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Kuryan, Nadzeya; Khan, Muhammad Saud; Gustafsson, Veronika

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Born Globals and Business Incubators: A Case Analysis

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Born Globals and Business Incubators: A Case Analysis**ABSTRACT****Purpose**

This paper analyses born globals and business incubators from an empirical standpoint. Particularly, the role of business incubators in the emergence and development of born global firms is focused; thereby outlining the significance of incubator influence on rapid internationalization.

Design/methodology/approach

Based on extant literature on born globals, business incubators, and their interrelationship that nurtures internationalization, a theoretical model is developed and empirically tested to analyze potential born globals residing in business incubators.

Findings

Due to services provided, such as infrastructure, business support and networking, business incubators create a favourable environment for rapid internationalization of their tenants. However, the initiative to go international comes from the incubatees, and the motivating role of business incubators in this process is fairly insignificant.

Originality/value

The incubator-incubation phenomenon is notably under-researched, with most of the literature focusing on “incubator topics”. This relationship is extremely important to understand in order to choose appropriate political measures and orchestrate effective management of business incubators.

Keywords: Business Incubator, Born global, Internationalization, Innovation, Entrepreneurship.

INTRODUCTION

International entrepreneurship is a topic that interests businesses, academic researchers and governments since decades (McDougall & Oviatt, 2000). For a long time, firm’s internationalization was considered to be an evolutionary or gradual process

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3 (Bell, McNaughton, Young, & Crick, 2003). However, subsequent studies proved the
4 existence of ‘born global’ firms that don’t follow the Uppsala model and internationalize
5 rapidly (Rennie, 1993; Oviatt & McDougall, 1995). Since the emergence of this concept in
6 the early 1990s, the amount of literature on it has expanded significantly. The importance of
7 the phenomenon is proven by the fact that the number of born global companies is constantly
8 growing (Moen, 2002). According to Eurofund (2012), about 20 per cent of European young
9 enterprises are considered to be born globals.
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15 Born global firms demonstrate a strong potential for growth (Jolly et al.; 1992). Wong, Ho,
16 and Autio (2005) found that high growth potential firms prove to have a significant positive
17 impact on national growth rates. Born global firms proved to contribute more to job creation
18 than other small and medium enterprises (Gruber-Mücke, 2011). On average, they employ
19 one person more than other start-ups (Eurofund, 2012). Furthermore, as born globals often
20 use sophisticated knowledge and technology as the main source of their competitive
21 advantage (Bell et al., 2003), these firms are also important in terms of innovation
22 (Autio & Yli-Renko, 1998). Therefore, research suggests that in order to promote economic
23 growth of a country, the policy-makers should encourage and facilitate the creation of high-
24 growth new firms (Wong et al., 2005), and born globals in particular. However, public and
25 policy discussions treat entrepreneurship and internationalization most often as two separate
26 phenomena and rarely combine them (Eurofund, 2012).
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36 Business incubators are primarily seen as organizations that create a favorable environment
37 for enterprise development (Peters, Rice, & Sundararajan, 2004). Start-ups usually suffer
38 from a lack of resources and managerial experience, which may cause failure (Bøllingtoft &
39 Ulhøi, 2005). Business incubators, in turn, provide the entrepreneurs with necessary facilities
40 and expertise, and hence enable them to turn their creative business ideas into practice (Al-
41 Mubarak & Busler, 2013). Thus, they are considered to be one of the instruments to promote
42 innovation, technology transfer and commercialization as well as to raise the success rate of
43 start-ups (Aerts, Matthyssens, & Vandenbempt, 2007; European Commission, 2002; Al-
44 Mubarak & Busler, 2013). In this way, business incubators can significantly contribute to a
45 country’s economic growth and employment (Moraru & Rusei, 2012; Hackett & Dilts, 2004).
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54 Eurofund (2012) suggests that one of the effective tools to facilitate the emergence and
55 development of born global firms could be “the establishment of internationally oriented
56 business incubators”. While mentioning it only briefly, the report doesn’t expand further on
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the topic. It does not explain the circumstances under which incubators could contribute to the process of internationalization. This relationship is extremely important to understand in order to choose appropriate political measures and orchestrate effective management of business incubators.

The incubator-incubation phenomenon is notably under-researched (Hackett & Dilts, 2004), with most of the literature focusing on “incubator topics” (Scillitoe & Chakrabarti, 2010). First of all, it examines facilities and services provided and their role in nurturing an entrepreneurial environment and enhancement of survival rates of the tenants (Aernouldt, 2004; Peters et al., 2004; Moraru & Rusei, 2012; Bruneel, Ratinho, Clarysse, & Groen, 2012; Amezcua, Bradley, & Wiklund, 2011). Thereby, the role of networking gets particular attention and is discussed separately by many authors (Hansen, Chesbrough, Nohria & Sull, 2000; Bøllingtoft & Ulhøi, 2005; McAdam & McAdam, 2006; Ecabit, 2008). Another popular topic that attracts researchers in recent years is the measurement and evaluation of the business incubation performance (Al-Mubaraki & Schrödl, 2011; Bergek & Norrman, 2008). The incubatees themselves get much less attention from researchers (Hackett & Dilts, 2004), with the internationalization process of the tenants hardly being deliberated. Extant literature points towards the need of a theoretical model bringing the phenomena of born global firms and business incubation together.

Therefore, this paper aims to contribute as follows. Firstly, based on extant literature it analyses the possible correlation between business incubators as institutions promoting entrepreneurship and the phenomena of born globals, leading to an integrated theoretical model bringing these two phenomena together. Secondly, the model is empirically tested, to observe and assess the existence and strength of these linkages. **Specifically, the purpose of this study is to empirically test the conceptual framework developed in order to examine the strength of linkages between its elements using a case study.** Based on the above discussion, the following three research questions form the focus of this investigation.

Research question 1: Who is the initiator of the incubated firm’s rapid expansion abroad?

Research question 2: To what extent and in which way does the business incubator influence the process of internationalization of the incubated firms?

Research question 3: Which of the services provided by the business incubator contributes most to the firm’s rapid internationalization?

THEORETICAL DEVELOPMENT

Born Globals

Despite numerous studies investigating the phenomenon of Born globals, there is no single, commonly accepted definition of born global firms, and multiple criteria have been used to describe them (Eurofund, 2012). In order to ease the differentiation between traditional firms and born globals, some *quantitative* characteristics are often attributed. First of all, it is the amount of time it takes the company to go international, defined as *pace*, or speed of internationalization (Taylor & Jack, 2013). Rennie (1993) argues that a born global firm starts international activities within two years from inception, while it takes three years according to Knight and Cavusgil (2004) and Madsen, Rasmussen and Servais (2000), and six years according to McDougall, Oviatt, and Shrader (2003). Other common quantitative criteria are the share of turnover/sales the firm generates from its international operations and the number of markets it enters. While the lowest limit for the former is commonly set at 25 per cent (Madsen et al., 2000), the latter is described as ‘multiple’ without any further specification (Rennie, 1993). These two criteria are used to measure the *scale* of internationalization, which refers to the intensity of the firm’s international activity (Taylor & Jack, 2013). Finally, born globals are seen as micro, small or medium-sized enterprises (Casas, Kavaliauske, & Dambrauskaite, 2011).

There are also a range of *qualitative* characteristics that are associated with born global firms. First of all, these companies are highly innovative (Knight & Cavusgil, 2004; Madsen & Servais, 1997), and actively use technology-based services in their everyday business (Eurofund, 2012). Then, the founders of born globals are entrepreneurs with a global mindset (McDougall et al., 2003) who are eager to search for and exploit the opportunities in foreign countries. The organizational culture of born globals facilitates the acquisition of knowledge (Knight & Cavusgil, 2004), and they use this knowledge in order to create unique resource configurations. The creation of complex international resource configurations is perceived to be their main source of competitive advantage (Karra, Philips, & Tracey, 2008; Oviatt & McDougall, 1994). In other words, born global firms can leverage a facilitative organizational culture which in turn is recognized as an important forecaster of open innovation activities (Naqshbandi, Kaur, & Ma, 2015).

Many studies on born globals focus on firms in the high-technology sector, such as biotechnology, IT, high-design. It is due to the fact that these sectors tend to be more

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3 international by their very nature (Eurofund, 2012). However, born global firms can be found
4 in all industries (Rennie, 1993; Taylor & Jack, 2013). Taking into consideration the above-
5 mentioned quantitative and qualitative characteristics, for the purposes of this paper, we
6 define *born globals* as innovative globally oriented enterprises that expand their international
7 activities into multiple countries within the first two years of inception.
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11 **Business Incubators**

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14 The literature offers a large number of definitions on business incubators, and these
15 definitions usually address two main aspects of the phenomenon: service and resource
16 provision together with their implications. Four main components relate to the first aspect
17 that researchers most frequently mention when defining business incubators: shared office
18 space and equipment offered to the incubatees under favorable conditions; financial services;
19 professional business support (mentoring, training, coaching); and networking (Bergek &
20 Norrman, 2008). Importantly, early definitions put a strong emphasis on the physical
21 facilities, while more recent studies underline other services provided by the business
22 incubator (EC, 2002). Regarding the second aspect, it is commonly mentioned that business
23 incubators create a favorable environment for entrepreneurs and hence accelerate the growth
24 and development of start-ups and fledging companies (National Business Incubation
25 Association [NBIA], 2014; Peters et al., 2004).
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35 In this paper, we adopt the definition offered by European Commission (2002): “*A business*
36 *incubator is an organization that accelerates and systematizes the process of creating*
37 *successful enterprises by providing them with a comprehensive and integrated range of*
38 *support, including: incubator space, business support services, and clustering and*
39 *networking opportunities*”. This definition comprises all the above-mentioned aspects, and
40 therefore is perceived to be more comprehensive than the others.
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46 **Relationship between Business Incubation and a Firm’s Rapid Internationalization**

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49 Business incubators offer a wide range of services that aim to help entrepreneurs successfully
50 transform their ideas into a viable business (Moraru & Rusei, 2012;
51 Al-Mubarak & Busler, 2013). The management team of a business incubator develops and
52 coordinates the range of services provided in accordance with the specific goals and
53 priorities of the incubator (Bøllingtoft & Ulhøi, 2005). These services can be offered both in
54 the incubator and through its network (NBIA, 2014).
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3 All business incubator services can be divided into three big groups: infrastructure, business
4 support and networking (Bergek & Norrman, 2008; Peters et al., 2004). Furthermore, we
5 discuss each of them in detail and investigate how they can facilitate the rapid
6 internationalization of the incubated companies. First of all, their impact on the
7 environmental factors influencing the emergence of born globals is considered. Then, we
8 examine how the incubatees can overcome the constraints to internationalization with the
9 help of services.
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15 *Infrastructure*

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17 Starting with the establishment of the first business incubator in Batavia, provision of
18 physical infrastructure has always been and remains one of the basic functions common to
19 almost all types of business incubators and is an integral part of their value proposition
20 (Aerts et al., 2007; Bruneel et al., 2012). The exception could be virtual incubators, which are
21 a recent phenomenon (Moraru & Rusei, 2012).
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27 In the first place, infrastructure includes a shared office space offered to the incubated
28 companies at favorable rental conditions (NBIA, 2014). Business incubators have small
29 production facilities (Bruneel et al., 2012). Such help is critical to the survival of start-ups
30 due to the high rental costs combined with their limited access to financial resources (Moraru
31 & Rusei, 2012). Other shared physical resources may include administrative facilities, such
32 as conferences, meeting rooms, reception, internet lines, fax, phones, car parking and similar
33 (Bruneel et al., 2012). Sometimes, business incubators provide access to laboratories and
34 research equipment (Grimaldi & Grandi, 2005). Direct financial support from the internal
35 sources of business incubator can also be considered as a part of infrastructure proposition if
36 the company uses it, for instance, to acquire the necessary equipment or similar.
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45 Providing infrastructure to the tenants, a business incubator contributes to their rapid
46 internationalization in several ways. First of all, it has a positive influence on the
47 organizational factors of firm's internal environment in its part related to tangible resources
48 available. The incubatees not only get access to necessary resources, but also benefit from the
49 economies of scale within the business incubator due to resource sharing, which reduces the
50 overhead costs (Bruneel et al., 2012). Moreover, the tenants get access to resources that
51 otherwise would be a luxury for them at the early stages of their development, such as
52 meeting rooms or private parking (Bøllingtoft & Uthøi, 2005). Thus, a business incubator
53 helps them to overcome one of their main constraints to rapid internationalization – the lack
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3 of resources connected with the liability of smallness and newness (Sepulveda &
4 Gabrielsson, 2013).

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7 Then, if the business incubator can provide access to the advanced technologies, it stimulates
8 innovation and encourages the development of knowledge-intensive products, which also has
9 a positive influence on speed and scale of internationalization (Sharma & Blomstermo, 2003;
10 Autio et al., 2000). Furthermore, due to the business incubator's help, entrepreneurs put less
11 effort and time in solving the problems related to infrastructure, and therefore can concentrate
12 more on their core business (Aerts et al., 2007). Being less limited in resources can increase
13 their inclination to go international. It illustrates the incubator's positive impact on
14 entrepreneur-related factors of internal business environment.
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20 21 ***Business support***

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23 At the beginning business incubators were the organizations offering primarily physical
24 facilities to start-ups. However, in the 1980s, the necessity of knowledge-based services
25 became evident, and they were included into the incubator's portfolio (Bruneel et al., 2012).
26 These services are referred to as business support.
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31 Business support services are usually associated with coaching and training
32 (Bergek & Norrman, 2008). Coaching means that an incubated company is assigned a coach
33 or a mentor who can typically provide professional advice on a wide range of issues related
34 to business development (Bruneel et al., 2002). Training refers to educational seminars and
35 workshops devoted to a particular topic (Peters et al., 2004). These activities can be initiated
36 by the business incubator as well as entrepreneurs themselves (as a reaction to the problem
37 they face); take place episodically or on a regular basis (Rice, 2002); and, can be offered for
38 a fee or free of charge (Peters et al., 2004). Direct financial help can also be considered as a
39 part of business support if used for educational purposes or purchase of services not provided
40 by the business incubator (for instance, translation of documents).
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49 Business support services cover various areas of expertise. First of all, business incubators
50 advice the start-ups on a range of business development matters. This may include business
51 planning (usually in the pre-incubation phase), product development, marketing and PR,
52 sales and distribution policy as well as provision of market-specific information, such as
53 buying preferences and similar (EC, 2002; Rice, 2002; Scillitoe & Chakrabarti, 2010). The
54 incubatees can also get assistance in numerous general business matters, such as accounting,
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3 financial management, risk management, various legal issues including protection of
4 intellectual property rights, human resource management and other (Moraru & Rusei, 2012).
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6 Sometimes, business incubators also offer scientific and technological support (NBIA, 2014;
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8 Bruneel et al., 2002). However, Scillitoe and Chakrabarti (2010) argue that incubator
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10 managers themselves have a limited ability to assist the tenants on technological issues.
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12 Trying to understand the technological needs of the company would just slow down the
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14 business incubation process. In this respect, the relevant network contacts provided by the
15
16 incubator appear to be much more beneficial. In summary, business incubators assist the
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18 incubatees in “*doing the right project and doing projects in a right way*” (Cooper, 1999).

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20 Start-ups often experience lack of business experience and develop the necessary skills in the
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22 process of learning-by-doing. Business support services offered by the business incubator
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24 play an essential role in acceleration of the incubatees’ learning process and are found to
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26 have a positive influence on their performance and timely graduation
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28 (Bergek & Norrman, 2008). As it generally refers to born global firms and firms oriented
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30 exclusively on the domestic market, coaching and training, if not specified, has an indirect
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32 positive impact on the firm’s internationalization process. However, specific business
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34 support services may directly influence the pace and scale of the incubatees’
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36 internationalization.

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38 First of all, coaching and training on business matters related to internationalization
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40 positively affect entrepreneur-related and organizational factors favorable for the emergence
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42 of born globals (Engelman et al., 2013). For instance, through direct interaction with the
43
44 business incubator management team and through access to business databases, an
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46 entrepreneur and/or his team can get additional knowledge on the internationalization
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48 process in general, international marketing and sales management, cross-cultural
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50 management, international technology transfer and intellectual property rights, e-business as
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52 well as some country-specific information (Ecabit, 2008). This is especially helpful if they
53
54 have no prior internationalization experience and knowledge. In this way, the business
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56 incubator helps to raise awareness of the opportunities that rapid internationalization may
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58 offer, to decrease the entrepreneurs’ risk-aversion, to enhance their global orientation and to
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60 develop competencies necessary to successfully operate a born global company. Thus, the
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62 firms get an additional tool to overcome the liabilities of newness and foreignness
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64 (Knight & Cavusgil, 2004). Moreover, coaching and training aimed at development of firms’

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3 capabilities in technology and innovation (Engelman et al., 2013) also stimulate the
4 formation of innovative organizational culture.
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7 Then, direct financial support for translation of legal documents, web page and marketing
8 material is an example that demonstrates how business incubators can help the potential born
9 globals to overcome the lack of resources and to cover additional costs linked to
10 internationalization. Finally, business incubators can assist the tenants in obtaining external
11 financing from domestic and foreign sources in the form of grants or investments.
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15 16 *Networking*

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18 Business incubator plays an important role as an intermediary, or mediator, between
19 incubated companies and environment (Bergek & Norrman, 2008). In this respect, business
20 incubator cannot be seen separately from the numerous internal and external networks they
21 establish (Hackett & Dilts, 2004).
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26 Internal networks include the incubator managers and other staff, incubator advisory board,
27 incubated firms and their employees. External network is much broader and consists of
28 public institutions (such as ministries and chambers of commerce), business associations,
29 other business incubators, venture capitalists and business angels, universities and research
30 institutions, firms outside the business incubator, professional service providers such as
31 accountants, lawyers, intellectual property experts, business development and marketing
32 specialists, insurance and tax consultants and similar (Hackett & Dilts, 2004; Engelman et
33 al., 2013). As participation in international fairs, conferences, and symposiums also
34 contributes to the expansion of incubatees' networks, the direct financial help provided by
35 the business incubator for these purposes can also be considered as a part of networking
36 services.
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45 Hansen et al. (2000) argue that networking is the determining factor of successful
46 implementation of business incubation programs. It has a significant influence on the
47 development of incubatees' growth strategy (McAdam & McAdam, 2006), which includes
48 the pace, scale and pattern of internationalization.
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52 First of all, the tenants can use the incubator's network as a tool to overcome the scarcity of
53 critical resources, such as financial capital, human capital, technology and knowledge, and
54 thereby accelerate their growth. Informal person-to-person contacts that exist within the
55 business incubator are primarily an important source of information for start-ups (McAdam
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3 & McAdam, 2006). The tenants, for instance, can learn from internationalization experience
4 of their peers. By means of external networks the incubatees can get access to resources and
5 competencies that cannot be offered by the business incubator itself (Grimaldi & Grandi,
6 2005). National and international venture capitalist and business angels within the
7 incubator's network can provide the tenants with additional financial resources (Aernoudt,
8 2004; Bruneel et al., 2012). In addition, as they want to safeguard their investments, they
9 tend to supervise the firm's activities. Hence, the firm gets professional business support.
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16 If the incubatees need an advice on highly specific topics, they can get it through incubator's
17 linkages with research centers, professional consultants and lawyers, and similar
18 (Bruneel et al., 2012). Such kinds of cooperation are especially advantageous when
19 technological expertise is required (Scillitoe & Chakrabarti, 2010), which is often the case
20 for born globals. Partnership between business incubators and universities also facilitates
21 technology transfer and commercialization of innovative research ideas (McAdam &
22 McAdam, 2006). Furthermore, in this way the firms get access to qualified labor force.
23 Students can take part or completely undertake some projects to which the start-ups might
24 have no allocated resources (McAdam & McAdam, 2006). Some universities also offer
25 business-consulting services, which can be very helpful for the incubatees. The more the
26 university is oriented entrepreneurially, the more valuable their contribution to the firm's
27 growth and development can be (Todorovic & Suntornpithug, 2008). Born globals could
28 especially profit from any kind of consultancy services related to doing business in foreign
29 countries.
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40 Then, the business incubators are involved in network mediation, which implies that the
41 incubator's existing network can to a great extent compensate the lack of the incubatees' own
42 established networks (Hansel et al., 2000). It can be especially difficult for entrepreneurs to
43 get access to potential clients and partners overseas (Al-Mubaraki & Busler, 2013). Thus,
44 international networks are extremely important for born globals. Firms that have international
45 exchange partners may enjoy a learning advantage and have fewer difficulties to go
46 international compared to those involved exclusively in domestic networks (Sharma &
47 Blomstermo, 2003). In this process, incubators that are networked not only at the national but
48 also at international level can be very beneficial as they increase visibility of the incubated
49 companies for international actors (Etzkowitz, Solé & Piqué, 2007; Grimaldi & Grandi,
50 2005). The incubator's international networks may include international employees within
51 the business incubator, other foreign business incubators and their employees, international
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3 risk capital providers, international experts and consultants, national companies with
4 international operations, international companies present at the domestic market. Cooperation
5 with institutions such as ministries, chambers of commerce, trade unions and international
6 business associations and participation in international fairs enabled by business incubators
7 can accelerate the process of foreign customer acquisition and partnership. This also
8 demonstrates the positive influence of networking on a firm's external environment.
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14 Thus, networking has a positive impact on born globals' internal and external environment
15 and can be used as a powerful tool to overcome the constraints to their rapid
16 internationalization related to the liabilities of newness, smallness and foreignness
17 (Knight & Cavusgil, 2004).
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20 21 *Other influences*

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23 Start-ups get some other essential advantages from being incubated. First of all, they benefit
24 from the nurturing entrepreneurial environment they get access to. Environmental conditions
25 are especially important at the initial stages of firm's development (Amezcuca et al., 2011;
26 Aerts et al., 2007). Generally, business incubators cannot change the firm's external
27 environment. However, they create their own *protected*, or *controlled* environment, and
28 hence protect the companies from changes and negative influences from outside and reduce
29 environmental pressures (Struwig & Meru, 2011; Amezcuca et al., 2011). Business incubators
30 may also be intermediaries between public institutions and the incubatees, which is called
31 *institutional mediation* (Bergek & Norrman, 2008). It implies that the incubators can not only
32 assist the tenants in understanding and interpretation of institutional regulations, laws, norms
33 and values, but also influence them.
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43 Moreover, the incubator's environment is innovative by nature (Moraru & Rusei, 2012;
44 Aernoudt, 2004), which has a positive influence on the firm's internal environment. As
45 already mentioned before, an innovative organizational culture stimulates a firms' rapid
46 internationalization and increases their survival rates (Taylor & Jack, 2013;
47 Sarkar, Echambadi, Agarwal, & Sen, 2006). In addition, if the environment created by the
48 incubator favors export and internationalization, it also finds reflection in the incubatees'
49 organizational culture (Engelman et al., 2013). Altogether, the conditions for entrepreneurial
50 development and growth in the business incubator are more favorable compared to those
51 outside the incubator; therefore the companies get a significant competitive advantage on the
52 national and international level.
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3 Finally, the acceptance in the business incubator means that the start-up has passed the initial
4 screening and has a potential for sustainability. This, in turn, increases the firm's credibility
5 in the eyes of potential international clients, partners or investors (McAdam & McAdam,
6 2006). Thus, the positive institutional image of a business incubator helps the born global
7 companies to overcome the liabilities of newness and foreignness.
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12 Based on the above discussion the following conceptualization is developed which explains
13 the effects that each group of services offered has on the factors facilitating and impeding the
14 emergence of born-globals (Figure 1).
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18 *“Insert figure 1 about here”*
19

20 **METHODOLOGY**

21
22 This section contains a detailed description of how the study was conducted. First of all, it
23 explains and offers arguments in support of case study as a preferable research method which
24 is consistent with the research questions. Then, it presents the sample selection and data
25 collection process. Finally, it discusses how the collected data was analyzed.
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29 *Methodological approach*

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32 The exploratory investigation necessitated qualitative research methods (Yin, 2009). It
33 implies collection and analysis of qualitative non-numerical data. According to Eisenhardt
34 (1989), case study method is particularly well suited for this purpose. This method gives the
35 researchers an opportunity to check the respondents' understanding of the issue and to
36 continue asking questions until sufficient information is obtained. Furthermore, the depths of
37 investigation by means of a case study allows for both theory testing and building (Ghauri,
38 2004), which goes in line with the study.
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46 In this paper, a single case study design is applied. Ghauri (2004) states that a single case
47 study provides useful insights into previously under-researched phenomenon and is therefore
48 appropriate for exploratory studies. The unit of analysis is a business incubator. An Austrian
49 business incubator is examined as a single case, within which the CEO of the incubator and
50 the founders incubated born global companies are embedded cases (Saunders et al., 2009).
51 Comparing the similarities and differences across the embedded cases give an opportunity to
52 investigate the issue from different viewpoints, to reveal and examine possible trends and
53 linkages and, in this way, to produce “detailed and holistic knowledge” (Eriksson &
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3 Kovalainen, 2008) on the phenomenon.
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5 It is imperative to understand that the value of a case study approach stands on how much is
6 already known and what new information the case brings (Eisenhardt, 1991). Thereby, an in-
7 depth single case with multiple embedded cases is a necessary approach to understand the
8 uncharted dynamics of born globals and business incubation. Furthermore, according to
9 Dyer & Wilkins (1991), it is argued "... that the page length, the number of cases or the
10 length of the researchers' stay in the field per se, is not the key issue. The important issue is
11 instead if the researcher is capable to describe and understand the context of the scene in
12 question so well that the context can be understandable to the reader and to produce theory in
13 relationship to that context" (Gustafsson, 2017, p.4).
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21 *Sample selection*

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23 The choice of the target population is an essential part of the research process and should be
24 consistent with the study purposes (Ghauri, 2004). In this study, the unit of analysis (a
25 business incubator) was defined by the research topic. The main criteria used for initial
26 screening of business incubators to be considered for the study were: 1) The business
27 incubator has born global companies in its portfolio; 2) The business incubator sets
28 internationalization of the incubated companies as one of its goals (in general, not necessarily
29 in the initial stages of incubation); 3) The business incubator has international networks
30 and/or strives to expand them.
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38 Based on the above, the business incubator was selected, which is a public technology-sector
39 incubator located in Austria. Detailed information on the business incubator is provided in the
40 following section discussing the results of the study. Selecting an informant is another
41 important task (Ghauri, 2004). The CEO of the incubator was selected as an informant as he
42 had the full access to information about the business incubator, its services and the incubated
43 companies.
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48 The interview with the CEO, along with information provided on the incubators' and firms'
49 webpages were used as a tool to define the born global firms within the business incubator to
50 be used as the embedded cases. As discussed previously, the following criteria were used to
51 select born global firms within the business incubator: 1) rapid internationalization (within 2-
52 3 years from inception); 2) simultaneous expansion to 2 or more countries.
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3 Basic information on the firms advised by the CEO of the incubator, including the evidence
4 of their compliance with the selection criteria, is provided in Table 1.
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7 *“Insert Table 1 about here”*
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10 **Data collection**

11
12 Case studies are characterized by triangulation, which refers to “collection of data through
13 different methods or even different kind of data on the same phenomenon” (Ghauri, 2004). In
14 order to get a deep understanding of the researched phenomenon, primary and secondary data
15 was obtained from different sources.
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19 Interviews conducted with the chief executive officer of the business incubator and the
20 founders/managing directors of the incubated companies were used as a primary source of
21 information. The exploratory nature of the study, a limited number of potential respondents
22 and the necessity to establish trustful relationship with informants in order to ensure honest
23 answers – were key features that made this method of data collection the most appropriate for
24 this study (Daniels & Cannice, 2004). Interviewing different companies within the business
25 incubator enable to include various viewpoints in the data set (Ghauri, 2004).
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29 Semi-structured interviews were used for data collection, which allowed flexibility in the
30 flow of conversation, including the order of questions and the content of interview, enabling
31 respondents to raise important issues that were neglected or overlooked by researchers and
32 hence to extend the understanding of the research topic, which is especially relevant for an
33 exploratory study (Saunders et al., 2009). In order to ensure that the conversation stayed on
34 track, an interview guide containing the list of themes as well as respective questions had
35 been created in advance in accordance with Daniels and Cannice (2004). The interview
36 questions were developed and structured in line with the research questions. Most of the
37 questions were open-ended and included ‘what’, ‘how’ and ‘why’ questions. As a result, a
38 rich and detailed data set was collated. Each interview was conducted via phone and skype in
39 English and was limited to approximately 15 minutes (on average) due to the tough
40 timetables of the interviewees. The conversation was tape-recorded with the permission of
41 the respondents.
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56 Secondary data sources included written reports and brochures of the incubator, incubated
57 born global firms retrieved from their websites or provided during interviews, as well as press
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3 releases and mass media publications. The multi-method approach of data collection enabled
4 creation of a holistic picture of the object under investigation, to ensure a comprehensive
5 analysis and reduce misinterpretation (Taylor & Jack, 2013).
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8 9 *Data analysis*

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11 Manual analysis was employed in order to ensure reliability of results (Taylor & Jack, 2013).
12 Data analysis was initiated from the first interview before the second interview took place, as
13 recommended by Ghauri (2004). The data from the first interview was used to test the pre-
14 developed interview questions, to reveal inaccuracy in question formulation, shortcomings of
15 the collected data and uncovered issues. This information was taken into consideration and
16 the data collection techniques were subsequently improved.
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22 The analysis started with the transcription of the tape-recorded interviews. As soon as it was
23 done, the transcript was sent to the respondents via e-mail with a request to recheck the
24 accuracy of the collected data. If any changes were suggested, they were incorporated in
25 order to avoid interpretation errors and enhance data reliability (Flick, 2008). Then, we
26 proceeded with the within-case analysis, which means that each embedded case was analyzed
27 separately (Eriksson & Kovalainen, 2008). Firstly, the general description of each case was
28 drafted. It was done so in order to reconfirm the compliance of the single case and embedded
29 cases with the selection criteria and to trace the phenomenon under research (rapid
30 internationalization of firms within a business incubator) in progress. Then, the empirical data
31 was sorted and organized by themes assigning codes to each (Ghauri, 2004). Subcodes were
32 used to specify the codes. The codes and sub codes were pre-determined in accordance with
33 the theoretical model and research questions (Eriksson & Kovalainen, 2008). Later,
34 additional (sub-) codes were added to the list comprising of other issues which were raised by
35 respondents. It helped to identify and examine new factors related to the investigated
36 phenomenon.
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42 Then, it was necessary to link the empirical data to the researched questions. For this purpose,
43 an integrated matrix with direct quotes from each of the embedded cases was developed. The
44 quotes related to each research question were chosen based on the codes discussed above.
45 This enabled to compare the data throughout all embedded cases and to observe the
46 interrelation between factors under research (Ghauri, 2004).
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49 50 51 52 53 54 55 56 57 **FINDINGS**

Incubator

The projects supported by the incubator can be divided into two main categories: high-tech and smart. The first one puts a strong emphasis on technology. The projects in the second category are also technology-oriented, but here the focus is more on the business model: They require less money and have a shorter period of realization.

Around 90 per cent of projects result in establishment of a company. During the last 10 years about 100 projects graduated from the business incubator, and, according to expectations, there will be many more graduates in the next ten years. There were 35 start-ups in the incubator. At least half of them were in the incubation phase, and another half in post-incubation. Up to 70 per cent of the incubatees go international.

We have no proven numbers, exactly proven numbers, but I think more than 50 per cent up to 70 per cent internationalize. Most of the technologies are niche technologies. And the market in Austria is small. So most of them have international intellectual property rights. And most of them go to different markets. (CEO, incubator)

The start-up process in the incubator consists of three phases: pre-incubation, incubation and post-incubation. The four main dimensions for project selection in the pre-incubation phase are team, technology, finance and market. The incubation phase lasts around half a year up to 1-1.5 years for 'smart' business models and 1-2 years for high-tech firms. The post-incubation program is called business2excellence, and its purpose is to help start-ups to overcome the challenges they face at the early stages of their development, shortly after their market entry.

The incubator provides a wide range of services. It's *infrastructure* consists of modern office space, research infrastructure and university laboratories, technical infrastructure, software tools and a founders' library. It also offers a significant financial help for start-ups.

Business support services include free professional coaching on developing the business model, business plan, patent search, technological strategy, financial strategy, network building, customer acquisition, legal formalities of founding a company, as well as numerous trainings and education programs on other business-relevant topics. The incubator also provides some modules related to internationalization of the incubatees. However, most of them are offered already after in the post-incubation phase.

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3 In the incubation process mostly internationalization is not the first priority. [...] [In
4 incubation] we have an extra module for them - a training module in the cultural differences,
5 sales (international sales), sales partnerships, etc. [...] But it is no more than training. For the
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In the incubation process mostly internationalization is not the first priority. [...] [In incubation] we have an extra module for them - a training module in the cultural differences, sales (international sales), sales partnerships, etc. [...] But it is no more than training. For the alumnis (for our post-incubatees), we have a special module. It is like a workshop. And we have a consultant for internationalization [...] where we help them really to make their next step – their [internationalization] strategy. (CEO, incubator)

Finally, there is a *network* of mentors, experts, other business incubators, and supports companies in contacting venture capitalists, business angels and other possible sources of funding. The University owns a lot of patents, and the business incubator offers a business plan consulting on how to bring these ideas to the market. Moreover, business students are developing business plans for these ideas as a part of their university courses.

There are also initiatives to expand the incubator's international networks. For instance, there was an attempt to make the incubator itself more international by means of attracting people from other countries to come to Upper Austria and setup a company.

We had an international incubator. The emphasis was: to bring students from other countries to us and to simulate them to build companies here. But it didn't work. It was too high level. (CEO, Incubator)

The incubator also strives to expand its international networks by means of contacts with other business incubators abroad. Earlier, it had some cooperation with business incubators in Serbia and Russia, which, however, did not bring results and was stopped. The incubator has a cooperation with ETH Zurich, and also established partnership with a sales consultant in the USA, thereby hoping to connect its start-ups to the US-market. Another direction of international cooperation is direct business contacts with companies, both with national companies that have operations abroad and with those located in other countries.

No, at the moment no [we have no direct contacts with companies in foreign countries], but it is our aim. But firstly, [...] at the moment our focus is to connect our start-ups to our industry because they have subsidiaries in different countries. And they can also penetrate other markets. That is the first step. (CEO, Incubator)

Company 'A'

Company 'A' is a young high-tech company with 11 employees operating in the field of IT-Security and Big Data analytics. It was officially established in 2013 within the business

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3 *incubator, and it was in the incubation phase. The planning started a year earlier, with the*
4 *main reasons to join the incubator being financial help and business consulting services.*
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7 Well, at the beginning of course, we get some money from business incubator, which is a
8 nice thing, especially for a start-up. And the second thing is, that we are all technicians,
9 and especially as a technician you need some commercial support. [...] I really appreciate
10 and I am really thankful about this part of cooperation with [...]. (CEO 'A')
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14 The company being active in Austria was planning to internationalize rapidly and is targeting
15 the whole European market. In Spetember 2014, they started exporting services to Germany
16 because there was no need to translate the language within their services. Expansion of
17 activities to other European countries was planned for the end of 2014 or early 2015 once the
18 english translation of all its services were completed. The company planned its
19 internationalization from the very beginning due to the small size of the Austrian market and
20 product characteristics.
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26 Well, our product is calculated and designed to serve a large of amount of customers. So, therefore
27 Austria is just too small. And especially this is a software service. And it is quite easy to start
28 internationalization. (CEO 'A')
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32 Apart from language considerations, company 'A' prioritizes its target countries depending
33 on the size of the market for its products. The company is targeting primarily webhosters and
34 telecommunication companies, and the Spanish and French markets are the biggest in this
35 sense. Turkey might also be interesting. However, the CEO underlines how existing contacts
36 may influence the choice of the markets.
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40 It maybe also depends on the fairs we are attending in September and October (there are
41 some international fairs). And depending on the people who are stopping by there, from
42 which countries, we will maybe change. If I get like 10 French prospects, then I will
43 probably start there first, because I have like 10 leads, which are really interested in the
44 product. (CEO 'A')
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49 The main services that company 'A' got from the incubator are not directly connected with
50 internationalization. However, according to the CEO, all such things as direct financial help
51 and assistance in writing applications for different funds, trainings on pitching, sales and
52 marketing are also helpful for company's internationalization. Also the company puts a
53 strong emphasis on potential networking opportunities provided by the incubator.
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Company 'B'

Company 'B' is a software company offering a platform for successful cooperation of software developers as well as translators across the globe. The company was established in the middle of 2012 within the incubator, but the founders started working on the project around half a year earlier. The main reasons that attracted the founders to join the incubator were financial help and the need to concentrate on the business side, and not only on the programming part.

The first one [reason] - the most obvious one - is always money. Because as a start-up you need the money, you need some kind of ground. The second one was because incubators force start-ups I would say to also focus on the business side. [...] With [...] we had to write a business plan, we had to keep to milestones. So, it was not just our normal work to do - to program staff. We actually had to think where we wanted to be in a year. Yeah, and this was actually really helpful for us. (CEO, 'B')

The incubation phase lasted one year. So, the company had already graduated from the incubator. However, the company was then in post-incubation. It still occupied the same office and had a very good connection to the incubator.

Company 'B' operated globally from inception. Rapid internationalization was embedded in its business model and reflected in its slogan "Be Global, Go Local". However, the CEO underlines that at the beginning it is a good idea for a start-up to concentrate the efforts on specific markets even if the product is global.

But, what we realized is, even if we have a global target group, it still makes sense to focus at the beginning on certain markets. In our case especially it will be Austria and Germany, first because of the language, it is easier to talk to customers in the same language. Yeah, like customers, I don't know, they still relate to companies which are in the same country as they are. So, for a start-up, I would really say that you have to focus on a specific market, even if your product is international. Simply because you need a user feedback, and you can much more concentrate on what to do next. (CEO 'B')

Now, the company gets most of its profit from foreign markets. It has customers from all over Europe, including Russia. Expansion to the US, Asia, South America is in the plans for the near future. The company is going to release a new product soon, with hobby and brilliance translators as a target group. These people are usually very mobile, travel a lot and live in different countries; therefore the focus will be truly global.

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3 The CEO hasn't noticed any significant help from the incubator directly related to the firm's
4 internalization process. He emphasizes the importance of networking, especially at the initial
5 stages of the firm's development, but all contacts of the company, were personal contacts of
6 its founders. However, the CEO thinks that extension of the incubator's international
7 network, especially through contacts with business incubators in other countries, could be
8 helpful.
9

10 11 12 13 14 *Company 'C'*

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16 Company 'C' develops hardware, software and applications for smartphones, which enable
17 the owners of dogs, cats and other pets to locate them anytime. The company is constantly
18 extending its product line. The company was founded in 2012 within the business incubator.
19 The team members working on the project already had broad experience in various fields,
20 therefore the main reason to join the incubator was financial support.
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25 For me it was purely financial. [...] A lot of our team members already have experience
26 in various fields. That are the things that incubators, at least the way I see it, here it is
27 more for students that have an idea at the university, and after university they want to
28 start something immediately and they have no business background or anything like
29 that. That is, I think, where the incubator helps. (CEO 'C')
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34 The company went international immediately. The product that 'C' offered was unique to
35 many markets, therefore rapid internationalization gave the first-mover advantage.
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38 We had a new product and we found there was naturally no competition in most
39 countries we went to. And we knew that if we want to sell this product in mass or
40 quickly, we have to be the first ones in each market. We developed product
41 immediately with all the local translations, verifications [...] and then were trying to get
42 shelf space in as many countries as possible as quickly as possible. That was our key
43 goal when we developed the first product. (CEO 'C')
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48 The company was present in over 60 countries in Europe, North and South America, Asia,
49 Australia and Africa. Most of its revenue come from foreign markets. So, Austrian sales
50 account for only 5 per cent of overall sales. Other European countries bring other 75-80 per
51 cent of revenue. The rest of the company gets from outside Europe. Company 'C' also has a
52 warehouse in the US. In the future, it is planning to target more of South America and
53 Canada because it sees a great potential there.
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3 The choice of countries to expand is defined almost purely by economic reasons. Established
4 personal networks were also very helpful, but not decisive.
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7 Our product requires a SIM-card [...], like a cell-phone SIM-card. So we had to make
8 sure that the SIM-card prices that we as [...] pay for a customer are in a range that we
9 can afford to still make money with the product. So that was our main motivator that
10 we are not going to certain countries and we are going to other. (CEO 'C')
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14 Talking about the help of incubator in the internationalization process, the CEO puts an
15 emphasis on financial support, which was used, among others, for the purpose of
16 internationalization. For instance, the company went to the Customer Electronic Show in Las
17 Vegas, which is the world's biggest show of its kind. Coaching and training on
18 internationalization issues, such as cultural differences, the ways of doing business in
19 different countries and similar, are not perceived as necessary in this particular case because
20 business runs mainly via emails. The incubator's networking also hasn't necessarily helped
21 the company. However, according to the CEO, networking is very important, and therefore
22 the expansion of the incubator's international network could be helpful for start-ups.
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30 Table 2 presents the summary of direct quotes related to each of the three research questions.
31 This enables comparability of data (Ghauri, 2004).
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37 *"Insert Table 2 about here"*
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39 DISCUSSION

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41 *Research question 1: Who is the initiator of the firm's rapid expansion abroad?*
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44 The results of the interviews revealed that all three born global companies planned to expand
45 their activities abroad already before they joined the business incubator, and they did not
46 notice any additional motivation for that from the incubator's side. The internationalization
47 strategy was embedded in their business models and business plans. The environmental
48 influences on the decision to go international can be clearly observed in all three firms,
49 which is consistent with findings of previous studies on born globals (Bell et al., 2004;
50 Zahra et al., 2005).
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56 First of all, the characteristics of the products offered play an important role. The interviewed
57 companies deal with knowledge-intensive products and are targeting very specific groups of
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3 customers, such as webhosts and telecommunication companies (A), developers and
4 translators (B), pet owners (C). Hence, they were operating in niche markets. These product
5 features go in line with organizational factors facilitating the emergence of born-globals
6 described in the literature (Autio et al., 2000; McDoughall et al., 2003; Rialp et al., 2005).
7 Similarly, the global vision of the founders, their perception and interpretation of the factors
8 of external environment as well as capabilities to recognize, evaluate and exploit
9 opportunities prove to be crucial for a firm's rapid internationalization (Andersson et al.,
10 2004; Moen, 2002; Zahra et al., 2005). The entrepreneurs mention such factors of external
11 environment as smallness of the Austrian market (A), absence of competition on both
12 national and international level (C) and IT-industry trends (A, B). Each of them sees
13 internationalization as one of the key success factors. For instance, company 'C' perceives
14 rapid internationalization as an opportunity to get first-mover advantages.
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24 The incubator confirms that most of the time companies show the initiative to go
25 international themselves. Most of them are the owners of patents, and it is their primary task
26 to decide in which countries they are going to enter in order to register their IPR there.
27 Internationalization is not the purpose of the incubator at the initial stages of the incubatees'
28 development. Therefore, the firm's potential to go international is not necessarily taken into
29 consideration while screening the projects for incubation. The incubator's efforts to influence
30 the process in the incubation phase are limited to a training module on internationalization. It
31 serves the purpose of raising awareness about internationalization opportunities. This could
32 have a positive influence on the global entrepreneurial vision and could stimulate the
33 decision in favor of a firms' rapid internationalization. However, the interviewed companies
34 never attended this training, therefore it is hard to assess its effectiveness based on the
35 available data.
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44 Thus, in the examined case study the initiative to go international came from within the
45 incubated firm. They did not get but also did not need any additional motivation from the
46 business incubator to go international. Business incubator was used purely as a tool to turn
47 the business idea to reality.
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52 **Research question 2:** *To what extent and in which way does the business incubator influence*
53 *the process of internationalization of incubated firms?*
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56 The results of the case study support the findings from previous research demonstrating that
57 the lack of resources is one of the main barriers to a firm's rapid internationalization (Jolly et
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3 al., 1992), and the business incubator helps the incubatees to overcome this constraint
4 (Bergek & Norrman, 2008). For all three firms financial benefits were among the main
5 reasons to join the business incubator. The companies also use the office space and other
6 facilities provided by the incubator.
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10 Another advantage of being in the business incubator confirmed by two (A, B) out of three
11 companies is the assistance in general business matters (Bruneel et al., 2002). So, 'A' finds
12 coaching and business training very useful and appreciates the opportunity to discuss the
13 ideas with the mentors and get an honest feedback from them, which helps to focus. 'B'
14 underlines that even just the necessity to write a business plan makes the entrepreneurs to
15 carefully think about their goals, to thoroughly examine the market and to correspondingly
16 develop their business strategy, which is very helpful. Only 'C' joined the business incubator
17 purely because of financial reasons. But this is linked to the fact that its management team
18 already had comprehensive experience in doing business, and the founders did not deny the
19 importance of business support services, in particular for student start-ups. Thus, consistent
20 with previous studies, this proves to be especially valuable for entrepreneurs without any or
21 with limited business background as it accelerates their learning process
22 (Bergek & Norrman, 2008).
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33 However, the above-mentioned services were predominantly not perceived by the
34 management of the firms as contributing to their internationalization process. Out of three
35 companies, only 'A' notes that, for instance, trainings on sales, marketing and pitching are
36 useful in order to successfully launch the company's both local and international activities.
37 Even if the money received from the business incubators is spent on the internationalization
38 purposes (C), there is still skepticism if it can be related to the business incubator's
39 internationalization help, because the decision on how to spend the money comes from the
40 company's management and is determined by a firm's initial business strategy. However, we
41 argue that these services shouldn't be neglected when talking about a firm's expansion
42 abroad and can be considered as a business incubator's indirect internationalization support.
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50 As for business support services directly related to internationalization, none of the
51 companies had experience of that within their incubator. It can be related to the fact that, as
52 mentioned earlier, internationalization is not the incubator's priority in the incubation, and
53 most of the consulting services related to this process are offered in the post-incubation
54 phase. 'A' was still in the incubation, and therefore could not evaluate the effectiveness of
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3 the measures towards internationalization during post-incubation. 'B' and 'C' never attended
4 workshops aiming at development of the firms' internationalization strategies mentioned by
5 the incubator. These companies went international from inception, and by the time of
6 graduation they already had a broad internationalization experience. Hence, none of the
7 companies can give an objective opinion about such services.
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12 At the same time, the companies were hesitating if the incubator should and is able to offer
13 such specialized coaching and training taking into consideration its limited financial and
14 human resources (A, B). From this perspective, expansion of the incubator's external
15 networks can be extremely helpful (A). In general, all three interviewed companies put a
16 strong emphasis on the importance of networking and potential positive impact it may have
17 on the internationalization process of the incubatees, even though 'B' and 'C' relied
18 primarily on the personal networks of their founders so far.
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25 Thus, the results of the interviews reveal the existence of a positive relationship between
26 incubation and a firms' rapid internationalization as depicted in the conceptual model (figure
27 1). However, if a business incubator does not set internationalization as one of its primary
28 goals, then its positive impact on the emergence of born globals is rather indirect and is not
29 always noticed by the incubatees. In this situation, the business incubator doesn't appear to
30 create any significant additional incentives for the incubatees' internationalization. The firms
31 rely primarily on their own knowledge and capabilities required for internationalization, and
32 are more likely to use business incubators purely as a tool to realize the existing business
33 ideas that include internationalization a priori. Networking is the only business incubator
34 service that the companies recognize as directly contributing to internationalization. Another
35 finding arising from the empirical data is that there is a difference in perception on the scale
36 of business incubator's help in the firm's internationalization process depending on the
37 background and prior experience of a firms' founders. This concurs with existing literature
38 underlying the importance of an entrepreneur's background in the choice of firm's
39 internationalization strategy (McDougall et al., 1994). The less experienced the founders are,
40 the more they tend to perceive the services to directly or indirectly facilitate their expansion
41 abroad, and the more interest they show in receiving any kind of help from the business
42 incubator.
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56 **Research question 3:** Which of the services provided by the business incubator contributes
57 most to the firm's rapid internationalization?
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3 In line with existing literature (Freeman et al., 2010), all interviewed companies underlined
4 the crucial role of networking for their start-ups' growth and development, including their
5 rapid internationalization. Established networks can often define the choice of countries the
6 company choose to expand to (A, B). Company 'A' sees the business incubator's extended
7 network and services promoting networking (such as encouraging and facilitating
8 participation in international fairs) as a tool to overcome its limited in-house possibilities in
9 terms of financial resources and expertise. Connecting the incubatees to the right people is
10 hence perceived to be the main business incubator's function facilitating the firm's
11 successful internationalization, and 'A' expects to get useful national and international
12 contacts from the incubator. Advice regarding international fairs would also be very helpful
13 for the company. 'B's contacts are mostly those of its founders, but it still believes that
14 business incubator networks could be a good networking and learning opportunity for the
15 company. In particular, short exchange programs with foreign business incubators – the
16 incubator's partners could be helpful for that. 'C' also agreed that extended incubator
17 networks would be very useful for start-ups.
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29 Thus, the empirical data from company interviews confirms that among all services provided
30 by business incubators, networking has the most significant direct impact on the emergence
31 of born-globals, which is consistent with earlier findings (Hansen et al., 2000; Oviatt &
32 McDougall, 1995). Due to their size, business incubators have limited financial and human
33 resources. As a result, they cannot provide all the financial help and cover all areas of
34 expertise the start-ups need for their growth and development, including successful expansion
35 abroad. At the same time, business incubators can be seen as suppliers of numerous weak ties
36 (Sharma & Blomstermo, 2003), which the incubatees can use not only as potential customers
37 or partners but also as additional source of funding and knowledge (Eriksson et al., 1997).
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45 Importantly, the discrepancy in perception of incubatees and business incubator's
46 management is clearly observed. The incubator does not deny the importance and potential
47 positive impact of networking on the internationalization process and demonstrates its
48 readiness and eagerness to expand its national and international network. Nevertheless, it
49 puts more emphasis on the consulting services. Some skepticism and uncertainty about the
50 indisputable effectiveness of business incubator's networking efforts for incubatees' rapid
51 internationalization can be caused by several reasons. First of all, the incubator has some
52 unsuccessful networking experience, when the cooperation with the business incubators in
53 Russia and Serbia did not become fruitful. At the same time, newly established networks,
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3 such as, the cooperation with the sales consultant in the US, were too young to evaluate their
4 results. Secondly, there is evidence of the incubator's narrower understanding of the
5 international networking concept, which is limited to cooperation with other business
6 incubators abroad and direct company contacts. According to the incubator, such contacts
7 could provide only a limited choice of countries for internationalization, while business
8 support, or consulting services, are not concentrated in one particular country and could
9 therefore be more effective. However, if perceived in a broader sense, international
10 networking includes, among others, also national and international firms, organizations and
11 experts offering all kinds of consulting services and financial help for internationalization
12 purposes. Thus, the extended understanding of the concept by an incubator's management
13 eliminates the above-mentioned discrepancy.
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22 CONCLUSION

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24 The empirical study confirm the existence of the linkages arising from the theoretical
25 analysis. Due to services provided, such as infrastructure, business support and networking,
26 business incubators create a favorable environment for rapid internationalization of their
27 tenants. However, the initiative to go international comes from the incubatees, and the
28 motivating role of business incubators in this process is fairly insignificant. The incubator's
29 impact on the pace, scale and scope of a firms' internationalization is also found to be rather
30 indirect, and therefore is not always immediately recognized by the incubatees. We assume
31 that such results are related to the fact that internationalization is not one of the primary goals
32 in the incubation phase. In fact, Struwig and Meru (2011) argue that the factors of business
33 incubator's internal environment, such as the incubator's vision, goals and management style,
34 determine the services provided. In this way, they influence the business incubation results
35 and determine the strength of an incubator's contribution to the emergence of born globals: If
36 internationalization is not a priority, this contribution is rather weak and indirect. Moreover,
37 the study demonstrates that among all services provided networking is perceived to have the
38 most significant direct impact on the firms' rapid expansion abroad. Finally, the empirical
39 data reveals the importance of a management team's perception in evaluating the business
40 incubator's internationalization support. Firstly, we observe some degree of discrepancy in
41 the business incubator's and incubatees' understanding regarding the importance of different
42 kinds of services. Secondly, there is a negative relationship between the perceived scale of
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3 business incubator's internationalization help and the level of prior business experience of the
4 firms' founders.
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7 **IMPLICATIONS FOR POLICY-MAKERS AND BUSINESS INCUBATION** 8 **MANAGERS** 9

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11 The value of this study extends to policy-makers. First of all, it provides an understanding
12 that business incubators can be used as a tool to stimulate the emergence of born globals,
13 which corresponds the purposes of three policy directions: promotion of entrepreneurship,
14 innovation and firms' internationalization. However, the study demonstrates that the
15 effectiveness of this measure may be strongly influenced by the business incubator's vision
16 and goals. Therefore, it is not sufficient to launch a public business incubator program.
17 Grimaldi and Grandi (2005) emphasize the importance of existence of a variety of incubators
18 serving different needs, and rapid internationalization could be one of them. In order to
19 achieve the desired result, the business incubators serving this goal should be identified, and
20 facilitation in this regard should be provided. Internationalization should be clearly set as one
21 of the incubation priorities for them, which would affect the content and intensity of services
22 provided (Struwig & Meru, 2011). Furthermore, the internationalization process should be
23 monitored. The indicators used for that can include the amount of time from a firm's
24 establishment to its internationalization, number of markets entered and the share of
25 turnover/sales generated from foreign operations (Taylor & Jack, 2011). Finally, the
26 government should foster cooperation between business incubators (both private and public)
27 and other institutions offering support and assistance in the internationalization process (for
28 instance, the Chamber of Commerce). In this way, the incubator's management will be kept
29 up-to-date on additional initiatives and opportunities outside the business incubator that
30 facilitate its tenant's expansion abroad.
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34 For business incubator managers, this paper provides insights on how to enhance the level of
35 internationalization of their tenants. Business incubators should start promoting rapid
36 expansion abroad already in the pre-incubation phase. Moen and Servais (2002) emphasize
37 that the basic resources and competences determining the firm's competitiveness on
38 international markets are formed in the establishment phase. If the firm is oriented only on
39 local markets from inception, it develops and relies on primarily domestic competencies,
40 which may be hard to move away from in the future due to inertial forces
41 (McDougall et al., 1994; Sharma & Blomstermo, 2003). It means, the earlier the firm goes
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3 international, the more likely it is to be competitive on foreign markets and to further extend
4 its international operations (Taylor & Jack, 2013). Thus, business incubators are
5 recommended to stimulate the firms to think about their internationalization perspectives at
6 the stage of developing their business model. They should raise the entrepreneurs' awareness
7 towards the opportunities that foreign markets may offer for their products, discuss the
8 possible ways of expanding abroad and encourage them to include the section
9 "internationalization" in their business plans. It would reduce risk-aversion and contribute to
10 formation of a global vision and orientation of the founders.
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17 In the incubation phase, business incubators could provide assistance in the form of coaching
18 and training on internationalization process in general, international marketing and sales,
19 intercultural management, international technology transfer and intellectual property rights.
20 In this way, the business incubator accelerates the entrepreneurs' learning process and helps
21 them to overcome the lack of their prior internationalization experience. Then, Eurofund
22 (2012) emphasizes the importance of start-ups' self-learning process, which includes reading
23 relevant literature. Therefore, it is essential that a business incubator provides access to good
24 quality books, scientific journals, industry reports and similar through its own or its partner's
25 library (such as university) and subscription for online databases.
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33 Due to limited availability of in-house infrastructure and expertise, business incubators are
34 recommended to focus primarily on extending their national and international networks
35 which can be useful for the tenants' internationalization. First of all, business incubators
36 should strive to inform the tenants on different funding opportunities and internationalization
37 support initiatives existing outside the business incubator. The results of the empirical study
38 demonstrate that firms are often not aware of such opportunities, for instance, financial and
39 expert help for internationalization purposes that SMEs can get in the context of 'Go-
40 International' program of the WKO, or an exchange program Erasmus for Young
41 Entrepreneurs funded by EC (Eurofund, 2012). In addition, business incubators should aim at
42 partnership with other business incubators abroad, trade unions and business associations,
43 external experts and consultants, business angels and venture capitalists, national companies
44 with international operations as well as international companies and so on. It should also
45 encourage the tenants to participate in international fairs and conferences and advise them on
46 which ones to attend. Business incubators can also use their cooperation with universities to
47 facilitate the tenant's internationalization. For example, university business students could
48 engage in development of internationalization strategies for incubatees as a practical part of
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3 one of their study courses. This doesn't bring any additional expenses for any party and
4 benefits the students, incubatees and the business incubator.
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7 Business incubators should continue supporting the tenants after their graduation. Amezcua et
8 al. (2011) found that though incubated firms demonstrate lower initial exit rates compared to
9 their non-incubated peers, these rates are increasing in post-incubation and the difference is
10 declining. It happens because the companies leave a protected environment created by the
11 business incubator and face the liability of newness again. Therefore, it is especially
12 important to continue to support the graduates in the post-incubation period. Finally, business
13 incubators could promote the tenant's internationalization by adding "international" elements
14 in their own internal culture. For this purpose, the business incubator could, attract
15 international employees in its management team or as its internal experts, and encourage
16 international students to start companies within the incubator.
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24 **LIMITATIONS AND FUTURE RESEARCH**

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27 The empirical work is based on a single case study; hence, the data cannot be generalized
28 (Ghauri, 2004). Aernoudt (2004) also warns against inaccuracy in assessment of the business
29 incubator's impact if the type of incubator is not taken into account. The incubator is a public
30 business incubator focusing on technology-oriented and knowledge-intensive start-ups, which
31 means that the firms' internal characteristics are already facilitating their rapid
32 internationalization (Bell et al., 2004; Sharma & Blomstermo, 2003). Moreover, the incubator
33 is located in Austria, which is the country with a small open economy, and
34 internationalization is therefore vital for a firm's growth and development (WKO, 2013b).
35 The interviewed companies confirmed this as well. Thus, the findings of the case study could
36 be different if they were based on another type of business incubator, pursuing different goals
37 and/or located in a different country.
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46 Another limitation of the study lies in the choice of the embedded cases. Despite having a
47 relatively large amount of tenants and graduates, their managers are often reluctant to
48 participate in any kind of interviews. Therefore, the list of potential interviewees consisted of
49 five companies recommended by the incubator CEO, and only three of them agreed to take
50 part in the case study. However, it is plausible that these companies may not be the most
51 representative ones for the study. All three companies represent IT-sector, which requires
52 relatively little effort to internationalize. Two firms graduated from the business incubator,
53 while another one was just at the beginning of the incubation process.
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3 The above-listed limitations result in suggestions for further research. The theoretical model
4 developed requires further empirical verification. The significance and strength of the
5 linkages discovered should be carefully tested in different types of business incubators,
6 taking into consideration their sources of financing, primary goals and managerial vision.
7 Here, the impact of services provided in different phases (pre-incubation, incubation and
8 post-incubation) should be examined separately. So far, pre- and post-incubation received
9 little attention among scholars. Another suggestion for further research concerns the business
10 incubator's networking strategy. The researcher could investigate which kinds of networks
11 have the strongest positive impact on the incubatees' internationalization.
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18 All the above-mentioned would help to discover, which type of incubator and which
19 configuration of its internal characteristics contribute most to the emergence of born globals.
20 This, in turn, is necessary in order to develop a business incubation model, which may prove
21 to be the most efficient in terms of the tenants' rapid internationalization. Due to the newness
22 of the topic, qualitative research methods seem to be more appropriate at the initial stages of
23 the research (Yin, 2009). Subsequent quantitative study could be useful to refine the model.
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29 A cross-country comparison needs to be carried out in order to examine the influence of the
30 incubator's external environment on the internationalization performance of its tenants. It
31 makes sense to compare the internationalization speed and scale of the incubatees in the
32 identical business incubators depending on the size (small or big economy) and level of
33 economic development (advanced, developing and transitional) in the country of location.
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39 Finally, while previous research made some attempts to compare the survival rates of the
40 incubated and non-incubated firms (Amezcuca et al., 2011), it would be interesting to conduct
41 a within-incubator comparison of the exit rates of born-globals compared to the firms
42 concentrating on domestic operations. Future research should examine the determinants of
43 survival for these two types of firms. It could help to enhance the overall incubatees' survival
44 rate after graduation by adjusting the services provided in the post-incubation to the firms'
45 actual needs.
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Company details	A	B	C
Industry	IT	IT	IT
Year of establishment	2013	2012	2012
Incubated/graduated	Incubated	Graduated	Graduated
Years spent in the BI	1	1	1
Speed of internationalization	Planned 1.5 – 2	Immediately from inception	Immediately from inception
Number of international markets entered	Planned: Europe	Europe (including Russia) Planned: US, Asia, South America	Worldwide: Europe, North and South America, Asia, Australia, Africa

Table 1. Companies within the business incubator selected for the case study

Research question	Incubator	Company 'A'	Company 'B'	Company 'C'
<p>1. <i>Who is the initiator of the firm's rapid expansion abroad?</i></p>	<p>"If they have a potential to internationalize - no, not really [a selection criteria]"</p> <p>"But the decision to internationalize in the first part especially when they know in which direction of intellectual property rights, they have to choose which countries they want to protect"</p> <p>"Some are earlier. Internationalization has focus on their strategy. Some can really make it later, in the post-incubation or at the end of the incubation"</p> <p>"Their idea, mostly their [to internationalize]. They come to us"</p> <p>"They visit the training and after that the awareness to internationalize is given or is here, and then they come and they [ask] how to internationalize. That means, yes that at some point we influence the issue"</p>	<p>"Well, our product is calculated and designed to serve a large of amount of customers. So, therefore Austria is just too small. And especially this is a software service. And it is quite easy to start internationalization"</p> <p>"That was already planned form the beginning. So it was not an idea that we got at the incubator, it was in the business plan from the very beginning"</p>	<p>"I mean, honestly, as a web application, especially when you have developers as your target group, you are global right away, because your product is normally in English, and the development community just uses English. So, if you have a website in English, then you are global. So, this was the plan for us to go global right away"</p> <p>"Our platform is focused on internationalization. So, we are specialized in translating and localizing software. So of course our focus was global"</p> <p>"So, that was already in the business plan of course" –"Yes"</p> <p>"We are also releasing a new product. For this product our customer target group is quite different. And what we suspect is that they are much more distributed globally"</p>	<p>"We started going to international firms of everywhere in Europe immediately"</p> <p>"We had a new product and we found there was naturally no competition in most countries we went to. And we knew that if we want to sell this product in mass or quickly, we have to be the first ones in each market"</p> <p>"When you started to work on the project it was already clear that you would go international, right?" -</p> <p>"That is correct"</p> <p>"No, there was no additional motivation for me to go international through the incubator"</p>
<p>2. <i>To what extent and in which way does the business incubator influence the process of internationalization of the incubated firms?</i></p>	<p>"In the incubation process mostly internationalization is not the first priority"</p> <p>"Of course, [in the incubation] we prepare them for internationalization. [...] But it is not more than a training."</p> <p>"In the next step [in post-incubation] is a concrete measure,</p>	<p>"Well, at the beginning of course, we get some money from business incubator. And the second thing is [...] you need some commercial support"</p> <p>"I think of them like the persons who know who to ask"</p> <p>"Hopefully networking. Yesterday</p>	<p>"The first one [reason] - the most obvious one - is always money"</p> <p>"We actually had to think were we want to be in one year. Yeah, and this was actually really helpful for us"</p> <p>"We haven't received any help [in internationalization]"</p> <p>"I think there is one workshop</p>	<p>"Only for money [joined the business incubator]"</p> <p>"For me - I don't think that it would necessarily help [coaching on cultural differences, doing business in different countries]"</p> <p>"We did use the money for our international projects, but... Yeah, I don't think... I mean, we would</p>

<p>workshops and preparing the strategy to internationalize”</p> <p>“Yes, networking could help”</p> <p>“It was for example so that three companies of Upper Austria came with us (before my time) came with us to Russia, and they showed what they could offer, but there was no result in it. It means, it could be not every time It is just special cases”</p> <p>“Neither with Serbia, nor with Russia we got results. But that is very specific”</p> <p>“We invited them 2 weeks ago for an exchange, a know-how exchange”</p> <p>“At the moment our focus is to connect our start-ups to our industry because they have subsidiaries in different countries. And they can also penetrate other markets”</p> <p>“Here we connect our start-ups to the US market [via partnership with sales consultant in the US]. We have two examples but they are just in the designing stage. [...] This cooperation is too young to say we have experience if it works or not”</p> <p>“In the next step [in post-incubation] is a concrete measure, workshops and preparing the</p>	<p>we mailed to get some contacts from [...], maybe they are in Austria but also from somewhere else”</p> <p>“We got some trainings but that is like not directly attached to internationalization, but things you need like sales and marketing, pitching your idea in 30 seconds and so on. So things you need in internationalization, but I don't think we had any training on internationalization”</p> <p>“I am not sure if the business incubator is speeding up the process. Basically it is we who have loads of work to do and it don't go faster with incubator or without. But still like the coaching and talking about all the staff helps focusing maybe. [...] You have a partner to tell the ideas you have and than you just get an honest feedback. [...] So, maybe that speeds it up a little bit, I don't know, honestly”</p> <p>“Yes, it is useful, and I would join in such a cooperation [between ... and the University when student develop an internationalization strategy for a company”]</p> <p>“And of course for us now is the most important thing is the support with writing applications for different funds. [...] I think the</p>	<p>which focuses a little bit on cultural differences, but I never attended it. So, I don't know. But... I have no experience that [...] did provide any information or courses or so about going international”</p> <p>“It is not something that incubator provides. It is a general thing to do in the business plan - to select your market, so that you do research on your market, how big is the market, where is the place, also locally, what is your target market at the beginning... but I don't think it is related to incubator”</p> <p>“All personal [contacts]”</p> <p>“Networking at all is the most crucial part for a start-up”</p>	<p>have gone international either way, with or without the money. And apart from the financial help, I don't think there was anything extra”</p> <p>“I don't think that [...] networking necessarily helped us to go international. But the networking itself helps a lot to meet other people, to learn very quickly and things like that”</p> <p>“For me it was purely financial. [...] A lot of our team members already have experience in various fields.... That are the things that incubators, at least the way I see it, here it is more for students that have an idea at the university, and after university they want to start something immediately and they have no business background”</p> <p>“Yes, without a question that this thing [networking] helps a lot”</p> <p>“We are not applying for any international grants. We have gone to the Consumer Electronics Show in Las Vegas [...] which has definitely helped us a lot”</p> <p>“For me it was purely financial”</p> <p>“The networking itself helps a lot to meet other people, to learn very</p>
<p>3. Which of the services provided by the business incubator contributes most to the</p>			

<p><i>firm's rapid internationalization?</i></p>	<p>strategy to internationalize” “Maybe it could have had results [cooperation with Serbian and Russian incubators]. I’ve cut it because we wanted to put an emphasis on the consulting sphere and from here to internationalization not to specific countries. Because it is more a matter of luck if you just have one [plan] to go to Russia. It is more luck than strategy” “Yes, we are keen on making international contacts for our start-ups”</p>	<p>money is really in the background” “Maybe the combination of all of them [networking, coaching, financial support]. Networking is a good thing to get new customers of course. Financial support: internationalization is not the cheapest thing to do. [...] I am not sure if these are the things that incubators should support too because there are many things in that case [financial support]. I think of them like the persons who know who to ask” “I am not sure if the incubators is the right company to do that [country-specific coaching] [...] That is the thing they cannot do with the amount of persons they have” “So, I guess that the main goal for the incubator should be to connect us “I think we are back on the networking part: which fairs and maybe that things. That is quite a hard thing to figure out at the beginning” “Connect the target people”</p>	<p>the beginning it is crucial to talk to your customers and to meet them. So, in this case it would be like conferences, also doing some talks at the conferences, establishing some credibility within your target group” “Networking at all is the most crucial part for a start-up, I would say. Of course you have to have a great product, you have to have something people what. But at the end so much depends on networking that is just... yeah, one of the most important things for a start-up at all” “First, it can recommend us for translating” “Probably the best thing is to actually go to a different market. So, if they work together with different incubators, incubators from other countries, and that you have like an exchange month or so where you are, for example, I don't know, in Spain or in England, also learn new people from other countries, meet new people from other countries, and also get the feelings that markets are different”</p>	<p>quickly and things like that” “Yes, it [business incubator's network] can never hurt. It would definitely help, yes”</p>
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Table 2. Research Questions and Corresponding Quotes

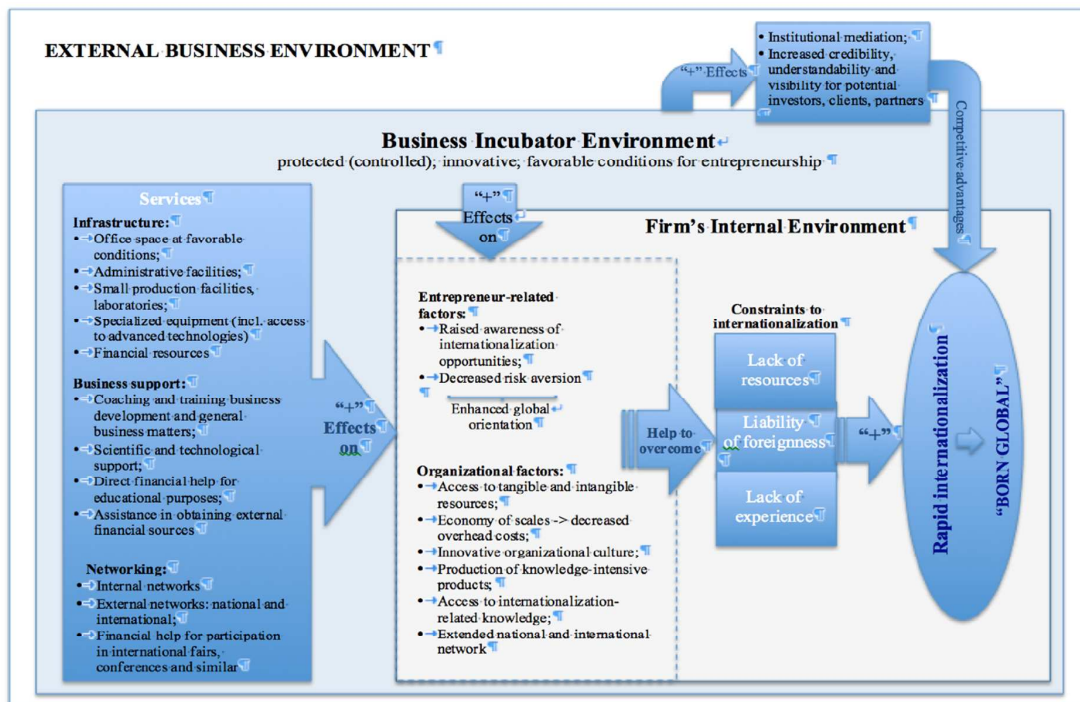


Figure 1. The impact of a business incubator on rapid internationalization of incubated companies