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STRATEGIC INTEGRATION AND VALUE CAPTURE: ENHANCING INDONESIA'S PARTICIPATION IN GLOBAL VALUE CHAINS (GVC) FOR SUSTAINABLE ECONOMIC GROWTH

Fajar Surya Putra

Pegawai Direktorat Jenderal Pajak, Kemenkeu RI

Email: fajar.sputra19@gmail.com

Article Info	Abstract
<p>Keywords:</p> <p>Global Value Chains (GVCs), international trade, forward participation, backward participation, trade regulations</p> <p>History of Article:</p> <p>Received: 04-15-2023 Reviewed: 04-19-2023 Accepted: 04-16-2023 Published: 04-30-2023</p> <p>DOI:</p>	<p>The rise of global value chains (GVCs) has redefined international trade, enabling countries to specialize in different stages of production. Indonesia's participation in GVCs is crucial for enhancing industrial productivity and export diversification. However, Indonesia still heavily relies on forward participation, primarily exporting raw materials and commodities, which makes its economy vulnerable to global price fluctuations. This paper examines Indonesia's trade characteristics, GVC participation trends, and the implications of both forward and backward participation for economic growth. The study highlights the need for strategic policies to balance these two forms of participation by fostering domestic industrial development, improving human capital, and investing in technology. Furthermore, the role of financial services and infrastructure is explored in facilitating backward participation, enabling Indonesia to integrate more effectively into the global production network. To optimize GVC benefits,</p>

Indonesia must adopt a multifaceted approach that includes economic diversification, technological advancement, and policy reforms. Strengthening collaboration with ASEAN countries and improving domestic capabilities will be critical in ensuring sustainable economic development and increasing global competitiveness.

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A. INTRODUCTION

The rise of global value chains (GVC) has reshaped the landscape of international trade and production. Producing goods and services no longer depends on a company in one country. Instead, countries worldwide can form chain of production, and raw materials are traded across jurisdictions multiple times. Indonesia's participation in GVC is crucial since it can increase industries' productivity and export product diversification. The government of Indonesia (GOI) should support local industries to participate in the value chain through trade-facilitating measures. The openness to service is vital since it can ensure the access market for foreign investors and increase the performance and competitiveness of domestic industries in export sectors. OECD (2015) argues that Indonesia still relies on natural resources and commodities to uphold GVC. However, this condition creates an unstable situation for sustainable economic growth since international market prices can easily swing influence natural commodities price. In contrast, GOI should consider another potential to increase international trade volume through GVC backward participation for export diversification. Therefore, this paper will posit its findings into four sections: The evolution of Indonesia's economic landscape. Secondly, Indonesia's trade characteristics and GVC participation. Thirdly, GVC forward participation. Lastly, GVC backward participation.

B. LITERATURE REVIEW

International trade creates the interconnection of economies between countries worldwide to produce goods. Antras (2020) argues that GVC is defined as stages in the production of goods or services sold to consumers, where at each stage, there is an increase in value consisting of at least two production stages in different countries. The study is crucial since it highlights that a country can be said to participate in GVC if it is involved in at least one stage in GVC. Shepherd and Soejachmoen (2017) broaden the concept of GVC in that many Asian countries try to participate in GVC using their specialized products where they have a comparative advantage. Product specialization can lead to greater efficiency and higher quality production, enabling

countries to compete effectively in the global market. GVCs can provide developing countries access to international markets, allowing them to export goods and services more efficiently. This exposure can increase trade volumes and integration into the global economy. In addition, domestic industries' capabilities can evolve to meet the international demand for global production by improving production processes and adopting new technology (Ernst and Kim, 2002). As a result, participation in GVC brings positive values for additional national revenue, creating job opportunities and improving living standards.

Indonesia's changing economic structure causes limited participation in GVC. Shresta and Coxhead (2018) argue that Indonesia experienced robust growth in the early 2000s driven by booming commodity exports. However, the research study points out that as global commodity prices fell and export demand weakened, Indonesia's economy slowed down. This declining economy highlighted the risks associated with heavy reliance on commodity exports and the need for economic diversification. In response to declining commodity exports, Indonesia shifted its economic focus towards strengthening the domestic market and revisited import substitution strategies (Garnaut, 2015). Nevertheless, this policy causes a dilemma in that growing local industries can insulate the economy from external shocks; it also reduces Indonesia's participation in GVC, potentially limiting access to foreign markets, technologies, and investment. Therefore, Indonesia needs a policy that can have a balanced approach that strengthens domestic industries and encourages GVC participation.

C. ANALYSIS AND DISCUSSION

1. Indonesia's Trade Characteristics and GVC Participation

Indonesia's trade landscape is heavily reliance on GVC forward participation. Ingot and Verico (2021) argues that two components in GVC are forward and backward participation. The research study illuminated that countries' participation in GVC can be examined by comparing the percentage of forward and backward participation. If the forward participation is more than backward, the country exports the majority of upstream products. However, if backward participation is more than forward participation, the country's majority trade involves the process of half to the final product. ADB (2019) highlights Indonesia's condition in GVC has a higher level of forward participation than backward participation. The study illustrated that Indonesia carries a lot of upstream economic activities that trade raw materials. As a result, Indonesia structure economy needs to maintain forward participation through product specialization. Nevertheless, it is also crucial to increase backward

participation so that domestic industrial technology becomes more advanced and can produce more goods that have added value in the international market.

Another Indonesia characteristic of GVC participation is lower engagement in GVC backward participation. Gonzales (2017) argues that Indonesia still participates less in GVC backward industries such as automotive, machinery, and electronics. This situation is critical since sector-oriented industries are often key drivers for economic growth and diversification. Therefore, Indonesia still has the opportunity to develop its infrastructure, human capital, and technology. In contrast, Malaysia, Thailand, Singapore, and Vietnam have robust value-added export products via backward participation. These nations' success in such activities indicates their ability to integrate local domestic products into the global production networks, thus gaining significant economic benefits. As a result, GOI should collaborate with these ASEAN countries to learn how to develop and enhance backward participation. The strategic partnership approach could catalyze GOI to learn best practices, adopt effective policies, and gain insights into overcoming the challenges it currently faces in backward industries sectors.

2. GVC Forward Participation and the relationswith Gross Domestic Product (GDP)

Primary products have a positive influence on GVC forward participation. Trademap (2021) argues that Indonesia has a comparative advantage in producing raw materials. The research study points out that one of Indonesia's raw or premier products is rubber, which has successfully penetrated big industries market in countries such as China, the US, Japan, Korea, India, and Malaysia. Also, Indonesia has secured a 36% share of the ASEAN 6 crude palm oil (CPO) market, showing that premier product positively influences GVC forward participation. Similarly, Fernandes et al. (2020) illustrate that natural resource products significantly influence forward participation because raw materials are used for the following productions process. For example, Indonesia green coffee beans are the major source input for multinational industries to produce instant coffee. As a result, the export premier products have specific characteristics needed for fast transportation and hygienic storage to keep the products fresh and maintain their quality for a long time. This situation suggests that the GOI needs to build an excellent infrastructure to bring positive results in forward participation.

However, the overreliance on primary products can lead to economic stagnation and vulnerability to external shocks. ADB (2018) argues that there is a notable decline in comparative advantage in the mining and drilling industry, from 3.4 in 2000 to 2.5 in 2017. The refined fuel and

petroleum manufacturing industries also suffer from a reduction of comparative advantage from 8.2 to 2.7. These down trends could be attributed to depleting natural resources, global market price fluctuations, and international tight competition. Such vulnerabilities expose the risks of Indonesia GVC associated with over-reliance on resource-based and low-technology industries. Strategic investments in education, research development, and developing high-value manufacturing are crucial to enhance Indonesia's comparative advantage in more technologically advanced sectors. Furthermore, trade and industrial policies should aim to nurture these high-potential manufacture sectors, facilitating a gradual transition from an economy predominantly driven by natural resources and low-technology to one characterized by innovation, high-value manufacturing, and diversified export products. Such a strategic reorientation would solidify Indonesia's global competitive position and ensure long-term sustainable economic development.

GDP is usually seen as a good sign of economic strength, but its impacts negatively on forward participation in GVCe Indonesia. Almeida et al. (2019) argue that Indonesia demand for domestic product is higher along the increase of GDP. The study highlights that the increase of GDP often translate high demand for local premier products resulting in lowering available product for natural resources products export. Similar to that BPS (2019) shows that Indonesia has 56% of domestic household consumption on the GDP structure. This situation indicate that Indonesia has heavy reliance on consumption of domestic premier product to generate national GDP. Therefore, GOI must encourage increasing productivity in domestic industries for accommodating high demand from international market. One of the methods to increase productivity is through enhancing quality jobs. Ginting et al. (2018) argue that increasing quality jobs in Indonesia will increase local capacity production. The study is crucial since it illustrate that GOI must provide better education for increasing human capital lead to enhancing local production in primary products. Rising the standard of human capital combine with investment in technology at macro level will accelerate the economic growth. The skilled workforce and technology are vital instrumentals in enhancing the efficiency and effective of process production. As a results, enhancing worker skills through education is significant in creating job opportunities that can give positive impact for poverty reduction due to it will give greater job opportunity for poor household. Pangestu and Dewi (2017) highlight that GOI has strategy giving targeted scholarship and assistance programs aimed at poor families. By increasing the participation and completion rates of children from the poor households, the government

not only fostered a more equitable educational opportunity but also create solid foundation for future skilled worker.

3. GVC Backward Participation

Indonesia participates in GVC through backward participation or act as a buyer. Gideon and Uwusu (2020) argue that backward participation captures the foreign value-added elements in the gross export of one country. This approach allows Indonesia to leverage global expertise, ingredients and technologies, embedding these elements into Indonesia export products. However, this reliance on foreign value-added components also indicates areas where domestic capability and capacity could be developed further. Understanding this dynamic is essential for strategizing how Indonesia can move up the value chain result in increased efficiency and effectiveness of domestic production. The crucial domestic production value-added products support GVC backward participation. Purwono et al. (2020) argue that value-added can be categorized into three categories: value-added comes from domestic processes, foreign context, and back-and-forth trade. The study highlights a growing trend of value-added products from original Indonesia expanded to 300%. Most of the export products are consumed by East Asian and ASEAN countries. This expansion creates an opportunity for Indonesia to develop technology to increase productivity and quality of value-added products, resulting in Indonesia shifting from intermediate to final products. However, for manufacturing industries, domestic value-added products have experienced fewer dynamic changes (Padilla et al., 2019). This situation suggests that while Indonesia has made positive progress in some industries, there are still sectors in which more focused efforts are needed. GOI needs to involve foreign investment in research and development, upgrading industrial infrastructure, and implementing policies that foster innovation and productivity.

The quality of financial institutions, especially in domestic financing services, plays a pivotal role in enhancing backward participation in GVC, particularly for the domestic manufacturing industry. Ingot and Verico (2020) argue that there is a positive and significant relationship between financial services and GVC participation because financial institutions serve as the backbone for industrial growth, providing the necessary capital for businesses to invest in new technologies, expand operations, and improve their competitive advantage in the global market. Similarly, Findlay and Roelfsema (2023); Anas and Narjoko (2019) contend that service is essential for GVC backward participation infrastructure. The study spot on that service can be a facilitator for the operation of the manufacturing industry through financial services and telecommunication result in giving contributor to increase national economic growth. In addition, Jones et al.

(2005) argue that the invention of new technology drives effective services. Moreover, the study shows that services can accommodate the rapid changing of manufactured products. However, the performance of GVCs is often hampered by underperformance in service sectors. For example, GOI launched imbalance trade regulations that could restrict trade in services and hinder the development of more competitive service markets. These restrictions could obstruct the efficiency and effectiveness of GVCs and affect the competitiveness of the goods produced within the domestic value chain.

D. CONCLUSION

The dynamics of global value chains (GVCs) play a critical role in shaping the economic landscapes of participating countries, including Indonesia. As scholars indicate, Indonesia's involvement in GVCs, particularly in forward participation through its export of primary products, has been a significant driver of its economy. However, the nation's over-reliance on these products poses risks and underscores the need for diversification and advancement in higher value-added sectors. Moreover, Indonesia's limited engagement in backward participation sectors such as automotive, machinery, and electronics highlights a crucial area for growth and development. The importance of domestic policies that balance strengthening between forward and backward participation cannot be underestimated.

Additionally, Indonesia's internal dynamics element, like its GDP composition and domestic consumption patterns, substantially impact its GVC participation. Efforts to enhance productivity through quality job creation, education, and investment in technology are essential for sustainable economic growth and integration into the global economy. The role of financial institutions, and telecommunication are fundamental in supporting domestic manufacturing industries and facilitating backward participation in GVCs. As a result, GOI must have political will through coherence trade regulations and seamless institutional coordination with a strong need to address service sector inefficiencies to enhance overall GVC performance. Therefore, to maximize its benefits from GVC participation, a multifaceted approach involving economic diversification, technological advancement, education, and policy reform is vital. All in all, GOI should treat balance between GVC backward and forward participation and addressing domestic and international challenges through collaboration with all layers of policy actors for better international trade integration that can bring positive impact for increasing Indonesia social welfare.

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