

The Future of International Entrepreneurship Post-COVID-19

Torkkeli Lasse, Faroque Anisur, Velt Hannes

This is a Author's accepted manuscript (AAM) version of a publication
published by Springer

in Faghih, N., Forouharfar, A. (eds) Socioeconomic Dynamics of the COVID-19 Crisis: Global, Regional, and Local Perspectives

DOI: 10.1007/978-3-030-89996-7_3

Copyright of the original publication:

© The Author(s), under exclusive license to Springer Nature Switzerland AG 2022

Please cite the publication as follows:

Torkkeli, L., Faroque, A., Velt, H. (2022). The Future of International Entrepreneurship Post-COVID-19. In: Faghih, N., Forouharfar, A. (eds) Socioeconomic Dynamics of the COVID-19 Crisis: Global, Regional, and Local Perspectives. Contributions to Economics. pp. 45-61. DOI: 10.1007/978-3-030-89996-7_3

**This is a parallel published version of an original publication.
This version can differ from the original published article.**

The Future of International Entrepreneurship Post-COVID-19

Cite as: Torkkeli, L., Faroque, A. & Velt, H. (2022). *The Future of International Entrepreneurship Post-COVID-19*. In: Faghih, N. & Forouharfar, A. (Eds.): *Socioeconomic Dynamics of the COVID-19 Crisis: Global, Regional, and Local Perspectives*. Springer.

Lasse Torkkeli (*corresponding author*)

Adjunct Professor of International Business

Turku School of Economics at University of Turku

email: lasse.torkkeli@utu.fi

Anisur Faroque

Post-Doctoral Researcher

LUT University School of Business and Management

email: anisur.faroque@lut.fi

Hannes Velt

Post-Doctoral Researcher

LUT University School of Business and Management

email: hannes.velt@lut.fi

Abstract

The COVID-19 pandemic has had a major impact on international entrepreneurship. The purpose of this study is to assess the future of international entrepreneurship as a field of research and to propose the main consequences for scholars and practitioners post-COVID-19. We examine the three main macro-level global phenomena (digitalization, ecosystems, and institutional support) that are impacting the consequences and repercussions of international entrepreneurship during and post-COVID-19. Specifically, we present arguments for the rise of born digitals as the predominant form of internationalizing enterprises, as well as for the importance of the local entrepreneurial ecosystem and export support for sustaining international entrepreneurship post-COVID-19 and beyond. Based on the analysis, we provide recommendations for researchers on international entrepreneurship for potential future research avenues. The study also includes recommendations for policy and practice on public support of digital international entrepreneurship, small- and medium-sized enterprise export promotion, and ecosystem support.

Keywords: International Entrepreneurship, COVID-19, Born Globals, SME Internationalization, Digitalization, Entrepreneurial Ecosystems, Export Assistance

1 Introduction

The COVID-19 pandemic has, since its global onset in 2020, had a major impact on entrepreneurs and businesses worldwide. Global foreign direct investment (FDI) in 2020 fell by 42%, with the trends for FDI expected to remain weak in 2021 (UNCTAD 2021). The pandemic also heavily impacts research on both international business (Caligiuri et al 2020) and international entrepreneurship (Zahra 2020), disrupting global value chains (Kano and Oh 2020) and calling into question a host of recurring decisions on internationalization and international operations (see Verbeke and Yuan 2021).

In a recessionary period, such as the pandemic is exerting on markets across the world, the importance of high-growth enterprises as drivers of economic development is even more important than normal (Greene and Rosiello 2020). High-growth enterprises in the international domain have been conceptualized as “born globals” (Rennie 1993; Knight et al 2004), which are small, rapidly internationalizing firms, often from knowledge-intensive industries (Madsen and Servais 2017), ventures whose purpose is to exploit a global niche from the inception of the company (Tanev 2012). Such rapidly internationalizing enterprises have also been termed international new ventures (McDougall et al 1994) among a host of other terms (see Rialp et al 2005; Romanello and Chiarvesio 2018). The study of such firms crucial for the present economic recovery is conducted within the international entrepreneurship domain of research (Jones et al 2011). Therefore, when assessing the COVID-19 aftermath from business and management perspectives, considering how the pandemic impacts international entrepreneurship, and how international entrepreneurship can and should be supported from policy and practice perspectives, is essential.

The purpose of this study is to assess the future of international entrepreneurship as a field of research (cf. Servantie et al 2016; Zucchella 2021) and a phenomenon and to propose the main consequences for scholars and practitioners post-COVID-19. In this study, we posit that three macro-level global phenomena impact entrepreneurship today: digitalization,

ecosystems, and institutional support are strengthening and will have a major impact on the consequences and repercussions of international entrepreneurship post-COVID-19. Specifically, we propose that 1) born digital enterprises will perform better globally post-COVID-19 than other types of internationalizing enterprises, 2) the entrepreneurial ecosystem is critical for sustaining international entrepreneurship resilience post-COVID-19, and 3) countries that provide more export support for small- and medium-sized enterprises (SMEs) post-COVID-19 will see an increase on their global share of international entrepreneurship. The chapter concludes with suggestions for ways forward for international entrepreneurship as a field of research as well as for policymakers and entrepreneurs looking to not only cope with the COVID-19 pandemic, but also to leverage it in decision-making to ensure continued success for international entrepreneurs post-pandemic.

The chapter continues as follows. The next section will discuss the origins and state of international entrepreneurship as a field of study. We then build on this in section three by discussing the growing role of digitalization in the field, marking the emergence and evolution of digital international entrepreneurship as a stream of research. This is followed by outlining the role of the ecosystemic view in taking the field forward post-COVID-19, after which we outline how export assistance by nations and governments is expected to impact the trajectories of entrepreneurial internationalization post-pandemic. The chapter concludes by discussing the future of international entrepreneurship post-COVID-19 in light of these developments, while also describing the main resulting managerial and policy implications.

2 International Entrepreneurship as a Field

International entrepreneurship as a field of study arose during the 1990s at the intersection of international business and entrepreneurship research. Traditional models of internationalization (Johanson and Wiedersheim-Paul 1975; Bilkey and Tesar 1977; Johanson and Vahlne 1977; Cavusgil 1980; Reid 1981; Czinkota 1982) were increasingly questioned and critiqued partly due to the fact that scholars (McDougall 1989; Oviatt and McDougall 1994) noted that global developments such as the rise of the internet and the progress of globalization were increasingly giving rise to new types of enterprises whose

international expansion did not match the process and patterns that the earlier models of internationalization in international business literature would predict.

Instead, the new types of ventures were characterized by rapid and intensive internationalization across culturally and geographically distant markets, as well as the closer ones. Oviatt and McDougall (1994, p. 49) define such firms as international new ventures, “a business organization that, from inception, seeks to derive significant competitive advantages from the use of resources and the sale of outputs in multiple countries.” New types of rapidly internationalizing, (often) small enterprises have subsequently been conceptualized in the international entrepreneurship domain as born globals (Rennie 1993; Knight et al 2004), global start-ups (Oviatt and McDougall 1995), and micromultinationals (Dimitratos et al 2003). The growth and relevance of international entrepreneurship research owes much to the study of such novel phenomena that were found to challenge the existing models and theories on internationalization (Zucchella 2021).

As international entrepreneurship research initially developed around the (mostly) empirical research of the early internationalizing firms, and while it has been criticized as theoretically fragmented (Keupp and Gassmann 2009), later studies have established that international entrepreneurship has reached a mature stage (Hånell et al 2013) and developed into a proper field of research (Servantie et al 2016; Zucchella 2021) with a domain ontology encompassing entrepreneurial internationalization, international comparisons of entrepreneurship, and comparative entrepreneurial internationalization (Jones et al 2011). International entrepreneurship has been defined along two lines of argument. First, international entrepreneurship is defined as the combination of innovative, proactive, and risk-seeking behavior that crosses national borders and is intended to create value in organizations (McDougall and Oviatt 2000). This definition aligns the field with the concept of international entrepreneurial orientation (Kuivalainen et al 2007; Covin and Miller 2014). A second, later definition of international entrepreneurship is “the discovery, enactment, evaluation, and exploitation of opportunities—across national borders—to create future goods and services” (Oviatt and McDougall 2005, p. 540), or as the “identification and exploitation of opportunities for international exchange” (Ellis 2011, p. 99). This second definition in turn aligns the domain with the concept of international opportunity recognition (Zahra et al 2005; Mainela et al 2014).

The COVID-19 pandemic is having a major impact on international entrepreneurship in general, and on born globals and international new ventures in particular. As Zahra (2020) has noted, it is expected that the post-COVID world will provide an international environment where agile and resilient international new ventures should be able to leverage their entrepreneurial orientation to find new international opportunities. Post-disaster environments in general are uncertain and volatile by nature, which further emphasizes the advantage of being able to develop capabilities and resources for new opportunity recognition (Battisti and Deakins 2017). Rapidly internationalizing small firms such as born globals are characterized by their unique capabilities (Weerawardena et al 2007; Cavusgil and Knight 2015) and tend to reside in high-tech industry sectors (e.g., Cannone and Ughetto 2014) such as software and other information and communication technology sectors that are more digitalized by nature compared to more traditional manufacturing industries. They comprise what we place under the umbrella term of digital international entrepreneurship.

3 Digital International Entrepreneurship

Digitalization is commonly defined as “the process of converting something to digital form” (Merriam-Webster 2021). The intersection of digital technologies and entrepreneurship gives rise to digital entrepreneurship, which considers how the distinct characteristics of digital technologies shape entrepreneurial pursuits (Nambisan 2017). The international entrepreneurship field of research has, since its foundation, shed light on how more or less digitally enabled, often small and young enterprises, internationalize. Bell and Loane (2010) have termed such firms “new-wave” global firms, SMEs that make use of web 2.0 tools and technologies to develop the capabilities necessary for rapid internationalization.

Other studies (e.g., Wentrup 2016) have shed light on how enterprises balance an online and offline presence during their internationalization and on the intricacies of internationalization in platform firms (e.g., internationalization of ibusiness firms) (Brouthers et al 2016). In sum, the phenomenon of digitalization has permeated the international entrepreneurship literature for the majority of its existence, however unlike its parent field of research, the domain of *digital* international entrepreneurship has also tended to lack in coherent unifying frameworks and in robust theoretical foundations.

That is, until recently: Several recent studies (Vadana et al., 2019; Monaghan et al., 2020; Vadana et al., 2020) have shed light on the internationalization of *born digitals*. Monaghan et al. (2020) discuss internationalization of digitally-intensive firms by contrasting them with earlier models of internationalization such as the revised U-model (Johanson & Vahlne, 2009). In this analysis, the main distinguishing factors of born digitals are twofold: They are firms that leverage digital infrastructure to enter foreign markets, and they rely on digital infrastructure to accrue the capabilities necessary for creating and selling their offerings online through a digital business model that is accessible to international markets (Monaghan et al., 2020).

The conceptualization by Vadana et al (2019, 2020) takes a partly distinct view of the internationalization of born digitals, defining them as a product or services company in which the value chain activities are digitalized in full at the inception of the company or soon after. This distinction allows for assessing the extent of digitalization and internationalization by explaining how and why firms that digitalize different parts of their value chain activities can strategize and perform in their international expansion, and it also allows for incorporating the research on born digitals with that of global value chains (Gereffi et al 2005; Cattaneo et al 2010). In sum, the conceptualizations of born digitals by both Monaghan et al (2020) and Vadana et al (2019, 2020) suggest that thanks to their extent of digitalization, born digitals are able to start international business activities either from their inception or soon after their inception.

We posit that born digital firms are in a position to benefit after the pandemic has passed. For one thing, digital enterprises are in a position to effectively respond to disruptions in global supply chains (e.g., Qermane and Mancha 2020). SMEs in general tend to be agile, and it has been suggested (Papadopoulos et al 2020) that SMEs can develop capabilities for sensing, seizing, and transforming activities that would enable them to deal with COVID-19. International digital competence allows digital companies to pursue international expansion via increasing online presence (Cahen and Borini 2020) and is therefore an important capability.

A similar tendency is seen in exporting firms as they can prioritize investments in digitalization instead of further export diversification during the pandemic, thus overcoming

crises through increased digitalization, in addition to simply diversifying their exports (Jaklič and Burger 2020). We therefore consider it likely that highly digitalized enterprises will, on average, be among the “winners” of post-pandemic global trade and international entrepreneurship, and we posit the following:

- Proposition 1: Born digital enterprises will perform better globally post-COVID-19 pandemic than other types of internationalizing enterprises.

4 Entrepreneurial Ecosystem Support in International Entrepreneurship

An entrepreneurial ecosystem is “a set of interconnected entrepreneurial actors, entrepreneurial organisations, institutions and entrepreneurial processes which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment” (Mason and Brown 2014, p. 4). Another, more recent definition of entrepreneurial ecosystem is “a regional community of hierarchically independent, yet interdependent heterogeneous participants who facilitate the start-up and scale-up of entrepreneurial new ventures who compete with innovative business models” (Thomas and Autio 2020). This latter definition further highlights the geographical and high-growth entrepreneurship supporting the nature of the ecosystem.

The entrepreneurial ecosystem is a complex adaptive system (Phillips and Ritala 2019) with a number of elements and sub-elements to be considered (Cavallo et al. 2019). Structurally, the entrepreneurial ecosystem has been conceptualized as consisting of the three interconnected dimensions of structural, cognitive, and relational (Theodoraki and Messeghem 2018). Theodoraki and Catanzaro (forthcoming) found that the sub-ecosystems of business creation and internationalization support each other.

Research on entrepreneurial ecosystems has been called under-theorized and in need of more development (Acs et al 2017). Studies (Velt et al 2018, 2020) have highlighted the role of regional and transnational entrepreneurial ecosystems in the development of born globals. Recently, Theodoraki and Catanzaro put forth the argument for incorporating international entrepreneurship and entrepreneurial ecosystem literature; they propose that

one of the primary objectives of entrepreneurial ecosystems should be facilitating the internationalization of firms (Theodoraki and Catanzaro forthcoming).

We posit that the role of entrepreneurial ecosystems will be particularly important in the post-COVID-19 global business environment and that this is due to the crucial role that entrepreneurial ecosystems have in supporting otherwise viable born globals and born digitals through the initial shock of the pandemic. Entrepreneurial ecosystems have a critical role in making sure SMEs can survive the COVID-19 pandemic. As Kuckertz et al (2020) recently argued, the pandemic will require policy measures to support startups with both short-term cash flow and long-term measures aimed at strengthening the entrepreneurial ecosystems in their home countries. Born globals are in general small firms characterized by their resource constraints (Sasi and Arenius 2012) and their rapid development (Nummela et al 2016). They also make use of unique sets of knowledge and resources to speed up their internationalization (Fan and Phan 2007; Gassmann and Keupp 2007). Those resources are acquired from local contexts, which means that the role of the local regional entrepreneurial ecosystem for born globals is critical (Velt et al 2018). Born globals often require endowments to support their internationalization in the best of times, and thus they are the type of entrepreneurship that have also required and will require entrepreneurial ecosystem support through and post-COVID-19.

The importance of the entrepreneurial ecosystem to entrepreneurial internationalization extends from born globals to internationalizing SMEs in general: the latter face a variety of barriers to international growth (Hutchinson et al 2009; Hessels and Parker 2013; Kahiya 2013), barriers that the entrepreneurial ecosystem can help mitigate (Theodoraki and Catanzaro forthcoming). More specifically, many of the typical barriers for successful entrepreneurial internationalization—outsidership to networks (Schweizer 2013), lack of financial resources (Freeman et al 2006), lack of international entrepreneurial culture (cf. Dimitratos and Plakoyiannaki 2003), and lack of knowledge (Fernhaber et al 2009)—correspond to the specific elements of the entrepreneurial ecosystem, as outlined by Stam and van de Ven (2019). Therefore, we posit that regional entrepreneurial ecosystems will have an important role in sustaining international entrepreneurial behavior and international entrepreneurship in general:

- Proposition 2: The entrepreneurial ecosystem is critical for sustaining international entrepreneurship resilience post-COVID-19.

5 Export Support in International Entrepreneurship

Given that international entrepreneurship contributes more to the local economy than local entrepreneurship (González-Pernía and Peña-Legazkue 2015), governments in most countries offer pro-international entrepreneurship policy incentives to assist existing and aspiring entrepreneurs to cross borders (Minniti 2008). In a broader sense, governments offer two types of export assistance: financial and marketing. Financial assistance includes direct and indirect financial incentives such as easily accessible and affordable export loans, duty-free provisions for export/import, tax breaks or lower taxes, export credit guarantees, and cash incentives. Marketing assistance consists mostly of information (Diamantopoulos et al 1993), though there may be some other forms of such assistance, such as aiding connections with potential exporters, product development, and product promotion. Additionally, general economic diplomacy as a soft public intervention also caters to the export promotion based on international relations through foreign trade missions and embassies.

Research on the relationship between export assistance and export performance has largely focused on traditional exporting firms, without paying attention to the needs of born global or digital firms (Faroque and Takahashi 2012, 2015). Furthermore, only a few studies have investigated how government support has helped firms to weather crises, especially recessions. Van Biesebroeck, Konings, and Volpe Martincus (2016), based on firm-level data for Belgium and Peru, found that after the global recession of 2009, firms that availed of government assistance programs did better during the crisis in terms of survival and continuation of exports to countries hit by recession.

We posit that in the post-COVID-19 era, governments all around the world, regardless of whether they are in developed or developing countries, will realize the importance of such assistance more than ever. Since 1920, the world has witnessed more than 15 recessions, each of which lasted just over a year. However, considering the unique nature of the

recession caused by the COVID-19 pandemic and the overwhelming impact of it, it is considerably difficult to predict specific consequences and the time period of the recession.

The pandemic has contributed to geo-economic instability, a lack of trust between nations, and an escalating fragmentation of economic space. A reduction in economic activity has caused a reduction in exports and imports of all countries, which has ultimately altered the international maps of supply/demand (Malysheva and Ratner 2020). Lin and Zhang (2020) found that the impact of COVID-19 on smaller firms is more severe than on larger firms. SMEs are more vulnerable to the pandemic and hence are in need of government intervention and incentives for exporting; at the same time, they have the potential to contribute more to the economy than large firms. Therefore, if SMEs receive sufficient and appropriate export assistance, they will guarantee economic recovery by confirming their global share of international entrepreneurship. Hence, we propose the following:

- Proposition 3: Countries that provide more export support for SMEs post-COVID-19 will see an increase in their global share of international entrepreneurship.

6 Discussion and Conclusion

This study sought to discuss the field of international entrepreneurship in light of the consequences and repercussions of the COVID-19 pandemic. In doing so, we identified three major forces impacting the future of international entrepreneurship: those related to digitalization, entrepreneurial ecosystems, and export promotion. The three propositions put forth in this study and pertaining to these forces help outline high-potential post-COVID-19 research trajectories in the international entrepreneurship research field.

The COVID-19 pandemic has resulted in global disruptions in logistics, global value chains, and entrepreneurship. Consequently, international business, entrepreneurship, and scholars from other business and management fields have rushed to describe how the restrictions and environmental volatilities introduced by the pandemic will impact their fields.¹ In a piece pertaining to the international entrepreneurship field, Zahra (2020) provides a relatively pessimistic view on how the effects of the pandemic would be expected to impact

¹ Our cursory search of the related literature for the present study yielded over 130 journal articles on the topic published in business and management journals from 2020 to February 2021.

international new ventures thanks to the disrupted networks, ecosystems, and platforms. However, this study does not consider in detail how some companies with digitally enabled value chains (such as born digitals) can not only survive but thrive in an environment characterized by the remote work and lack of face-to-face services that the COVID-19 pandemic has introduced. Born digital business models and business model innovation (Clauss et al 2019; Westerlund 2020) will be crucial for international entrepreneurs post-COVID-19. Digital platform firms also continue to provide interesting research questions related to internationalization and innovation (Rasmussen and Petersen 2017).

Similarly, we have seen many governments around the world react to the crushing impact of the pandemic on global value and supply chains and on international business in general, by looking to make maximal use of country- and region-specific institutional support mechanisms, often through national export promotion organizations and through more or less well-functioning regional entrepreneurial ecosystems. Consequently, our view on the future of international entrepreneurship post-COVID-19 is much more positive. In essence, this study suggests that international entrepreneurship during and after the immediate COVID-19 crisis will undergo a process of Schumpeterian creative destruction, the winners of which will be the enterprises that are born digital, regions that are endowed with well-functioning entrepreneurial ecosystems, and nations that have effective and efficient export support organizations that help internationalizing enterprises through the initial shock phases of the pandemic.

In continuing the exploration of the presented propositions empirically, research on international entrepreneurship will be able to combine research most critical to consequences and repercussions of COVID-19 with the theoretically most important areas of further development for the field. The former is supported by our arguments for the propositions outlined in the present study; the latter were recently highlighted by Zucchella (2021), who outlined digitalization and “novel networked opportunities endeavors like platforms,” as high-potential future research opportunities for anyone looking to explain contemporary entrepreneurial internationalization. From a theoretical perspective, the entrepreneurial ecosystem literature can serve as a basis for shedding light on the dynamics of international entrepreneurship post-COVID-19. As discussed, the international entrepreneurship literature has been criticized as lacking in unifying theoretical foundations, and this criticism of a “scattered” literature is valid for research on born globals as well (e.g.,

Baier-Fuentes et al 2019). Moreover, since barriers that born globals and other types of internationalizing enterprises face in their efforts to do so are linked to specific entrepreneurial ecosystem elements within the ecosystemic framework (Stam and van de Ven 2019; Velt et al 2020), we conclude that employing an entrepreneurial ecosystem framework within the international entrepreneurship field of research would help advance research in this field by presenting a coherent theoretical framework that looks to be more relevant than ever in a post-COVID-19 world.

The study also provides practical implications and guidelines for international entrepreneurs and public policy-makers looking to come out on the other side of the COVID-19 pandemic more resilient than before. For one thing, there is clearly a need to transfer from general entrepreneurship support policy toward SME export promotion and ecosystem-level policy in particular (cf. Autio and Levine 2017). Since so many elements of the entrepreneurial ecosystem are linked to successful international entrepreneurship originating from a given country, governments and local municipal decision-makers should focus on strengthening the weaknesses of their regional entrepreneurial ecosystems, instead of trying to pinpoint specific SMEs considered “most in need” for support during the COVID-19 pandemic. Focusing merely on the latter risks misattributing support based on subjective assessments of the extent of the predicament a given enterprise faces instead of ensuring a level and well-functioning playing field on which growth- and internationalization-seeking small firms are able to “weather the storm” of the COVID-19 pandemic and retain their competitive international advantage and globally scalable business models (cf. Hennart 2014).

The present study makes similar suggestions for policy-makers in charge of organizing and distributing financial and other types of resource support for entrepreneurs and their enterprises in that we recommend such assistance to be organized under export assistance for SMEs specifically. To date, in most countries, we have mainly witnessed support for entrepreneurs based on the extent of the immediate effects that the COVID-19 pandemic is having on the industry sector and the type of services it provides (e.g., in the tourism and hospitality sectors, such as hotels and restaurants). However, this short-term support should be complemented by a more long-term view of which exporting small firms are in most need for assistance to cope with the challenges that the pandemic has exerted on global value and supply chains and to conduct international business in general. Based on our analysis, we consider it very likely that those countries prioritizing export support presently will reap

the benefits in the post-COVID-19 world through more competitive international entrepreneurship originating from within the country. Such policies are expected to be particularly important for developed, small, open economies, in which the small domestic market size tends to coincide with highly technology-intensive industries and a digital entrepreneurship scene with a substantial share of local startups with globally scalable business models. Nordic countries in particular fit this description closely. The main implications for theory and practice are summarized below in Table 1.

Proposition	Arising Research Questions	Managerial Implications	Policy Implications
<p>Born digital enterprises will perform better globally post-COVID-19 than other types of internationalizing enterprises.</p>	<p>How do international digital entrepreneurs operate post-COVID-19?</p> <p>How does international digital competence facilitate post-COVID-19 internationalization?</p> <p>How does increasing digitalization of their value chains enable small businesses to widen the intensity of their foreign operations from exporting to include other types of foreign operation modes?</p>	<p>Internationalizing enterprises need to digitalize parts of their value chains for resiliency.</p> <p>Some of the changes brought on by the pandemic, such as increased remote work and digitalized entertainment, may remain; business models must be innovated to account for them.</p>	<p>Provide SMEs the resources and training necessary for them to develop digital competence.</p> <p>Prioritize support for those growth enterprises exhibiting born digital tendencies (digitalized value chains).</p>
<p>The entrepreneurial ecosystem is critical for sustaining international entrepreneurship resilience post-COVID-19.</p>	<p>How can COVID-19-related export barriers be mitigated by the entrepreneurial ecosystem?</p> <p>How has COVID-19 reconfigured the free movement of endowments (financial, knowledge, human capital) needed for internationalization?</p> <p>How do local entrepreneurial ecosystems facilitate networks essential for internationalization?</p>	<p>Entrepreneurs need to focus on efficiency and self-sufficiency when acquiring resources.</p> <p>Entrepreneurs need to increase global presence even more to tackle issues related to internationalization.</p> <p>Entrepreneurs should familiarize themselves with the particular strengths and weaknesses of their local regional ecosystems and prioritize exports to contexts where the host entrepreneurial ecosystem is</p>	<p>Transfer from general entrepreneurship support policy toward the SME export promotion and ecosystem-level policy needed.</p> <p>Focus on strengthening the weaknesses of regional entrepreneurial ecosystems.</p> <p>Transfer from general entrepreneurship support policy to SME export promotion and ecosystem-level policy</p>

		welcoming to exporting foreign firms.	
Countries that provide more export support for SMEs post-COVID-19 will see an increase on their global share of international entrepreneurship.	<p>To which type of internationalizing enterprises is export support the most beneficial for successful rebounding post-pandemic?</p> <p>How do countries compete nationally with export support post-pandemic?</p> <p>In what form should developed and emerging economies primarily provide post-COVID-19 export support to SMEs?</p>	<p>Entrepreneurs and small business managers need to educate themselves on the export support systems within their home countries, particularly the types of support specific to the COVID-19 pandemic.</p> <p>Using the available export support to increase the scope of exports to a wider range of host countries can help mitigate risks arising from COVID-19 restrictions in specific areas in the world.</p>	<p>Governments should organize their assistance for small business management and entrepreneurship primarily under export assistance for SMEs.</p> <p>Countries with small open economies are in the position to economically benefit the most from prioritizing export support over other types of support for entrepreneurs.</p>

Table 1. Implications for theory and practice (authors' own table)

Every study naturally also comes with limitations, some of which provide potentially fruitful avenues for future research. We acknowledge that, due to the focus of this study on the macro- and ecosystemic levels, future studies should look to establish a similar propositional view at the microfoundational level. For instance, entrepreneurial resilience has previously been established as a significant differentiator between failure and success in entrepreneurship in general (Bullough et al 2014; Korber and McNaughton 2018). As the

definition of resilience, the “ability to go on with life, or to continue living a purposeful life after hardship or adversity” (Tedeschi and Calhoun 2004), seems even more necessary during a pandemic, we suggest that research looking to establish determinants of entrepreneurial success in the aftermath of COVID-19 explore the role of resilience in international entrepreneurship as it is linked to long-term survival and success post-COVID-19. The role of entrepreneurship in building resilient economies post-COVID-19 will be essential (Korsgaard et al 2020), and the microfoundational view can allow for ambidextrous use of exploitation and exploration capabilities (e.g., Faroque et al 2021). Thus, this microfoundational aspect of international entrepreneurship is likely to remain a potential topic for important research beyond the immediate effects of the pandemic on societies and entrepreneurs.

We also note that, when it comes to international entrepreneurship, the meso-level, most often taking the firm as the unit of analysis, provides interesting potential for future research seeking to map the consequences and repercussions of the COVID-19 pandemic. For instance, it is an established fact that internationalizing small enterprises are forced to make trade-offs between international expansion and capability development during the best of times (e.g., Fernhaber and McDougall-Covin 2014; Torkkeli et al 2015). How an extended external shock such as the COVID-19 pandemic impacts the choices available and the trade-off decisions necessary for internationalizing small firms is to date an unexplored issue. Moreover, capabilities of many firms are embedded in network relationships and can change in line with changes in network structure (Hånell et al 2013). The COVID-19 pandemic has already exerted major changes in global supply chains (Ivanov 2020; Miroudot 2020), and thus network structures of international entrepreneurs are likely to be on the receiving end of such changes in network structures and, by extension, their capabilities. Therefore, what capabilities are most useful in international entrepreneurship post-COVID-19 remains an enticing area of future research.

To conclude, we highlight the role of international entrepreneurship in general as an important phenomenon helping global trade and business move forward from the pandemic. Though the COVID-19 crisis is proving to be an ongoing, serious threat to humankind, long-term global challenges such as climate change and environmental pollution are not going away during or after the pandemic but remain to be solved. In that process, sustainable international entrepreneurship (Torkkeli et al 2017; Morozova et al 2019) remains key, and

through continued support of internationalizing SMEs promoting such change (for instance, renewable energy SMEs) (cf. Asemokha et al. 2019), these macroeconomic developments will mean that the future of international entrepreneurship post-COVID-19 remains bright.

References

Acs ZJ, Stam E, Audretsch DB et al (2017) The lineages of the entrepreneurial ecosystem approach. *Small Business Economics* 49(1): 1-10

Asemokha A, Ahi A, Torkkeli L et al (2019) Renewable energy market SMEs: Antecedents of internationalization. *Critical Perspectives on International Business*.

Autio E, Levie J (2017) Management of entrepreneurial ecosystems. *The Wiley Handbook of Entrepreneurship* 43: 423-444

Baier-Fuentes H, Hormiga E, Miravittles, P et al (2019) International entrepreneurship: A critical review of the research field. *European Journal of International Management* 13(3): 381-412

Battisti M, Deakins D. (2017). The relationship between dynamic capabilities, the firm's resource base and performance in a post-disaster environment. *International Small Business Journal* 35(1): 78-98

Bell J, Loane S (2010) 'New-wave' global firms: Web 2.0 and SME internationalisation. *Journal of Marketing Management* 26(3-4): 213-229

Bilkey WJ, Tesar G (1977) The export behavior of smaller Wisconsin manufacturing firms. *Journal of International Business Studies* 9(Spring/Summer): 93-98

Brouthers KD, Geisser KD, Rothlauf F (2016) Explaining the internationalization of ibusiness firms. *Journal of International Business Studies* 47(5): 513-534

Bullough A, Renko M, Myatt T (2014) Danger zone: The importance of resilience and self-efficacy for entrepreneurial intentions. *Entrepreneurship Theory & Practice* 38(3): 473-499

Cahen F, Borini FM (2020) International digital competence. *Journal of International Management* 26(1): 100691

Caligiuri P, De Cieri H, Minbaeva D et al (2020) International HRM insights for navigating the COVID-19 pandemic: Implications for future re-search and practice. *Journal of International Business Studies*: 51: 697–713.

Cannone G, Ughetto E (2014) Born globals: A cross-country survey on high-tech start-ups. *International Business Review* 23(1): 272-283

Cattaneo O, Gereffi G, Staritz C (eds) (2010) *Global value chains in a postcrisis world: A development perspective*. The World Bank

Cavallo A, Ghezzi A, Balocco R (2019) Entrepreneurial ecosystem research: Present debates and future directions. *International Entrepreneurship and Management Journal* 15(4): 1291-1321

Cavusgil TS (1980) On the internationalization process of firms. *European Research* 8(November): 273-281

Cavusgil ST, Knight G (2015) The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *Journal of International Business Studies* 46(1): 3-16

Child J, Hsieh L, Elbanna S et al (2017) SME international business models: The role of context and experience. *Journal of World Business* 52(5): 664-679

Clauss T, Abebe M, Tangpong C et al (2019) Strategic agility, business model innovation, and firm performance: An empirical investigation. *IEEE Transactions on Engineering Management*. 68(3): 767-784.

Covin JG, Miller D (2014) International entrepreneurial orientation: Conceptual considerations, research themes, measurement issues, and future research directions. *Entrepreneurship Theory and Practice* 38(1): 11-44

Czinkota MR (1982) *Export development strategies: US promotion policies*. Praeger Publishers, New York

Diamantopoulos A, Schlegelmilch BB, Katy Tse KY (1993) Understanding the role of export marketing assistance: Empirical evidence and research needs. *European Journal of Marketing* 27(4): 5-18

Dimitratos P, Johnson J, Slow J et al (2003) Micromultinationals: New types of firms for the global competitive landscape. *European Management Journal* 21(2): 164-174

Dimitratos P, Plakoyiannaki E (2003) Theoretical foundations of an international entrepreneurial culture. *Journal of International Entrepreneurship* 1(2): 187-215

Doern R, Williams N, Vorley T (2019) Special issue on entrepreneurship and crises: Business as usual? An introduction and review of the literature. *Entrepreneurship & Regional Development* 31(5-6): 400-412

Ellis B (2011) Social ties and international entrepreneurship: Opportunities and constraints affecting firm internationalization. *Journal of International Business Studies* 42: 99-127

Fan T, Phan P (2007) International new ventures: Revisiting the influences behind the “born-global” firm. *Journal of International Business Studies* 38(7): 1113-1131

Faroque AR, Takahashi Y (2012) Export assistance: The way back and forward. In *Export assistance: The way back and forward*. Springer, New York.

Faroque, AR, Morrish SC, Kuivalainen O et al (2021) Microfoundations of network exploration and exploitation capabilities in international opportunity recognition. *International Business Review* 30(1): 101767

Faroque AR, Takahashi Y (2015) Export marketing assistance and early internationalizing firm performance: Does export commitment matter? *Asia Pacific Journal of Marketing and Logistics* 27(3): 421-443

Fernhaber SA, McDougall-Covin PP (2014) Is more always better? Risk trade-offs among internationalizing new ventures. *European Business Review* 26(5): 406-420

Freeman S, Edwards R, Schroder B (2006) How smaller born-global firms use networks and alliances to overcome constraints to rapid internationalization. *Journal of International Marketing* 14(3): 33-63

Gassmann O, Keupp MM (2007) The competitive advantage of early and rapidly internationalising SMEs in the biotechnology industry: A knowledge-based view. *Journal of World Business* 42(3): 350-366

Gereffi G, Humphrey J, Sturgeon T (2005) The governance of global value chains. *Review of International Political Economy* 12(1): 78-104

González-Pernía JL, Peña-Legazkue I (2015) Export-oriented entrepreneurship and regional economic growth. *Small Business Economics* 45(3): 505-522

Greene FJ, Rosiello A (2020) A commentary on the impacts of 'Great Lockdown' and its aftermath on scaling firms: What are the implications for entrepreneurial research? *International Small Business Journal* 38(7): 583-592

Hennart JF (2014) The accidental internationalists: A theory of born globals. *Entrepreneurship Theory and Practice* 38(1): 117-135

Hessels J, Parker SC (2013) Constraints, internationalization and growth: A cross-country analysis of European SMEs. *Journal of World Business* 48(1): 137-148

Hutchinson K, Fleck E, Lloyd-Reason L (2009) An investigation into the initial barriers to internationalization: Evidence from small UK retailers. *Journal of Small Business and Enterprise Development* 16(4): 544-568

Hånell SM, Nordman ER, Tolstoy D et al (2013) International entrepreneurship research during the last decade: A review. *Journal for International Business and Entrepreneurship Development* 7(2): 116-138

Ivanov D (2020) Predicting the impacts of epidemic outbreaks on global supply chains: A simulation-based analysis on the coronavirus outbreak (COVID-19/SARS-CoV-2) case. *Transportation Research Part E: Logistics and Transportation Review* 136: 101922

Jaklič A, Burger A (2020) Complex internationalisation strategies during crises: The case of Slovenian exporters during the great recession and COVID-19 pandemic 1. *Teorija in Praksa* 57(4): 1018-1041

Johanson J, Vahlne J-E (1977) The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies* 8(1): 23-32

Johanson J, Vahlne J-E (2009) The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies* 40(9): 1411-1431

Johanson J, Wiedersheim-Paul F (1975) The internationalization of the firm: Four Swedish cases. *Journal of Management Studies* 12(3): 305-323

Jones MV, Coviello N, Tang YK (2011) International entrepreneurship research (1989–2009): A domain ontology and thematic analysis. *Journal of Business Venturing* 26(6): 632-659

Kahiya ET (2013) Export barriers and path to internationalization: A comparison of conventional enterprises and international new ventures. *Journal of International Entrepreneurship* 11(1): 3-29

Kano L, Oh CH (2020) Global value chains in the post-COVID world: Governance for reliability. *Journal of Management Studies* 57(8): 1773-1777

Keupp MM, Gassmann O (2009) The past and the future of international entrepreneurship: A review and suggestions for developing the field. *Journal of Management* 35(3): 600-633

Knight G, Cavusgil ST, Innovation OC (2004) The born-global firm. *Journal of International Business Studies* 35(2): 124-141

Korber S, McNaughton RB (2018) Resilience and entrepreneurship: A systematic literature review. *International Journal of Entrepreneurial Behavior and Research* 24(7): 1129-1154.

Korsgaard S, Hunt RA, Townsend DM et al (2020) COVID-19 and the importance of space in entrepreneurship research and policy. *International Small Business Journal* 38(8): 697-710

Kuckertz A, Brändle L, Gaudig A et al (2020) Startups in times of crisis—A rapid response to the COVID-19 pandemic. *Journal of Business Venturing Insights* e00169

Kuivalainen O, Sundqvist S, Servais P (2007) Firms' degree of born-globalness, international entrepreneurial orientation and export performance. *Journal of World Business* 42(3): 253-267

Lin BX, Zhang YY (2020) Impact of the COVID-19 pandemic on agricultural exports. *Journal of Integrative Agriculture* 19(12): 2937-2945

Madsen TK, Servais P (2017) *The internationalization of born globals: An evolutionary process?* Routledge

Mainela T, Puhakka V, Servais P (2014) The concept of international opportunity in international entrepreneurship: A review and a research agenda. *International Journal of Management Reviews* 16(1): 105-129

Malysheva EV, Ratner AV (2020) Small and medium-sized business export support in terms of global economy changed by coronavirus. *International Trade and Trade Policy* 6(3): 79-96.

Mason C, Brown R (2014) *Entrepreneurial ecosystems and growth oriented entrepreneurship*. Background paper prepared for the workshop organized by the OECD

LEED Program and the Dutch Ministry of Economic Affairs on Entrepreneurial Ecosystems and Growth Oriented Entrepreneurship. The Hague, Netherlands

McDougall PP (1989) International versus domestic entrepreneurship: New venture strategic behavior and industry structure. *Journal of Business Venturing* 4(6): 387-400

McDougall PP, Oviatt BM (2000) International entrepreneurship: The intersection of two research paths. *Academy of Management Journal* 43(5): 902-906

McDougall PP, Shane S, Oviatt BM (1994) Explaining the formation of international new ventures: The limits of theories from international business research. *Journal of Business Venturing* 9(6): 469-487

Merriam-Webster (2021) Digitalization. <https://www.merriam-webster.com/dictionary/digitalization>. Accessed 28 Feb 2021

Minniti M (2008) The role of government policy on entrepreneurial activity: Productive, unproductive, or destructive? *Entrepreneurship Theory and Practice* 35(5): 779-790

Miroudot S (2020) Reshaping the policy debate on the implications of COVID-19 for global supply chains. *Journal of International Business Policy* 3(4): 430-442

Monaghan S, Tippmann E, Coviello N (2020) Born digitals: Thoughts on their internationalization and a research agenda. *Journal of International Business Studies* 51(1): 11-22

Morozova IA, Popkova EG, Litvinova TN (2019) Sustainable development of global entrepreneurship: Infrastructure and perspectives. *International Entrepreneurship and Management Journal* 15(2): 589-597

Nambisan S (2017) Digital entrepreneurship: Toward a digital technology perspective of entrepreneurship. *Entrepreneurship Theory and Practice* 41(6): 1029-1055

Nummela N, Saarenketo S, Loane S (2016) The dynamics of failure in international new ventures: A case study of Finnish and Irish software companies. *International Small Business Journal* 34(1): 51-69

Oviatt BM, McDougall PP (1995) Global start-ups: Entrepreneurs on a worldwide stage. *Academy of Management Perspectives* 9(2): 30-43

Oviatt BM, McDougall PP (2005) Defining international entrepreneurship and modeling the speed of internationalization. *Entrepreneurship Theory and Practice* 29(5): 537-554

Papadopoulos T, Baltas KN, Balta ME (2020) The use of digital technologies by small and medium enterprises during COVID-19: Implications for theory and practice. *International Journal of Information Management* 55: 102192

Phillips MA, Ritala P (2019) A complex adaptive systems agenda for ecosystem research methodology. *Technological Forecasting and Social Change* 148: 119739

Qermane K, Mancha R (2020) WHOOP, Inc.: Digital entrepreneurship during the Covid-19 pandemic. *Entrepreneurship Education and Pedagogy*, 4(3): 500-514.

Rasmussen ES, Petersen NH (2017) Platforms for innovation and internationalization. *Technology Innovation Management Review* 7(5): 23-31

Reid ST (1981) The decision-maker and export entre and expansion. *Journal of International Business Studies* 12(Fall): 101-112

Rennie MW (1993) Born global. *The McKinsey Quarterly* 4: 45-53

Rialp A, Rialp J, Knight GA (2005) The phenomenon of early internationalizing firms: What do we know after a decade (1993–2003) of scientific inquiry? *International Business Review* 14(2): 147-166

Romanello R, Chiarvesio M (2019) Early internationalizing firms: 2004–2018. *Journal of International Entrepreneurship* 17(2): 172-219

Sasi V, Arenius P (2012) Strategies for circumventing born global firms' resource scarcity dilemma. In *New technology-based firms in the new millennium*. Emerald Group Publishing Limited

Schweizer R (2013) SMEs and networks: Overcoming the liability of outsidership. *Journal of International Entrepreneurship* 11(1): 80-103

Servantie V, Cabrol M, Guieu G et al (2016) Is international entrepreneurship a field? A bibliometric analysis of the literature (1989-2015). *Journal of International Entrepreneurship* 14(2): 168-212

Stam E, van de Ven A (2019) Entrepreneurial ecosystem elements. *Small Business Economics* 1-24

Tanev S (2012) Global from the start: The characteristics of born-global firms in the technology sector. *Technology Innovation Management Review* 2(3): 5-8.

Tedeschi RG, Calhoun LG (2004) Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry* 15(1): 1-18

Theodoraki C, Catanzaro A (forthcoming) Widening the borders of entrepreneurial ecosystem through the international lens. *Journal of Technology Transfer*

Theodoraki C, Messeghem K, Rice MP (2018) A social capital approach to the development of sustainable entrepreneurial ecosystems: An explorative study. *Small Business Economics* 51(1): 153-170

Thomas LD, Autio E (2020) Innovation ecosystems in management: An organizing typology. In *Oxford research encyclopedia of business and management*

Torkkeli L, Saarenketo S, Nummela N (2015) The development of network competence in an internationalized SME. In *Handbook on international alliance and network research*. Edward Elgar Publishing

Torkkeli L, Saarenketo S, Salojärvi H et al (2017) Sustainability and corporate social responsibility in internationally operating SMEs: Implications for performance. In Value creation in international business. Palgrave Macmillan, Cham

UNCTAD (2021) Global investment trend monitor, no. 38.

https://unctad.org/system/files/official-document/diaeiainf2021d1_en.pdf [Accessed 10 May 2021]

Vadana, I. I., Torkkeli, L., Kuivalainen, O., and Saarenketo, S. (2020). Digitalization of companies in international entrepreneurship and marketing. *International Marketing Review*, 37 (3), 471-492.

Vadana II, Torkkeli L, Kuivalainen O et al (2019) The internationalization of born-digital companies. In The changing strategies of international business. Palgrave Macmillan, Cham

Van Biesebroeck J, Konings J, Volpe Martincus C (2016) Did export promotion help firms weather the crisis? *Economic Policy* 31(88): 653-702

Velt H, Torkkeli L, Saarenketo S (2018) Uncovering new value frontiers: The role of the entrepreneurial ecosystem in nurturing born globals. *International Journal of Export Marketing* 2(4): 316-342

Velt H, Torkkeli L, Saarenketo S (2020) Transnational entrepreneurial ecosystems: The perspectives of Finnish and Estonian born-global start-ups. In *Research handbook on start-up incubation ecosystems*. Edward Elgar Publishing

Verbeke A, Yuan W (2021) A few implications of the COVID-19 pandemic for international business strategy research. *Journal of Management Studies* 58(2): 597-601

Weerawardena J, Mort GS, Liesch PW et al (2007) Conceptualizing accelerated internationalization in the born global firm: A dynamic capabilities perspective. *Journal of World Business* 42(3): 294-306

Wentrup R (2016) The online-offline balance: Internationalization for Swedish online service providers. *Journal of International Entrepreneurship* 14(4): 562-594

Wenzel M, Stanske S, Lieberman MB (2020) Strategic responses to crisis. *Strategic Management Journal* 42(2): 16-27

Westerlund M (2020). Digitalization, internationalization and scaling of online SMEs. *Technology Innovation Management Review* 10(4): 48-57

Zahra SA (2020) International entrepreneurship in the post Covid world. *Journal of World Business* 101143

Zahra SA, Korri JS, Yu J (2005) Cognition and international entrepreneurship: Implications for research on international opportunity recognition and exploitation. *International Business Review* 14(2): 129-146

Zucchella A (2021) International entrepreneurship and the internationalization phenomenon: Taking stock, looking ahead. *International Business Review* 101800