



MINISTRY OF TRADE
REPUBLIC OF INDONESIA



ITAPS
INTERNATIONAL TRADE ANALYSIS AND POLICY STUDIES



POLICY BRIEF

TRADE POLICY ADVISORY GROUP (TRADEPAG) STRENGTHENING THE ECOSYSTEM OF VALUE CHAIN DOMESTICALLY, REGIONALLY AND GLOBALLY

COLLABORATION OF TRADE POLICY AGENCY OF THE MINISTRY OF TRADE WITH ERIA

EXECUTIVE SUMMARY

Over the past two decades, international trade has transformed into an integrated global production network. Existing conditions show that more than 70% of world trade is related to global value chains (GVCs), which have become the main drivers of competitiveness and economic growth. However, global dynamics such as economic fragmentation, protectionism, and the transition to digitalization and green transformation pose new challenges for developing countries, including Indonesia.

Indonesia faces structural barriers in deepening its participation in GVCs. National exports are still dominated by low-tech commodities, high logistics costs, and the contribution of Micro, Small, and Medium Enterprises (MSMEs) in exports is very limited despite their contribution of more than 60% to GDP. On the other hand, neighboring countries such as Vietnam and Thailand have succeeded in increasing the added value of their manufacturing industries, while Indonesia tends to lag behind in technology adoption and export-oriented supply chain integration.

To overcome these multidimensional challenges, policies aimed at strengthening national competitiveness are needed. For the Ministry of Trade, the main policy directions include optimizing Indonesia's role in regional economic integration through free trade agreements (FTAs), particularly the Regional Comprehensive Economic Partnership (RCEP), and the ASEAN+1 FTA, promoting digital and green trade, and improving the readiness of domestic businesses to meet global standards. With a smart, inclusive, and evidence-based trade policy platform approach, Indonesia has the potential to strengthen its position as a center of production and innovation in Southeast Asia in the evolving global value chain landscape.

KEY MESSAGES

- Indonesia's participation in global value chains remains low and dominated by resource-based exports, with MSMEs contributing minimally despite their major role in the economy.
- High logistics costs, fragmented regulations, and limited digital readiness continue to constrain Indonesia's trade competitiveness and MSME export capacity.
- Strengthening ASEAN centrality and optimizing free trade agreements such as RCEP and ASEAN+1 FTA are crucial to deepen regional integration and attract quality investment.
- Accelerating MSME digital transformation, skills upgrading, and access to certification and financing is key to enhancing inclusive export participation.
- Coordinated, evidence-based trade governance through mechanisms like a National GVC Strategy Council and GVC Intelligence Unit is essential to position Indonesia as a regional production hub by 2045.

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1. BACKGROUND

Over the past two decades, international trade has developed into a global value chain (GVC), where the production process of a product can span countries from raw materials to finished products. Currently, more than 70% of global trade, including services, raw materials, spare parts, and components, occurs within the GVC framework (OECD, 2022). This makes participation in GVCs a key factor for competitiveness and economic growth, including for MSMEs, which play roles as suppliers, distributors, or service providers. However, global uncertainties such as the COVID-19 pandemic and geopolitical conflicts have disrupted GVCs. The pandemic caused a 5.3% contraction in global trade in 2020 (WTO, 2021), while conflicts like the US-China trade war, the Russia-Ukraine war, and escalations in the Middle East have prompted countries to evaluate and undertake risk mitigation efforts regarding reliance on GVCs. In addition, reciprocal tariffs and improper management and the restrictive effect of the Non-Tariff Measures (NTMs) also contribute to rising uncertainty and suppress the competitiveness of the industry (OECD, 2023).

In addition to external factors, structural changes have fundamentally shaped the Global Value Chain landscape. First, increased attention to environmental issues has encouraged companies to adopt green supply chain management. Stricter carbon emission regulations in international markets require products with a lower carbon footprint. Second, accelerated digitalization and technological innovations from automation, artificial intelligence, IoT, and blockchain have enhanced supply chain efficiency while also increasing the complexity within GVCs (Wang et al., 2020).

In Southeast Asia, Indonesia's participation in GVCs is relatively low. According to UN Comtrade data, Indonesia's global export share in 2024 is around 0.9%, lower than Vietnam (1.5%) and Thailand (1.3%), which excel in high-value manufacturing sectors, particularly in electronics and automotive. Indonesia's level of participation in GVCs still faces obstacles related to access to intermediate inputs, resulting in relatively low backward participation (Nugroho, 2022). Other challenges include infrastructure and logistics. The World Bank's 2023 Logistics Performance Index (LPI) ranked Indonesia 61st out of 139 countries with a score of 3.0, lower than Malaysia (3.6), Thailand (3.5), and Vietnam (3.3). The archipelagic geography, fragmentation of central and regional policies, and limited digital infrastructure increase costs and delays. This has the potential to reduce supply chain efficiency and potentially compress export margins (Nugraha et al, 2025)

Although there have been reforms such as the Online Single Submission (OSS), regulatory fragmentation persists, and rise compliance burdens from NTMs continue to constrain MSMEs' internationalization. High conformity assessment costs, inconsistent enforcement, and limited digitalization of certification processes disproportionately affect MSMEs, which also often lack the financial and technical capacity to meet standards related to product safety, sustainability, and traceability. Despite MSMEs accounting for 99% of business units and more than 60% of GDP, their participation in GVCs remains low (BPS, 2023; Tambunan, 2019). Nearly 97% of MSME workers are involved in simple manufacturing (Ministry of Finance, 2024). Increasing MSME participation in GVCs is important to strengthen national competitiveness, facilitate access to knowledge, international standards, and technology transfer, as well as to promote economic growth. Proactive policies are necessary to position Indonesia more strategically in GVCs. Therefore, it is crucial to create proactive policy directions to enhance Indonesia's position in GVCs as one of the leverage factors for inclusive and sustainable economic competitiveness and growth.

2. OBJECTIVES

1. To analyze the current state of Indonesia's value chain participation at the domestic, regional, and global levels.

2. To identify key challenges and opportunities in enhancing Indonesia's value chain integration.
3. To explore policy recommendations for strengthening Indonesia's logistics and value chain networks.

3. DISCUSSION

3.1. Global Value Chain Landscape

3.1.1. Global Value Chain Dynamics, Emerging Disruptions, and Strategic Implications for Indonesia

The global economic environment in the 2020s is marked by deep structural transformation and rising geoeconomic fragmentation. The prolonged slowdown in trade openness, intensifying protectionism, US–China trade tensions, the COVID-19 pandemic, supply chain realignments, and the geopolitical disruptions caused by the Russia–Ukraine conflict collectively weaken market- and rule-based integration (ADB, 2024). Strategic industrial policies such as the Inflation Reduction Act, CHIPS Act, and green trade instruments like the EU's CBAM promote reshoring tendencies and raise new compliance requirements for exporters. This fragmentation increases uncertainty, disrupts upstream–downstream linkages, and heightens the risks of bloc rivalry and hence limiting the resilience of global value chains (GVCs), especially for emerging economies (Thangavelu, 2025). Against this background, Indonesia must pursue a geoeconomic strategy that strengthens its integration into regional networks while upgrading its role in GVCs.

In this context, ASEAN centrality could become Indonesia's primary platform to manage fragmentation and prevent being locked into low-value activities. A stronger and rules-based ASEAN economic architecture can mitigate geopolitical frictions by institutionalizing dispute settlement, protecting intellectual property, and promoting investment, services, and labor mobility. However, three longstanding structural constraints persist: (i) intra-ASEAN trade remains stagnant around 20%, (ii) high-value functions are still concentrated in advanced economies, and (iii) widening skills asymmetries have limited labor mobility gains, especially for lower-skilled workers. To accelerate GVC upgrading, ASEAN must strengthen both its economic and social pillars in AEC, with governments facilitating while firms lead the integration of production networks.

The Regional Comprehensive Economic Partnership (RCEP) also plays an increasingly critical role in enhancing Indonesia's strategic positioning in regional value chains. As the world's largest trade bloc, covering one-third of global GDP and population, RCEP has high potentials to deepen regional market access, simplifies rules of origin, and enhances supply chain complementarities (Itakura, 2022). Maximizing its benefits requires Indonesia to promote RCEP utilization by domestic firms, strengthening cross-border trade facilitation, and support the establishment of a formal RCEP Secretariat to enhance institutional coordination and policy dialogue. Effective implementation will help Indonesia secure a more strategic position in Asia-centric GVCs, particularly in electronics, automotive components, and agro-processed products.

Complementing these trade-architecture strategies is servicification, i.e. to growing embedding of services within manufacturing and GVC activities, which has become a key driver of efficiency, innovation, and sustainability in GVCs. Digitalization is central to this transformation, as it significantly enhances the tradability and cross-border deliverability of services embedded in goods. The rapid expansion of digitally deliverable services, ranging from cloud-based control systems and IoT-enabled predictive maintenance to e-commerce logistics, demonstrates this shift. Digital trade currently accounts for about 24% of global trade, rise from 19% in 1995, while exports of digitally deliverable services have

more than tripled to USD 3.811 trillion between 2005 and 2021. Digital trade lowers entry barriers through data-driven logistics, platform-based labor matching, and enhanced supply-chain performance. However, disparities in connectivity, skills, and digital literacy risk widening regional inequality. This underscores the urgency to strengthen digital institutions, human capital, and interoperable connectivity frameworks, particularly by ensuring Indonesia's contribution in shaping the ASEAN Digital Economy Framework Agreement (DEFA). It is important to upgrade to the "third unbundling" phase, where people-to-people connectivity and cross-border collaboration emerge as a new growth frontier for the manufacturing, services, and global production networks in East Asia (Baldwin, 2011; Kimura, 2018). Servicification also offers a strategic pathway toward green upgrading. Service-intensive production models typically reduce material dependency and carbon footprints such as green logistics, eco-design, circular-economy maintenance that can increase capacity to meet stringent green trade requirements such as CBAM, EUDR, and ESG-based standards. These dynamics suggest the alignment between servicification, digitalization, and sustainability transitions.

Overall, there is no single *silver bullet* for building resilience and sustainability in Indonesia's value chains. Therefore, the interconnectedness between the digital economy, the green economy, and resilience need to be examined. **In designing policies, it is also important to incorporate a GEDSI (Gender Equality, Disability, Social Inclusion) perspective to make strategies more inclusive.** Hence, policy innovation through a *sandbox approach* is recommended. Many commitments are difficult to realize because they wait for full consensus. The *sandbox approach* can be used to test new policies before they are widely adopted in ASEAN. With *the sandbox*, some countries can pilot them first, then scale them up once they prove successful. We can use this approach for various strategies that have long been discussed in ASEAN but not yet implemented. Stakeholder engagement and a participatory approach will also generate new ideas to address challenges in ASEAN and Indonesia.

In order to be inclusive, workers in the region must be systematically skilled, reskilled, and upskilled to unbundle their competencies, enabling them to participate effectively in diversified value chains. The emergence of platform economies, automation, and artificial intelligence requires not only technical proficiency but also cognitive agility and the ability to integrate across interdisciplinary domains. Enhanced economic cooperation is essential to strengthen technical and vocational education and training (TVET) systems. Such cooperation should prioritize the upgrading of critical skills among vulnerable labor segments, including youth, informal workers, and those in rural or marginalized sectors.

3.1.2. Promoting of GVC Participations: Lessons from China

China's integration into global value chains (GVCs) represents one of the most significant economic transformations in modern history. From 1995 to 2020, both China and ASEAN deepened their participation in GVCs; however, China advanced much faster by successfully reducing dependence on foreign inputs and developing longer, more complex domestic value chains. This transformation was the outcome of a balanced combination of domestic market reform and proactive industrial policy, pursued consistently over four decades. The interplay between state guidance, market liberalization, and international commitments offers valuable lessons for Indonesia's efforts to enhance its role in GVCs.

China's early reforms (1978 - 1991) focused on liberalizing agriculture, decentralizing fiscal and administrative authority, and gradually opening select industries to competition. These market-oriented reforms laid the foundation for private sector dynamism, while parallel investments in infrastructure particularly in energy, logistics, and transport ensured that industrial growth was well supported. For Indonesia, this underscores the importance of pairing institutional reform and regulatory simplification with infrastructure investment, so that industrial development is not constrained by bureaucratic or logistical inefficiencies.

Between 1992 and 2001, China deepened its market transition by introducing enterprise reforms, improving the business environment, and creating special economic zones that linked domestic producers with global markets. The commitment to join the World Trade Organization (WTO) acted as a powerful anchor for reform, compelling the government to align its domestic regulations, tariff regimes, and competition policies with international standards. WTO accession in 2001 accelerated these changes improving transparency, reducing protectionism, and enhancing investor confidence. For Indonesia, this phase highlights how participation in international frameworks can serve as a *disciplining mechanism* for domestic reform, fostering efficiency, predictability, and credibility in the policy environment.

Post-WTO, China gradually shifted from low-cost assembly toward innovation-driven and high value-added production. Industrial policy remained important, but its success was built upon the credibility gained through earlier market reforms. The government used a range of instruments targeted subsidies, preferential tax incentives, and public investment funds such as the China Investment Corporation (CIC) and Government Guidance Funds (GGFs) to nurture high-tech and strategic sectors. Yet these interventions operated within a more competitive and open domestic market shaped by WTO commitments. For Indonesia, this suggests that industrial policy is most effective when complemented by sound market institutions and clear, rules-based governance.

Since 2012, initiatives such as *Made in China 2025*, the *Belt and Road Initiative (BRI)*, and the *Dual Circulation Policy* have aimed to strengthen advanced manufacturing while expanding domestic demand. Local governments have played a vital role in implementing these strategies attracting investment, developing industrial clusters, and supporting SMEs through programs like “10,000 Little Giants.” Indonesia could emulate this *multi-level coordination* model, while ensuring that local policy innovations remain consistent with national reform priorities and international obligations.

The Chinese experience also illustrates the reciprocal relationship between external openness and internal reform. International engagement through trade agreements, FDI partnerships, and value chain participation created both opportunities and pressure for China to modernize its domestic regulations, institutions, and technology standards. For Indonesia, deeper participation in global and regional economic frameworks (such as RCEP or ASEAN+1 FTA) could similarly act as a catalyst to accelerate domestic reforms in logistics, competition policy, and investment facilitation key prerequisites for upgrading within GVCs.

Ultimately, China’s success in GVC participation was not driven by industrial policy alone, but by the synergy between market reform, global integration, and strategic state intervention. For Indonesia, the lesson is to view international commitments not as constraints but as levers for reform using them to reinforce domestic competitiveness, attract investment, and build the institutional foundations needed for sustained participation in high-value segments of global value chains.

3.2. Indonesia’s Global Value Chain

3.2.1. Indonesia’s Position in GVC and its Comparations with Regional Peers

Indonesia's manufacturing sector has undergone an evolution in recent times, as evidenced by its contribution to GDP showing a declining trend, and it is indicative of premature deindustrialization. This trend began after the Asian financial crisis and continued into the post-Covid-19 period. Nevertheless, an OECD study (2025) indicates a negative correlation between trade in GVCs and the number of people living in poverty. In addition, OECD data (2025) also shows that increased trade activity is associated with higher GDP per capita. Therefore, Indonesia's participation and position in GVCs remain a strategic trade policy to accelerate economic growth.

Over the past two decades, Indonesia's integration into GVCs has experienced moderate progress. Both forward participation and backward participation have increased,

albeit with different patterns. The forward participation rate rose from 20% in 2000 to 24% in 2022 (OECD TiVA, 2025). In the manufacturing sector, its value also increased from 16% to 24%, higher than the Philippines (20%), Thailand (12%), Malaysia (23%), Singapore (16%), and Vietnam (11%). This indicates that Indonesia plays a larger role as a supplier of inputs for production in other countries, particularly resource-based goods with low added value (Prakash, 2024). Conversely, Indonesia's backward participation tends to decrease and is relatively low compared to other ASEAN countries. Total participation is only around 10%, far below Malaysia (35%), the Philippines (25%), Singapore (40%), Thailand (36%), and Vietnam (45%). In the manufacturing sector, the rate fell from 22% in 2000 to 15% in 2022 (OECD TiVA, 2025).

Indonesia is still stuck in low-complexity commodities. By comparison, in 1995, Vietnam's complexity level was only half of Indonesia's, but now it is more than 50% higher. Since 2015, Indonesia's Economic Complexity Index ranking has stagnated at position 72, reflecting difficulties in transitioning to high-tech and high value-added manufacturing sectors. Indonesia's exports are still concentrated in the mineral and agricultural sectors, while great opportunities in high-tech manufacturing sectors such as machinery, electronics, and vehicles have not been optimally utilized. As a result, competitiveness in the global market remains low.

By sector, Indonesia's position in the GVC is still uneven. Indonesia exhibits high forward linkages in the primary sector, as it has comparative advantage in resource based industries, while it still depends on more imported complex intermediate inputs for manufacturing. Resource-based industries remain dominant, contributing about one-third of domestic inputs that are exported, mainly from the energy and non-energy mining sectors. In contrast, medium- and high-tech manufacturing such as electronics, automotive components, and machinery involve more in backward participation. Data from WTO (2023) showed that Indonesia's foreign value added content in electronics, computers, and equipment exports about 38.8% in 2022, which increased from 34.5% in 2017. In addition, textiles and food processing manufactures still heavily depend on imported materials, i.e. its foreign value added content in export is about 49.5% in 2022, increasing about 15.7 percentage change, compared to its share in 2017. These subsectors have strategic potential for increasing GVC participation. In addition, the service sector, particularly digital, logistics, and finance, still accounts for less than 15% of GVC participation.

Global shocks, such as the COVID-19 pandemic and trade wars, have transformed global value chains as well as domestic supply chains. The pandemic caused disruptions in global supply and demand, trade, and foreign direct investment (FDI). Post-pandemic, trade wars and geopolitical tensions have driven near-shoring, resulting in the relocation of production to Southeast Asian countries. However, investment flows to Indonesia lag behind Vietnam and Thailand, due to slow policy responses and inadequate infrastructure. To attract investment and build economic resilience, rebalancing policies and reforms in response to global dynamics are crucial.

3.2.2. Strengths and Challenges of Indonesia's GVC Integration: Focus on MSMEs

MSMEs contribute more than 60% of GDP and 63% of the workforce, yet their export contribution is only 15.7%. Most MSMEs operate in the trade and services sectors, with only 13.9% in the manufacturing sector. This disparity indicates low productivity and limited involvement of MSMEs in high value-added exports. In addition, 99.5% of small-scale manufacturers are not legally registered and 89.6% still use manual technology. This situation results in low productivity in the small-scale manufacturing sector, which is subsistence-oriented, has not achieved economies of scale, and is unable to compete in the export market.

Some of the challenges faced by MSMEs include: (i) limited access to finance; (ii) market access barriers; (iii) high logistics costs; (iv) inability to meet international standards; (v) gaps in digital and financial literacy; (vi) instability of the regulatory

framework; (vii) minimal partnerships; (viii) limited export support infrastructure; and (ix) weak coordination among ministries.

Access to financing remains one of the main challenges. Compared to neighboring countries, MSMEs in Indonesia face complicated loan procedures, high interest rates, and collateral requirements that are difficult to meet. The average interest rate on MSME loans is around 9%, much higher than in Thailand (4%) and Malaysia (5%). The government has introduced Kadeka MPE (Digital Card for Cooperatives and MSMEs) to facilitate financing, but its implementation still faces challenges, particularly in fund distribution, determining recipient eligibility, and the readiness of financial institutions. Meanwhile, the share of Exim Bank loans for MSMEs has also decreased from 22% in 2019 to 17% in 2024, indicating a widening financing gap.

Limited market access is also a major challenge for MSMEs. High costs to enter modern retail markets such as supermarkets, along with unevenly distributed market information, hinder MSME expansion. High logistics costs further suppress MSME competitiveness. Indonesia's logistics costs reach about 23% of GDP, placing Indonesia at rank 61 in the World Bank's Logistics Performance Index. Indonesia's logistics score is only 2.9-3.3 out of 5, one of the lowest in Asia. In the fisheries sector, for example, around 90% of operators are MSMEs, with export costs being over 85% higher for small-scale shipments (Less than Container Load-LCL). Nevertheless, Indonesia's fishery exports have grown quite rapidly, with an average annual growth rate (CAGR) of more than 15% from 2018 to 2024.

The inability to meet international standards, along with gaps in digital literacy and financial literacy, remains a major challenge weakening the competitiveness of Indonesian MSMEs. Regulatory uncertainty also poses a hindrance. Although reforms such as the Omnibus Law and Government Regulation No. 7 of 2021 aim to simplify business licensing through the Online Single Submission (OSS) system, rapid regulatory changes often create uncertainty for MSMEs. Limited partnerships are also a significant issue. Only about 5% of small industries have partnerships, and most are limited to the marketing sector.

In addition, Indonesia's export promotion infrastructure is still very limited. Indonesia only has 20 trade promotion offices abroad, far fewer compared to South Korea (113 offices) and Japan (76 offices). Market research publications are also still minimal, so supporting information for MSMEs to penetrate global markets is not optimal. The Export Guidance Program has proven to have a positive impact on export involvement, but its scale is still small, covering only 2,169 participants with a success rate of 26%. The Ministry of Trade also runs a Business Meeting Program to connect MSMEs with foreign buyers, with transaction values reaching USD 87 million in the first half of 2025, however, that figure is still far from its actual potential. Coordination between Ministries also needs to be strengthened for sustainable MSME development.

4. POLICY RECOMMENDATION

Based on the analysis and discussion that have been presented, several short-term and long-term policy recommendations are proposed as follows.

4.1. Short-Term Policy Recommendations

i. Strengthening Trade Integration and Facilitation

a. Expanding Participation in Regional and Global Trade Agreements

Indonesia needs to enhance its engagement in trade by effectively utilizing existing free trade agreements, particularly within the RCEP forum and the ASEAN-China FTA. Through these mechanisms, Indonesia can increase market access, attract high-quality investment, and integrate more effectively into regional and global production networks. The Ministry of Trade should also take advantage of the momentum of ASEAN-China economic cooperation, especially with the implementation of the ASEAN-China Free Trade

Agreement (ACFTA) in 2025. To maximize the potential benefits of free trade agreements (FTAs), the Ministry of Trade should enhance stakeholders' comprehension of the Rules of Origin (ROO) and their implications for trade competitiveness. This effort should extend beyond conceptual understanding to include practical support in sourcing raw materials within the regional supply base to ensure products qualify as originating goods. Moreover, assisting firms in interpreting and complying with export market regulations and non-tariff measures (NTMs) is essential to improving compliance readiness, facilitating smoother market entry, and strengthening Indonesia's overall export performance.

b. Advancing Deregulation Especially on Services

Deregulation policies, especially those aimed at reducing Non-Tariff Measures such as administrative and customs procedures, logistics, and local content requirements, need to be evaluated to ensure their alignment with participation in GVCs. This deregulation aims to increase participation in upstream supply chains, as well as enhance the use of high-tech intermediate input in production, thereby generating higher value-added output. In addition, deregulation, including opening market access in the service sector, is crucial to promoting servicification, given the growing contribution of services in the manufacturing sector as a driver of productivity and innovation.

ii. Enhancing Human Capital and MSME Participation

a. Promoting Training and Upskilling Programs

This policy can be positioned as a learning mechanism that accelerates technology absorption, productivity growth, and workforce quality improvement through exposure to global markets and production standards that encourage the adoption of modern technology and skill enhancement. Conditional trade incentive programs can also be linked to workforce training requirements. Furthermore, expanding access to the trade of services, particularly in the fields of education, technology, and professional exchange, should be a priority to accelerate knowledge transfer, utilizing agreements such as the ASEAN Mutual Recognition Agreement (MRA) to strengthen the mobility of skilled workers and the management of unskilled labor.

b. Supporting Sector-Specific Digital Transformation for MSME

To enhance export competitiveness in strategic sectors such as halal products, batteries (EV), processed foods, and digital services, the Ministry can establish sectoral export facilitation units that provide technical assistance, international certification guidance, and market access support. Moreover, collaboration with BKPM is crucial to direct FDI to sectors with high export potential and local supply chain development. Export incentives such as simplified licensing and tax relief should prioritize and involve MSMEs. Empowering MSMEs is key to inclusive participation in GVCs through expanded access to financing, logistics and certification efficiency, and optimization of e-commerce to improve digital literacy and export readiness.

c. Advocating rules-based integration for MSME

The acceleration of the implementation of Rule-Based FTAs related to digitalization (such as ASEAN DEFA) and the encouragement of SMEs to adopt global standards will strengthen Indonesia's competitiveness in the GVC. Strengthening the image through the **"Made in Indonesia"** initiative, accompanied by the identification of niche GVC segments such as eco-friendly packaging, halal-certified products, or modular electronics, can promote higher value-added exports. The establishment of a **GVC Intelligence and Analysis Unit** is necessary to monitor strategic exports based on data and to support evidence-based policies. In addition, the **"Thursday Use Local Movement (Gaspol)"** needs to be orchestrated nationally as a key strategy to enhance the competitiveness of domestic products, and export

training and international certification for SMEs and women entrepreneurs will strengthen a more inclusive GVC.

iii. Strengthening Institutional Coordination and Policy Effectiveness

a. Trade Facilitation

To strengthen Indonesia's position in the regional and global value chains, it is necessary to simplify customs procedures, digitize trade, and improve the efficiency of port and inter-island logistics to reduce transaction costs. Trade facilitation needs to be enhanced to accelerate market entry and lower transaction costs, thereby encouraging Indonesia's participation in GVCs. Meanwhile, regarding digitalization and e-commerce, the Ministry of Trade can support the development of digital trade infrastructure, including electronic certification systems, customs modernization, and cross-border logistics platforms. In parallel, policies that promote digital consumer protection, cybersecurity standards, and digital literacy, especially for small businesses, are crucial for building trust in online trade and expanding Indonesia's digital footprint in regional and global markets.

b. Implementation of *Regulatory Impact Assessment* (RIA)

Regulatory Impact Assessment (RIA) and cost-benefit analysis of policies need to be implemented to strengthen evidence-based policymaking. In addition, the trade policies that are implemented require **coordination across Ministries**, policymaking Agencies, and regulatory bodies to ensure consistent and integrated industrial, trade, and investment policies. Moreover, these policies also require collaboration not only at the policymaker level but also within the business ecosystem, including global logistics providers and supply chain actors. To balance the interests of various stakeholders in the policymaking process, policymakers in government institutions must have shared goals, such as achieving a high-income level by 2045. Therefore, policymakers need to formulate and implement trade policies based on empirical evidence.

4.2 Long-Term Policy Recommendations

In the long term, the Ministry of Trade must ensure that **trade policies are deeply integrated into Indonesia's national development planning framework, namely the RPJPN (*Rencana Pembangunan Jangka Panjang Nasional*) dan RPJMN (*Rencana Pembangunan Jangka Menengah Nasional*)**. Effective vertical coordination between central trade strategies and regional government industry priorities is crucial to avoid fragmented programs and to support regional export hubs, vocational zones, and logistics clusters. The establishment of a cross-ministerial National GVC Strategy Council can help align trade, industrial, and educational policies cohesively.

Increasing export capacity in innovation-driven sectors requires strong investment in R&D. The Ministry must support fiscal incentives for companies developing potentially high-export technologies. Building partnerships between universities and industry can accelerate innovation with commercial value. Learning from China's coordinated industrial innovation approach, the Ministry can also facilitate an ASEAN R&D platform to strengthen Indonesia's competitiveness in production.

Regarding **financing and institutional aspects**, the Indonesia Investment Authority can be mobilized to co-finance projects that support exports. Indonesia can also invest together with global partners to develop innovation centers or high-tech export infrastructure. The Ministry of Trade can adopt a smart industrial trade policy based on scientific evidence, selective in intervention, yet avoid excessive protection and align with global trade rules. Strategic sectors such as halal food, digital services, electric vehicle battery components, and precision agriculture should receive targeted support without distorting market incentives. Policy design should also consider long-term social objectives, including sustainability, inclusive employment, and resilience to global shocks. By acting as a catalyst in trade-driven transformation, the Ministry of Trade can position Indonesia not only as a regional production

hub but also as a globally competitive and adaptive economy in the ever-evolving GVC landscape.

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