

SUSTAINABILITY AS A MARKET NICHE FOR INTERNATIONALIZATION OF A BORN GLOBAL SME: THE CASE OF A CENTRAL EASTERN EUROPEAN FIRM STRATEGY

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Abstract

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Classical models often describe the internationalization of small and medium-sized enterprises (SMEs) as a gradual process and data underpins that SMEs are less likely to engage with foreign markets compared to larger firms. However, globalization and the proliferation of niche market opportunities stimulated some, primarily knowledge-intensive, SMEs to internationalize rapidly and to a great extent (Mushtaq et al., 2023). Such SMEs may play a crucial role in responding to global challenges, such as environmental sustainability, by offering economically viable solutions with global applicability. Yet, understanding the most important factors that affect the success and pace of their internationalization process requires further research. The purpose of the study is to contribute to the existing body of knowledge through the in-depth analysis of a born global (BG) Hungarian SME that offers an innovative and sustainability-focused service, with the aim of identifying the key driving forces behind its rapid international expansion. The paper uses a semi-structured interview-based case study method to respond to the call for geographical diversification in this research field and engages in the discussion by concluding that the entrepreneurs' mindset and attitude play a pivotal role in capitalizing on a sustainability-oriented niche opportunity on the international stage, even amidst financial constraints.

Keywords: Internationalization, Born Global, SME, Renewable Energy, Sustainability

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1. INTRODUCTION

The liberalized global economic regime that emerged in the second half of the 20th century largely as a result of revolutionary technological advancements — primarily in information communication technology (ICT) and transportation modes — and the mass reduction of tariff and non-tariff barriers stimulated companies of all sizes to look beyond national borders and explore the opportunities offered by a higher level of engagement with foreign markets through cross-border trading or foreign direct investments (FDI) (Inomata, 2017). Larger multinational enterprises (MNEs) with extensive formal and informal networks, and with abundant financial and human resources tend to dominate international trade and FDI, however small and medium-sized enterprises (SMEs) are also important participants in global trade, accounting for almost 50% of direct exports and imports in many European countries (World Trade Organization [WTO], 2016). Compared to their MNE counterparts, SMEs tend to face major challenges when it comes to internationalizing their operations due to the smaller scale and lower levels of disposable financial resources among others. Yet, digital solutions offer ways to bridge the gaps that historically prevented many of the competitive SMEs from stepping foot on the international stage (Dollar, 2017).

The increase in wealth and prosperity on a global scale brought by the exponential growth of industrial productivity and output was accompanied by the emergence of a set of new challenges, including environmental sustainability (Shrivastava, 1995). Environmental sustainability can ultimately be broken down into two major components — leveraging renewable resources from the input side, and the reduction of waste emissions and pollution from the output side (Goodland, 1995). As Goodland (1995) argues, no two countries or industries have the same path to achieving strong environmental sustainability, but our attention should always be directed towards the above-mentioned two pillars. Reducing emissions has become one of the primary concerns of the international community over the past decades, reinforced by aggressive deadlines, milestones and long-term strategies documented in multilateral agreements. For example, the Paris Agreement aims to limit the extent of global warming through the significant reduction of greenhouse emissions (United Nations Framework Convention on Climate Change [UNFCCC], 2023) and the World Bank's Zero Routine Flaring initiative looks to cut routine gas flaring to zero by 2030 (World Bank Group, 2023a). With milestones approaching and substantial results lacking, the world is yet to catch up to its sustainability commitments. Is it primarily a governmental responsibility to steer the economy towards sustainability? Or should MNEs be the key drivers of change? As the study reveals, SMEs certainly deserve a seat at the table with their tremendous potential to make an impact on a global scale with innovative solutions. Sveen et al. (2020) already noted that sustainability-related commitments among SMEs have been gradually increasing lately.

The following case study is about the internationalization model of a highly

internationalized Central Eastern European (CEE) small-sized company that offers a novel, unique, innovative, globally applicable and highly digitalized solution to advance the cause of sustainable energy production. As Love and Roper (2015) point out in their landmark study, the great majority of SMEs neither export nor innovate, and very few do both. Therefore, further research is required to better understand the internal and external factors influencing the success of such SMEs. Furthermore, Andersson and Wictor (2003) emphasize that small firms with novel technological solutions often deviate from traditional internationalization theories with unique factors — such as entrepreneurial mindset, personal networks and industry knowledge — largely influencing their strategies. Andersson and Wictor (2003) call for further research to focus on analyzing internal resources affecting the management's decision-making process, and the foreign market entry modes of born global (BG) SMEs. The contribution of this article to the literature is a detailed description of the internationalization process of an innovative BG SME through a case study, focusing on the entry mode and the key factors that facilitate and hinder the process. The use of the case study method allows us to test empirics against theory and fill in potential gaps in the literature, through assessing the particularity and complexity of a single case. Morais and Ferreira (2020) also conclude that further case studies of internationally successful SMEs may contribute to a better understanding of key driving forces and influencing factors, which may ultimately benefit policymakers and business owners.

The structure of the paper is as follows. Section 2 reviews the relevant literature. Section 3 analyses the methodology that has been used to conduct the empirical research. Section 4 describes the main findings of the study. Section 5 discusses and contextualizes the results and their implications. Section 6 concludes the paper by describing its limitations, summarizing the key findings, and outlining avenues for future research.

2. LITERATURE REVIEW

2.1. Relevant key characteristics of SMEs

Companies classified as small and SMEs are not universally defined. The European Commission adopts a definition that requires firms to a) have fewer than 250 employees, and b) have a maximum of 50 million euros net annual turnover or a balance sheet total of 43 million euros (Dominguez & Mayrhofer, 2017). Other organizations and institutions may deviate from these thresholds, which poses a general challenge to the comparability of the results of various research papers (e.g., United Nations Conference on Trade and Development [UNCTAD], 2022; Munro, 2013; Lu & Beamish, 2006; Lee et al., 2012; Batra et al., 2015).

When it comes to the peculiarities of SME internationalization *vis-a-vis* the characteristics we may observe with regard to the internationalization process of larger-scale multinational companies, Morais and Ferreira (2020) point out four crucial disadvantages:

1) liability of smallness, suggesting the smaller scale and therefore fewer resources;

2) liability of newness, meaning lower reputational levels on the international stage;

3) liability of foreignness, pointing out the relatively low level of knowledge required to efficiently engage in cross-border economic activities;

4) liability of outsiders, which demonstrates the trend that SMEs tend to have a lower level of embeddedness in international networks.

In conjunction with the above, Arteaga-Ortiz and Fernández-Ortiz (2010) identify four key dimensions of the export barriers that disproportionately influence the internationalization of SMEs: 1) knowledge (e.g., managerial, marketing or sales), 2) resource (e.g., capital or adequate human resources), 3) procedures, and 4) exogenous barriers. The latter might include factors like the institutional environment (Gao et al., 2010) or political instability (Kaynak et al., 1987).

On the other hand, SMEs also have advantages compared to larger MNEs. Smaller firms tend to be more capable of swift decision-making and, therefore, will respond dynamically to new market opportunities (Love & Roper, 2015). As Kalinic and Forza (2012) describe, a higher degree of strategic flexibility allows SMEs to act swiftly in line with their specific strategic focus. This characteristic plays a pivotal role in newborn and innovative SMEs' capability to not only carve out niche segments in the international market but also to create their own niche markets (Malodia et al., 2023).

2.2. Internationalization of SMEs

The term “internationalization” has been defined in a number of ways in business and management literature, and captures various aspects of the phenomenon it seeks to describe. This study builds on the definition set forth by Beamish (1990) who construes internationalization as the process by which companies heighten their understanding of the direct and indirect effects of international transactions on their future prospects, as well as develop business relationships with other countries; complemented by the notion offered by Calof and Beamish (1995), who explain internationalization as “the process of adapting to the international environment” (p. 115). The two definitions, if combined, precisely capture the dynamic nature of the process,

while also emphasising the importance of adapting to the external environment. Furthermore, as explained by Welch and Luostarinen (1988), internationalization should not be considered a continuous, linear process because a company may decide at any stage to reverse the process and “de-internationalize”.

The classical theoretical framework describes internationalization as a gradual process and explains the notion of an enterprise increasing its involvement and business interests in international markets to take shape in an incremental manner as firms accumulate the knowledge required for expanding their business to the international stage (Johanson & Vahlne, 1977; Bi et al., 2024). In the Uppsala model, companies first engage in business activities in the domestic market, then — as the consequence of a consciously planned sequence of steps — the management intentionally starts increasing the firm's international business (IB) footprint by 1) exporting, which happens to be a low risk, low-commitment mode of entry, then by 2) establishing a foreign sales subsidiary entity, followed by 3) conducting licencing, contract manufacturing and/or subcontracting activities, and finally by 4) creating a foreign production affiliate. One of the key axioms of the Uppsala model is that companies tend to engage in cross-border transactions first with firms located in countries with relative cultural and political proximity, then — as managerial knowledge and experience grow — the management may continue to deepen their commitment to international markets and expand their perspectives by exploring the opportunities offered by psychically distant countries (Antalóczy & Sass, 2011).

An alternative approach to the Uppsala model within the domain of the incremental strategy is the innovation method, which also emphasizes the gradual nature of the internationalization process (Morais & Ferreira, 2020). The core concept of the innovation approach points out the distinguishable stages that are heavily influenced by the series of decisions a firm's management makes. As illustrated in Table 1, the two prominent papers advocating this model differ with respect to the number of stages established throughout the entire cycle of internationalization.

Table 1. Stages of internationalization in Bilkey and Tesar (1977) and Cavusgil (1980)

<i>Stages</i>	<i>Bilkey and Tesar (1977)</i>	<i>Cavusgil (1980)</i>
Stage one	No interest in exporting	Domestic marketing only
Stage two	No active export opportunity seeking, but filling unsolicited export orders	Pre-export stage companies by arising interest in external markets
Stage three	Active export opportunity seeking	Experimental involvement is usually at a marginal scale
Stage four	Experimental exporting to countries within psychological proximity	Active involvement in direct exporting
Stage five	Experienced and elevated exporting	Committed involvement with exporting being at the core of business operations
Stage six	Exporting to countries outside of psychological proximity	

Source: Author's elaboration.

More recently, building on the concept of the Uppsala model there emerged an approach pointing out the importance of networks in internationalization processes. This model sheds light on the fact that the environment the firm operates in usually has a significant impact on its decision-making process (Anderson et al., 1994) and

hence is attributed a crucial role to the business and personal network ties throughout a firm's internationalization process, emphasizing the importance of industrial and social interactions and relationships between the company and other market actors, such as suppliers, distributors, customers, non-profit organizations or governmental

and public institutions (Kontinen & Ojala, 2011). Literature often states that this model is especially relevant for SMEs — *vis-a-vis* their MNE counterparts — as leveraging formal and informal relationships may contribute to compensating for the “liability of outsiders”, which SMEs often face during the internationalization process (Antalóczy & Sass, 2011). As components of the economic circulatory system, every firm interacts with a wide range of economic actors daily, therefore, the partnerships and alliances they create over time may greatly contribute to acquiring the knowledge required for developing a successful internationalization strategy. Furthermore, the willingness per se to establish alliances is an important coefficient in internationalization (Fernandez & Nieto, 2014). As the research conducted by Coviello and Munro (1997) underlines, small firms operating in knowledge-intensive sectors like software development often tend to grow international in only a matter of a few years mainly because of their relatively extensive network ties built in the initial stages of their operations. Coviello and Munro (1997) also conclude that networks not only impact the pace of internationalization but also influence foreign market selection and entry mode. Leveraging social and business relationships may also contribute to companies penetrating different foreign markets at the same time, contrary to the axiom of the gradual internationalization theory, by alleviating challenges related to the psychic distance of various external markets (Nordman & Tolstoy, 2014). Moreover, building networks may also enable SMEs to closely observe the best practices of their peers with respect to their internationalization strategies and — as a low-risk approach — they will imitate methods that proved to be successful before. Oehme and Bort (2015) tested this hypothesis on almost a thousand German companies and their longitudinal study affirmed that “young” SMEs with formal networks established have a high propensity of following an imitative behaviour when it comes to internationalizing — as these ties may compensate for the lack of own experience and knowledge, and ultimately reduce the uncertainty and risk associated with the process.

One of the takeaways from the paper published by Coviello and Munro (1997) is that managers of SMEs need to be conscious about building and leveraging business and personal relationships due to its potential boost to efficiently internationalize — a notion that sets the foundation for another internationalization model, the international entrepreneurship method. Given that an enterprise is solely a legal entity after all, the personal networks and entrepreneurial mindset of the owner and the management — and ultimately the pool of employees — may also strongly influence the propensity to internationalize and the success of the process. When we refer to international entrepreneurship as a method to internationalize, the academic community mostly interprets this approach as associated with innovative, knowledge-intensive firms (Lopez et al., 2009) that do not limit their operations to the domestic markets in the very early days of their operations, but start exporting almost from the outset. These companies are often referred to as international new ventures (INV) or BG companies (Knight & Cavusgil, 2004).

The rapid internationalization of many of these firms — for example, IB literature tends to define BGs as firms that either acquire at least one-quarter of their turnover from external markets within the first three years of their business operations (Cannone & Ughetto, 2014) or start exporting within two years and at least one-quarter of total sale revenue is capitalized through foreign markets (Andersson & Wictor, 2003) — were primarily enabled by the homogenization of buyer preferences globally and the technological advancements enabling producers to supply goods with relatively low transportation costs to various geographical locations, therefore this field of IB became widely researched starting from the early 1990s — coinciding with the timing of the technology boom globally. Andersson and Wictor (2003) even explicitly state that the trends closely associated with what we call “globalization” made it easier for SMEs to implement and follow through on BG strategies. Additionally, there is a very strong argument to be made that the advancement of ICT technologies and ICT access for SMEs greatly contribute to firms pursuing BG strategies and improving export performance even in the early phases of operations (Dollar, 2017).

In terms of the determinants of the formation of INVs, one key element to be pointed out is the entrepreneur per se, who — primarily based on previously gained experience, and knowledge, as well as formal and informal network ties — realizes market gaps and niche markets and comes up with profit-making opportunities. Consequently, founders of such firms tend to be more innovative, entrepreneurial, well-connected and often more educated compared to founders of non-INV companies (McDougall et al., 1994). Furthermore, Rennie (1993) in a landmark study points out the dynamically changing consumer preferences and technological disruptions — ultimately reducing many costs associated with initial exporting — to be the primary sources of the pattern of a growing number of SMEs seizing the opportunity to penetrate in foreign markets early on — on many occasions complemented by the founder’s industry-knowledge and social capital (Jones et al., 2011). Autio et al. (2000) argue that early internationalization and knowledge intensity are closely associated with rapid international growth. Furthermore, “new” firms — especially in high-tech industries — tend to be more agile in learning the competencies required for a successful international strategy. Overall, young SMEs tend to be more inclined to engage in foreign trade and build their business model around niche opportunities with international relevance than incumbent firms (Širec et al., 2023). On the other hand, BGs need to simultaneously handle the complexities arising from starting up a business with the challenges imposed by entering new international markets (Chaudhuri et al., 2024).

Sleuwaegen and Onkelinx (2014) outline two different strategies INVs may follow when it comes to their swift internationalization: Sprinkler strategy, which represents the entry mode when a firm enters multiple foreign markets roughly at the same time with the aim of securing a strong market position in each, whereas firms following the waterfall strategy only make a minor commitment to one — or only a few — markets and gradually penetrate to other

countries over time. Firms considered BGs tend to opt for the former with a relatively significant initial commitment to project credibility. However, statistically, it pairs up with a higher likelihood of failure compared to traditional exporters — typically following a gradual approach — less often withdrawing from external markets. Sleuwaegen and Onkelinx (2014) also differentiate between global and regionally focused companies depending on the international market selection.

Contrary to classical gradual models, innovative and knowledge-intensive SMEs — which proliferated in the past decades — tend to follow different patterns when it comes to expanding their operations to foreign markets. As the existing literature in the domain of SME internationalization already concludes, the digitalization of commerce and the global economy opened doors for new models that are primarily pursued by SMEs, which offer high-technology products and services with, on many occasions, global applicability. As Denicolai et al. (2021) observe, digitalization and sustainability are positively linked. First movers in these areas have a higher propensity to build and maintain a solid presence not only in the domestic but also in foreign markets — especially if the services provided by them offer solutions to global challenges, like climate change and environmental sustainability.

3. RESEARCH METHODOLOGY

To better understand the patterns of the ways innovative, first-mover, knowledge-intensive SMEs internationalize, a Hungarian tech-energy SME with 100% foreign activity was selected as the subject of my case study. Throughout the research, the author strives to understand the internationalization of the company from the point of view of the people involved, or in other words — building on the research design model of Saunders et al. (2009) — by representing an interpretivist philosophy. Although the paper does not seek highly generalizable results due to the context-bounded nature of the study, it does seek to contribute to the available knowledge through an inductive approach building on the in-depth analysis of a BG SME. While alternative qualitative (e.g., content or discourse analyses) or quantitative (e.g., survey or regression analysis on secondary data) methods with larger or more diverse samples may lead to more robust and generalizable results, Chetty (1996) describes the case study as a valuable method to approach SME research.

As the first step of the research, the author gathered all articles and interviews publicly available about the company to gain an overall understanding of the key characteristics of the business model and the internationalization process. A Google search for “Enerhash” yielded 22 written articles and nine interviews ranging from June 2020 to September 2023. The sources used at this stage of the secondary research were not scientific in nature, these were materials that appeared in the press and different media outlets, mostly in the Hungarian language. Concurrently, the author reviewed the available financial statements of the company as presented on the website of the Ministry of Justice¹.

The review of publicly available secondary materials on corporate background helped to advance to the second stage of the research. Based on a list of themes and questions compiled, the author went on to conduct a three-hour, in-person, semi-structured interview with the chief executive officer (CEO) of the company with questions mostly revolving around the key factors influencing their internationalization strategy and the success of the process. Subsequently, the author held unstructured, in-person conversations in informal settings with 1) the chief operating officer (COO), 2) colleagues in other leadership positions, and 3) employees involved in operations. Furthermore, the management of the company provided insights into some of their non-public materials for scientific research purposes to facilitate a deeper understanding, from an internationalization perspective, of the drivers and challenges. The following sections present the key findings and results of the case study of Enerhash from an internationalization perspective.

4. RESEARCH RESULTS

4.1. Mission and business model

Enerhash was founded in 2019 by two Hungarian entrepreneurs, who happened to be brothers. Based on the number of employees and annual turnover, the firm classifies as an SME. The company’s mission revolves around sustainable and efficient energy production and consumption, and is based on two pillars: It seeks to facilitate the flexible use of energy systems to reduce emissions and wishes to advance the cause of sustainable energy production, and strives to turn the computing demand of artificial intelligence (AI) and bitcoin to its advantage.

With the increased demand for sustainability, the challenge of integrating renewables into the energy mix to a greater extent has become a crucial point of the energy industry in the past decades. The core challenge of doing so is the inherent uncertainty and exposure to weather conditions in the case of renewables, as well as the lack of efficient solutions to increase the flexibility of non-renewable sources of energy. Turning fossil-based power plants on and off as the energy production of, for example, a wind or solar panel fluctuates comes with financial loss and significantly lower efficiency, therefore a central concern of integrating renewables into the power grid is to increase the flexibility of fossil-based power plants. Achieving higher energy efficiency and increasing the use of renewable resources have been listed among the paramount goals of the energy industry and international agencies, but significant improvements in economic viability have been lagging behind in the past decade (Chen et al., 2024). Disrupting the energy industry with sustainability-oriented innovations is indispensable to achieving long-term environmental sustainability.

One potential way from the demand side to increase the efficiency of hybrid models and therefore to increase the proportion of renewables in the mix is to complement the energy grid with flexible and controllable energy consumers. That notion is the backbone of the business concept of the company. The turnkey solution they provide is

¹ <https://e-beszamolo.im.gov.hu/oldal/kezdolap>

to deploy databoxes next to fossil and renewable power plants. The databox can be described in simple terms as a conventional container filled with high-performance computers that ultimately act as flexible and controllable consumers. In other words, if the power demand on the grid is lower than the output of the plant, the databox will pick up — buy, on a pre-agreed fixed or floating price — the “excess” electricity and the computers will transform the energy to computing power. The other leg of the business model is marketing the computing power obtained. The computing capacity gained from otherwise unused energy can either be sold to bitcoin mining pools or can be leveraged to support and perform central processing unit (CPU)-intensive calculations, for example, running algorithms in relation to AI-based modelling.

In 2022, the core area of focus for innovation within the company was to specialize in offering a solution to mitigate the environmental effects of gas flaring. Gas flaring is the activity of burning natural gas during oil extraction. This burning of natural gas is necessary as oil fields are typically located in remote areas and hence transporting the associated gas to a place of energy demand is logistically and economically challenging. What Enerhash offers is to bridge the gap between the point of “waste energy” production and the point of high energy demand through their databoxes. The innovative digitalized solution not only helps to satisfy the energy demand of computing power-intensive activities but more importantly facilitates the advancement of World Bank goals of significantly reducing the CO₂ and methane emissions of the energy industry (World Bank Group, 2023b).

To summarize, by providing grid balancing services, optimizing power generation, and eliminating gas flaring, the company contributes to more sustainable energy production on a global scale — while generating revenue streams from satisfying the ever-growing demand for AI development and bitcoin mining. The company is classified as the textbook example of a green innovator (Skordoulis et al., 2022).

4.2. Internationalization process

The first year following the foundation of the company was hallmarked by an overall lack of business success largely due to classic first-mover disadvantages (Lieberman & Montgomery, 1988). The service the company offered was so novel and innovative at the time that the power plants approached by the company did not invest substantial time and resources — suspected capacity and resources to explore innovative partnerships were completely lacking for smaller potential partners — to better understand the benefits of the business concept presented.

The first successful project was domestic, although the partner was the local subsidiary of a privately owned, Western Europe-based multinational electric utility company, which had a dedicated business development department to explore innovative market opportunities. This project served to be a steppingstone for a rapid internationalization process that followed. Upon

deploying the first databox next to a gas power plant and showcasing practical results — publicity was provided through digital platforms by the reputable, multinational partner — power plants from across the globe started to approach Enerhash to negotiate about the opportunities of customizing the provided service to the specific needs and circumstances of the partner. Consequently, the firm followed a reactive, ad hoc market selection process — which is recognized as more typical among traditional manufacturing firms *vis-a-vis* knowledge-intensive businesses (Bell et al., 2003) — in a sense that foreign market selection was largely dependent on the feasibility of incoming partnership requests, but the firm did not conduct proactive and strategic marketing efforts to target a specific country or region.

The lack of further business deals in the home economy can be primarily attributed to the inadequacy of the bureaucratic system of the home country and the lack of market opportunities due to the small size of the domestic economy. In other words, not only the institutional factors that may facilitate or hinder internationalization, but the size of the home country also matters. When examining small firms in the United Kingdom, Crick and Jones (2000) found that some high-technology SMEs tend to exploit domestic opportunities before looking to satisfy international demands; but the opportunities are much more limited in a smaller economy. It underpins the importance of conducting qualitative research in the domain of SME internationalization with samples from countries of different sizes to contribute to a more comprehensive understanding of different influencing factors.

The first foreign project followed the domestic success shortly. In early 2022, in cooperation with a state-owned multinational power company, the firm launched its first substantial renewable project in Northern Sweden. Given the service provided is not held back by the constraints of national borders, the company will be able to optimize its operations on a global scale and deploy databoxes to the economically most ideal locations — for example, in Northern Sweden with its unique natural conditions. On the one hand, renewable energy sources are abundant in the region (particularly wind and hydro), and on the other hand, the local energy demand is relatively low due to the low density of the population.

Almost simultaneously with the Swedish expansion, the company gained a foothold in New Zealand with a project designed for power plant optimization and demand response service in the southern part of the country. Only a few months later, the company started establishing its United States (US) operations, which was a landmark event from both the internationalization, as well as from the business development and innovation perspective. The lack of constraints imposed by national borders is evident, and the concurrent expansion on three different continents in the first few years of operations clearly sets the case for a BG company. The rapid sequence of new international deals of the observed company coincides with the findings of Autio et al. (2000), who concluded that firms that engage in cross-border business in their early stages of operations often develop a proactive culture with a higher propensity to

realize new foreign opportunities. As a result, the firm will not follow a traditional, gradual internationalization model, but will step on a path that the literature describes as BG (Andersson & Wictor, 2003; Knight & Cavusgil, 1996) or international new venture (McDougall et al., 1994). Strong links between high innovation and the early internationalization of small businesses were also recognized by Knight and Cavusgil (2004).

The breakthrough nature of the US expansion was to diversify the services of the company, with the US business being heavily focused on gas flaring solutions — which since has become one of the core competencies of the company and the primary focus of further business negotiations, among other regions, in the Middle East. As of 2023, the company conducts 100% foreign activity with no domestic business.

Although more than two years passed by between the foundation and the first foreign deal, considering: a) only a single domestic project was launched in the first two years of operations, and b) the pace and nature (i.e., strong forward momentum) of the internationalization process following the initial project, the author argues that we speak of a BG firm or an INV.

4.3. Internationalization strategy

The company is pursuing a high investment, high risk, high control mode of penetration strategy with an equity mode of entry to each foreign market. As opposed to looking for export opportunities, the management decided to establish local subsidiaries — ranging from fully-owned subsidiaries to joint ventures — on a project basis through FDI. Entering through FDI is beneficial for maintaining ownership and control, as well as for the purposes of protecting know-how. However, it is typically accompanied by large upfront costs (Root, 1998). Following a sprinkler strategy (Sleuwaegen & Onkelinx, 2014), the company entered multiple countries almost simultaneously with high commitment and with the aim of exploiting the first-mover advantages. The entry mode observed at Enerhash contradicts the findings of the landmark study of Crick and Jones (2000), who observed that the vast majority of high-technology SMEs with international operations initially internationalize solely through non-equity and low commitment (exporting) entry modes in line with risk-averse internationalization strategies. Despite the high rate of failure among SMEs who internationalize with considerable initial commitment (Sleuwaegen & Onkelinx, 2014), the company is on a significant growth path measured through the proxy of annual revenues.

As a consequence of the entry strategy, the structure of the company group is complex. Altogether, the company group consists of 11 entities, nine out of them registered outside of the home country. The parent company is a holding entity registered in Western Europe with management rights over other entities — including the initially founded entity in the home country. As for the local operations of the foreign projects, subsidiaries or joint ventures are established in both Sweden and New Zealand; with a slightly different model applied for US operations. As for the US-based gas flaring partnerships, a set of subsidiaries

and special purpose entities are established largely for business and financing purposes. Furthermore, there is an administrative entity within the company group registered in East Asia, as well as a subsidiary in a neighbouring country for hardware importing purposes. The fact that not only the business operations but also the company structure is spread across multiple continents sheds light on another dimension of BG small businesses in the era of globalization: The opportunities offered by novel ICT solutions, facilitated by the gradual reduction of trade barriers, help young firms to optimize their legal and financing structure on a global scale and, therefore, increase their competitiveness on the international stage while keeping close control and ownership of the business. The role of globalization in the proliferation of BG SMEs has already been recognized in the literature (Knight & Cavusgil, 1996), however, the constantly changing landscape of the global economy prompts the necessity to keep testing existing theories against new empirics.

Clearly, like many knowledge-intensive SMEs, Enerhash does not follow the gradual pathway of the Uppsala model (Johanson & Vahlne, 1977) and neither can be adequately explained through other classical models, such as the product cycle theory, internationalization stage theory, oligopolistic theory and different innovation models (Andersson & Wictor, 2003; Bilkey & Tesar, 1997; Cavusgil, 1980). However, the cultural proximity element of the Uppsala model can still be observed to a certain extent. If we look at the foreign markets the company is active in, we find that all of its markets are part of the liberalized democratic “Western” culture. Even if the foreign countries were not selected on the basis of thorough consideration of ideological proximity, business negotiations have not yet manifested in actual project partnerships based in culturally or ideologically fundamentally different nations.

4.4. Key drivers and challenges influencing the internationalization

4.4.1. Human capital as a driver

Human capital is recognized as one of the key internal factors influencing internationalization efforts. Leonidou et al. (2007) identify three components to it: 1) special managerial interest/urge, 2) utilization of special managerial talent/skills/time, and 3) management trips overseas. As for Enerhash, the composition of the management and the individual traits of the leaders in large part explain the BG nature of the firm, reaffirming the importance of entrepreneurial competencies of INV when it comes to a successful internationalization process, as observed by McDougall et al. (1994).

Concerning the individuals in the roles of the top three positions — CEO, COO, and chairman of the board — all three have years of international work and/or education experience, industry expertise (energy trading, digital strategies, multinational energy advisory), a green entrepreneurial mindset (Skordoulis et al., 2022) and a deep and extensive international network. The latter has already been recognized by the literature to strongly advance the rapid internationalization of knowledge-intensive and high-tech SMEs (Coviello & Munro, 1997), and harnessing previous experience may

also facilitate international growth opportunities (McDougall et al., 1994). Pre-internationalization — or as the case may be, pre-foundation — networks of owners can also play a crucial role during the internationalization process of a young firm (Coviello, 2006). As one of the interviewees described, the firm has at least one, successful and ongoing, business partnership that is based on an informal relationship established long before the foundation of the firm.

Moreover, the leadership members are dominated by an entrepreneurial mindset with a willingness to take risks, proactivity, open-mindedness, and an overall refusal to fail, which thereby reaffirms the relevancy of the international entrepreneurship approach pointed out by IB scholars (McDougall et al., 1994; Lopez et al., 2009; Jones et al., 2011). In other words, these traits essentially bridge the liability of outsiders for the company. This is in line with the human capital factors Morais and Ferreira (2020) identify as crucial drivers of rapid internationalization.

Given two out of the three top positions are still occupied by siblings, the firm can be classified as a family SME. Contrary to the findings of Fernandez and Nieto (2014), who found that family SMEs, in general, tend to lack qualified managers required to steer the company through a successful internationalization process, in the case of Enerhash the competency and ambitions of the management and the workforce are one of the strongest driving forces of the company's international success. At Enerhash, an interesting synergetic and complementary nature of entrepreneurial competencies is showcased among the two founders — industrial experience and alertness to a market niche and a willingness for risk-taking (CEO) is combined with a technocratic, business development-focused skillset (COO).

Moreover, despite findings of earlier studies such as Knight and Cavusgil (2004), the firm, as a small-BG business, does not suffer from the lack of qualified human resources and human capital does not hinder international growth opportunities. With respect to the composition of the operational workforce of the firm, it is spread out geographically with 60% of total employees being located outside of the home country. Ultimately, in the case of the subject company, human capital classifies as a clear driver of internationalization.

4.4.2. Financing as a challenge

The financing model of the company largely builds on venture capital and private equity from the outset, which is in line with the general observation Cannone and Ughetto (2014) made about high-tech start-ups. The business model is capital expenditure heavy with high upfront costs, therefore funding is secured on a project basis through multiple rounds of capital raising among private investors. External investments, such as outside equity from private investors or corporate block holders, strongly influencing the international growth potential of family SMEs have been recognized by Fernandez and Nieto (2014). A statement repeatedly emphasized during the interview with the CEO was that the key bottleneck to further growth is access to capital — reaffirming the findings of, among others, Knight and Cavusgil

(2004) who observed the scarcity of financial resources as a factor regularly hindering the growth of BGs. It also fits the pattern of previous research in the CEE region, as Slovenian SMEs cited the lack of adequate financial resources as the most frequent barrier to internationalization (Vide et al., 2010).

With the company's service proven to be effective in various use cases globally and the steadily growing focus on sustainable energy production — which is expected to further increase in the years to follow — integration of renewables in the energy mix, and reducing emissions create a global demand for the service significantly higher than the supply. In other words, the company is being approached from across the globe with negotiations for partnerships, but securing adequate quantity and quality of capital for the projects is an absolute bottleneck to further internationalisation. While Crick and Jones (2000) state that financial resources “of small firms are no longer the constraining factor they once were” (p. 3) given high-technology SMEs often choose non-exporting modes of entry to foreign markets, however, our case proves the contrary: Even though globalization has driven the costs of establishing foreign subsidiaries significantly lower, making the equity mode of entry more tempting, financial constraints still play a major role in the struggles of BG SMEs to deepen their international market penetration and exploit the growth opportunities.

As banks are typically reluctant to provide lending with commercially viable terms to young SMEs, bank loans and debt securities are currently not present in the financial model. In order to increase the company's access to capital, the management is looking to go public with one of the Hungarian entities. The expectation is that the financial results of the past years and greater transparency to company records will increase the company's access to capital — both equity and debt types — which can facilitate further growth and internationalization.

5. DISCUSSION OF THE RESULTS

Undoubtedly, the landscape SMEs need to adapt to and operate in has changed fundamentally in the past decades. Globalization with all four of its dimensions (Steger, 2020) has led to a world with blurred national borders and intense international competition among companies. Arguably, larger companies were better equipped to capitalize on the newly emerging opportunities, but economic globalization — accompanied by rapid technological developments and digitization, which ultimately reduced the cost of doing business internationally — offered new opportunities also for SMEs, particularly to the ones operating in smaller countries (Cannone & Ughetto, 2014), to think on a global scale and develop new internationalization models by establishing international presence almost from the outset.

The globalization of services and the reduction of barriers to trade and investing abroad paved the way for a special set of knowledge-intensive SMEs to grow internationally in only a few years' time. Nevertheless, the failure rate among SMEs is still high, therefore business scholars need to invest continuous efforts in better understanding success stories and in identifying how the weight of

influencing factors, drivers and challenges, change over time. Existing literature cited in this paper provides explanations for various SME internationalization models, but further case studies are often called for to advance the deeper understanding of driving forces, especially in the context of sustainability-oriented firms. This study responds to a common theme emerging among the recommendations of recent articles published in the domain of international entrepreneurship and sustainable solutions (Torkkeli et al., 2017; Skordoulis et al., 2022; Malodia et al., 2023; Širec et al., 2023), that is the call for future empirical research to analyze SMEs in different countries to observe regional similarities and differences. The geographical scope of the existing literature covers East Asia (Malodia et al., 2023; Mushtaq et al., 2023), Southern (Skordoulis et al., 2022), Western (Kalinic & Forza, 2012) and Northern Europe (Torkkeli et al., 2017; Sveen et al., 2020). Therefore, one of the paper's main contributions is that it examines green entrepreneurship and green innovation in the context of BG CEE SMEs. Furthermore, the paper engages in the dialogue opened by Torkkeli et al. (2017) suggesting that sustainability orientation has an ambiguous effect on the success of SME internationalization, thus the topic is in need of further research.

The findings of the study underpin the vital role of the entrepreneur in pursuing a green innovation-based IB strategy as the leadership's mindset and attitude — complemented by their industrial experience and network ties — are the most significant determinants of the competitive advantage and rapid internationalization of Enerhash. For policymakers and scholars, it implies that investment in human capital — and more specifically in green human capital (Astuti et al., 2023) and strengthening entrepreneurial orientation (Malodia et al., 2023) — is crucial for stimulating newborn SMEs to make not only business but also a positive environmental impact on the international stage.

As the niche service offered by the firm bears global applicability and the demand is currently higher than the supply, the target market selection reaffirms the findings of Skordoulis et al. (2022), namely that countries with relatively high environmental awareness are more likely to serve as foreign hosts for sustainability-focused SMEs. This observation has a fundamental impact on the potential internationalization trajectories of SMEs with similar orientations, as well as may contribute to managers considering the environmental consciousness of potential target markets when deciding which foreign market would be the most rewarding to penetrate. Furthermore, it is also worth contemplating that entering international markets almost simultaneously with launching a business doesn't necessarily exaggerate managerial complexities — as stated by Chaudhuri et al. (2024), but the global applicability of the service offered, and the associated rapid internationalization may actually make the business model economically viable and help to overcome the constraints potentially imposed by the size of the domestic economy. Thus, from a policy-making perspective, the paper echoes the conclusions of Malodia et al. (2023) to focus on mitigating the burdens associated with exporting and investing abroad.

Simplifying the international regulatory environment and lowering barriers to foreign market entry would contribute to unleashing the potential of green entrepreneurs and green innovators.

As a novel contribution, the paper contradicts the observation made by Denicolai et al. (2021) with respect to the de facto trade-off between digitalization and sustainability among internationalized SMEs. Despite SMEs typically struggling to focus on both during the internationalization process, Enerhash successfully combines cutting-edge digital solutions and a coherent sustainability orientation.

6. CONCLUSION

The study's purpose was to broaden the existing body of knowledge about the dynamics of BG, sustainability-oriented SMEs by expanding the geographical scope of the research to the CEE region. In order to do so, the case study approach was used. While it is well suited to uncover the complexity of a single case, the methodology's inherent limitation is that the findings may be context-bounded and hence bear limited generalizability. Moreover, the research approach may leave room for the unintentional subjectivity of interpretation from the researcher's side, as well as for subjectivity in the context of the responses provided during the interviews from the respondents' perspective.

Enerhash, the subject SME in the case study, offers a novel and innovative solution in a highly digitalized way to one of the key global challenges of the early 21st century. Upon capitalizing on a successful domestic project first, it leapfrogged to the international market and grew to be a global actor within a matter of a few years — while continuously innovating and adapting to emerging opportunities. By the end of the company's third full business year, the operations spanned across three different continents with 100% of sales revenues coming from foreign markets. The equity-based sprinkler entry mode required high upfront investments and high initial commitment, but ultimately enabled the management to maintain ownership and control over business operations. The rapid and successful internationalization process was largely driven by internal factors, such as human capital, entrepreneurial mindset, formal and informal managerial networks, and knowledge and experience acquired prior to the foundation of the company. As a result of strong internal resources, the company group now consists of a complex group of subsidiaries and affiliates, which was found to be a quite unorthodox way of entering foreign markets for a young SME. On the other hand, the lack of financial resources and access to capital has proven to be the bottleneck to further growth, which fits into the findings previously observed in relation to Central European SMEs (Vide et al., 2010).

Worth noting the close family relationship between the CEO and COO, which was not the focus of this study, yet may be an interesting avenue for future research to explore the dynamics of BG family SMEs. Moreover, it would be recommended to conduct further empirical research with the use of quantitative methods to test hypotheses derived from the findings of this paper on larger samples in the region. As for the longitudinal aspect, with

a gradually increasing focus on climate change on a global scale, it is strongly suggested to keep revisiting models introduced by recent papers to measure how the passage of time shapes the orientation and dynamics of innovative and internationalized SMEs.

REFERENCES

- Anderson, J. C., Håkansson, H., & Johanson, J. (1994). Dyadic business relationships within a business network context. *Journal of Marketing*, 58(4), 1–15. <https://doi.org/10.1177/002224299405800401>
- Andersson, S., & Wiktor, I. (2003). Innovative internationalisation in new firms: Born globals — The Swedish case. *Journal of International Entrepreneurship*, 1, 249–275. <https://doi.org/10.1023/A:1024110806241>
- Antalóczy, K., & Sass, M. (2011). Kis-és közepes méretű vállalatok nemzetköziesedése — Elmélet és empiria [Internationalization of small and medium-sized companies — Theory and empiricism]. *Külgazdaság*, 55, 22–33. <http://surl.li/iqrlqn>
- Arteaga-Ortiz, J., & Fernández-Ortiz, R. (2010). Why don't we use the same export barrier measurement scale? An empirical analysis in small and medium-sized enterprises. *Journal of Small Business Management*, 48(3), 395–420. <https://doi.org/10.1111/j.1540-627X.2010.00300.x>
- Astuti, P. D., Datrini, L. K., & Chariri, A. (2023). An empirical investigation of the relationship between green intellectual capital and corporate sustainable development. *Corporate & Business Strategy Review*, 4(2), 48–58. <https://doi.org/10.22495/cbsrv4i2art5>
- Autio, E., Sapienza, H. J., & Almeida, J. G. (2000). Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of Management Journal*, 43(5), 909–924. <https://feb.kuleuven.be/public/u0100611/Literature%20Exam/1556419.pdf>
- Batra, S., Sharma, S., Dixit, M. R., Vohra, N., & Gupta, V. K. (2015). Performance implications of industry appropriability for manufacturing SMEs: The role of technology orientation. *Journal of Manufacturing Technology Management*, 26(5), 660–677. <https://doi.org/10.1108/JMTM-09-2013-0132>
- Beamish, P. W. (1990). The internationalization process for smaller Ontario firms: A research agenda. In A. M. Rugman (Ed.), *Research in global strategic management international business research for the twenty-first century: Canada's new research agenda* (pp. 77–92). JAI Press.
- Bell, J., McNaughton, R., Young, S., & Crick, D. (2003). Towards an integrative model of small firm internationalisation. *Journal of International Entrepreneurship*, 1, 339–362. <https://doi.org/10.1023/A:1025629424041>
- Bi, S., Sass, M., & Gáspár, T. (2024). Internationalization strategy management for small and medium-size enterprises: A case study of LED industrial enterprise. *Corporate & Business Strategy Review*, 5(1), 204–215. <https://doi.org/10.22495/cbsrv5i1art19>
- Bilkey, W. J., & Tesar, G. (1977). The export behavior of smaller-sized Wisconsin manufacturing firms. *Journal of International Business Studies*, 8, 93–98. <https://doi.org/10.1057/palgrave.jibs.8490783>
- Calof, J. L., & Beamish, P. W. (1995). Adapting to foreign markets: Explaining internationalization. *International Business Review*, 4(2), 115–131. [https://doi.org/10.1016/0969-5931\(95\)00001-G](https://doi.org/10.1016/0969-5931(95)00001-G)
- Cannone, G., & Ughetto, E. (2014). Born globals: A cross-country survey on high-tech start-ups. *International Business Review*, 23(1), 272–283. <https://doi.org/10.1016/j.ibusrev.2013.05.003>
- Cavusgil, S. T. (1980). On the internationalization process of firms. *European Research*, 8(6), 273–281. <https://www.researchgate.net/publication/302560081>
- Chaudhuri, R., Vrontis, D., & Chatterjee, S. (2024). External environment and internal dynamics of “born global”: Strategic and operational firm performance. *Management Decision*, 62(1), 274–300. <https://doi.org/10.1108/MD-02-2023-0168>
- Chen, W., Alharthi, M., Zhang, J., & Khan, I. (2024). The need for energy efficiency and economic prosperity in a sustainable environment. *Gondwana Research*, 127, 22–35. <https://doi.org/10.1016/j.gr.2023.03.025>
- Chetty, S. (1996). The case study method for research in small-and medium-sized firms. *International Small Business Journal*, 15(1), 73–85. <https://doi.org/10.1177/0266242696151005>
- Coviello, N. E. (2006). The network dynamics of international new ventures. *Journal of International Business Studies*, 37, 713–731. <https://doi.org/10.1057/palgrave.jibs.8400219>
- Coviello, N., & Munro, H. (1997). Network relationships and the internationalisation process of small software firms. *International Business Review*, 6(4), 361–386. [https://doi.org/10.1016/S0969-5931\(97\)00010-3](https://doi.org/10.1016/S0969-5931(97)00010-3)
- Crick, D., & Jones, M. V. (2000). Small high-technology firms and international high-technology markets. *Journal of International Marketing*, 8(2), 63–85. <https://doi.org/10.1509/jimk.8.2.63.19623>
- Denicolai, S., Zucchella, A., & Magnani, G. (2021). Internationalization, digitalization, and sustainability: Are SMEs ready? A survey on synergies and substituting effects among growth paths. *Technological Forecasting and Social Change*, 166, Article 120650. <https://doi.org/10.1016/j.techfore.2021.120650>
- Dollar, D. (2017). Executive summary. In *Global value chain development report 2017. Measuring and analyzing the impact of GVCs on economic development* (pp. 1–14). World Trade Organization. https://www.wto.org/english/res_e/booksp_e/gvcs_report_2017.pdf
- Dominguez, N., & Mayrhofer, U. (2017). Internationalization stages of traditional SMEs: Increasing, decreasing and re-increasing commitment to foreign markets. *International Business Review*, 26(6), 1051–1063. <https://doi.org/10.1016/j.ibusrev.2017.03.010>
- Fernandez, Z., & Nieto, M. J. (2014). Internationalization of family firms. In L. Melin, M. Nordqvist, & P. Sharma (Eds.), *The SAGE handbook of family business* (pp. 403–422). SAGE Publications. <https://doi.org/10.4135/9781446247556.n20>
- Gao, G. Y., Murray, J. Y., Kotabe, M., & Lu, J. (2010). A “strategy tripod” perspective on export behaviors: Evidence from domestic and foreign firms based in an emerging economy. *Journal of International Business Studies*, 41, 377–396. <https://doi.org/10.1057/jibs.2009.27>
- Goodland, R. (1995). The concept of environmental sustainability. *Annual Review of Ecology and Systematics*, 26, 1–24. <https://doi.org/10.1146/annurev.es.26.110195.000245>

- Inomata, S. (2017). Analytical frameworks for global value chains: An overview. In *Global value chain development report 2017. Measuring and analyzing the impact of GVCs on economic development* (pp. 15-36). World Trade Organization (WTO). https://www.wto.org/english/res_e/booksp_e/gvcs_report_2017.pdf
- 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, 23-32. <https://doi.org/10.1057/palgrave.jibs.8490676>
- Jones, M. V., Coviello, N., & Tang, Y. K. (2011). International entrepreneurship research (1989-2009): A domain ontology and thematic analysis. *Journal of Business Venturing*, 26(6), 632-659. <https://doi.org/10.1016/j.jbusvent.2011.04.001>
- Kalinic, I., & Forza, C. (2012). Rapid internationalization of traditional SMEs: Between gradualist models and born globals. *International Business Review*, 21(4), 694-707. <https://doi.org/10.1016/j.ibusrev.2011.08.002>
- Kaynak, E., Ghauri, P. N., & Olofsson-Bredenlow, T. (1987). Export behavior of small Swedish firms. *Journal of Small Business Management*, 25(2), 26-32. <http://surl.li/vnjfjw>
- Knight, G. A., & Cavusgil, S. T. (1996). The born global firm: A challenge to traditional internationalization theory. *Advances in International Marketing*, 8, 11-26. <http://surl.li/tglytv>
- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organization capabilities, and the born-global firm. *Journal of International Business Studies*, 35, 124-141. <https://doi.org/10.1057/palgrave.jibs.8400071>
- Kontinen, T., & Ojala, A. (2011). Network ties in the international opportunity recognition of family SMEs. *International Business Review*, 20(4), 440-453. <https://doi.org/10.1016/j.ibusrev.2010.08.002>
- Lee, H., Kelley, D., Lee, J., & Lee, S. (2012). SME survival: The impact of internationalization, technology resources, and alliances. *Journal of Small Business Management*, 50(1), 1-19. <https://doi.org/10.1111/j.1540-627X.2011.00341.x>
- Leonidou, L. C., Katsikeas, C. S., Palihawadana, D., & Spyropoulou, S. (2007). An analytical review of the factors stimulating smaller firms to export: Implications for policy-makers. *International Marketing Review*, 24(6), 735-770. <https://doi.org/10.1108/02651330710832685>
- Lieberman, M. B., & Montgomery, D. B. (1988). First-mover advantages. *Strategic Management Journal*, 9(1, special issue), 41-58. <https://doi.org/10.1002/smj.4250090706>
- Lopez, L. E., Kundu, S. K., & Ciravegna, L. (2009). Born global or born regional? Evidence from an exploratory study in the Costa Rican software industry. *Journal of International Business Studies*, 40, 1228-1238. <https://doi.org/10.1057/jibs.2008.69>
- Love, J. H., & Roper, S. (2015). SME innovation, exporting and growth: A review of existing evidence. *International Small Business Journal*, 33(1), 28-48. <https://doi.org/10.1177/0266242614550190>
- Lu, J. W., & Beamish, P. W. (2006). SME internationalization and performance: Growth vs. profitability. *Journal of International Entrepreneurship*, 4, 27-48. <https://doi.org/10.1007/s10843-006-8000-7>
- Malodia, S., Dhir, A., Alshibani, S. M., & Christofi, M. (2023). Born global: Antecedents and consequences of innovation capabilities. *Asia Pacific Journal of Management*, 1-34. <https://doi.org/10.1007/s10490-023-09909-1>
- McDougall, P. P., Shane, S., & Oviatt, B. M. (1994). Explaining the formation of international new ventures: The limits of theories from international business research. *Journal of Business Venturing*, 9(6), 469-487. [https://doi.org/10.1016/0883-9026\(94\)90017-5](https://doi.org/10.1016/0883-9026(94)90017-5)
- Morais, F., & Ferreira, J. J. (2020). SME internationalisation process: Key issues and contributions, existing gaps and the future research agenda. *European Management Journal*, 38(1), 62-77. <https://doi.org/10.1016/j.emj.2019.08.001>
- Munro, D. (2013). *A guide to SME financing*. Palgrave Pivot. <https://doi.org/10.1057/9781137373786>
- Mushtaq, R., Murtaza, G., Yahiaoui, D., Vijay, P., & Talpur, Q.-u.-A. (2023). Are born global firms environmentally more responsible? Evidence from the East Asia and Pacific region. *Asia Pacific Journal of Management*. <https://doi.org/10.1007/s10490-023-09915-3>
- Nordman, E. R., & Tolstoy, D. (2014). Does relationship psychic distance matter for the learning processes of internationalizing SMEs? *International Business Review*, 23(1), 30-37. <https://doi.org/10.1016/j.ibusrev.2013.08.010>
- Oehme, M., & Bort, S. (2015). SME internationalization modes in the German biotechnology industry: The influence of imitation, network position, and international experience. *Journal of International Business Studies*, 46, 629-655. <https://doi.org/10.1057/jibs.2015.8>
- Organisation for Economic Co-operation and Development (OECD). (2016). *Entrepreneurship at a glance 2016*. https://doi.org/10.1787/entrepreneur_aag-2016-en
- Rennie, M. W. (1993). Global competitiveness: Born global. *The McKinsey Quarterly*, 4(4), 45-52. <https://www.proquest.com/docview/224554703?sourcetype=Scholarly%20Journals>
- Root, F. R. (1998). *Entry strategies for international markets* (2nd ed.). Jossey-Bass.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students* (5th ed.). Pearson Education.
- Shrivastava, P. (1995). The role of corporations in achieving ecological sustainability. *Academy of Management Review*, 20(4), 936-960. <https://doi.org/10.2307/258961>
- Širec, K., Samsami, M., & Schött, T. (2023). Born globals and born sustainables: Motives of accumulating wealth and of making a difference in the world. *Organizacija*, 56(4), 342-351. <https://doi.org/10.2478/orga-2023-0023>
- Skordoulis, M., Kyriakopoulos, G., Ntanos, S., Galatsidas, S., Arabatzis, G., Chalikias, M., & Kalantonis, P. (2022). The mediating role of firm strategy in the relationship between green entrepreneurship, green innovation, and competitive advantage: The case of medium and large-sized firms in Greece. *Sustainability*, 14(6), Article 3286. <https://doi.org/10.3390/su14063286>
- Sleuwaegen, L., & Onkelinx, J. (2014). International commitment, post-entry growth and survival of international new ventures. *Journal of Business Venturing*, 29(1), 106-120. <https://doi.org/10.1016/j.jbusvent.2013.01.001>
- Steger, M. B. (2020). *Globalization: A very short introduction* (5th ed.). Oxford University Press. <https://doi.org/10.1093/actrade/9780198849452.001.0001>
- Sveen, A., Gresaker, O. K., Hæhre, R., Madsen, D. Ø., & Stenheim, T. (2020). Attitudes and actions towards sustainability: A survey of Norwegian SMEs. *Corporate Ownership & Control*, 17(4), 117-128. <http://doi.org/10.22495/cocv17i4art10>

- Torkkeli, L., Saarenketo, S., Salojärvi, H., & Sainio, L. M. (2017). Sustainability and corporate social responsibility in internationally operating SMEs: Implications for performance. In S. Marinova, J. Larimo, & N. Nummela (Eds.), *Value creation in international business: An SME perspective* (Vol. 2, pp. 359-373). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-39369-8_15
- United Nations Conference on Trade and Development (UNCTAD). (2022). *World investment report 2022: International tax reforms and sustainable investment*. United Nations (UN). https://unctad.org/system/files/official-document/wir2022_en.pdf
- United Nations Framework Convention on Climate Change (UNFCCC). (2023). *The Paris Agreement*. United Nations (UN). <https://unfccc.int/process-and-meetings/the-paris-agreement>
- Vide, R. K., Bobek, V., Cancer, V., Perko, I., & Hauptman, L. (2010). The efficiency of entrepreneurship policy support for the internationalisation of SMEs: The case of Slovenia. *European Journal of International Management*, 4(6), 644-664. <https://doi.org/10.1504/EJIM.2010.035593>
- Welch, L. S., & Luostarinen, R. (1988). Internationalization: Evolution of a concept. *Journal of General Management*, 14(2), 34-55. <https://doi.org/10.1177/030630708801400203>
- World Bank Group. (2023a). *Zero routine flaring by 2030*. <https://www.worldbank.org/en/programs/zero-routine-flaring-by-2030>
- World Bank Group. (2023b). *Global flaring and methane reduction partnership (GFMR)*. <https://www.worldbank.org/en/programs/gasflaringreduction/gas-flaring-explained>
- World Trade Organization (WTO). (2016). SMEs in international trade: Stylized facts. In *World trade report 2016: Levelling the trading field for SMEs* (pp. 28-55). WTO. https://www.wto.org/english/res_e/booksp_e/wtr16-0_e.pdf