests were not necessarily aligned with those of the new ventures. AC Rochester was well resourced, enabling rapid international growth. But its membership of the GM group later constrained its development by making it more difficult to attract external customers. In contrast, Fact International did not obtain sufficient resourcing from its parent, so sought another arrangement to enable it to grow internationally. In the process, it tied its future to a declining industry. Only Cochlear avoided the downsides of dependence on its parent. This is because Nucleus's business model was to incubate and globalize new technologies to the point where they could be profitably spun out. Accordingly, it nurtured Cochlear until the firm was able to compete internationally on its own.

Our case findings form a distinct contrast to those found in the original BG and INV sources that leave out the role of incumbents, including MNC parents and joint-venture partners. The well-publicized BG narrative of the Cochlear case does not include its parent Nucleus, nor does the classification of AC Rochester factor in its position as a GM subsidiary. The INV explanation of Fact International does not include any references to its co-founder and joint-venture partner Trigon, even though the latter made Fact's establishment and early internationalization possible – as well as placing constraints on its ability to expand beyond the neighboring market of Australia.

Sibling Relationships: Ownership, Time-Bound Commitment

Sibling relationships were the result of consecutive, related foundings, enabling the later venture to benefit from the legacy of the previous one. The

ventures are linked either because they are founded by the same habitual entrepreneur(s), or because they are different legal structures for what is substantially the same entity.¹¹ In these scenarios, the upfront transfer of core assets from the pre-existing organization enables the founding of the new venture. In the two cases we profile – Betatene and Austal – the commercial opportunity they were founded to pursue had been identified and enabled by an older sibling venture owned by the same entrepreneur. In Betatene's case, the older sibling was dissolved when Betatene was established; in Austal's case, the older sibling was sold. In both cases, the serial entrepreneur was the driving force behind the new entity, but in Betatene's case his ownership was diluted through a stock market listing as part of the establishment process.

BG/INV account

Both Betatene and Austal belong to the original born global sample in the McKinsey report. Their international expansion post-foundation is aligned with the BG narrative, to the extent that both companies were able to start international sales within less than 2 years following incorporation. This narrative excludes events before the companies were founded as this period is not included. This leads to the impression that they started around a new technological opportunity and were able to organize their commercialization independently.

Inter-generational account

Betatene The foundation and critical early years of the company were defined by two people: the scientist who generated the intellectual property, and the serial entrepreneur to whom he reached out as a last resort after failing to interest an established multinational corporation in becoming a development partner. Both have shared their accounts of events with us. The scientist remained in his position at the research institute, while the entrepreneur saw the potential of the IP and agreed to commercialize it. But the process of commercialization was long and resource consuming even before Betatene was founded. The underlying technological innovation spent 9 years in the R&D phase, first within the research institute where the scientist made the original discovery, and then within another corporate entity (Cockajemmy Proprietary Limited) set up by the same founding team as Betatene (Figure 4). This first 'sibling' venture was dissolved and Betatene was set up as a

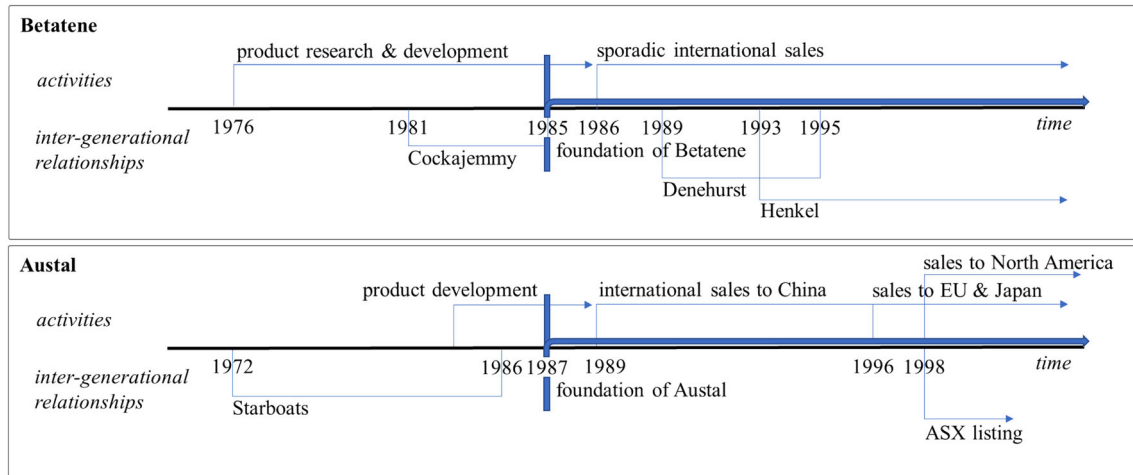


Figure 4 Sibling relationships.

'cleanskin' entity to attract investors in the lead-up to an IPO that provided additional funding for manufacturing scale-up.¹²

Founded 4 years after Cockajemmy, Betatene was established with global markets specifically in mind. Within months, it started exporting to Japan, playing on the strengths of its sibling, including the latter's track record and product development efforts. Yet Betatene faced the combination of an immature product and immature niche market, and was not able to go beyond sporadic international sales. Despite the time its scientific innovation had been nurtured by its older sibling, Betatene experienced unstable production throughout its first 6 years, while it struggled to perfect its manufacturing processes. Demand for its product was also nascent as customers were experimenting with applications, resulting in modest sales to its initial markets of Japan and the USA. In this period, the survival of the startup was in doubt, as the development costs proved much higher than anticipated, and beyond the financial capacity of the serial entrepreneur.

To survive, Betatene had to go through successive relationship upgrades. Its first upgrade came in the form of investment from another small Australian company, Denehurst, founded by the same entrepreneur as Betatene. But the costs involved in developing efficient production methods far exceeded the new venture's revenue, and in time also exceeded the resources of Denehurst. However, by then Betatene was able to demonstrate substantial progress towards solving its production problems. On this basis it was able to attract a large

multinational, Henkel, initially as its marketing alliance partner, then minority investor with a 20% stake in the company, before a full acquisition 2 years later. Henkel's international distribution network was a suitable platform for an acceleration of Betatene's international expansion. These relationship upgrades allowed Betatene to develop its global niche market and realize the opportunity that the original founding team had started to commercialize 14 years earlier – but at the cost of being absorbed by a larger corporation.

Austal Austal benefited from the endowments of the founder's previous venture, Star Boats, that included not just proceeds from the sale of the older sibling company, but also relevant networks, a team of experienced shipbuilders and a promising business idea focused on international opportunities for the new, light and fast aluminum vessels. The benefits Austal obtained from these endowments from its predecessor were coupled with the favorable timing of its first export sales, that coincided with a market opening for high-speed ferries in Asian markets (interview with Austal founder, 2018). Although the traditional Australian shipbuilding cluster was in decline, the location retained high levels of relevant expertise, which was further reinforced by attractive government incentives for building vessels for export. This was fertile ground for Austal's formation.

Less than 2 years following foundation, Austal made its first sale of a \$7 million high-speed passenger catamaran to China. The founder obtained a bank loan to finance the construction

of this first vessel thanks to the success of his prior venture. Rapid growth followed, resulting in the next 30 export contracts (valued at \$150m), originating from the same customer: a regional government in China. Austal's subsequent growth and international expansion were organic. By 1993 (4 years after international sales commenced), its sales to the original customer in China helped to establish the company as the leading manufacturer of 40-m vessels in Asia. Nine years after foundation, Austal started to expand beyond the region to Europe and Japan. Like Betatene, it needed additional capital injections to grow internationally. Once listed on the Australian Stock Exchange in 1998, it was able to expand into the North America, building an attractive network with presence in key international markets (Figure 4).

The BG explanation of these cases emphasizes the role of the 'inherent advantages of small companies' (Knight & Cavusgil, 1996: 22), leading to the conclusion that these are a unique type of firm that can reap the benefits of technological advancements and market interconnectedness in a way superior to traditional firms. The fact that years, and sometimes decades, of research and commercialization attempts prior to company foundation are not mentioned risks producing a simplified interpretation of the underlying processes, including internationalization. For Betatene, the process started 9 years prior to its foundation, including 4 years of direct commercialization efforts by the predecessor sibling venture. Betatene remained dependent on regular injections of resources for the next 10 years, until it was fully acquired by Henkel. Austal too required additional capital injections, but its R&D effort was not as costly so it was able to cover these upfront costs without being acquired.

Thus, although the venture might be new, the opportunity it was pursuing and the resources it exploited to do so were not. Once this history and the legacy of earlier 'sibling' ventures are considered, each case company's commercialization journey to global sales becomes much more protracted. The journey is also more problematic, given that the endowments that the ventures obtained from their older siblings were not a sufficient basis for their subsequent internationalization. Although these firms were founded with the intention of having an independent future – in contrast to subsidiaries – this independence was difficult to sustain.

Alliance Relationships: Non-Ownership, Time-Bound Commitment

The alliance relationships in our dataset took the form of contractual arrangements with incumbent organizations that enabled the foundation of the new venture. These alliances had the goal of progressing commercialization of a technology or product. They included licensing, research collaborations and development partnerships – all of which represented limited and time-bound commitments on the part of the incumbent. Alliances of this kind often accompanied other types of inter-generational relationships. This was the case with both Logitech and Femcare, the new ventures we profile (as well as Cochlear, as already discussed). Both firms were founded with alliance relationships in place that were only made possible by the prior activities of earlier ventures owned by individuals closely associated with the new entity.

BG/INV account

According to INV scholars, Logitech 'challenges traditional beliefs about how firms internationalize' (Oviatt & McDougall, 1995: 30) and epitomizes the new breed of companies (Jolly & Bechler, 1992; Jolly, Alahuhta, & Jeannet, 1992). The INV explanation is that Logitech got its global positioning right from the outset: It had a global vision thanks to its internationally oriented founders, built up production volumes quickly, and made focused foreign investments boosting its international connections (McDougall et al., 1994c). This enabled the company to build a strong position against competition from incumbent firms, redefining the entire industry in the process. McDougall et al. (1994c) provide fewer details on Femcare, but they do mention that its 'internationally oriented founders' were instrumental in enabling the new venture to 'leapfrog the normally expected stages of internationalization' (McDougall et al., 1994c: 473). Indeed, Femcare recorded its first international sales immediately upon foundation.

Inter-generational account

Logitech The Swiss and Italian co-founders of Logitech started collaborating on a word processing system while studying for their master's degrees at Stanford. In the 5-year period in between graduating and founding Logitech, they straddled Silicon Valley and Switzerland, accumulating expertise in integrating hardware and software in two ventures they founded: BeZy and Polytech. Neither of these ventures was successful, but their brief existence

helped the founders to showcase their technological skills and gain commercial experience in the form of a large contract with their first client, Swiss company Bobst Graphic. The contract was terminated when Bobst was acquired, but it earned the founders a sufficient track record to attract the interest of the large Japanese corporation, Ricoh. On the strength of securing a feasibility study with Ricoh, they established Logitech – their third startup in a row. At that point, they had no other prospects than the alliance with Ricoh (Figure 5). But in their favor was that, unlike Fact, they were on the right side of the technological shift to PCs. Because of the timing of its founding – 1 year before IBM commenced sales of its personal computer and 3 years prior to Apple’s introduction of the Macintosh, the first successful mouse-driven computer – Logitech was able to exploit this market opening.

In the Logitech case, this pre-foundation alliance between alliance partner and new venture was subsequently extended by a follow-on contract. Satisfactory delivery of the feasibility study to Ricoh led to the two companies signing another, much larger contract that funded the 4-year-long development of the software solution for what became Logitech’s first product and one of the first commercially successful computer mouse designs on the market. The alliance was also the catalyst for Logitech to expand its office in Silicon Valley, which it inherited from BeZy, in order to be close to Ricoh’s development facilities. Without this contract with Ricoh and the funds it secured, developing and internationalizing Logitech’s first product

would not have been possible. The Silicon Valley office became a fertile base for the launch and rapid international expansion of its computer mouse, soon to be established as a standard complementary product to personal computers.

Femcare Femcare was formed in 1982 to commercialize an invention, a female sterilization device, whose development over the previous 10 years – entailing the construction of a succession of prototypes (six in total) and extensive clinical trials not just in the UK, but also Europe, Asia, South America and Africa – had been managed and financed by a charitable foundation, the Simon Population Trust (Figure 5). Additional investment was provided by one of the trustees, Donn Casey, to manufacture and sell the device once it was ready to be commercialized. This organizational arrangement might well have continued, had the trust not received legal advice that it created a conflict of interest for Casey. This dilemma was resolved by establishing Femcare as a new corporate structure along with new ownership. Casey, who was the driving force and a social entrepreneur in today’s terminology, had to relinquish any direct involvement. The trust became the licensor of the medical device, distancing itself from the newly formed company with the only remaining connection being the collection of royalties. All but one of the Femcare founders were new and had not been involved in developing the medical device. The exception was the scientist who had invented the device and overseen its clinical trials.

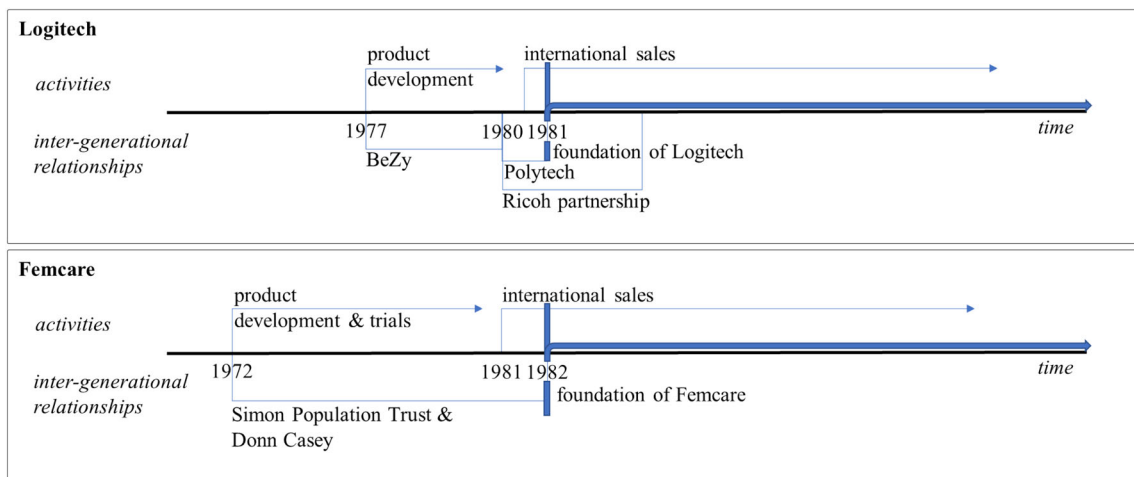


Figure 5 Alliance relationships.



According to this scientist (interview, 2017), international sales of what became Femcare's product started prior to its incorporation, when a dedicated marketing manager was employed. Internationalization was rapid because the product had already been tested in 12 countries, with more than 9000 patients participating in the pre-foundation trials. A year before Femcare's foundation, the trust received international orders for nearly 18,000 of its medical devices, far exceeding the production capacity of Casey's small manufacturing facility. Although Femcare did not receive additional resources from the trust after foundation, it was able to benefit from its license to a commercially proven product that was already selling in global markets, and that gave it the basis for developing a leadership position in its market niche. For Femcare, just as for Logitech, reliance on an incumbent organization had a positive outcome.

Once these additional events are taken into consideration, internationalization is no longer as rapid as it first appears. Contrary to INV claims (McDougall et al. 1994a, b, c), Logitech did not redefine the industry from the outset. In fact, there was a long history, not just of the software development that took place in its sibling ventures, but also of the R&D to produce the hardware. Logitech licensed the hardware for the mouse from a Swiss university, which had developed and prototyped it well before Logitech's foundation. Logitech's main achievement was the development of the software that provided a functional interface between the mouse and the PC. This was financed by Ricoh, at a scale that was beyond the resources of a resource-poor startup. Yet Ricoh's role is not mentioned in the INV account of the Logitech case (McDougall et al., 1994c; Oviatt & McDougall, 1995). Nor are the sibling ventures that made it possible for the founders to secure such a major industry partner.¹³

The role of the alliance partner was equally decisive in the case of Femcare. The incumbent organization that licensed its technology to Femcare was responsible for 10 years of intense product development, international medical trials, and the gradual building of a global customer base – yet its role is not mentioned by McDougall et al. (1994a, b, c). In the cases of both Logitech and Femcare, their alliance was the reason why early internationalization of the technological invention was achievable. The difference between the two ventures is that Femcare's product was already commercialized and selling on global markets

when the new venture was founded, whereas Logitech's product development commenced upon founding.

Foster Relationships: Non-Ownership, Ongoing Commitment

Fostering took place when an incumbent provided ongoing support to bring a new venture's products to market. Support was based on trust-based mechanisms at the inter-personal level, rather than equity or contracts. In the two cases we feature, this type of informal support for venture formation was motivated by the personal commitment of individuals in the incumbent organization. They were driven by genuine enthusiasm for the innovation and willingness to back the vision for the new venture. Their expectation that the newly established firm would in time be able to function as an independent entity, with no ongoing obligations to the fostering organization. In the case of Oxford Instruments, the champion was the head of the prestigious Clarendon Laboratory of the University of Oxford; in the case of Heartware, they were the inventors of the technology which their employer, a Dutch university, licensed to the new venture.

BG/INV account

Both Oxford Instruments and Heartware are featured extensively in the original INV studies (McDougall et al., 1994a; Oviatt & McDougall, 1995; Oviatt, McDougall, Simon, & Shrader, 1994). Oxford Instruments is presented as one of 'the most successful global start-ups' (Oviatt & McDougall, 1995: 38). This success is explained by its possession of every advantage of an INV,¹⁴ particularly its 'unique intangible [technological] asset' that 'became an ever-increasing and unbeatable competitive advantage' (ibid: 37). Heartware, on the contrary, lacked these success characteristics. In particular, its failure is attributed to an inadequate global vision which was not 'shared by a supportive network of business relationships extending across national borders' (Oviatt & McDougall, 1995: 36).

Inter-generational account

Oxford Instruments The Clarendon Laboratory of the University of Oxford actively supported the foundation of Oxford Instruments. The Laboratory not only consented to the establishment of the firm, but continued to employ the founder, Martin Wood, for a decade after the company was founded

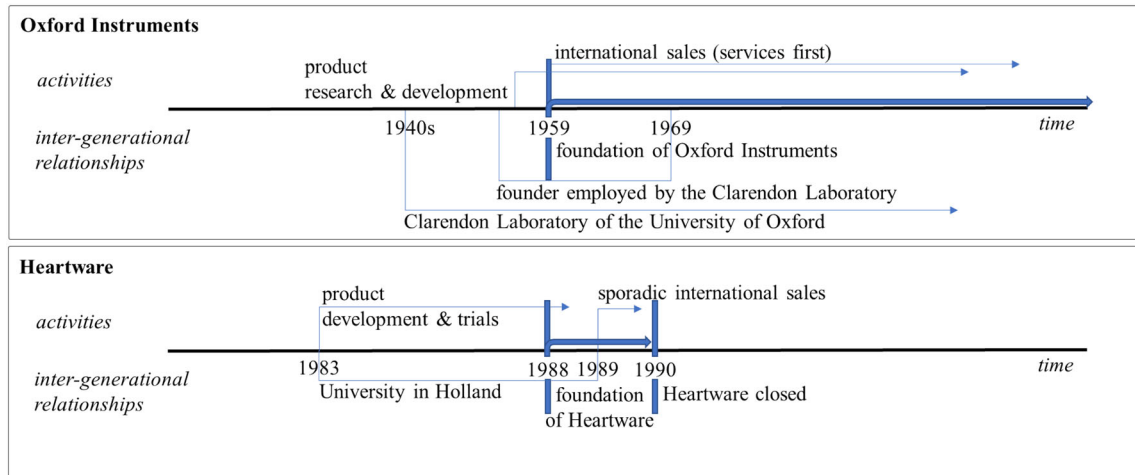


Figure 6 Foster relationships.

(Wood, 2001) (Figure 6). Originally, the company specialized in technical consulting services. The idea for its first product, materials for product development, initial publicity via conferences, network of customers and marketing were all obtained from the Clarendon Laboratory. The first product, the foundation for the company's success, was a highly specialized piece of laboratory equipment (i.e., magnets), modelled on equipment already being used in the Lab. Wood later recalled: 'We made money from year 1 because all the technology came out of the university' (Wood, 2012: 18). Once the product was ready to sell, the Laboratory served as the manufacturing subcontractor, and its reputation and research networks provided the company access to an international customer base. The leading scientific laboratories worldwide that formed Oxford Instruments' customer base would not have purchased equipment from unverified sources.

The technological leadership of the company was nurtured and co-shaped by the Laboratory without the university ever formalizing this relationship or claiming an equity stake. This arrangement can be explained by the timing of the startup. When it was founded in 1959, Oxford University had no prior experience of spinning out ventures and no formal process of supporting them. However, it was able to provide valuable inputs and experience at the points at which they were needed, allowing the technology to reach the stage of commercial viability. This allowed Oxford Instruments to grow organically. Withdrawal of support occurred

gradually and at a time when the venture had been able to establish itself in international markets and was on the path to global niche leadership.

Heartware Heartware's founder – like Wood, a committed but inexperienced entrepreneur – left his employment and started the venture on the understanding that it would receive from a Dutch university not just a technology license (for instruments measuring and treating cardiac arrhythmias), but also ongoing support, technology updates and market leads from the university researchers who invented the technology. This support was crucial given the technology was an 'engineering' rather than 'commercial' product: that is, too early to be commercially viable. Heartware was also dependent on the inventors' international network of professional contacts to recruit hospitals that were prepared to act as early adopters (interview with Heartware founder, 2017).

However, the firm's prospects were gravely hampered by the breakdown of its relationship with the Dutch university within the first year of its operations (Figure 6). The informal fostering arrangement with the inventors did not survive their sudden exit from the university, leaving the firm without technical support and further market leads. On its own, the technology license that the Dutch university had granted was not enough. In his interview with us, the founder estimated that transforming the technology into a product that could be commercialized would cost \$US1 million, but despite considerable effort he was unable to attract a development partner that would make

such an investment given the uncertain payoff. Located far from relevant industry clusters and without a replacement partner, Heartware was forced to close. Its internationalization never went beyond a proactive but ultimately futile worldwide search for finance, technology partners and customers that would be prepared to act as trial sites.

Both Oxford Instruments and Heartware were startups without market-ready products upon founding and whose founders had no prior entrepreneurial experience. But crucially, they differed in the nature of the fostering they received. Without the comprehensive, long-term support of the Clarendon Laboratory, Oxford Instruments would not have built and internationalized its 'unique intangible asset' (Oviatt & McDougall, 1995: 37). And no global vision would have saved Heartware from stalling once the Dutch university researchers stopped sharing technological updates, making the product unattractive to investors. The internationalization and the very viability of each company was affected by its foster relationship.

In Oviatt and McDougall's version, Oxford Instruments' 'unique intangible asset' (1995: 37) is attributed solely to the company. The omnipresent role of Oxford University in building this asset is not considered. In fact, Oxford University and the Clarendon Laboratory are not mentioned by Oviatt and McDougall (1995) at all. In the case of Heartware, they acknowledge that the company 'failed because its relationship with its Dutch suppliers was insecure' (1995: 36) but do not explain how dependent it was on the Dutch university for more than the technology license. The premature termination of this relationship was the reason for the company's attempts at internationalization, and its ultimate failure.

DISCUSSION: EARLY AND RAPID INTERNATIONALIZATION REVISITED

Our empirical revisit has uncovered a phenomenon that has been systematically omitted, or at least downplayed, in existing research: the presence of an incumbent organization in the founding of a new venture. In this section, we provide our alternative explanation for the early internationalization of such incumbent-backed ventures. In the first part of this section, we specify how each relationship type may facilitate, but also potentially hinder, internationalization. We then complete our revisit by contrasting our explanation, that factors in organizational reproduction, with the

explanation found in the original BG/INV studies, that treats these new ventures as though they were independent.

Alternative Explanation: How and Why Inter-generational Relationships Matter

Although they might facilitate early international expansion, we have found that incumbents were not necessarily advantageous to the internationalization of the new ventures whose founding they supported. Synthesizing these findings from our revisit, we now delineate how each type of inter-generational relationship affected the internationalization pathways of new ventures: not just the timing and speed of entry into international markets, but also the possible pressure points and destabilization produced by the interactions over time between the parties to the relationship. In this conceptual treatment of the relationship types, we specify how the characteristics of each one generated distinct advantages and disadvantages for new venture internationalization (Figure 7).

Quadrant 1: Parent–subsidiary relationships

In this kind of relationship, the venture's dependence on its parent was high, but if the resources it received in return were munificent and aligned with the requirements of the market it was servicing, its internationalization could be both early and rapid. Of particular value were a commercial-ready product, thanks to the incumbent's investment in product development process prior to establishment of the subsidiary, and extended support after foundation as well (e.g., Cochlear). If the parent company was a large multinational (e.g., AC Rochester), the subsidiary's internationalization might also benefit from a high level of external legitimacy and an internal market in the form of other business units of the group. These were cases of what has been termed 'internationalization of the second degree' (Forsgren, Holm, & Johanson, 1992); that is, internationalization of the subsidiary organization.

However, parents did not necessarily make a substantial resource commitment to the venture if they regarded it as a side bet rather than a strategic one. In such cases (e.g., Fact), the resourcing they provided typically fell short of what would be needed to sustain the new venture into the future – with this shortfall particularly acute for those new ventures without a market-ready offering upon founding. The parent might also have little prior exposure to the industry in which the new venture

		EXPECTED RELATIONSHIP DURATION	
		ongoing	time-bound
RELATIONSHIP GOVERNANCE	ownership	<p>(1) Parent-subsidiary relationships <i>fulfilling subsidiary mandate</i></p> <p>Potential benefits for internationalization early, rapid internationalization due to: - munificence and complementarity of parental support, - availability of an internal market, - external legitimacy due to industry position of the parent</p> <p>Potential disadvantages for internationalization pressure points: mandate changes, reduction in commitment, ownership changes, leading to - high level of dependence on corporate parent to enable and sustain internationalization, - if a side bet by parent, limited resource commitment and lack of complementarities, - limited international expansion due to restrictions of subsidiary mandate</p>	<p>(2) Sibling relationships <i>pursuing an existing opportunity within a new legal entity</i></p> <p>Potential benefits for internationalization strong basis for internationalization due to: - superior resources, - experiential knowledge inherited from sibling firm, - external legitimacy due to credibility of serial entrepreneur</p> <p>Potential disadvantages for internationalization pressure points: resource shortfalls, loss of independence, leading to - need for relationship upgrades, - risk of ineffective transfer between sibling ventures of entrepreneur's experience</p>
		<p>(4) Foster relationships <i>jointly bringing an innovative solution to market</i></p> <p>Potential benefits for internationalization continuity of formal and informal support of internationalization, including: - flexible and targeted resourcing that bridges the high upfront costs of internationalization, - external legitimacy due to reputation and industry contacts of fostering organization</p> <p>Potential disadvantages for internationalization pressure point: withdrawal of organizational permission for fostering, limited funding leading to - lack of contractual safeguards and redress - insufficient funding for product development and marketing</p>	<p>(3) Alliance relationships <i>advancing a collaborative project</i></p> <p>Potential benefits for internationalization high level of complementarity of alliance partners, including: - international experience of the alliance partner, - high level of external legitimacy, - provision of reference site</p> <p>Potential disadvantages for internationalization pressure points: cessation of alliance prior to commercialization of product, limited funding, leading to - joint project remaining unproven and incomplete - need to source additional partnerships for resourcing</p>
	non-ownership		

Figure 7 How inter-generational relationships affect new venture internationalization.

was seeking to establish itself, with this lack of complementary experience limiting its capacity to provide the resources and global market access that were required. In such a scenario, the subsidiary suffered from the twin disadvantages of high dependence and a high level of resource constraints. This means rapid growth in international markets was beyond the venture's reach. The subsidiary or joint venture could face closure or sale if its growth and internationalization did not meet the objectives set by its parent.

No matter the munificence of the resourcing, ongoing dependence on the parent had the potential to constrain second-degree internationalization. Although a proactive management team might find ways to expand its mandate, the subsidiary's growth in the longer term could be hindered by its association with the parent. Even a well-resourced and profitable subsidiary might not have a secure future in the multinational group from which it originated, but could be sold or spun out if the parent's strategic priorities changed. The subsidiary's position within the parent group was not assured, and it had to adjust to mandate

changes or new ownership arrangements, including an independent future for which (unlike Cochlear) it may have been poorly equipped. The second-degree internationalization that commenced within one firm might continue inside another legal entity. These developments represented pressure points on the subsidiary's internationalization trajectory over time.

Quadrant 2: Sibling relationships

The accumulated assets, reputation and experience of the older sibling firm could provide a promising legacy for the new venture and its internationalization. This inheritance from the previous venture might be sufficient to enable the new one to internationalize early. In this scenario (e.g., Austral), the venture was able to benefit from the transfer of assets from its predecessors, even though the resourcing may not have been as extensive as in the case of subsidiaries and joint ventures. The resource transfers could take the form of technological and industry expertise, skilled and experienced staff, and even international experience and relevant contacts. Given its association with its



predecessor, the new venture might commence with a degree of external legitimacy, enabling it to obtain support from external parties such as banks, distributors and customers. If a habitual entrepreneur remained involved, this potentially ensured that valuable experiential knowledge was not lost in the resource transfer from one sibling firm to another.

However, the inheritance from the older sibling might not be so strong, providing a mixed or even problematic legacy for the new venture. This was particularly the case if the new venture inherited a product that was not at the point of being commercially viable (e.g., Betatene). Because the older sibling did not provide ongoing support, there was insufficient resourcing available for internationalization of the new venture. The resourcing shortfall might be exacerbated by barriers to a smooth transfer of assets between sibling firms – for example, the failure to secure key personnel. In response to these pressure points, the venture might be able to secure a relationship upgrade, attracting additional investors who provided resources that were beyond the capacity of the sibling firm. However, this diluted the control of the founder and eroded the venture's independence.

Quadrant 3: Alliance relationships

Although the incumbent's commitment to alliance relationships was bounded in its scope and duration, its willingness to strike an alliance, prior to the existence of a legal entity, provided the new venture with considerable credibility. The reputational benefits of being associated with the incumbent firm could lead to additional opportunities, partnerships and resources. In this way, pre-founding contractual relationships could fast-track the development of the venture's product and international markets (e.g., Femcare), providing the new firm with a track record, external legitimacy and, in the case of R&D partnerships, a reference site.

While alliances were critical in providing access to the resources – such as IP and funds for R&D – necessary to found the new venture (e.g., Logitech), they did not amount to long-term commitments or the promise of ongoing investment. Yet despite this low level of commitment on the part of the incumbent, the venture's dependence on its alliance partner was high: without this support, development and commercialization of the innovation would not be viable. Conclusion or early withdrawal of the alliance partner was therefore a critical pressure point. In such circumstances, the

future of the new venture remained precarious, jeopardizing any chance of growth in international markets. Given these limitations, other inter-generational relationships might be needed (e.g., Cochlear had a parent, not just alliance relationship), so that the new venture could access the additional resources not available from its alliance partner.

Quadrant 4: Foster relationships

Although these relationships were based on informal arrangements and in-kind contributions, they could play a critical role in enabling early internationalization. Incumbents were not able to provide equity due to the informality of the arrangements, but a wide range of resource transfers was nonetheless possible: e.g., technical expertise, industry knowledge, access to equipment, introductions to potential customers and networks, and even payments for services. Critical to early internationalization was the incumbent's provision of initial contacts with potential customers and in-kind support to develop the first product, given that the costs would otherwise have been prohibitive. In this way, support from the incumbent could bridge the gap between the deficient resources of a startup and the upfront costs of international expansion (e.g., Oxford Instruments). Because of the informality of the relationship, there was considerable flexibility to provide well-targeted and timely support, responding to needs as they arose.

However, the lack of contractual obligations meant that the new venture was exposed to changes in the priorities and policies of the incumbent firm. The viability of the foster relationship was also highly dependent on the champions in the incumbent continuing to have organizational permission to support the new venture. The professional standing, seniority and decision-making autonomy of the champion or champions in the incumbent firm were critical in this regard. Sudden withdrawal of this support (e.g., Heartware) was the main pressure point on the new venture's internationalization, pushing the company to scale up its international search for resources to compensate for a precarious position at home. In addition, the informal nature of the relationship restricted the extent of the resource transfers that were possible. The lack of direct financial support by the incumbent means that internationalization of the new venture depended on organic growth so necessarily proceeded slowly.



To sum up, inter-generational relationships did not just make founding of the new ventures possible, potentially becoming involved years prior to the formation of the legal entity; they also motivated early internationalization. However, the presence of the incumbent does not mean that internationalization would be rapid, or that it could be sustained over time. Instead, the actions of incumbents were a source of tensions and instability, not just beneficial resourcing. Whether the inter-generational relationship generated momentum for internationalization, or else restricted and even destabilized it, the impact on the new venture extended beyond the pre-foundation period. The growth bursts or pressure points produced by the incumbent were related to the characteristics of the relationship itself: its purpose, governance, dependence and duration. For these reasons, internationalization could not be understood without reference to the incumbent and the evolution of its relationship with the new venture. In the next section, we contrast this inter-generational explanation for the BG/INV phenomenon with that of the original studies.

Contrasting the Two Explanations

As we have already discussed in our review of existing literature, the dominant explanation in IE identifies three features of new ventures that explain their early and rapid internationalization: the entrepreneurial attributes of the founding entrepreneurs, the superior resources and capabilities of the new ventures, and the networks that they are able to access. This has remained the favored explanation for new venture internationalization (e.g., Jones et al., 2011; Keupp & Gassmann, 2009; Zahra & George, 2002; Zucchella,

2021), but in this section we will contrast it with the alternative that our revisit has uncovered (Table 2): that early, and possibly rapid, internationalization, may be the result of organizational reproduction. Having conceptualized this reproductive process as a dynamic inter-generational relationship, we now demonstrate how and in what ways this provides a different explanation of the internationalization pathways of new ventures.

Founder attributes and resources

Turning first to the entrepreneurial proclivities of individuals, the evidence from our revisit does not negate the importance of an entrepreneurial orientation on the part of the founder or founding team. As our case analysis has shown, the focal new ventures we studied were led by capable and committed individuals. They varied in their level of experience (i.e., habitual entrepreneurs versus first-timers) and motives (e.g., social entrepreneurs versus inventors), but they exhibited the entrepreneurial attributes that have been identified in existing research (e.g., Hennart et al., 2021; Jiang et al., 2020).

However, a focus on the human capital found in the new venture is insufficient. Decision-makers and venture champions in incumbent organizations were also decisive actors. In some cases, decision-makers in the incumbent organizations were even the ones who identified and pursued the initial opportunity, and recruited the founding team. Managing a positive relationship with these decision-makers was a priority for the management of the new venture, requiring considerable time and energy. Relationship management was a critical skill for the new venture's leadership team in maximizing the benefits that could be gained from

Table 2 BG/INV versus inter-generational explanation

Key dimensions	Original explanation (BG/INV)	Inter-generational explanation
Founder attributes	Entrepreneurial attributes of founders and founding teams	Role played by subsidiary/joint venture managers and venture champions in incumbent organizations
Firm-level resources and capabilities	Superior resources and capabilities e.g., intangible assets of new venture; unique product	Dependence of new venture on resources transferred by incumbent organization, particularly to progress product development
Relationships and networks	Industrial networks (comprising suppliers, customers, intermediaries, etc.) and social networks (personal contacts) constituting the venture's social capital	Destabilizing effects of inter-generational relationships on internationalization Self-interest of incumbent Power and dependence Pressure points: resourcing shortfalls, reduced commitment, withdrawal from relationship

the incumbent, and mitigate the problems that arose in the relationship – including the negotiation of relationship upgrades if they became necessary.

Firm-level capabilities and resources

The second factor highlighted in existing literature – the resources and capabilities of the new venture (e.g., Jiang et al., 2020; Rialp et al., 2005) – also needs to be rethought due to the presence of incumbent firms. In the cases we revisited, many of the critical resources and capabilities that enabled early and even rapid internationalization were developed and provided by incumbent organizations over an extended period of up to two decades prior to, and more than a decade after, foundation (i.e., Cochlear, see Appendix 1 in Supplementary Material). Because of the complexities of bringing an innovation to market, product development activities were often the first step, not international sales, and were the reason why incumbents were necessary to the founding of the new ventures. Even the ventures founded by experienced habitual entrepreneurs only internationalized early because they were able to exploit the legacy assets inherited from, and opportunities nurtured by, an older sibling.

Dependence on the incumbent did not necessarily cease upon foundation. Following its establishment, the new venture itself often did not have sufficient resources to operate independently, let alone absorb the costs of international growth. These costs could be substantial, if the new venture's product was still immature and a market for it yet to be established. The innovation might at some point in the future constitute the basis for competitive advantage, as emphasized in BG/INV accounts (e.g., Zucchella, 2021), but it was often little more than an unrealized promise at this early stage of the venture's existence. Even with the backing of an incumbent organization, turning this promise into a reality typically exhausted the resources available to a startup. In these circumstances, early internationalization was not an indicator of strong resourcing and a favorable heritage. On the contrary, the venture was potentially internationalizing in the attempt to secure the resources and support it had been unable to obtain from the incumbent. The only new ventures that did not face these uncertainties and dilemmas surrounding innovation were those that inherited a market-ready product from the incumbent organization.

These ventures were able to commence their internationalization with sales, exploiting the resources that had been transferred to them.

Inter-organizational relationships and networks

The third advantage of new ventures proposed by existing literature – the networks with industrial partners they can use to access resources (e.g., Bembom & Schwens, 2018; Sedzinauskienė et al., 2019) – also requires reassessment in light of the findings from our revisit. Relationships with incumbent organizations were not a straightforward advantage for the new venture. They made early internationalization possible, but the dependence that they entailed was problematic. Although support from the incumbent organization was necessary during the often-extended period when the new entity was not able to survive on its own, the power lay with the incumbent organization. This means that decisions were being made in the interests of the incumbent, not the newly formed venture. The dominance of self-interest over benevolence on the part of the incumbent – notwithstanding some notable exceptions, including that of Cochlear's parent – explains the struggle that new ventures often had to obtain sufficient resourcing to secure their futures. Even if incumbents were benevolent, they were not necessarily well resourced – again, Cochlear's parent was an exception in this regard.

While it might be expected that power would over time be rebalanced, as the new venture grew, the demands of growth could in fact increase the new venture's dependence on the incumbent over time. During this period, the new venture was vulnerable to decisions by the incumbent that destabilized its internationalization. Through our case analysis we have seen that these pressure points included resourcing shortfalls, reduced commitment to or withdrawal from the relationship. In such circumstances, transitioning to a new relationship might be the only option to enable internationalization to continue – particularly if the new arrangement represented an upgrade in terms of the commitment and complementarities that were on offer. Overall, then, the dynamics of inter-generational relationships made it difficult for new ventures to sustain their international growth while still dependent on an incumbent organization that might act as a destabilizing force.

Once the dynamics of inter-generational relationships are factored in, our interpretation of specific events changes. Early internationalization



following foundation is only possible because of the international activities – product development and even international sales – already undertaken by the incumbent organization. Nor is early internationalization of a new venture necessarily an indication of superior resources and capabilities; on the contrary, it may be an indication of resource shortfalls. Rapid internationalization is not a measure of the superiority of the founder's entrepreneurial proclivities or the new venture's capabilities, but rather indicates the incumbent's commitment to providing the new venture with a sufficient resource base. Rapid internationalization in one time period, far from being the basis for competitive advantage, may undermine it by increasing the venture's dependence on the incumbent's support. By excluding the role of the incumbent, scholars studying new venture internationalization risk causal misattribution.

Our study has emphasized the value of including a longer time horizon than is typical in studies on the BG/INV. In doing so, it contributes to the shift underway in IE research from concentrating on the timing of the startup's first international step in relation to its establishment, to explaining the dynamics of its internationalization over time (Reuber, Dimitratos, & Kuivalainen, 2017). Inter-generational relationships commence prior to the foundation of the firm, and their impact continues beyond it – even if the incumbent organization is no longer directly involved. If restricted time scales are adopted studies risk downplaying or misinterpreting the internationalization processes they investigate. This, then, has implications for the research design and theoretical approaches that researchers choose in the future, to which we now turn.

CONCLUSION

The seminal studies that we have revisited in this paper succeeded in drawing attention to the phenomenon of early and rapid internationalization, a phenomenon that had previously received little explicit attention from researchers in the field of international business. But since these studies were conducted, numerous developments have occurred – empirical, methodological and theoretical – which we have shown warrant a revisit. Empirically, more information is now available on the internationalization pathways of the new ventures which were examined by the original studies, allowing us to include a longer time period than

was available to the pioneering researchers, who were not able to track the progress of the case firms. This has allowed us to correct the success bias that was inherent to the designs of the original studies, which observed firms that were (seemingly) in a growth phase of their internationalization. Methodologically, there have been considerable advances in case research since the 1990s, particularly the use of research designs which are more sensitive to process and context (e.g., Langley et al., 2013; Welch, Piekkari, Plakoyiannaki, & Paavilainen-Mäntymäki, 2011). Theoretically, there have been considerable advances in the understanding of organizational reproduction and the provision of more accurate terminology, work which we have used to inform our own study.

In the sample of firms we re-examined, the quintessential 'born global' – the truly independent startup which builds a global (not just regional) market – did not appear. But given that this dataset was not based on a representative sample of firms, we emphasize that we are not making any claims about the population of BGs and INVs. What our analysis does show is that inter-generational relationships, formed as they are prior to foundation, are explanatory factors that are easy to miss. At the very least, we recommend that future IE research pay greater attention to the origins of early internationalizing ventures than has occurred to date in studies on the phenomenon. This should extend to involuntary forms of organizational reproduction, which we were not able to investigate in our study given the composition of the original samples.

Our study is place- as well as time-bound. Due to the inclusion of the McKinsey dataset, the sample we revisited was biased towards Australian firms (55% of the total). New business models enabled by technological progress made since the original samples were collected should be investigated to understand inter-generational relationships in digital markets (Monaghan, Tippmann, & Coviello, 2020). Further research will also need to be conducted to validate and extend the explanation we have developed, linking it to other conversations in the literature, including on social, corporate, public and independent entrepreneurship (e.g., Phan, Wright, Ucbasaran, & Tan, 2009; Weerawardena & Mort, 2006). Given the constraints of our dataset, it was not possible to compare incumbent-backed and independent ventures in a meaningful way, something that will require a carefully matched sample. We would also recommend further study of ventures seeking to commercialize new-to-the-



world innovations. Our findings suggest that the extended timelines involved (see also Rothaermel & Thursby, 2005; Wennberg, Wiklund, & Wright, 2011) make the benevolent support of incumbents critical yet difficult to achieve.

Our study shows how applying a history-sensitive methodology can generate new theoretical insights in existing research fields. Because we extended the time period under investigation to include the firm's origins (i.e., the pre-establishment period), and its full internationalization pathway to date (i.e., the post-entry period), we were able to take into account antecedents and processes which were not systematically included in the original studies – and which still receive little sustained attention in the literature. Our alternative explanation could not have been developed based on the original evidence as key events took place far beyond the temporal scope of the original BG/INV studies. The relational dynamics which our explanation has highlighted can only be detected if the firm is analyzed over a lengthier time period. This is illustrated by the example of Cochlear, the born global firm that triggered this study: its relationships with incumbent organizations, including its parent Nucleus, spanned 28 years (Appendix 1 in Supplementary Material). It took this amount of time for the original invention to be turned into the market leader of a rapidly growing global niche. The implication for future research is that exclusive reliance on snapshot views can potentially be misleading, as understanding of a firm's current activities may be altered once placed in its temporal context. Studies such as ours that cover a more extended period of time therefore complement IE literature that concentrates on particular phases, such as scaling up (Monaghan & Tippmann, 2018; Nambisan, Zahra, & Luo, 2019).

As well as enabling us to identify an overlooked explanatory factor, a revisit contributes to what has been recognized as an important goal for a research community: to conduct follow-up studies (Hochwarter, Ferris, & Hanes, 2011). Yet despite recognition of the importance of replication (Aguinis, Cascio, & Ramani, 2017; Dau, Santangelo, & van Witteloostuijn, 2022), international business has been slow to conduct different forms of follow-up studies, including qualitative revisits (Hennart's, 2014 reanalysis of Logitech being a notable exception). In particular, it is rare to re-examine the cases on which a new theory and research stream are based. A case study revisit confronts challenges faced by any history-sensitive study – notably

memory loss, hindsight bias and the loss of relevant material – but it also offers numerous strengths for theory building. In particular, a revisit allows the collection of additional data not available to the original researchers, and benefits from the greater historical distance which applies, bringing longer-term processes into sharper relief. Tracing the chain of events has allowed us to enhance the internal validity of our conclusions.

Our revisit therefore provides multiple opportunities for future research. It has enabled the development of an alternative explanation for new venture internationalization that can be further extended and tested. Our relational conceptualization of organizational reproduction provides a new dimension to the networks formed by small and young firms. By demonstrating the dynamic nature of these relationships, we have contributed to a more process-oriented agenda to entrepreneurial internationalization. Beyond these contributions to IE research, we have offered a methodology which can be employed to study other topics in international business. Above all, our study has shown the value of returning to previously studied settings. The case of Logitech has now been analyzed in three separate studies, with three contrasting conclusions drawn, attesting to the complexity of the IB phenomena we seek to explain and the necessarily partial and limited nature of any single study. Re-examining historical evidence and returning to cases we thought we understood can therefore be the basis for novel and unexpected insights.

ACKNOWLEDGEMENTS

This paper has benefited from feedback at numerous forums. Alain Verbeke and JT Li provided valuable comments at a paper development workshop held at the University of Sydney in November 2018. Thanks are also owed to Peter Liesch, Peter Buckley, and other participants at a University of Queensland Business School research seminar in August 2019; and John Child and other participants at a Department of Strategy and International Business seminar held at the University of Birmingham in October 2019. We would like to express our gratitude to participants of this study for their generosity in sharing their memories. This study would not have been possible without George Argyrous (University of Technology Sydney), who shared with us the original McKinsey sample of born global companies which was used in this study. He was kind enough to provide feedback on our early



interpretations. Eriikka Paavilainen-Mäntymäki was an important discussion partner early on. Special thanks are due to Lisa Hewerdine, who was the one who first discovered the full history of Cochlear, the case that motivated us to write this paper. We have benefited from the support David Anstice has provided to our ongoing research into Australian innovations. We are grateful to Liena Kano for her encouragement and patience throughout the process and to three anonymous reviewers for challenging us in each round but also seeing potential in our work. Tamer Cavusgil was very kind in encouraging us to pursue our line of inquiry.

FUNDING

Open Access funding provided by the IReL Consortium.

NOTES

¹There is inconsistent usage of terminology in the existing management literature to refer to organizations that produce other organizations. We use the term ‘organizational reproduction’ to denote any form of incumbent organization, and restrict ‘parenting’ to refer specifically to corporate parents of subsidiaries.

²Organizational reproduction can be voluntary (i.e., the incumbent makes a deliberate decision to support a new venture) or involuntary (i.e., an employee leaves the incumbent organization, using the knowledge and other resources gained as the basis for a new, often competing venture). Given these two forms of reproduction are very different in nature, and our dataset overwhelmingly comprised voluntary reproduction (with the exception of one case featuring both, see Appendix 3 in Supplementary Material), we confine the scope of our paper to this form.

³Håkanson and Kappen (2017) apply modern statistical techniques to the dataset used to construct the original Uppsala Model (Johanson & Vahlne, 1977). As the authors use exactly the same dataset to suggest a new theoretical explanation of the original events, it does not amount to a revisit.

⁴Knight and Cavusgil (1996), the original academic paper introducing ‘born globals’, relied on the survey findings from the McKinsey report

(1993). Apart from several examples provided in the report, Knight and Cavusgil did not have access to the names of the 39 firms classified as ‘born global’ by McKinsey and prepared to be publicly identified. Similarly, 12 out of the 24 McDougall et al. (1994a, b, c) cases were conducted by third parties and sourced from journal publications or conference proceedings. Even when it comes to the 12 cases that the authors conducted themselves, there is no transparency as to the number of interviews, or analytical process used by the authors.

⁵For example, one of the promising new ventures featured in McDougall et al. (1994a, b, c), Technomed International SA, was founded in 1985 but went into liquidation the same year the article was published. This is a very different trajectory to that projected in the glowing press coverage relied on by the researchers (e.g., Mamis, 1989).

⁶ANCA was founded in 1974, not in 1980, as was mistakenly claimed in the McKinsey (1993) report. This excludes the company from the ‘born global’ category as its exports started 10 years after foundation. Camarao Brasiliensis (McDougall et al., 1994a, b, c) was based on a teaching case done by a third party. The original case was about whether the new venture should commence exporting and did not record whether any international sales were actually made. We were unable to locate additional data on this company.

⁷Oviatt and McDougall (1994) included these cases as a type of INV.

⁸In total, we have completed 17 in-depth case studies: 15 of companies reproduced by incumbent organizations and two of independent firms. The independent firms (Mana, a software firm, and Food Spectrum, a specialized food ingredients producer) were studied in-depth to allow for a comparison with our core sample. The remaining 15 cases were used for the initial analysis, with 9 cases selected for presentation in the paper (other cases were selected to examine themes not covered in the current paper, even though they contributed to our understanding of inter-generational relationships). More information on all in-depth cases is provided in Appendix 3 in Supplementary Material.

⁹Such sources included, e.g., the biography of the founder of Scitex Efraim Arazi (Milstein, 2004); numerous video recordings of the reflections of Momenta’s founder Kamran Elahian (e.g., Elahian, 2010); the history of Oxford Instruments written by one of the founders (Wood, 2001); the book about

the early years of Lonely Planet written by Tony and Maureen Wheeler, its husband and wife co-founders (Wheeler & Wheeler, 2006); the history of the American Wang Laboratories, a key sponsor of Fact International (Kenney, 1991); a history of Cochlear (Bondarew & Seligman, 2012); etc.

¹⁰Coviello and Munro (1997: 372) mention Fact's relationship with Wang in their narrative, describing Wang as a Japanese multinational. This is incorrect: Wang was headquartered in the USA.

¹¹Habitual entrepreneurs include serial and portfolio entrepreneurs, as well as successful entrepreneurs who also become active as angel investors to a new generation of ventures. Changes in the legal form of an existing entity include incorporations of previously unincorporated entities (e.g., partnerships) and reincorporations (due to e.g., an acquisition, management buyout, corporate spinoff or stock-market listing).

¹²Reincorporations ahead of an IPO are a common occurrence. One implication of our revisit is that if studies use IPO prospectuses as their data source, researchers should code for whether the entity is a reincorporation.

¹³Jolly and Bechler (1992) refer to the contract with Bobst, but they state this was with Logitech. However, this is incorrect, and erases Logitech's pre-foundation history.

¹⁴According to Oviatt and McDougall (1995: 39), the seven characteristics of INV success include global vision, international experience, strong network, pre-emptive technology or marketing, a unique intangible asset, linked product extension, and tight coordination.

REFERENCES

- Agarwal, R., Echambadi, R., Franco, A. M., & Sarkar, M. B. 2004. Knowledge transfer through inheritance: Spin-out generation, development, and survival. *Academy of Management Journal*, 47(4): 501–522.
- Aguinis, H., Cascio, W. F., & Ramani, R. S. 2017. Science's reproducibility and replicability crisis: International business is not immune. *Journal of International Business Studies*, 48: 653–663.
- Argyrous, G. 1993. Emerging exporters: An evaluation. *Journal of Australian Political Economy*, 32: 106–126.
- Argyrous, G. 2000. The high road and the low road to international trade: Emerging exporters revisited. *Journal of Australian Political Economy*, 45: 46–67.
- Baum, J. A., & Silverman, B. S. 2004. Picking winners or building them? Alliance, intellectual, and human capital as selection criteria in venture financing and performance of biotechnology startups. *Journal of Business Venturing*, 19(3): 411–436.
- Bembom, M., & Schwens, C. 2018. The role of networks in early internationalizing firms: A systematic review and future research agenda. *European Management Journal*, 36(6): 679–694.
- Bergh, D. D., & Sharp, B. M. 2015. How far do owners reach into the divestiture process? Blockholders and the choice between spin-off and sell-off. *Journal of Management*, 41(4): 1155–1183.
- Bolzani, D., Rasmussen, E., & Fini, R. 2021. Spin-offs' linkages to their parent universities over time: The performance implications of equity, geographical proximity, and technological ties. *Strategic Entrepreneurship Journal*, 15(4): 590–618.
- Bondarew, V., & Seligman, P. 2012. *The Cochlear story*. Collingwood: CSIRO Publishing.
- Bruneel, J., Clarysse, B., & Autio, E. 2018. The role of prior domestic experience and prior shared experience in young firm internationalization. *International Small Business Journal*, 36(3): 265–284.
- Burawoy, M. 2003. Revisits: An outline of a theory of reflexive ethnography. *American Sociological Review*, 68(5): 645–679.
- Burawoy, M. 2009. *The extended case method: Four countries, four decades, four great transformations, and one theoretical tradition*. Berkeley: University of California Press.
- Cavusgil, S. T., & Knight, G. 2009. *Born global firms: A new international enterprise*. New York: Business Expert Press.
- Cavusgil, S. T., & Knight, G. 2015. The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *Journal of International Business Studies*, 46(1): 3–16.
- Chesbrough, H. 2002. Graceful exits and missed opportunities: Xerox's management of its technology spin-off organizations. *The Business History Review*, 76(4): 803–837.
- Chesbrough, H. 2003. The governance and performance of Xerox's technology spin-off companies. *Research Policy*, 32(3): 403–421.
- Child, J., Karmowska, J., & Shenkar, O. 2022. The role of context in SME internationalization: A review. *Journal of World Business*, 57(1): 101267.
- Clarysse, B., Wright, M., & Van de Velde, E. 2011. Entrepreneurial origin, technological knowledge, and the growth of spin-off companies. *Journal of Management Studies*, 48(6): 1420–1442.
- Coviello, N. E., & Munro, H. 1997. Network relationships and the internationalization process of small software firms. *International Business Review*, 6(4): 361–386.
- Cuervo-Cazurra, A., Grosman, A., & Megginson, W. L. 2022. A review of the internationalization of state-owned firms and sovereign wealth funds: Governments' nonbusiness objectives and discreet power. *Journal of International Business Studies*. <https://doi.org/10.2139/ssrn.4030118>.
- Cusmano, L., Morrison, A., & Pandolfo, E. 2015. Spinoff and clustering: A return to the Marshallian district, Papers in Evolutionary Economic Geography. *Cambridge Journal of Economics*, 39(1): 49–66.
- Dau, L. A., Santangelo, G. D., & van Witteloostuijn, A. 2022. Replication studies in international business. *Journal of International Business Studies*, 53: 215–230.
- De Bettignies, J. E., & Brander, J. A. 2007. Financing entrepreneurship: Bank finance versus venture capital. *Journal of Business Venturing*, 22(6): 808–832.
- De Clercq, D., Sapienza, H. J., Yavuz, R. I., & Zhou, L. 2012. Learning and knowledge in early internationalization research: Past accomplishments and future directions. *Journal of Business Venturing*, 27(1): 143–165.
- Drori, I., Ellis, S., & Shapira, Z. 2013. *The evolution of a new industry: A genealogical approach*. Stanford: Stanford University Press.



- Dyer, J. H., & Singh, H. 1998. The relational view: Cooperative strategy and sources of interorganizational competitive advantage. *Academy of Management Review*, 23(4): 660–679.
- Elahian, K. 2010. *Art of failure*. Presentation at Monterey Institute of International Studies. <https://www.youtube.com/watch?v=moyulerwSSM>. Accessed 30 September 2017.
- Eriksson, T., & Kuhn, J. M. 2006. Firm spin-offs in Denmark 1981–2000: Patterns of entry and exit. *International Journal of Industrial Organization*, 24(5): 1021–1040.
- Fernhaber, S. A., & Li, D. 2013. International exposure through network relationships: Implications for new venture internationalization. *Journal of Business Venturing*, 28(2): 316–334.
- Ford, D. (Ed.). 1990. *Understanding business markets: Interaction, relationships, networks*. London: Academic Press.
- Forsgren, M., Holm, U., & Johanson, J. 1992. Internationalisation of the second degree – The emergence of European-based centres in Swedish firms. In S. Young, & J. Hamill (Eds.), *Europe and the multinationals – Issues and responses for the 1990s*: 235–253. Cheltenham: Edward Elgar.
- Gabrielsson, M., Kirpalani, V. M., Dimitratos, P., Solberg, C. A., & Zucchella, A. 2008. Born globals: Propositions to help advance the theory. *International Business Review*, 17(4): 385–401.
- Grimaldi, R., Kenney, M., Siegel, D. S., & Wright, M. 2011. 30 years after Bayh–Dole: Reassessing academic entrepreneurship. *Research Policy*, 40(8): 1045–1057.
- Håkanson, L., & Kappen, P. 2017. The ‘casino model’ of internationalization: An alternative Uppsala paradigm. *Journal of International Business Studies*, 48(9): 1103–1113.
- Håkansson, H. (Ed.). 1982. *International marketing and purchasing of industrial goods: An interaction approach*. New York: Wiley.
- Heaton, J. 2004. *Reworking qualitative data*. London: Sage.
- Hennart, J. F. 2014. The accidental internationalists: a theory of born globals. *Entrepreneurship Theory and Practice*, 38(1): 117–135.
- Hennart, J. F., Majocchi, A., & Forlani, E. 2021. The myth of the stay-at-home family firm: How family-managed SMEs can overcome their internationalization limitations. *Journal of International Business Studies*, 52: 1665–1694.
- Hewerdine, L. J. & Welch, C. 2008. Reinterpreting a “prime example” of a Born Global: Cochlear’s international launch”. In M. Feldman & S. D. Santangelo (Eds.), *New perspectives in international business research, progress in international business research*, Vol. 3: 189–206.
- Hochwarter, W. A., Ferris, G. R., & Hanes, T. J. 2011. Multi-study packages in organizational science research. *Research Methodology in Strategy and Management*, 6: 163–199.
- Ibeh, K., Jones, M. V., & Kuivalainen, O. 2018. Consolidating and advancing knowledge on the post-entry performance of international new ventures. *International Small Business Journal*, 36(7): 741–757.
- Jiang, G., Kotabe, M., Zhang, F., Hao, A. W., Paul, J., & Wang, C. L. 2020. The determinants and performance of early internationalizing firms: A literature review and research agenda. *International Business Review*, 29(4): 101662.
- 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.
- Johanson, M., & Kalinic, I. 2016. Acceleration and deceleration in the internationalization process of the firm. *Management International Review*, 56(6): 827–847.
- Jolly, V. K., Alahuhta, M., & Jeannet, J. P. 1992. Challenging the incumbents: How high technology start-ups compete globally. *Strategic Change*, 1(2): 71–82.
- Jolly, V. K., & Bechler, K. A. 1992. Logitech: The mouse that roared. *Planning Review*, 20: 20–24.
- Jones, G., & Khanna, T. 2006. Bringing history (back) into international business. *Journal of International Business Studies*, 37(4): 453–468.
- Jones, M. V., Coviello, N., & Tang, Y. K. 2011. International entrepreneurship research (1989–2009): A domain ontology and thematic analysis. *Journal of Business Venturing*, 26(6): 632–659.
- Karra, N., Phillips, N., & Tracey, P. 2008. Building the born global firm: Developing entrepreneurial capabilities for international new venture success. *Long Range Planning*, 41(4): 440–458.
- Kenney, C. 1991. *Riding the runaway horse: The rise and decline of Wang Laboratories*. Boston: Little, Brown.
- Keupp, M. M., & Gassmann, O. 2009. The past and the future of international entrepreneurship: A review and suggestions for developing the field. *Journal of Management*, 35(3): 600–633.
- Kipping, M., & Usdiken, B. 2014. History in organization and management theory: More than meets the eye. *The Academy of Management Annals*, 8(1): 535–588.
- Klepper, S. 2016. *Experimental capitalism: The nanoeconomics of American high-tech industries*. Princeton: Princeton University Press.
- Knight, G. A., & Cavusgil, S. T. 2004. Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, 35(2): 124–141.
- Knight, G. A., & Cavusgil, S. T. 1996. The born global firm: A challenge to traditional internationalization theory. *Advances in International Marketing*, 8: 11–26.
- Knight, G. A., & Liesch, P. W. 2016. Internationalization: From incremental to born global. *Journal of World Business*, 51(1): 93–102.
- Langley, A. N., Smallman, C., Tsoukas, H., & Van de Ven, A. H. 2013. Process studies of change in organization and management: Unveiling temporality, activity, and flow. *Academy of Management Journal*, 56(1): 1–13.
- Lindholm-Dahlstrand, A. 1997. Growth and inventiveness in technology-based spin-off firms. *Research Policy*, 26(3): 331–344.
- Lindstrand, A., & Hånell, S. M. 2017. International and market-specific social capital effects on international opportunity exploitation in the internationalization process. *Journal of World Business*, 52(5): 653–663.
- Lockett, A., Siegel, D., Wright, M., & Ensley, M. D. 2005. The creation of spin-off firms at public research institutions: Managerial and policy implications. *Research Policy*, 34(7): 981–993.
- Mamis, R. A. 1989. Global start-up. *Inc*, 11(8): 38–47.
- McDougall, P. P., Oviatt, B. M., Shrader, R. C., & Simon, M. 1994a. Heartware International Corporation: An entrepreneur’s roller coaster ride Part B. *Entrepreneurship Theory and Practice*, 18(2): 129–135.
- McDougall, P. P., Oviatt, B. M., Shrader, R. C., & Simon, M. 1994b. Heartware International Corporation: Death of a company Part C. *Entrepreneurship Theory and Practice*, 18(2): 137–139.
- McDougall, P. P., Shane, S., & Oviatt, B. M. 1994c. Explaining the formation of international new ventures: The limits of theories from international business research. *Journal of Business Venturing*, 9(6): 469–487.
- McGaughey, S. L. 2007. Hidden ties in international new venturing: The case of portfolio entrepreneurship. *Journal of World Business*, 42(3): 307–321.
- McKinsey & Co 1993. *Emerging exporters: Australia’s high value-added manufacturing exporters*. Melbourne: Australian Manufacturing Council.
- Milstein, D. 2004. *Efi Arazi: His way*. Israel: Daniella De-Nur Publishers.
- Monaghan, S., & Tippmann, E. 2018. Becoming a multinational enterprise: Using industry recipes to achieve rapid multinationalization. *Journal of International Business Studies*, 49(4): 473–495.
- Monaghan, S., Tippmann, E., & Coviello, N. 2020. Born digitals: Thoughts on their internationalization and a research agenda. *Journal of International Business Studies*, 51(1): 11–22.



- Nambisan, S., Zahra, S. A., & Luo, Y. 2019. Global platforms and ecosystems: Implications for international business theories. *Journal of International Business Studies*, 50(9): 1464–1486.
- Nguyen, Q. A., & Mort, G. S. 2021. Conceptualising organisational-level and microfoundational capabilities: An integrated view of born-globals' internationalisation. *International Entrepreneurship and Management Journal*, 17(4): 1781–1803.
- Oviatt, B. M., & McDougall, P. P. 1994. Toward a theory of international new ventures. *Journal of International Business Studies*, 25(1): 45–64.
- Oviatt, B. M., & McDougall, P. P. 1995. Global start-ups: Entrepreneurs on a worldwide stage. *Academy of Management Perspectives*, 9(2): 30–43.
- Oviatt, B. M., McDougall, P. P., Simon, M., & Shrader, R. C. 1994. Heartware international corporation: A medical equipment company "born international" part A. *Entrepreneurship Theory and Practice*, 18(2): 111–128.
- Phan, P. H., Wright, M., Ucbasaran, D., & Tan, W. L. 2009. Corporate entrepreneurship: Current research and future directions. *Journal of Business Venturing*, 24(3): 197–205.
- Prashantham, S., & Dhanaraj, C. 2010. The dynamic influence of social capital on the international growth of new ventures. *Journal of Management Studies*, 47(6): 967–994.
- Rennie, M. W. 1993. Born global. *McKinsey Quarterly*, 4: 45–52.
- Reuber, A. R. 2018. Research themes about international entrepreneurship: Tales from the *JIBS* backlist and onward journeys. In A. R. Reuber (Ed.), *International entrepreneurship, JIBS special collections*: 1–28. Cham: Palgrave Macmillan.
- Reuber, A. R., Dimitratos, P., & Kuivalainen, O. 2017. Beyond categorization: New directions for theory development about entrepreneurial internationalization. *Journal of International Business Studies*, 48: 411–422.
- Rialp, A., Rialp, J., & Knight, G. A. 2005. The phenomenon of early internationalizing firms: What do we know after a decade (1993–2003) of scientific inquiry? *International Business Review*, 14(2): 147–166.
- Ritchie, D. A. 2015. *Doing oral history*. New York: Oxford University Press.
- Rothaermel, F. T., Agung, S. D., & Jiang, L. 2007. University entrepreneurship: a taxonomy of the literature. *Industrial and Corporate Change*, 16(4): 691–791.
- Rothaermel, F. T., & Thursby, M. 2005. Incubator firm failure or graduation? The role of university linkages. *Research Policy*, 34: 1076–1090.
- Sapienza, H. J., Autio, E., George, G., & Zahra, S. A. 2006. A capabilities perspective on the effects of early internationalization on firm survival and growth. *Academy of Management Review*, 31(4): 914–933.
- Savage, M. 2005. Revisiting classic qualitative studies. *Forum: Qualitative Social Research*, 6(1): Art 31.
- Sedzinauskienė, R., Sekliuckienė, J., & Zucchella, A. 2019. Networks' impact on the entrepreneurial internationalization: A literature review and research agenda. *Management International Review*, 59(5): 779–823.
- Seward, J. K., & Walsh, J. P. 1996. The governance and control of voluntary corporate spin-offs. *Strategic Management Journal*, 17(1): 25–39.
- Stinchcombe, A. 1965. Organization-creating organizations. *Society*, 2(2): 34–35.
- Timmermans, S., & Tavory, I. 2012. Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological Theory*, 30(3): 167–186.
- Treibich, T., Konrad, K., & Truffer, B. 2013. A dynamic view on interactions between academic spin-offs and their parent organizations. *Technovation*, 33(12): 450–462.
- Uzunca, B. 2018. Biological children versus stepchildren: Interorganizational learning processes of spinoff and non-spinoff suppliers. *Journal of Management*, 44(8): 3258–3287.
- Verbeke, A., & Ciravegna, L. 2018. International entrepreneurship research versus international business research: A false dichotomy? *Journal of International Business Studies*, 49(4): 387–394.
- Verbeke, A., Zargarzadeh, M. A., & Osiyevskyy, O. 2014. Internalization theory, entrepreneurship and international new ventures. *Multinational Business Review*, 22(3): 246–269.
- Wallin, M. W., & Dahlstrand, Å. L. 2006. Sponsored spin-offs, industrial growth and change. *Technovation*, 26(5–6): 611–620.
- Walter, S. G., Heinrichs, S., & Walter, A. 2014. Parent hostility and spin-out performance. *Strategic Management Journal*, 35(13): 2031–2042.
- Wang, P. 2021. Gain initial endorsement from the core: market entry, initial partners, and embeddedness in the venture capital market. *Industrial and Corporate Change*, 1–24.
- Welch, C., Nummela, N., & Liesch, P. 2016. The internationalization process model revisited: An agenda for future research. *Management International Review*, 56(6): 783–804.
- Welch, C., Piekkari, R., Plakoyiannaki, E., & Paavilainen-Mäntymäki, E. 2011. Theorising from case studies: Towards a pluralist future for international business research. *Journal of International Business Studies*, 42(5): 740–762.
- Wennberg, K., Wiklund, J., & Wright, M. 2011. The effectiveness of university knowledge spillovers: Performance differences between university spinoffs and corporate spinoffs. *Research Policy*, 40: 1128–1143.
- Weerawardena, J., & Mort, G. S. 2006. Investigating social entrepreneurship: A multidimensional model. *Journal of World Business*, 41(1): 21–35.
- Wheeler, M., & Wheeler, T. 2006. *Once while travelling*. Penguin UK.
- Wood, A. 2001. *Magnetic venture: The story of Oxford Instruments*. Oxford: Oxford University Press.
- Wood, M. 2012. *Oral history interview*. The Royal College of Physicians and Oxford Brookes University Medical Science Video Archive MSV A 167, 10 June 1997: 1–23.
- Woolley, J. L. 2017. Origins and outcomes: The roles of spin-off founders and intellectual property in high-technology venture outcomes. *Academy of Management Discoveries*, 3(1): 64–90.
- Yli-Renko, H., Autio, E., & Sapienza, H. J. 2001. Social capital, knowledge acquisition, and knowledge exploitation in young technology-based firms. *Strategic Management Journal*, 22(6–7): 587–613.
- Yow, V. R. 2015. *Recording oral history* (3rd ed.). Lanham: Rowman and Littlefield.
- Zahra, S. A., & George, G. 2002. International entrepreneurship: The current status of the field and future research agenda. In M. A. Hitt, R. D. Ireland, S. M. Camp, & D. L. Sexton (Eds.), *Strategic entrepreneurship*: 254–288. Oxford: Blackwell.
- Zahra, S. A., Ireland, R. D., & Hitt, M. A. 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.
- Zhou, L., Barnes, B., & Lu, Y. 2010. Entrepreneurial proclivity, capability upgrading and performance advantage of newness among international new ventures. *Journal of International Business Studies*, 41: 882–905.
- Zucchella, A. 2021. International entrepreneurship and the internationalization phenomenon: taking stock, looking ahead. *International Business Review*, 30(2): 101800.

ABOUT THE AUTHORS

Maria Rumyantseva is Lecturer and Academic Fellow in Strategy and Innovation at the University of Sydney Business School, Australia. She has a longstanding interest in how new technologies are commercialized and the role of internationalization in this process. Maria uses process-based



methodologies to demonstrate how qualitative studies can discover new patterns and critically revisit established theories.

Catherine Welch is Professor of Strategic Management at Trinity College Dublin, Ireland, and Distinguished Visiting Professor at Aalto University, Finland. Her research interests lie in the areas of qualitative research methodology and process approaches to studying firm internationalization. She is a Fellow of the Academy of International Business and a founding committee member of the AIB's Research Methods SIG (RM-SIG).

Open Access This article is licensed under a Creative Commons Attribution 4.0 International

License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Accepted by Liena Kano, Guest Editor, 26 December 2022. This article has been with the authors for four revisions.