



## Global value chains participation to enhance export: Evidence from Indonesian apparel SMEs

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### ARTICLE INFO

#### ► Research Article

#### Article History

Received 7 February 2022

Accepted 27 March 2022

Published 23 April 2022

#### Keywords

apparel SME; backward participation; GVC; SME export

#### JEL Classification

F59; F63; L67

### ABSTRACT

After recording remarkable growth and gaining more prominence within the domestic economy, Indonesian small and medium enterprises (SMEs) are now being pushed by the government to go beyond the domestic market. Indonesian government has introduced global value chains (GVCs) to SMEs to boost their export in the last recent years. Apparel SMEs normally can join GVCs through backward or forward participation. But in this case, the GVCs' impact on apparel SMEs export remains sluggish because they are highly concentrated in forward participation. This research, therefore, provides empirical cases on how Indonesian apparel SMEs can engage in backward participation to raise their competitiveness in global market using the evidence of apparel SMEs. Utilizing three dimensions of GVCs analysis: governance, upgrading, and local policy network, this research finds that SMEs can easily engage in backward participation to obtain foreign inputs by using the internet. Moreover, the decision to venture into GVCs and global market is heavily influenced by e-commerce. Findings of this research can provide guidance for Indonesian policymakers about the importance of GVCs on SMEs' export performance, creating a better environment for manufacturing and cross-border e-commerce that can be exploited by SMEs as the largest economic driver.

**To cite this article:** Nugroho, M. I. (2022). Global value chains participation to enhance export: Evidence from Indonesian apparel SMEs. *Journal of Socioeconomics and Development*, 5(1), 99-114. <https://doi.org/10.31328/jсед.v5i1.3499>

ISSN 2615-6075 online; ISSN 2615-6946 print  
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### INTRODUCTION

Indonesia is currently witnessing the rapid ascent of SMEs (Small and Medium Enterprises). In 2018, they contributed 61% to Indonesia's Gross Domestic Product (GDP) and accounted for 97% of the employment rate (Abe & Proksch, 2017; OECD, 2021). In recent years, they are gaining more prominence as the digital companies have expanded their access within domestic market, which put SMEs as the undisputed main actor in the Indonesian economy (Ministry of Cooperatives and SMEs, 2020; Beschoner, 2021). As things stand, the SMEs' progress within domestic market will likely remain

positive, considering the high demand from domestic consumers and stakeholders' intention to keep SMEs having such a strong footing within domestic market (Ministry of Cooperatives and SMEs, 2020).

However, SMEs will face a big challenge from now onwards. The government, through The National Medium Term Development Plan 2020-2024 (RJPMN), is pushing SMEs to sell product beyond domestic market, which may put them in a delicate situation. This is because Indonesian SMEs are the least exposed to global markets with only recorded export value of US\$20 billion in 2018, a number that is relatively small compared to their ASEAN peers. To illustrate, Thailand

recorded an export value of US\$72 billion, while Malaysia managed to generate US\$42 billion during the same period (OECD, 2021). As for export in apparel sector, only 14% of Indonesian SMEs were participating in export, while the proportion of Thailand and Vietnam SMEs were 28% and 26% respectively (Abe & Proksch, 2017; Chaldun et al., 2020; Tambunan, 2021; González, 2017). It implies that Indonesia SMEs is lacking ideal formulas to flourish in global market.

There are various methods to boost export and one of them is to engage in global value chains (GVCs) (Bas & Strauss-Kahn, 2014; Ndubuisi & Owusu, 2021; Revindo et al., 2019; Tolstoy et al., 2022). As a framework, GVCs provide an understanding of how global productions are governed by analysing the hierarchy and interplay of various actors involved in a certain industry (Gereffi, 1999; Gereffi & Fernandez-Stark, 2018). To developing countries, GVCs has had offered them plenty of opportunities and challenges, and Indonesia is no exception (Gereffi & Luo, 2018). For example, the performance of Indonesian textile and apparel industry in the 1990s was similar to China's in the last recent years because their products such as yarn, fabric, and apparel were subject to the global production networks of global brands. Unfortunately, Indonesia failed to maintain its competitiveness, specifically for yarn and fabric due to the outdated machinery and the emergence of free trade agreements (FTAs) that highly favoured the apparel industry (Gereffi & Frederick, 2010; Li et al., 2019a).

Similar to large firms, apparel SMEs can also engage and benefit through GVCs insertion. Before GVCs, apparel SMEs always faced some challenges such as logistics, high fixed costs, and economic scale in relation to exporting goods (OECD, 2021). But GVCs, specifically through indirect export, can be a turning point for SMEs because those challenges will soon be managed by the buyer (forward participation). This is the typical case of developing countries, where the predominant apparel SMEs generally have advanced technology and know-how shortcomings to produce sophisticated products (González, 2017; Lanz et al., 2018). Similarly, Indonesian SMEs have also been facing uphill struggles for tapping higher benefits from GVCs participation as they continue to generate low value-added activities (Stöllinger, 2021; Tijaja & Faisal, 2014). Thus, their overall share of participation in

GVCs is the smallest among ASEAN members (6.3%) as Malaysia's SMEs lead at 40% (Ministry of Cooperatives and SMEs, 2020).

Therefore, additional support from stakeholders is essential because they must be treated as such. Some scholars viewed e-commerce adoption can play a significant role to help SMEs thrive in GVCs (Lanz et al., 2018; Chen, 2019; Cusolito et al., 2016). Chen (2019) provided a useful example that e-commerce adoption has given Taiwanese textile SMEs more flexibility to supply various foreign apparel brands. Meanwhile, Lanz et al. (2018) found that SMEs with a website tend to source a larger share of foreign inputs in a bid to reduce technological barriers. Unfortunately, this study does not further explain the correlation between having a website and sourcing a large share of foreign inputs.

Likewise, Lendle et al. (2016) and Li et al. (2019b) viewed e-commerce as a powerful means to enable SMEs to go through global market directly. E-commerce allows them to focus on the highest value-added activity that is often associated with research and development (R&D) and marketing. Given this condition, developing digital infrastructure immediately is imperative to enable SMEs into GVCs and global market. Lanz et al. (2018) noted that simple digital infrastructure is sufficient enough to facilitate SMEs securing a spot at the global level. Then, Jin & Hurd (2018) and Li et al. (2019a) put high emphasis on institutional cooperation and reform to enable cross-border e-commerce sales on a wider level. Still, the importance of delivering sophisticated products is noteworthy since SMEs will face larger firms in global market, and in light of this, competing in niche markets must be taken into consideration (Ganne & Lundquist, 2019; Khan & Lew, 2018; Tambunan, 2008).

In Indonesia, the government has persistently introduced GVCs to SMEs since many years ago but, unfortunately, the progress remains sluggish. In theory, SMEs can engage in GVCs through two channels: forward and backward participation (Cusolito et al., 2016). While in the case of Indonesian apparel SMEs, the share of participation between the two channels is uneven. Only 8% of apparel and textile SMEs participate in backward participation GVCs, while forward participation accounts for higher proportion (28%), which is notably driven by textile SMEs (upstream), where they appear to supply intermediate

inputs to multinational enterprises (MNEs) (Epede & Wang, 2022; González, 2017; Hing et al., 2020)

As a framework, GVCs would normally suggest small and medium-sized firms—notably from developing countries—to import in order to obtain more advanced specifications kind of input. A country that upholds this view can have a higher export value, and vice-versa (Bas & Strauss-Kahn, 2014; Feng et al., 2016). As shown in Figure 1, textile and apparel SMEs in Thailand and Vietnam managed to record 20% and 38% participation respectively. Indonesian SMEs accounted for lower participation as the textile and apparel SMEs only had 8% of backward participation. As a consequence, their export proportion could only reach 14%, which was two times smaller compared to that of Thailand and Vietnam (González, 2017).

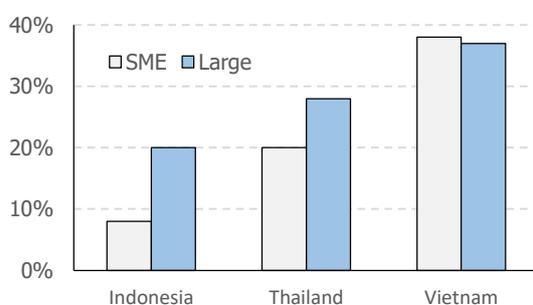


Figure 1. Percentage of backward participation of textile and apparel by country, 2017 (González, 2017)

Against this backdrop, the success of increasing the export of apparel SMEs through GVCs will likely depend on how the state, SMEs, and other stakeholders unlock and capitalize on all GVCs' channels. By unlocking their potential through backward participation, apparel SMEs will have a higher chance to be competitive in global market. This research aims to elucidate empirical analysis on how Indonesian apparel SMEs can participate in GVCs through backward participation in order to raise their competitiveness in global market using GVCs framework. It focuses on apparel because it is a labour-intensive manufacturing sector. It is also the third-largest contributor to Indonesian SMEs sales and at the same time the fifth-largest contributor to Indonesian export (Ministry of Cooperatives and SMEs, 2020).

## RESEARCH METHOD

This study on GVCs' participation to enhance export is qualitative research with an empirical case approach. Qualitative research seeks to grasp the attitude and behaviour of SMEs in participating GVCs to favour their export performance (Gerring, 2004). The empirical case approach was chosen to give an understanding that backward participation is obviously viable to be accessed by the other Indonesian SMEs focusing on retail trade and assembly activity. The cases were analysed using three dimensions of GVCs analysis – governance, upgrading, and local institutional context. The first dimension, governance, provided the production structure of SMEs. The upgrading would be an illustration of how SMEs upgrade certain aspects of their business to enter the global market. Whereas, local institutional context offered latitudes by examining local policy settings (Gereffi & Fernandez-Stark, 2018).

Theoretically, firms can engage in backward participation through two channels: direct and indirect participation. However, this research only focuses on direct participation where SMEs are importing input from foreign suppliers without being further processed by domestic textile industry. There were several export-oriented apparel SMEs that engaged in indirect backward participation, and they normally source foreign input from domestic textile industry. They generally produce t-shirts with standout graphic designs. However, after briefly examining their production trajectories, this kind of SMEs did not come under the provision of this research because their success in entering global market is rather defined by their graphic design instead of the inputs they utilized.

Empirical cases were drawn from the experience of two Indonesian apparel SMEs based in Jakarta and Bandung, Indonesia, who have been performing export. The research was conducted through desk research and in-depth interview. Desk research was conducted beforehand to find Indonesian apparel SMEs that fall into the category of this research. It is an important phase because it was quite difficult to find an appropriate database regarding the business activity of apparel SMEs in detail. Nevertheless, those kinds of SMEs could still be identified through digital platforms such as Instagram and official website. They normally put international payment systems to ease the foreign consumer in a transaction.

Table 1. Governance Structures in Global Value Chains

Governance structure	Leading industries and timing	Main drivers	Forms	Pioneers
Producer-driven chain	•Natural resources: late 19 <sup>th</sup> and early 20 <sup>th</sup> centuries •Capital goods & consumer durables: 1950s &1960s	Transnational manufacturers	Vertical integration (ownership and control)	• Oil companies • Mining industries • Agribusiness • Ford and Japanese automobile
Buyer-driven chain	Consumer non-durables: 1970-1990s	Retailers and marketers	Network integration (logistics and trust)	• Mexico, Taiwan, South Korea, etc. • Nike, Reebok, Adidas, UNIQLO, etc.
Consumer-feedback chain	Apparel industry in China: 2010s	Online consumers	Online marketplace	• Handu • Garment industry clusters in Humen town, China

Adapted from Gereffi (2001) and Li et al. (2019b)

Table 2. The definitions of SMEs in Indonesia

Criteria	Definition
Assets <sup>1</sup>	Assets valued at Rp 50 million-Rp 10 billion, equal to approximately US\$3.476-695.255.
Annual Turnover <sup>1</sup>	Annual turnover of RP 300 million-Rp 50 billion, equal to US\$20.857-3.476.277.
Employees <sup>2</sup>	Enterprises with 5-99 employees

<sup>1</sup>Ministry of Cooperatives and SMEs of Indonesia

<sup>2</sup>Indonesian Statistics Agency/BPS

Adapted from Revindo et al. (2019)

On the other hand, an in-depth interview was conducted to verify that SMEs resulting from desk research process were as per SMEs' definitions set by the Indonesian government (Table 2). Here, the two Indonesian apparel SMEs were in accordance with existing definitions in terms of annual turnover and number of employees. The interview was also intended to confirm that SMEs were never been associated with foreign capital. It was to ensure this research would generate policy recommendations that are inclusive and feasible for all Indonesian SMEs focusing on downstream activity since Indonesian SMEs are predominantly self-reliant in terms of financing (Esquivias & Harianto, 2020; Kergroach, 2019). In addition, it was to derive more detailed information regarding the governance of the value chain and what are their approaches toward GVCs participation. The world of textile and apparel is normally built upon buyer-driven chains governance (Table 1). It is governance in which the key parameters – what is to be produced, and how it is to be produced – are set by retailers or firms which focus on R&D and marketing, and thereby it is not compulsory for them to build any production facilities (Humphrey & Schmitz, 2001; Nadvi, 2008; Neilson et al., 2014).

At this rate, identifying the type of governance is crucial to this research for two reasons. First, it provides an insight into what kind of role is played by SMEs at the various stages of value chain. Second, by recognizing the role of SMEs we can understand Indonesian SMEs apparel's approaches to participate in GVCs through backward participation. On the other hand, the interview is also targeted to determine the variables that enable SMEs to go through global market by providing examples. In other words, it reveals the upgrading strategies of SMEs to reach global market. In the end, research implications will be drawn from the interview finding combined with analysis results using the dimension of local institutional context.

## RESULT AND DISCUSSION

### GVCs Participation of SME

This part of the research will attempt to elucidate the approach used by Indonesian apparel SMEs to engage in backward participation GVCs. Therefore, for a better understanding of the approach, this part provides the illustration of the value chain structure of two Indonesian apparel SMEs which are drawn from the empirical experience of Orbit Gear and NBDN Denim (Figure 3). The two SMEs are appropriate examples for this research for some reasons. To begin with, the majority of their products are sold to foreign consumers as they have been targeting foreign markets since the beginning. Additionally, they also have been highly reliant on foreign inputs to meet their production standards. Moreover, both SMEs have never been injected by a foreign entity or capital in order to enter a foreign market or utilize certain foreign inputs from a certain country.

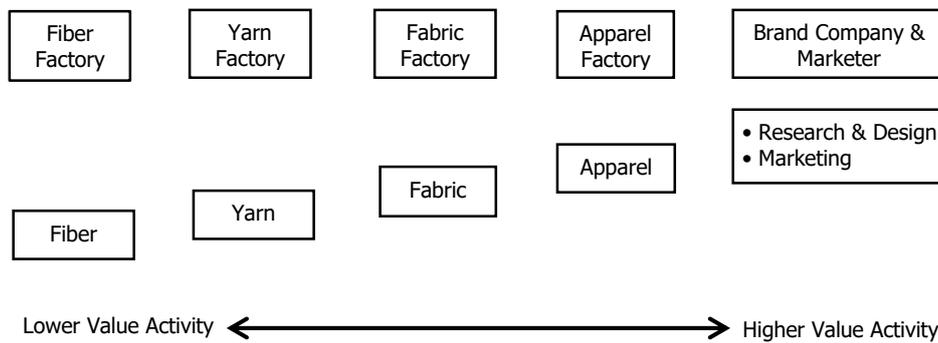


Figure 2. Value chain activities of the apparel industry (adapted from Gereffi and Frederick (2010))

Established in 2008, Orbit Gear is a Jakarta-based apparel brand primarily selling pants, jackets, and bags. By the end of 2019, the coverage of their sales has managed to reach countries like the United States, Canada, Russia, Germany, Japan, Hongkong, Taiwan, and some other countries in Asia recently. In 2018, their total sales were more than US\$350 thousand, and 90% of it came from overseas sales. Meanwhile, NBDN Denim is a Bandung origin apparel brand primarily selling denim jeans and jackets. Established in 2012, they began to export in 2015 as the demand from several ASEAN countries emerged. Later, they managed to go through Japan market, followed by several other European countries and North America by the end of 2018. By 2019, their total sales have reached US\$300 thousand, and 60% of it have resulted from export activity (Table 2).

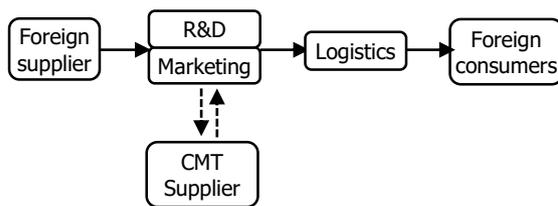


Figure 3. Value chain structure of Orbit Gear and NBDN Denim (based on the interview with the founders of SMEs)

Among all specializations along the chains, both SMEs are mastering the highest activity with added value – R&D and marketing (Figure 2). This resembles the roles of the lead firm in a buyer-driven chain, where the responsibilities of SMEs are divided into two

important roles (Gereffi et al., 2005; Neilson et al., 2014). Here, they are not only responsible for developing products and setting marketing objectives, but also to source suppliers who are capable to translate their production standards (Figures 3 and 4). Therefore, it raises the question of how such a small firm organizes the production networks and the demand of end-user at the same time.

For Orbit Gear and NBDN Denim, fabric is a crucial input as it determines the significance of their products. As illustrated in Figures 5, both SMEs obtain fabrics from countries that are distant from Indonesia. In the past, this could lead SMEs to a significant hurdle. However, the distance between countries has been diminished by adopting internet which enables them to perform electronic commercial activities (e-commerce). Internet, at this rate, has a major role as an intermediary to enable Indonesian SMEs obtaining foreign inputs through backward participation (Figure 4). It becomes viable because all of their foreign suppliers have long been incorporating internet into their business. They normally have a website as a means to interact, exhibit the directory of products, as well as span their sales destination (Oliveira et al., 2021; Strange & Zucchella, 2017; Wang et al., 2017). The experience of both SMEs is similar to the finding from Chen (2019), which shows that Taiwanese textile SMEs can easily supply various foreign brands in Europe following the e-commerce adoption. Internet allows textile manufacturers to perform Business to Business (B2B) e-commerce as a way to shift from the traditional methods in order to reach overseas buyers (Chen, 2019).

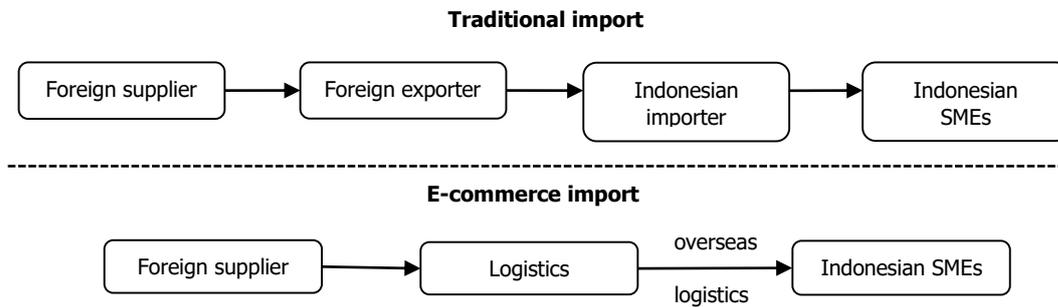


Figure 4. Backward participation in the age of internet by Indonesian apparel SMEs (adapted from Wang et al. (2017) and the interview with the founders of SMEs)

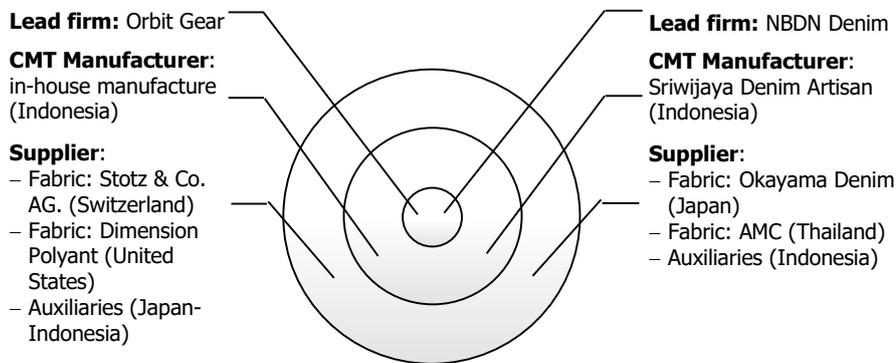


Figure 5. The production governance of Orbit Gear and NBDN Denim (based on the interview with the founders of SMEs)

Nevertheless, despite being able to participate in backward participation through internet, this research found that both SMEs can only reach a certain degree in terms of relationships with suppliers, i.e. through market. Their linkages with suppliers cannot go beyond the market relationship as internet does not allow them to function in this way (Antràs, 2020). Unlike SMEs, large firms are not highly dependent on the internet. Before the internet era, there is no constraint for large firms to engage in GVCs because they generally have abundant resources to establish various means of communication with overseas consumers and suppliers: analogue telephones, in-person travelling, or even building an overseas subsidiary (Ganne & Lundquist, 2019; Gereffi & Frederick, 2010). For this reason, both SMEs cannot easily develop modular, relational, or even hierarchy relationships, which allow them to obtain specific or

customized products that suppliers do not necessarily produce for others (Gereffi & Fernandez-Stark, 2018; Gereffi & Luo, 2018).

**Determinant to Export**

Small enterprises typically face more barriers to export than large firms. They are generally impeded by two problems to compete in global market. First, SMEs cannot produce competitively priced products on large scale due to low labour productivity (Lopez-Gonzalez, 2016; OECD, 2021). Second, they only have relatively small resources to make their product visible in global market. For example, it is difficult for them to open physical stores overseas or use celebrities to promote the brand. However, Li et al. (2019b) argued that the opportunity to go through global market is immensely wide despite only having small resources.

Li et al. (2019b) showed that a growing number of Chinese apparel SMEs have taken a greater stride by utilizing e-commerce to enter some overseas markets. In 2015, their total export successfully generated millions hundreds of dollars through e-commerce selling. But in this case, the most credit should be given to some largest online marketplaces in China (e.g., Globalegrow, JD, Tmall, and Taobao) that have been providing proper cross-border e-commerce platforms. Meanwhile, In Indonesia, there is Erigo. an apparel brand that was once SME in 2012. Erigo is recently known as the champion of apparel in domestic market in terms of total sales. They gradually become a large firm following a series of funding they participated in, and as a result, they recently began to sell products to overseas individuals after investing a huge amount of money on top celebrities in order to promote their brand (Ningsih & Putri, 2020).

Nevertheless, the cases of SMEs above are not common for Indonesian because it does not correspond to the difficulties faced by the predominant Indonesian SMEs. In practice, Indonesia have not yet built dedicated cross-border e-commerce platforms like China. Besides, SMEs do not need to progress and transform to be a large firms, like Erigo, in order to export (Lanz et al., 2018). For that reason, Indonesian SMEs must look into any available options. This part of the research attempts to unravel the strategies of SMEs in order to be visible and competitive in global market within the context of Indonesia.

**Identify and respond to the niche market demand.** It is true that backward participation GVCs can boost the competitiveness of SMEs to a certain degree. Yet, in the case of Orbit Gear and NBDN Denim, using foreign inputs alone would not help them secure a spot in global market. Apart from suggesting utilizing sophisticated foreign inputs, almost all literature also cite the importance of niche markets (Nemati & Khajeheian, 2018; Tambunan, 2008). Theoretically, the impetus to enter niche market can be rooted from several reasons, for instance to explore the segments that offer lower or higher prices, to produce high-quality products or designs, or even to offer products with technical advantages, etc. (Nemati & Khajeheian, 2018). Orbit Gear and NBDN Denim have also taken this approach to prevent direct competition with larger firms that excel in producing a mass-market type of product. At this rate, identifying what kind of niche market they can go in is important,

but how they respond to the challenges and demands from niche markets is instrumental.

The R&D department of Orbit Gear focused on the segment of technical gear from the outset. Technical gear normally appears to have many pockets and breathable yet water repellent fabric, and for this reason is suitable for commuting in all seasons since it offers high functionality to its user (Sabir, 2017). On the other hand, NBDN Denim is an SME with the area of specialization of selvedge denim jeans. It is a kind of jeans that takes the form of classic jeans, which are made from 100% of cotton and undergone a dyeing process using natural substances. In addition, what sets it apart is the sophisticated-looking finishing stitches inside of the jeans called "selvedge", which cannot be found in regular or modern jeans (Abrego, 2019). By focusing on this market, NBDN Denim strove for the gap left by the likes of Wrangler Jeans, Lois, Lee Cooper, etc., which tend to focus on the segment of modern jeans. Whereas, Orbit Gear tended to prevent direct competition with the likes of The North Face, Columbia, etc.

Table 3. Price Comparison between Indonesian Apparel SMEs and Their Competitors

Competitors (origin, product's price range)	Fabric's origin
<b>Orbit Gear (US\$185-320)</b>	
- Enfinleve (Germany, US\$700-1000)	Switzerland
- Guerilla Group (China, US\$350-500)	Switzerland
- Acronym (Germany, US\$1000-1600)	Germany
- Vollebak (United Kingdom, US\$500-1200)	United States
- Cloudburst (Russia, US\$600-1200)	Japan
- Krakatau (Russia, US\$200-400)	United States
- Riot Division (Russia, US\$180-380)	Austria
<b>NBDN Denim (US\$145-170)</b>	
- Oldblue Co. (Indonesia, US\$130-250)	United States
- Pure Blue (Japan, US\$215-470)	Japan
- Iron Heart (United Kingdom, US\$300-350)	Japan
- Naked and Famous Denim (Canada, US\$170-400)	Japan
- Soso Brothers (Sweden, US\$160-190)	Japan
- Nudie Jeans (Sweden, US\$200-398)	Japan
- Studio D'Artisan (Japan, US\$280-315)	Japan

Author's calculation

The competition among SMEs that share the same niche market specialization is also inevitable. In general, Orbit Gear and NBDN Denim competed with other SMEs, the majority of which come from various developed countries, mainly from Europe (Table 3). However, in order to thrive within niche market, Orbit Gear and NBDN Denim embarked on the same strategies as the requisites to enter are relatively simple. It is imperative to follow this pattern because

each niche market has similar characteristics (Fouji & Hoque, 2021).

Selection of the right fabric is at the heart of strategy for SMEs targeting the niche market of technical gear and selvedge denim jeans. Many SMEs specializing in these niche markets tend to source fabric from the same region, if not the same countries. In fact, in many cases, they sourced from the same suppliers (Table 3). To illustrate, many selvedge denim jeans labels around the world opted to use Japanese input—notably from Okayama Denim supplier—in order to be recognized by the international selvedge denim community (Table 3). It is because there is a general consensus among this community that excellent quality of denim jeans can be achieved by using a shuttle loom machine, which generally can be found in Japanese denim manufacturers (Abrego, 2019). Different from denim, the product quality of the technical gear is rather defined by the raw material itself, which is extra-staple-long cotton. Known as the finest cotton, this material is not common for mass-market products, and thereby only several country countries with high-tech manufacturing capability are able to process it (Braja & Gemzik-Salwach, 2019; Sabir, 2017).

Table 4. The Impact of Inputs on Market Diversification

Input used (fabric)	Market entry (year)
<b>Orbit Gear</b>	
ElecorSHIELD (China)	Indonesia (2017) Singapore (2017)
Stotz & Co. AG. (Switzerland)	South Korea (2018)
Dimension Polyant (United States)	Taiwan (2018) Hongkong (2018) Philippines (2018) Germany (2018) East Europe (2018) Russia (2019) United States (2019) Canada (2019) Poland (2019)
<b>NBDN Denim</b>	
Domestic input	Indonesia (2012)
Atlantic Mills (Thailand)	Thailand (2015) Malaysia (2015) Singapore (2016)
Okayama Denim (Japan)	Japan (2016) United States (2017) Canada (2017) Switzerland (2017) Germany (2018) Netherlands (2019) New Zealand (2019)

Adapted from the interview with the founders of SMEs

On the other hand, the selection of fabric has also facilitated both SMEs in tapping market diversification to some extent. For example, in the early days both SMEs encountered similar struggles in venturing international market because they used domestic input which at that time was considered less sophisticated for the niche market (Table 4). Market coverage was limited. But as the process of R&D developed, sophisticated foreign inputs were significantly added in order to reinforce the competitiveness of products (Gereffi & Fernandez-Stark, 2018; Gereffi & Luo, 2018; Ndubuisi & Owusu, 2021). New sales destination was opening gradually as the fabric that originated from Switzerland, the United States, and Japan continued to entice the niche markets (Table 4). However, domestic inputs remained essential to accommodate the local consumers who demanded the cheaper sort (Table 4).

Regardless of how impactful the foreign inputs, the role of design activities cannot be undermined either because both SMEs have successfully managed to deliver high-quality products. But on top of that, price settings have also been important in providing entry into niche market (Nemati & Khajeheian, 2018). As shown in Figures 5 and 6, both SMEs prefer to carry out assembly activities in their home country. Here, both SMEs have been backed by Indonesia's industrial settings, because for more than a decade, Indonesia has continued to maintain its comparative advantage in low-technology sectors. This condition has benefited the upstream sectors, including apparel industry, to continue gaining competitive advantages in global market in terms of the price of the products. Subsequently, it presents Orbit Gear and NBDN Denim with an additional advantage on the global stage because they can produce lower-priced products without any tradeoffs (Goldberg et al., 2010; Hollweg, 2019; OECD, 2021) (Table 3).

#### The role of domestic textile industry.

Indonesia is among countries to have a complete configuration of textile industries, from textile to apparel. But why did Orbit Gear and NBDN Denim choose to source fabrics from foreign suppliers instead of local ones? There are some reasons that caused this issue. To begin with, the products of both SMEs require extra-long-staple cotton, which is the highest quality of its kind (Abrego, 2019; Sabir, 2017). Unfortunately, this input cannot be found in domestic textile industry because Indonesia is not a cotton producer country (Soumya & Yeledhalli, 2021).

Instead, the majority of domestic textile industry is specialized in man-made fibre products (MMF) and has been widely known as the second strongest MMF producer behind China (Gereffi & Frederick, 2010). A country can build a competitive advantage in an intensive-capital sector despite not having a comparative advantage in it (Porter, 1990; Zhu & Pickles, 2014).

However, domestic textile industry seems reluctant to embark on this path. For example, in 2010, the government approved a large amount of budget to update the textile machinery in order to meet Japan’s high standards. But the program was then ruled out due to a lack of interest and applicants (Gereffi & Frederick, 2010). At the same time, domestic textile industry was gradually losing the competitiveness on global stage with the emergence of several free trade agreements (FTAs) that highly favour the apparel industry (Gereffi & Frederick, 2010). For instance, ASEAN-China FTA, which was ratified in 2010, is the one that mostly exacerbates the downfall of domestic textile industry on global stage. At that time, China was the biggest hub of global textile trade, thereby enabling them to produce lower-priced inputs than the other countries (Frederick & Gereffi, 2011; Li et al., 2019a). Thereby, it will be hard to see domestic textile industry produce high-quality inputs in the near future as their machinery is only capable produce a normal quality of inputs (Kadarusman & Nadvi, 2013). Thus, it is normal if Orbit Gear and NBDN Denim opted to source the fabric from foreign manufacturers.

**E-Commerce and market diversification.**

Determinants of export of Orbit Gear and NBDN Denim are not only defined by the activity in the upstream side, where both SMEs quest for a higher share of foreign inputs in order to succeed within the niche market. Instead, the key factor to export occurs throughout the value chain activities, including in the back end of value chains, which normally consist of marketing-related activities (Agarwal et al., 2021; Rahayu & Day, 2017; Sinkovics et al., 2013). To be linked with the foreign consumers, both SMEs used the same formula as the one they were using to source the foreign suppliers. With the internet, both SMEs have conducted a Business-to-Consumer (B2C) e-commerce manifested in their official website, which was meant as the main channel to sell their products.

Many scholars have cited the importance of e-commerce adoption in providing a different path of market entry for SMEs (Al-Khalidi Al-Maliki, 2021; Jin & Hurd, 2018; Li et al., 2019b; Rahayu & Day, 2017; Tan et al., 2009; Tolstoy et al., 2021; Wang et al., 2017). On the one hand, e-commerce can be exploited by SMEs to evade the conventional export model, in which firms are considered necessary to make big investments in order to sell their product overseas (e.g., opening physical stores, using local celebrities to promote) (Li et al., 2019b; Qi et al., 2020). On the other hand, it also helps SMEs to reduce the barriers to logistics in terms of quantity of the product and organization of the shipment (Jean & Kim, 2020; Kinda, 2019; van Asch et al., 2020).

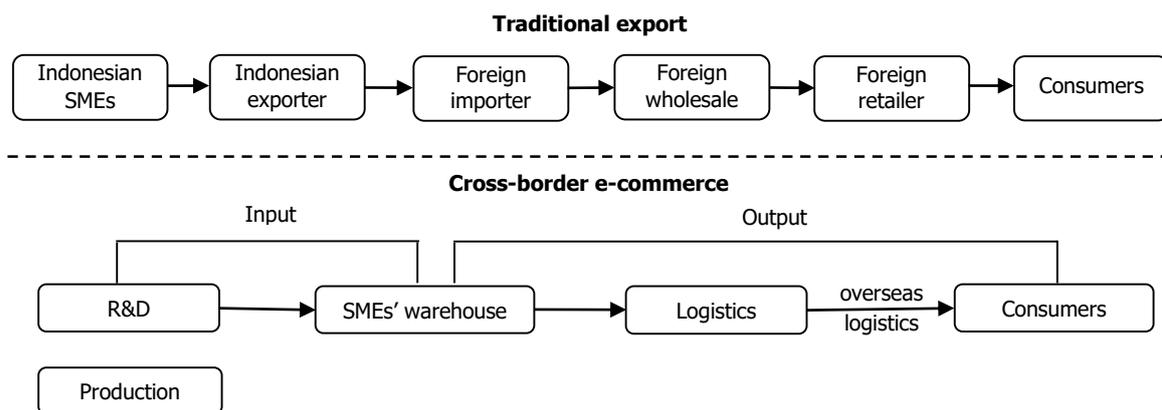


Figure 6. Cross-border e-commerce model of SME end-market upgrading (adapted from the interview with the founders of SMEs)

By adopting B2C e-commerce from the outset, Orbit Gear and NBDN Denim have successfully performed end-market upgrading by selling the product to individuals overseas without having a physical store as well as leasing the containers for shipment, and at the same time has accelerated the whole process of logistics. As seen in Figure 6, both SMEs have cut back the large part of trade intermediary actors that normally partake in the traditional export, which is then replaced by only one actor: logistics. In addition to lessening the export process, this also means that by using e-commerce, both SMEs will not be subject to the high fare of traditional export (Figure 6).

Besides the advantages of using B2C e-commerce on export, deploying a website as the main channel of selling is proven to be instrumental in settling both SMEs into the niche market. It is true that websites have facilitated both SMEs to be visible and recognized by their consumers that are geographically dispersed (Table 4). However, from an e-commerce point of view, there is a key factor that propels both SMEs to be accepted by the international market that is worth highlighting. As shown in Figure 7, it was the ability of both SMEs to monitor the dynamics of their market and execute their available resources based on the market preferences (Sinkovics et al., 2013; Stoian et al., 2018).



Figure 7. Cross-border e-commerce strategy of Orbit Gear and NBDN Denim (based on the interview with the founders of SMEs)

Through e-commerce, Orbit Gear and NBDN Denim are not merely selling product to foreign consumers. Instead, e-commerce platforms have been purposefully used to observe the trends and changes in a targeted market. This strategy was useful when both SMEs reached a deadlock in entering foreign markets during the early years of their business (Table 4). To this end, research was conducted by both SMEs

using data of business transactions, including consumers' feedback, which has entirely been derived from their e-commerce platforms (e.g., website, and Instagram). Both SMEs were then presented with a clear mapping of the state of their targeted markets (e.g., what input should be used, how to properly assemble the inputs, how to export, etc.). One of the outputs of this research was the decision to participate in the backward participation GVCs, which in the end led Orbit Gear and NBDN Denim to obtain the best fabric according to their niche market consensus (Table 4). In the end, their decent international performance was underpinned by a skillset to grasp market dynamics, which involves online selling capabilities both on the input and output side (Nakos et al., 2019; Tolstoy et al., 2022).

What has been accomplished by Orbit Gear and NBDN Denim can affirm the discovery by Lanz et al. (2018), which argued that SMEs with website tend to source a larger share of foreign inputs. As previously mentioned above, this study did not provide a further explanation as to whether the website and a large share of foreign inputs are positively correlated. Therefore, this research attempts to offer an explanation stemming from the experience of Orbit Gear and NBDN Denim. Here, building and having a website can be the catalyst as to whether SMEs possess profound know-how about internet and e-commerce. This is also in line with research from Ganne & Lundquist (2019) which stated that SMEs – particularly from developing countries – can thrive in GVCs and international trade if they are proficient in internet and e-commerce.

Meanwhile, from a political viewpoint, international performance can be partially associated with the regulatory settings of a country. Chinese apparel SMEs, for example, have a strong basis within global markets because the government designed some well-rounded policies on e-commerce many years ago (Li et al., 2019b). In the meantime, Indonesia's position on this issue is still in the early stages of development. However, despite the lack of comprehensive regulations on e-commerce, the success of both SMEs in building websites to enter global market can be attributed to the decent broadband internet connectivity in Indonesia (UNCTAD, 2018). In the end, this finding also confirms the research from Lanz et al. (2018) that simple internet infrastructure is sufficient to bring SMEs into global market.

### Research Implication

This research argues that Indonesia can survive the challenges given all the resources they have. Therefore, this part explores the latitudes of policy settings that can possibly raise the export performance of Indonesian SMEs through GVCs, particularly direct backward participation. It covers two main aspects. First, the input side consists of a recommendation on a policy that can be reinforced by the Indonesian government to attract more SMEs to engage in backward participation. Second, it explores the output side concerning through what channel Indonesian SMEs can enter the global market.

If Indonesian SMEs are being pushed to have more export share, the government must show its commitment towards a more outward-looking policy. This assumption is grounded in what the Indonesian government has done to raise the export performance of export-oriented sectors decades ago. From the 1980s until today, the competitiveness of exporting sector has been backed by the ease of import for export purposes facility (KITE). A policy that is consistent with the fundamental of global value chains, where in order to export a country could delegate its competitive disadvantages to its counterparts whose more proficient in a certain activity (Bown et al., 2021; Gibbon et al., 2008; Porter, 1990). Indonesian shortcoming on the intensive-capital sector has been looming over the years and, for this reason, the government continually enforces KITE in the downstream sector as a way to cope (Gereffi & Frederick, 2010).

The implementation of KITE for SMEs can be a turning point for all stakeholders who are concerned about SMEs' low participation in GVCs and export. For SMEs, KITE would be useful for three reasons. First, it will make imports more attractive as KITE allows SMEs to avoid import duties and consequently, lowering the price of the SMEs' products. Second, this policy will ensure SMEs export after processing raw or intermediate foreign inputs. Third, in general, it can be means to boost the export performance and backward participation GVCs of Indonesian SMEs at the same time (Bas & Strauss-Kahn, 2014). However, this policy might need several adjustments before bringing it into force because it is still only accessible to large firms (Tijaja & Faisal, 2014). For example, the recipient of KITE should be a limited company (PT), while many SMEs have a limited partnership scheme (CV). In addition, Orbit Gear and NBDN Denim have shown that

participating in GVCs is feasible using digital means and more SMEs are likely to continue down this path in the near future. Therefore, adjusting KITE to keep up with digital development must also be taken into consideration by the government (UNCTAD, 2018).

As for the output, e-commerce can be the main alternative to Indonesian SMEs' export growth that remains sluggish (Vu et al., 2022). However, it will be unwise to force the existing marketplaces to create cross-border e-commerce immediately. The government along with the marketplaces seem to uphold this view. They prefer to improve the readiness of SMEs in producing sophisticated products as they become more discerning as to which SMEs can go to the global market (Fahmi et al., 2017; Markusen et al., 2008). However, the following snippet of President Joko Widodo's statement indicates that Indonesian apparel SMEs have started to evolve.

*I just came in (an expo of SMEs export in Jakarta), and my colleagues showed me the SMEs' products, and apparel surprises me a lot. I saw the design is no longer outdated. They are now very fashionable (Sekpres, 2019).*

This statement implies that the predominant Indonesian apparel SMEs was producing less sophisticated products, but several SMEs have started to produce more sophisticated products. In 2019, the government made an open invitation for local apparel SMEs to participate in an international apparel expo abroad. The total applicants were 121, but only five were selected and four of them are specialized in the niche market of technical gear and selvedge denim jeans. Moreover, they even engaged in backward participation GVCs (Ministry of Tourism and Creative Economy, 2019). The issue of competitiveness is also recognized by Indonesian marketplaces. Almost all Indonesian marketplaces have launched at least a program to address this issue. For example, Shopee Indonesia has created Shopee Export Campus to facilitate Indonesian SMEs in identifying their competitiveness as well as navigating into global market (Suyanto et al., 2021). Against this backdrop, building cross-border e-commerce for Indonesian SMEs must be done on an incremental basis, and should come along with the readiness of Indonesian SMEs (Lendle et al., 2016; Rahayu & Day, 2017).

### CONCLUSION AND SUGGESTION

As a country with low-tech manufacturing capability, Indonesian apparel export has long been

championed by the mass-product category, which its success is mainly driven by Indonesian comparative advantage – a huge labour force. For Indonesian apparel SMEs, it might be arduous to embark on the mass-product category considering discrepancies in resources compared to that of large firms (Khan & Lew, 2018). For this reason, Indonesia apparel SMEs are presented with twofold approaches in order to prosper on the global stage. They can either produce apparel with excellent graphic design or deliver product lines utilizing high-grade materials.

Orbit Gear and NBDN Denim that plunge into the latter option have decided to import in order to obtain advanced specifications of fabric. This article concludes that their decision toward backward participation GVCs has been prompted by two events at the domestic and international levels. At the domestic level, the dismissive attitude by the Indonesian government and businesses towards the agenda of modernizing outdated machinery and fabricating the competitiveness of the textile industry on derivative cotton products has brought hesitancy among both SMEs to engage in indirect backward participation GVCs. Meanwhile, the international event, which has been shaped by the consensus of their niche market community, guides both SMEs to obtain inputs with advanced specifications that are only found in several countries with high-tech manufacturing capability.

With regards to SMEs' participation in backward participation GVCs, Orbit Gear and NBDN Denim have been benefited from the development of the internet in the last recent years. The quest for foreign suppliers can be easily performed by both SMEs since many of their suppliers have engaged in B2B e-commerce. Despite being able to search for foreign suppliers through the internet, this article concludes that it is the internet proficiency of both SMEs that has led them to the right inputs. Because, in order to find the input that matches their niche market demand, both SMEs have to conduct comprehensive online research to identify which supplier is fall under their category. Furthermore, this proficiency is also advantageous for expanding their market destination. It is not only useful for building the website as the main channel of selling but also crucial for mapping their niche market dynamics in order to deliver products that fit the market demand.

To further progress the development of Indonesian SMEs into backward participation GVCs and export,

Indonesian government can exercise the KITE policy to SMEs to make the import more attractive. As for e-commerce export, the government does not need to create a dedicated cross-border e-commerce platform imminently. Instead, improving the digital literacy among Indonesian SMEs must be taken into account. In the end, Indonesian SMEs can provide many valuable lessons as more scholars have come up with issues that are still unexplored within the context of Indonesia. For example, although the production activities of Orbit Gear and NBDN Denim are underpinned by e-commerce, this research does not address how the latest governance of GVCs – consumer-feedback chain – emerges. This kind of governance has been anticipated by Gereffi (2001) back in 2001, but the emergence just raised in 2019 as Li et al. (2019b) captured this governance shifting through the experience of Chinese SMEs, where their sales growth was robust since they engaged in the Chinese cross-border e-commerce giants.

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