The governance of born globals and their global value chains

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Abstract

Research about early internationalisation of SMEs has evolved over the last three decades. Nevertheless, questions about the governance of their global value chain (GVC) are rarely addressed in the literature. By drawing on seven case studies of born globals across the EU, this paper seeks to uncover critical factors determining the governance structure of the GVC amongst born global enterprises. Our findings suggest that firm characteristics, network, nature of their business and the replicability of their partners determine the power of the GVC relationship. Mutual trust and benefits are regarded as critical success factors in sustaining the GVC relationships in the global market. Our findings provide insights to the international

entrepreneurship, network and governance theories, as well as practical implications to owner-managers of born global enterprises in developing the GVC network.

Key words: Global Value Chain (GVC), SME, internationalisation, governance

Note: This is a working paper and is still in the process of development, as part of our project.

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Introduction

The increasing emerge of international transactions and networks in the global marketplace has given rise to the development of global value chain (Gereffi et al. 2005; Mudambi, 2007; 2008; Laplume et al., 2016). The concept of value chain is conventionally defined as "the process by which technology is combined with material and labour inputs, and then processed inputs are assembled, marketed, and distributed. A single firm may consist of only one link in this process, or it may be extensively vertically integrated" (Kogut, 1985, p.15). A global value chain, therefore, is referred to as a distinct, international form of network governance (Kano, 2017). It combines the process of outsourcing and offshoring, and imposing a strong focus on different activities along the supply chain, such as R&D, procurement, operations, and marketing and customer services. Global Value Chain (GVC) has been described as a "the world economy's backbone and central nervous system" (Canttaneo et al., 2010, p.7), contributing to transforming the global marketplace from trading in goods to trading in activities (Kano, 2017).

Despite the growth in the number of studies of GVC, investigations focusing on governance issues are scarce. Governance is defined as "authority and power relationships that determine how financial, material and human resources are allocated and flow within a chain" (Gereffi, 1994, p. 97). Early studies of governance are related to the "buyer-producer" relationship driven. However, governance issues turn out to be more complicated in new, young internationalising firms due to their limited resources and newness in the industry. Yet, internationalising firms need to address governance issues pertaining to GVCs, particularly amongst born global firms in their early stages of internationalisation. Born globals can be defined as "entrepreneurial start-ups that, from or near their founding, seek to derive a substantial proportion of their revenue from the sale of products in international markets" (Knight and Cavusgil, 2004). Maintaining GVC relationship contributes to enhance the new young internationalising firm's competitive advantages, facilitates new market entry and develops their growth in the global industries (Gereffi and Fernandez-Stark, 2016).

However, previous research on GVCs has been on multinational enterprises (MNEs) rather than born globals which are typically SMEs.[1]

This paper seeks to bridge the research gap by examining the governance issues between born global enterprises and their international partners. It aims to answer the following:

1. What are their motivations and challenges in developing their GVC?
2. What are the critical factors that result in different types of GVC governance configurations?
3. What are the governance issues facing born globals in managing their global value chains?
4. What are the main implications for:
    a) the theories used for analysing born globals
    b) owner-managers of born globals in sustaining the GVC relationships

By drawing on the seven case studies of manufacturing born globals across seven European countries (the UK, Spain, Estonia, Germany, Netherlands, Romania, and Denmark), the paper analyses the motivations and challenges of born globals in developing GVC; the critical factors that shape different configurations of governance of the GVC of born globals using the framework of Gereffi et al. (2005); and if there has been any evolution of the GVC relationship management. Finally, the study provides implications for applying GVC governance in born global models, and lessons for SME owner-managers in sustaining GVC relationships.

2. Literature Review

In examining born global enterprises and governance issues, we draw upon the literature on new international entrepreneurship theory, network, and GVC governance theory.

International Entrepreneurship Theory

International entrepreneurship theory suggests that born globals generate sales from international activities in multiple markets from inception, without necessarily relying on cultural or geographical proximity (Leonidou and Samiee, 2012; Cavusgil and Knight, 2015). Based on their highly innovative, international orientated characteristics and constrained use of resources, born globals tend to have a proactive approach to internationalisation and outperform their counterparts regarding export speed, intensity and scope (Crick, 2009; Kuivalainen et al, 2007; Madsen and Servais, 1997). Their target market is often derived from their opportunity identification based on utilising their existing networks and experience (Coviello, 2006). Theoretically, young internationalising firms tend not to follow successive stage in entry modes (Leonidou and Samiee, 2012), but instead are more motivated to approach less resource-intensive modes, such as direct export, subcontracting, licensing or franchising to lower costs and risks (Cavusgil and Knight, 2009). Hence, integrating in GVC can enhance their market identification, lower their costs in production and distribution and

[1] A born global is normally defined as a firm that has internationalisation activities from inception, or within five years of their foundation. A SME is typically a firm that employs less than 250 employees.

allow them to take advantage of the knowledge sharing, technology development and existing networks from their partners. This somehow influences a born global's strategy in integrating and managing their GVCs during their internationalisation process.

The increasing turbulent global business environment has imposed lots of pressures on small businesses. Born globals, in particular, have to deal with the uncertainty (Federation of Small Business, 2017). Hence, it is essential that born globals acquire new capabilities to leverage technologies to allow them to optimise their global operations along the value chain and enhance young firms' ability to deal with the global risks (Freeman et al., 2006). In uncertain markets, born global firms are often seen to develop and draw on collaborative ventures and network relationships to minimise the risks. Finding and leveraging competent partners increase the firm's competency to overcome the "liability of foreignness and newness", and create synergies to discover new market opportunities (Cavusgil and Knight, 2015). This may motivate born globals to enhance their integration into a GVC. However, there is a lack of research investigating the challenges of the GVC integration process and how SMEs utilise their network to enhance their competences. This refers to our first research question that seeks to identify not only motivations but also potential challenges born global dealing with in integrating into GVC.

Network theory

Network theory explains how an internationalising firm utilises and integrates into the GVC. Born globals tends to rely more on informal and personal relationship rather than formal relationships (McDougall et al, 1994 and Freeman et al, 2006). This typically distinguishes SMEs from large organisations, in terms of building GVC relationships. According to OECD (2008) cooperation with upstream and downstream partners will enhance the SME's knowledge, spillovers, human and technological capital and innovation, which contributes to the firm's performance. Previous studies emphasises the role of network on born globals' internationalisation as it helps them to acquire new knowledge and identify market opportunity (Coviello and Munro, 1995). In the same vein, born global model also suggests that network development can enable SMEs to overcome the resource barrier in their internationalisation process (Mort and Weerawardena, 2006). From network perspective, the process of internationalisation involves the formulation and development of relationships in foreign networks rather than local networks (Idris et al., 2017).

Facilitating networks enables firms to expand and growth nationally and internationally (Larsson et al., 2003). By participating in networks, a firm can gain access to resources based on existing ties or building new relationships (Ghauri et al., 2014). This contributes to enhance the capability to "exchange and combine their resources through various activities for their mutual benefits" (Ghauri et al., 2014, p. 580). This is particularly essential to small firms which trust is often emphasised as the critical factor in determining the trade relationship and network formulation (Brunetto and Farr-Wharton, 2007).

Networks can be built based on informal and formal relationships, which influences the governance of the GVC. Informal relationships can be referred to more flexible relationships and connections, which are not “bound by an explicit agreement”. A formal relationship, however, is often associated with a formal connection with organisations and individuals such as with banks, accountants, lawyers, business associations (Das and Teng, 1997). Some argue that formal networks such as suppliers in the foreign market facilitate the born global to enter this market (Ojala, 2009). On the other hand, smaller firms internationalisation via intermediaries such as distributors, subcontractors, licensors) are often known to take advantage of their informal networks to expand their market abroad (Idris et al., 2017). Whether direct or indirect entry mode is more applicable to born globals remains questionable; and whether born globals tend to rely more on informal or formal networks is controversial. In order to understand this, it is crucial to verify the impact of the firm characteristics, nature of the business, and its role on the GVC relationships. Collectively, these contribute to shape the governance structure of the born global’s GVC.

Global Value Chain Governance

Since in the 1990, the concept of value chain has been viewed from different landscapes from “buyer-driven commodity chain” where the leading corporation control the relationship as a merchandiser, to “producer-driven commodity chains” where the leading suppliers controls the production activity (Gereffi and Korzeniewicz, 1994). The value chain explains the entities which are connected to create a value to generate competitive advantage (Al-Mudimigh et al., 2004; Hernandez and Pedersen, 2017), as well as the firm’s relationship with their suppliers and customers to lower cost and offer the best value of their products or services (Christopher and Gattorna, 2005). The concept of GVC refers to “the full range of activities that firms and workers perform to bring a product from its conception to end use and beyond” (Gereffi and Fernandez-Stark, 2011, p. 4). GVC is also referred to the “global commodity chain” that reflects the coordination across borders to generate value to the all the players in the chain (Gereffi and Korzeniewicz, 1994).

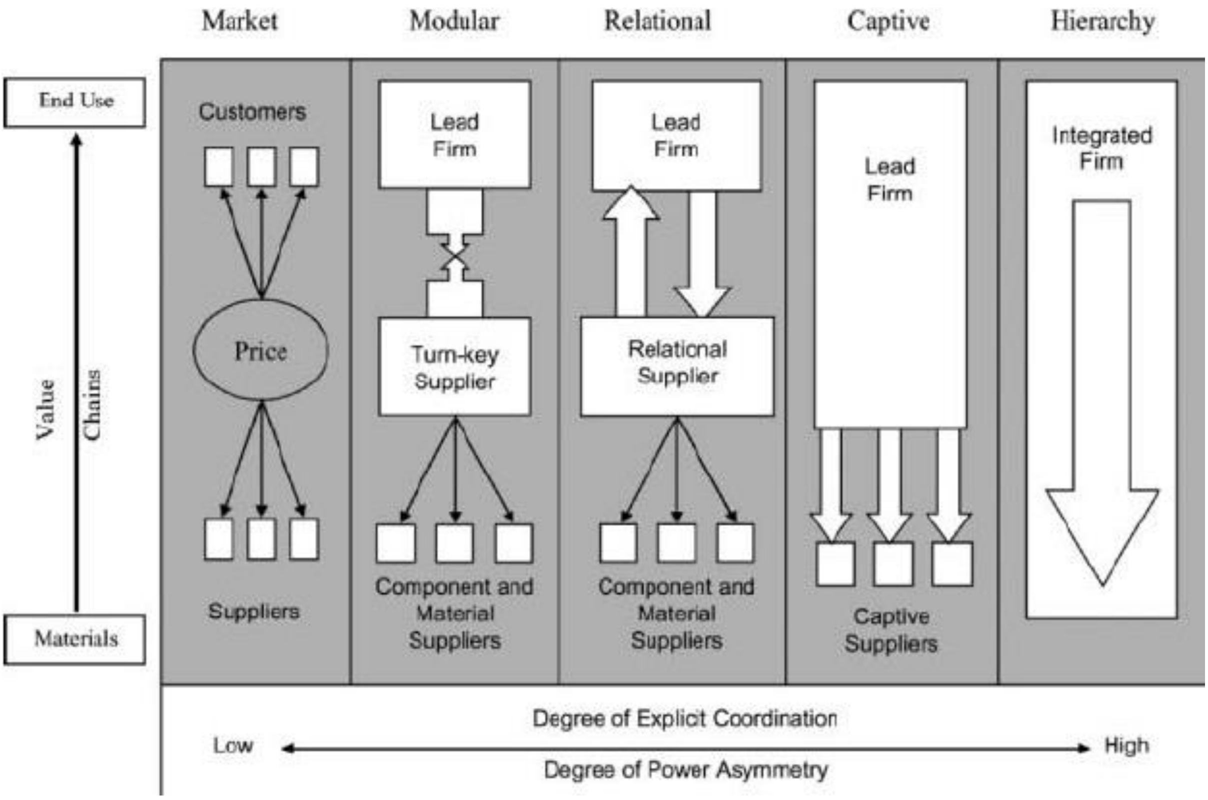
For some born global firms, that are often known to proactively engage in the international market, integrating into the GVC is seen as the nature of their businesses to sustain in the market (Baum et al., 2015). However, born globals may encounter lots of challenges because of their limited resources, lack of prior network involement, and in many cases are dominated by the key players who have established position in the market. Hence, it is significant to understand the nature of the GVC relationship to capture the best value while effectively managing the relationship. One of the most key issues that challenges small firm is the *governance* issues as this requires an identification of the leaders in the sector, their market, geographical location, and how the firm can interact with the these players in the market (i.e. suppliers, distributors, customers) to manage and balance the relationships (Gereffi and Fernandez-Stark, 2016). Analysing different configurations of the governance structures enable firm to have a better control of the governance of their GVC. This relies on the main three factors “complexity of the information” exchanged between the actors involved in the GVC, the “level of competencies” of the suppliers, and “how the information for production can be coded” (Frederick and Gereffi, 2009; Gereffi and Fernandez-Stark, 2016).

The literature suggests different configurations of governance structures. For example, Sturgeon and Lee (2001) initiated three types of supply relationship based on the complexity of the information and the products provided to the customers. This includes (1) the '*commodity supplier'* that provides standard products, (2) the '*captive supplier'* which produce non-standardised products based on the buyers' needs, and (3) the *'turn-key supplier'* that refer to the highly competent supplier "who produces customised products for buyers by utilising flexible machinery to pool capacity for different customers" (Gereffi and Fernandez-Stark, 2016, p.10). Built on the classification of suppliers suggested by Sturgeon and Lee (2001), Gereffi et al, (2005) and Hernandez and Pedersen (2017) develop five basic types of value chain governance, ranging from the highest to least autonomous relationships between players engaged in the GVC. This includes *market governance*, *modular governance*, *relational governance*, c*aptive governance* and *hierarchical governance*. As shown in Figure 1, the five governance configurations illustrates the increasing level of coordination and degree of power asymmetry from left to right along the value chain.

Market: This mode refers to the simplest form of governance structure. It reflects little cooperation between customers and suppliers along the chain, but mainly rely on price to reach the agreement. At this mode, the information exchange and the product specification can be completed quickly without the formal cooperation or interaction between the two parties beyond the exchange of goods and services. Switching costs between suppliers is cheap in this case, as it tends to follow a standardised production process rather than customised and can easily be replaceable.

Modular: This mode describes the governance structure where suppliers follow the lead firm's specifications to make the product. In this case, the flow of information is codified and the agreement is based on the turn key contracts where "lead firm concentrates on the creation, penetration and defence of markets for end products" (Hernandez and Pedersen, 2017, p. 140).

Figure 1: Configuration of GVC governance



Source: Gereffi et al., 2005

Relational: This refers to the structure where the level of complexity of the information exchange increases, requiring higher co-ordination and interaction between the two parties in order to reach agreement. The relationship between supplier and lead firm is balanced in this case, based on mutual trust, social relationships and shared norms (Poppo and Zenger, 2002; Altenburg, 2006).

Captive: This structure describes the unbalanced relationship where the lead firms have great control over the suppliers (Gereffi et al., 2005). In this case, suppliers have much weaker position in negotiating or bargaining terms and conditions, however, it can gain support from the lead firm due to its established position in the market (Altenburg, 2006). Switching cost is very high in this case due to the unique role/ competence of the lead firm in the market.

Hierarchy: describes vertically integration chains where all the transactions take place in house- or in other words, is totally managed within the lead firms. This is often approached when the level of complexity is high in the products, specification cannot be codified or lack of competent suppliers (Gereffi and Fernandez- Stark, 2011).

Despite a few studies on governance structure of the GVC, scarce research links the nature of GVC governance with new young internationalising firms, or so-called, born globals. Most previous studies aim to reflect the governance structure of MNEs, which are highly integrated in the GVCs based on their intensive global business activities rather than focusing on small firms which internationalise early. Hence, our research aims to bridge the research gap by identifying the most common governance structures found in born globals, and explains the reasons behind each configuration based on the framework developed by Gereffi et al., (2005), and the implications from both theoretical and practical perspective.

3. Methodology

The research upon which this paper draws is part of a larger European project investigating 28 internationalisation policy measures and seven case studies of born global enterprises. One of the distinguishing features of this study was that the case studies included primary data collected by seven European project partners, investigating not only the born global businesses located in the UK, Spain, Netherlands, Estonia, Romania, Germany and Denmark but also their international partners located elsewhere.

Case study approach

The case study method is chosen as it reflects in-depth analysis of each born global's integration into a GVC, their internationalisation activities, their own strengths and challenges in the market and how they governed their GVC relationships. It also reflects the specific context of the organisation behaviour and the nature of their GVC in different target markets (Dubois and Gadde, 2002). This approach in accordance to the contextual study in the area of international business (Michailova, 2011; Welch et al., 2011). The case study provides in-depth insight into each born global and the nature of their GVC relationship, as well as their motivation and challenges in integrating into the GVC and their governance issues. This also provides inputs to shape our thematic analysis to uncover critical factors that determine the governance structure in different contexts. The themes reflect the reasons why the born globals integrate into their GVC, the obstacles faced in governing the value chain relationships, formulation of the cooperation, control and power relationship within the cooperation.

Sampling

For the purpose of this project, born globals are defined as independent, individual companies, employing less than 250 employees, with headquarters located in the EU country clusters where project partners are based. These firms are actively engaged in international activities, less than seven years old, trading in at least two international markets and generating at least 20% turnover abroad.

All the seven born global firms are in manufacturing industry, innovative and active in at least two foreign markets. The data was collected during 2017-2018 by seven European institutions, with 23 in-depth semi-structured interviews, each of which last for around one hour. Each case study is conducted by one of our seven European institutions. This data provides a sound basis for the development of case studies.

The questionnaire includes the increasing dispersion and fragmentation of the value chain phases across countries, an enhanced specialisation of countries on tasks, the role of the different actors within this process as well as the relevance of networks and cooperation as mechanisms in the global production (OECD 2013a, 2013b). Born global enterprises are firmly embedded in international networks and global value chains, where open innovation and public-private research and development cooperation are supported.

These born global enterprises are located in seven EU Member States (Denmark, Estonia, Germany, Romania, Spain, The Netherlands and the United Kingdom (UK)); whereas the value chain partners are located in different EU Member States (Belgium, Finland, Germany, Sweden and the UK) and third countries (Hong Kong, India, Japan, Malaysia, Taiwan, United Arab Emirates and the USA).

First, a list of 40 potential born globals were identified and ranked by priority per each country. Second, the research team contacted enterprises (both the born global enterprise and two international value chain partners) to identify their interest in participating following the ranking list. Then, at least three interviews were conducted per each case study, one with a manager/owner of the born global enterprise (face-to-face interview) and one with a relevant representative of each of the two international value chain partners (by phone or face-to-face, depending on the possibilities).

Fourth, the results of these interviews were reported according to a predefined template to produce seven case studies. Finally, the last step foresaw a synthesis report where the main results and conclusions, stemming from these seven case studies, are analysed and discussed.

Within the context of this research, two main types of international value chains can be identified:

- *Input value chain:* Own value chain of the born global enterprise, where the born global enterprise acts as the main beneficiary of the supply chain (the born global enterprise as ’client’); and
- *Output value chain*: Participation of the born global enterprise in international value chains (the born global enterprise as ’seller’).

In this regard, the international value chain partner of the born global enterprise can be either an international client of the born global enterprise or an international supplier or distributor of services/products to the born global enterprise.

While the selection of born globals strictly follows our definition above, the analysed international partners participating in the value chain of the born global enterprise can be of any size and these international value chain partners should be located in different countries from the ones where the born global enterprises’ headquarters are located.

Table 1 describes main characteristics of the seven born global enterprises. This includes the main products and services, firm’s location, firm size, firm age and the location of their international partners which work closely with the born globals. Most of these born globals were founded in 2013. All the products offered by the analysed born globals are highly innovative, as they represent new products with added properties in their respective markets. Even though all of the born global enterprises are in manufacturing industry, the nature of their business services and products is quite diverse. Each born global also has a diverse target markets across Asia, EU, Middle East and America because of their global presence. Four out of seven born globals are of small size (i.e. having less than 50 employees), two of them are micro firms (i.e. having less than 10 employees) and one of them is medium sized firm which has 45 local employees at the headquarter and 110 in other branches worldwide.

Table 1: Description of the seven born global case studies

Born Global	Country	Product/service	Foundation Year	Size	GVC location
1	Denmark	Development, creation and commercialisation of robotic solutions and services	2013	45 + 110 world-wide	USA, Sweden
2	Estonia	Production of ICT-based monitoring platform solutions, combining hardware and software for light electric vehicles.	2014	15	Finland, China
3	Germany	Manufacture high ropes course for fun and sports purpose and provide complete service package in relation to its high ropes courses.	2010	30	UAE, USA
4	Netherlands	Produce interactive media walls combining specialised software and hardware for use in healthcare sector, and consultancy services on designing interiors of mental health care institutions.	2013	5	Belgium, Netherlands, UK
5	Romania	R&D firm specialised in engineering and biology such as water filter system.	2013	7	Malaysia, India
6	Spain	Produce graphene in different formats for R&D and industrial applications.	2010	22	UK, Germany, USA

7	U.K	Design and manufacture lightweight children bikes and accessories.	2013	48	Taiwan, Japan, Belgium

4. Findings

Drawing on the literature of GVC governance, network and international entrepreneurship, the research has identified the motivation, challenges and roles of born globals in GVC, their firm characteristics and nature of the business and their international partners. These inputs are significant to identify the seven governance structures and factors determining the GVC relationships.

Born globals' role and nature of the GVC relationship

All the analysed born global enterprises actively participate in different international value chains, where they usually play a twofold role. On the one hand, they act as clients for other international companies, whereby international value chain partners supply different products and services to the born global (for example, production, intermediary key components, equipment suppliers, commercial distribution agreements and quality checking services). On the other hand, born global enterprises act either as suppliers of products or services, usually to other companies (B2B), or as international cooperation partners with other companies (joint R&D/product improvement activities and joint commercialisation efforts, among others) (see Table 2). The main internationalisation activities of these seven born global enterprises include exporting, subcontracting, technical and commercialisation cooperation, R&D and FDI.

Table 2: Main activities and roles of the analysed born globals in GVC

Born globals	Main activities
1	Firm 1 acts as a supplier of new robotics solutions and services to different business customers and as a reseller of new advanced third party robots to private and public sector customers, making use of their joint ventures and sales partners to reach countries around the world. In addition to this, it also acts as a research partner in international consortia working on different R&D projects.
2	Firm 2 subcontracts other companies to manufacture hardware production and production of prototypes, where these suppliers are located in Estonia, Finland, China and Taiwan.

3	Firm 3 subcontracts major input steel and wood/timber materials from German suppliers. Occasionally, when it is short of staff capacity for assembling work, an Italian company helps with assembling on the site. On the other hand, firm 3 participates in the value chain of leisure and tourism clients as supplier of high ropes courses to operators of leisure facilities, either directly or indirectly via resellers (leisure park developers) that may deliver the high ropes courses to park operators as part of multiple amusement facilities.
4	Firm 4 has a small network of international supply chain members, including one supplier of hardware (touch screens) and sale partners engaged in the promotion/sale of its product in international markets.
5	Firm 5 collaborates with different partners, including a French-owned manufacturer based in Romania, several suppliers of intermediary components (such as the water tanks or the ultra-filtration systems) or, finally, distribution firms for several international national markets.
6	Firm 6 acts as supplier of graphene (B2B) to different international clients, including universities, technology centres and large companies' research services, basically interested in purchasing sample graphene lots for testing and analysing the properties and possible industrial applications of graphene. It has a network of international suppliers of raw materials, key specialised equipment or the provision of strict quality control mechanisms. It is active in international research cooperation activities and integrates in a network of international distributors.
7	Firm 7 works with independent retailers in the different countries, in addition to having an online sales channel. The firm collaborates with international suppliers from 25 different countries who manufacture some of the 150 components that typically form a bike.

Source: Own elaboration

In order to analyse the nature of the GVC relationships, it is crucial to investigate their partners in the GVC. Table 3 describes an overview of the GVC partners which are associated with the seven born globals as follows.

Table 3: Description of GVC partners of the seven case studies

Born global enterprises	GVC Partner	Foundation year of GVC partner	Brief description of the GVC partners
Firm 1	Company 1-ST	2011	Medium sized firm in developing and building remote telepresence technology, located in USA Target customers are primarily in the business segment, and then schools, universities in USA, Europe and Asia.
	Company 1-BOR	2015	It was founded in Sweden. The company has 1.5 employees (one working full-time and one part-time). It specialises in designing, developing and introducing new generations of robotic solutions, focusing primarily on the health care, education and manufacturing sectors in Sweden. Their customers are public and private sector organisations.
Firm 2	Company 2_MO	2013	The firm is located in Finland with five workers. It provides online 3D printing service and products. Their clients are engineering companies of various size and sectors in the European market.
	Company 2-AVS	2008	This is a branch of a parent company which is well-established and market leader in the healthcare sector in Hong Kong. The company has 14 employees It has offices in Germany, the UK, Taiwan and China and active in global market including USA, Germany, Australia, UK, Japan, Taiwan, Malaysia and Singapore. The company focuses on sport related electronic solutions, telematics applications and consulting and development of services for the car electronics/automotive industry.

Firm 3	Firm 3-HP	2008	It is located in the UAE with 40 employees It provides customised playgrounds and adventure spaces to operators of leisure parks and similar facilities, including hotel chains. It has suppliers and customers globally
	Firm 3-FE	2000	It is located in USA, family business with no employees. The company specialises in the leisure and sport business, including consultancy work in the development of leisure park facilities, activities as USA sales representative for a number of German sport–related companies.
Firm 4	Firm 4-TZ	Late 1970s	It has two main locations in Belgium and Netherlands with 170 employees. The firm distributes electronic products and components such as power supplies, card readers and touch screens.
	Firm 4-Br	2006	It is located in the UK, with 100 employees. It produces and sells commercial windows for a broad variety of applications. Its main market is domestic (NHS) and 10% is global market.
Firm 5	Firm 5-PP	1984	It is based in Malaysia, but it is also registered in France. The company has 250 employees along the production chain. It manufacturers water tanks. Its main export markets are Europe and South Africa, whereas main clients include property developers, public utilities firms, large infrastructure actors and manufacturing firms.

	Firm 5-PE	2015	It is based in New Delhi, India, with 21 employees. It is a marketing, representation and franchising firm. The company works with firms such as hotels, spas and retailers that want to develop their loyalty marketing schemes, and they also help international firms expand to India via franchising/representation.
Firm 6	Firm 6-AI	1983	It is located in Germany as a spin-off from RWTH Aachen University. Their manufacturing sites are located in Germany, UK and USA, and they have selling and service customer points in Asia, USA, Europe and Oceania. The company has around 750 employees worldwide. It manufactures metalorganic chemical vapour deposition equipment.
	Firm 6-GK	1916	The firm has its head-quarters in Germany, and several subsidiaries in Czech Republic, Sri Lanka, China and Mozambique, with a total of 480 employees worldwide. The firm specialises in the extraction, processing and refining of natural crystalline graphite. The company exports particularly to EU markets, but also to other markets such as Japan, the USA or South Korea.
	Firm 6-GR	2015	It is located in USA, with three employees. The company is very new to the market, it is developing a transformative graphene-based membrane platform technology with significant applications in different fields.

Firm 7	Firm 7-TK	1986	Its headquarters are in Chang-hua (Taiwan), but it has additional branches in China and the USA. The total employees of all branches add up to over 1,200.
			The firm manufacture brakes, disc pads, and brake pads for bikes and accessories. It has established a strong international network with distributors in the EU, Asia, South Africa, USA, New Zealand, and Australia. However, its main clients are based in the EU.
	Firm 7-SH	1921	Its head-quarter is located in Japan. The company has 53 consolidated subsidiaries around the world in Asia, Europe, North America, Australia, New Zealand and South America, whereas primary manufacturing plants are in China, Malaysia and Singapore. The number of employees is over 13,000. Market leader of manufacturing cycling components, fishing tackle and rowing equipment. It has a strong reputation for its brand worldwide, especially regarding cycling components.
	Firm 7-JG	1984	Its headquarters is in Taiwan with 80 employees. The company has branches in Belgium and China, and offices in Vietnam and the USA. It mainly involves in the production and sales of control mechanical cables in the bicycle industry. Its clients are bicycle manufacturers based in Europe and China.

Source: Own elaboration

Motivation of integrating into GVC

Evidence from our seven cases studies indicate that their main drivers to integrate into a GVC include the nature of their business to target global market, but also to lower costs by taking advantage of the GVC partners' resources in developing R&D, innovation, and market expansion. .

The reasons for initiating the cooperation can relate to aspects such as access to sourcing networks, key suppliers and complementary product and knowledge providers, among others. As suggested in previous studies, that the higher the complexity of the product or service, the higher the degree of cooperation between firms and this is in line with previous study (OECD, 2008; Partanen and Servais, 2012; Gerrefi et al., 2005). On the other hand, lower forms of cooperation such as subcontractors, complementary product providers, and raw material and standard component suppliers could be replaced easily (Partanen and Servais, 2012). Our analysis shows several reasons for the different companies to initiate the cooperation. For instance, the reason for firm 2 to start cooperating with firm 2-MT was the absence of Baltic companies that could supply small batches of high-quality 3D printed parts at low prices and in quick delivery times.

In other cases, the main reasons for initiating the cooperation refers to assuring access to a reliable supplier of component/raw material or specialised equipment that may increase the general quality, competitiveness and/or image of the products. For example, Firm3-HPS initiated the GVC relationship with firm 3 to explore the possibility of integrating the latter's high ropes course in a very large indoor theme park project developed by the former. Similarly, firm 6 collaborated with its partner firm 6-GK to access to a reliable supplier of raw materials. Firm 4 collaborated with firm 4-ZT because of its expertise as supplier of reliable and high quality touch screens. Unlike other cases, firm 7's motivation to collaborate with Firm 7-SH was to take advantage of the leading manufacturer in the industry to innovate their design and quality of their products, irrespective of price considerations.

Further motivations are related to the desire of the companies in accessing to new markets and business opportunities. This is for instance the case of firm 1 and firm 1-ST, whose cooperation was initiated to discuss opportunities for firm 1 to act as a sales partner representative for Firm 1-ST in Europe. In the same vein, firm 7 was also approached by firm 7-JG as a potential supplier of bike component to expand their market. Commented on this, the sales manager of firm 7-JG expressed:

> "The reason of initiating the relationship is to enhance growth on the European market to make firm 7-JG a household name in every bike brand and to increase our market in terms of cables"

Challenges to integrate into the GVC

In integrating into the GVC, born globals encounter various external and internal challenges. External barriers to their GVC include the existence of local regulations and laws, special national certification and product/technical requirements (Federation of Small Business, 2017). This is in line with our analysis of the UK born global, where the CEO/owner-manager revealed that:

> "I think the biggest thing from an international point of view is that there isn't a common standard. Not every market is happy with the international ISO standard. The US has a different standard. So we have had to have our products to go through lots of testing and that is expensive. It is about USD

> 20,000 for a test on a bike…. The Australian/ New Zealand have also a slightly different standard, so we have to go through the process…"

Additional difficulties associated to non-EU Member States include custom-related issues or lack of fair competition in some countries/sectors. To clarify this, the CEO of UK born global commented that:

> "Russia has massive import duties and it has some distribution issues.….whereas, other market like Poland is actually a barrier for us is finding the right people on the ground".

The challenges may also be related to the context of the domestic market or the country of origin, such as difficulties in accessing external capital and finance on good terms and conditions, the existence of a poor national image and national support structure in the origin country and/or, finally, difficult internal political situations, often resulting in important degrees of uncertainty (for example, Brexit). Other external challenges include the difficulties of finding clients and suitable teams with the right abilities and knowledge; time-consuming needed to build trust and establish good relationships amongst partners, cultural difference, and finally, the existence of long geographical distances or large differences in time zones.

Internal challenges originate from the born global's limited resources, lack or network, lack of market knowledge, lack of capable human resources, and more importantly is the lack of image and reputation to gain trust with its partners in the GVC. These constraints are not only common amongst born globals but also internationalsing SMEs in general. Therefore, born globals tend to rely on informal relationships (i.e. personal contacts and networks) to develop GVC relationships. This can be seen in the case of firm 1 and firm 1-BOR which the two CEOs have known each other for ages, which facilitates the business relationship between the two firms in the GVC. Our analysis suggests that even though born globals utilise both informal and formal network in their GVC integration. The informal network plays a more critical role in enhancing their business relationships and facilitate their GVC management. This is in line with the previous literature which confirms the reliance of informal network in the internationalisation process amongst SMEs (Coviello, 2006; Freeman et al., 2006; Ghauri et al., 2014; Idris et al., 2018).

Governance

Among the analysed case studies, there are limited examples of relationships that are based on formal cooperation agreements between born globals and international value chain partners. A typical example of this is demonstrated by firm 3-HPS and firm 3, where the latter orders high ropes courses from the former on the basis of a long-term agreement of standard prices. In other cases, the relationships are often bound by flexible terms such as price negotiation, cooperation in some aspects of the production, marketing and trade and R&D process.

Regarding the framework of governance configurations as depicted in Figure 1, the cooperation between firm 1 and firm 1-ST is following the "*relative"* structure, which the relationship is balanced between both parties and formalised through an ad-hoc contract. This can be explained of the similar market position of these two parties and relatively young in the industry. In addition, the relationship was formulated by the two CEOs of these companies who have known each other for many years and built trust. This facilitates the management of the relationship in terms of collaboration and support. Nevertheless, the governance structure between firm 1 and its joint-venture firm 1-BOR is formal power-unbalanced. This reflects the example of the "*captive"* mode. In this case, firm 1-BOR is obliged to comply with an ownership agreement and statutes drafted by firm 1, to be in line with its mission and strategy. The commitment binds the relationship between the two firms and renders it irreplaceable as a partner company. Firm 1-BOR, however, has freedom in exploring new market opportunities for the development of the firm.

The GVC relationship can be built based on a commercial client-supplier relationship that adds value to some processes such as manufacturing, commercialisation and sales, and trade. For example, firm 2 and firm 2-AVS built the relationship based on a non-formalised invoicing geographical policy agreement, which illustrates the mode "*Market"*. It means that each party has freedom and high level of autonomy in maintaining the relationship. However, the level of coordination is low. Another example of "Market" governance structure is seen in the case of firm 5 and its partner firm 5-PP, which the relationship is governed by contracts specific to each purchasing order. Similarly, the governance structure between firm 2 and its partner firm 2-MT, and firm 3 and firm 3-FE reflect the "Market" governance structure as the relationship relies on purchasing orders according to either the existing price terms or a pre-defined contract. On the other hand, firm 4 and its partner firm4-ZT approach the "relative" mode which facilitates their collaboration in re-designing its products to lower costs and improve the functions.

The governance structure can be complex between the born global enterprises and its different partners, depending on the firm size, level of co-ordination, the unique and ir-replaceable position of the partner and the market position. The relationship between firm 7 and its two international value chain partners demonstrate the two modes *"relative"* and "*captive"*. The *relative* governance structure is seen between firm 7 and firm 7-TK, where it develops a long term mutual supportive relationship rather than buyer-supplier relationship by coordinating in design parts of the products. In addition, the power of each party is quite balanced in governing the relationship and facilitated by regular informal communication and contact. This can be explained by the presence of relatively similar company sizes, the irreplaceability of the partnership or the perceived mutual benefits between both parties

On the other hand, firm 7 and firm 7-SH has a more difficult relationship, which explains the mode "captive". The relationship is dominated by its partner firm 7-SH due to its well-established position in the market and the unique technology which is significant to the design and manufacture of firm 1's products. In addition, firm 7-SH is very big with thousands of employees, engaging in huge network of suppliers and clients and present globally. The big difference in terms of firm size between the born global and this partner makes it more challenging to manage the relationship. Even though their relationship is only based on buyer-supplier contract, firm 1 relies significantly on firm 1-SH to manufacture its products following the technology of its partner. In addition, the significant difference in terms of firm size (i.e. between a new young born global with a small share of demands, compared to the big giant in the industry) can explain for the unbalanced power in the relationship. According to the owner-manager of firm 7, they encounter lots of challenges in dealing with the big giant supplier due to their unbalanced size and reputation in the industry, but they are still irreplaceable due to the significant value added to the firm's products. The CEO of firm 7 commented that:

> "It is our choice if we take Firm 7-SH. We would be foolish to remove Firm 7-SH from the brand, from our product range because the competitor is not as good in our opinion. But actually customers would not be happy if we took firm 7-SH off the product. Firm 7-SH would not care because even if we bought 200,000 units from them a year, it is so small in comparison to the volume that they do with everybody". He also added "They are much more dominant. They are the biggest component manufacturer in the world".

Overall, our findings suggest that the larger, more influential partner usually dominates the other party in the relationship. A born global may establish cooperation with a large company to support a new product speed to market, involving high specialisation. If at the beginning this can strengthen the born globals' position, a more demanding attitude can be developed by the large company towards the born global over time (for instance in terms of diversification of activities to be performed). Our results show that four out of five types of governance configurations exist, including "*market", "modular", "relational"* and *"captive"*, in all seven case studies. Each born global was found to experience at least two types of different GVC governance configurations. The relationships were found to be built both formally and informally. However, informal relationships were common, developed from either a supplier-buyer relationship and / or their previous or existing network.

The main factors that contribute to the different GVC configurations are related to firm size and market position, together with comparative advantage, their duties and roles involved in the GVC, and the level of dependency of the born global on its international partner, as well as different stages of their business development. In some cases, the relationship between the born global and the international partners has evolved over time, transforming their GVC governance configuration from a "*market"* to "*relational"* type. An example can be seen in the case of firm 7, as explained by the owner-manager:

> "With firm 7-TK, our relationship has evolved because we have been talking to them about improving their products. So most of the opportunity with us is, because we have got this unique research about kids on bicycles that nobody else has. That puts us in a really strong position when we talk to manufacturer".

In other cases, informal relationships have been converted into more formalised relationships, when more resources were committed into activities beyond their supplier-buyer relationship. Their motivations to engage in the GVC were related to the comparative advantage of their international partners, cost considerations, increased sales, or extended geographical market scope, technical cooperation for innovation, and mutual benefits of both parties.

Born globals encounter numerous challenges in maintaining their GVC relationships due to regulatory barriers in target markets, their limited resources, language and cultural differences, geographical distance, and administrative burdens. Trust and mutual interests are found to be critical factors in building a "*relational"* governance configuration. For example, sales manager of firm 7-JG emphasised "increasing trust with international partners, the best way is to have personal contact with them, particularly face-to-face contact. That helps the most. One thing I have found out in the past eight years is that, to have trust with a partner on an international level, you have to know them on a personal level. If you have this kind of relationship, then it is easy to do business". On the other hand, the superior comparative advantage in production or supply was central to shaping the "*captive*" governance structure. For those who adopt "*market*" or "*modular*" configuration, this kind of relationship can be fostered by negotiation in terms of price and conditions and regular communication and information exchange.

5. Conclusion and implications

This paper contributes to enhancing the GVC governance literature by strengthening its linkage with the early internationalisation and network theories. Our research has verified the motivation and challenges of born globals in GVC integration and management. By exploring the GVC governance structures of the seven manufacturing born globals across seven EU countries, using Gereffi et al., (2005)'s framework, this research has clarified critical factors that shape the GVC for born globals. Unlike MNEs, who are often well-established in the market with lots of networks and resources, born globals encounter numerous challenges in integrating and governing the GVC relationships. Their limited resources, lack of trust and reputation in the industry in the early days of internationalising present particular challenges for birn global small firms. Our investigation confirms that main critical factors that distinguish born globals' governance structures include firm size, their international experience, network involvement, their market position in the industry and the replace-ability of their partners. The level of co-ordination and autonomy in the relationship also determines the type of governance structure. The most common governance structure of GVC found in our case studies are "market" "relational", and "captive". In some cases, the relationship can be transformed from "market" to "relational" due to the improving level of co-ordination and commitment between the born global enterprises and its GVC partners. This helps to identify the particular issues faced by SME born globals and thus distinguishes them from MNEs, ultimately contributing to both the born global's and GVC literatures. It also adds a further dimension to the literature on the power relationship between small and larger organisations.

Practically, our findings clarify the key factors that lead to different governance structures and how firms can sustain the GVC relationships. The results provides insights to CEOs/ owner-managers of internationalising firms, especially in the manufacturing sector, to anticipate the challenges and solutions that can be approached to enhance their GVC relationships. One of the key factors that contribute to successful co-ordination and collaboration in GVC relationship is “trust” building and “mutual benefits”, and it must be based on learning and supportive attitudes from both parties. Whether the relationship may evolve over time and transform from formal to more informal or not is reliant on how the firm can enhance their trust, reputation, network and competences in the GVC relationships.

Policy-makers can also benefit from the findings to have a better understanding of the born global’s needs during their GVC integration and governance to improve existing internationalisation support and initiate new interventions to promote born globals/ SME internationalisation. Network facilitation and enhanced access to resources should be prioritised for young small internationalising firms, particularly born globals, to foster their network development and enable them to sustain their position in the unbalanced power GVC relationships with larger and more established firms.

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