
| RESEARCH ARTICLE

Reorganizing Economic Global Value Chains in an Era of Polycrisis: Global Drivers, Strategic Responses, and Opportunities for South-East European Countries

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| ABSTRACT

The reorganization of global value chains (GVCs) has become a defining question in international economics and business strategy. Pandemic disruption, geoeconomic rivalry, war-related energy and transport shocks, climate risk, and digital transformation have raised the value of resilience, yet they have not caused an indiscriminate reversal of cross-border production. This article develops a structured integrative review and comparative secondary-data synthesis to assess nature, drivers, and consequences of contemporary GVC reorganization. It argues that the dominant adjustment is selective rewiring: firms diversify suppliers, regionalize stages, increase inventories for critical inputs, digitalize visibility, and rebalance the efficiency–resilience trade-off while retaining global specialization. The analysis then considers South-East Europe, especially the Western Balkans and adjacent EU economies, as a potential complementary production and services space for European chains. The region's opportunity is conditional on regulatory alignment, logistics, skills, innovation, energy transition, and regional coordination. A policy agenda centered on functional upgrading rather than low-cost assembly alone can connect resilience objectives with inclusive and sustainable development.

| KEYWORDS

Global value chains, resilience, regionalization, nearshoring, South-East Europe, industrial upgrading

| ARTICLE INFORMATION

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1. Introduction

Global value chains (GVCs) organize firms' design, production, distribution, and after-sales activities across multiple countries. Their expansion characterized the late twentieth and early twenty-first centuries, driven by trade liberalization, lower communication and transport costs, modular production, and the global reach of multinational enterprises. Production fragmentation enabled firms to assign tasks to locations with optimal capabilities, costs, assets, and market access. This process facilitated the cross-border flow of technology, investment, and employment, while generating complex interdependencies among suppliers, lead firms, logistics providers, and public infrastructure (Gereffi et al., 2005; World Bank, 2020).

The operating environment has changed materially. Recent crises, including the global financial crisis, US–China trade tensions, the COVID-19 pandemic, Russia's invasion of Ukraine, Red Sea disruptions, climate shocks, and rising strategic competition, have highlighted the risks of lengthy, concentrated supply chains. Consequently, firms and governments are re-evaluating lean inventories, single sourcing, and production concentration. Their focus now includes continuity, dependency risks, cybersecurity, environmental compliance, and political alignment. Policy terms such as reshoring, nearshoring, friend-shoring, de-risking, strategic autonomy, and economic security reflect this broader reassessment of production geography. Yet the claim that globalization is simply ending is not supported by the available evidence. The global export-to-GDP ratio rose from 17% in 1986 to 31% in 2008, then stabilized around 30%, a trend labeled as "slowbalisation" rather than deglobalization (European Commission, 2024). Value-added data similarly indicate ongoing GVC integration.

According to the Eurostat FIGARO database, global GVC participation reached 41.9% in 2022, slightly above 2010, with rates of 37.9% for the EU, 35.3% for the US, and 33.8% for China (European Commission, 2024). Reports from the WTO, Asian Development Bank, IDE-JETRO, and UIBE (2023) also find that GVCs expanded in 2022, despite rising concentration risks and geopolitical tensions. GVCs are being reorganized rather than uniformly dismantled. Firms maintain international specialization due to complex inputs, specialized expertise, economies of scale, embedded supplier learning, and hard-to-replicate contracts. However, supply networks are evolving as firms add suppliers, build regional hubs, adjust inventories and contracts, separate sensitive technologies, and invest in digital traceability.

This reorganization varies by product and stage, with the most significant changes occurring where inputs are critical, substitution is difficult, shocks are costly, or policy restrictions are severe, and less so where comparative advantages persist and switching costs are high. This distinction matters for South-East Europe, which includes EU members like Bulgaria, Croatia, Greece, Romania, and Slovenia, and Western Balkan countries such as Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia. Although their institutions and industrial structures vary, these countries share geographic proximity to the EU and seek deeper integration with European production networks. Several already engage in sectors like automotive components, textiles, food processing, energy, tourism, and business services. A more regionalized European production system could expand these opportunities. However, proximity alone does not guarantee investment or upgrading, as firms also consider trade costs, quality standards, customs efficiency, infrastructure, skills, supplier base, energy reliability, environmental compliance, and institutional stability. This article examines the practical implications of GVC reorganization for South-East Europe and makes four key contributions. First, it differentiates selective network rewiring from broad deglobalization. Second, it combines international economics and GVC governance to explain varied industry responses to shocks. Third, it synthesizes evidence on organizational responses—such as diversification, regionalization, strategic inventory, vertical integration, digitalization, and supplier development—and their trade-offs. Fourth, it proposes a policy framework linking nearshoring with functional upgrading, sustainability, and regional cooperation for South-East Europe.

The article is structured as follows: Section 2 reviews theory on GVC governance, resilience, and regionalization; Section 3 describes the integrative-review methodology; Section 4 outlines the drivers, strategies, and regional context of GVC reorganization; Section 5 discusses the trade-offs between resilience, efficiency, inclusion, and environmental goals; Section 6 considers implications for research and practice; and the final sections present conclusions and future research directions.

2. Literature Review and Theoretical Underpinning

2.1 From international fragmentation to GVC governance

Classical trade theory attributes cross-border exchange to differences in productivity, factor endowments, and relative prices. GVC analysis introduces an organizational perspective, emphasizing how firms manage trade in intermediate goods and services through networks that set product standards, quality, timing, and supplier relations. The key issue is not simply which country exports the final product, but where value is created, who controls critical functions, and how knowledge and risk are distributed across the chain.

Gereffi et al. (2005) identify five governance forms, including market, modular, relational, captive, and hierarchy, shaped by transaction complexity, information codifiability, and supplier capability. This typology remains valuable for understanding GVC reorganization. Market-based chains can change suppliers easily, while relational and captive forms depend on firm-specific knowledge, tooling, quality assurance, and trust. In complex sectors like automotive, semiconductors, pharmaceuticals, and energy, switching suppliers often costs more than absorbing short-term tariff or freight increases. These features enhance chain resilience to brief disruptions but may increase vulnerability if a critical node fails.

Antràs (2020) argues that the extent of production fragmentation depends on weighing the benefits of international task location against coordination costs. The pandemic increased coordination risks, such as border closures and supply delays, without erasing specialization advantages. As a result, uniform reshoring across sectors is unlikely. Firms weigh relocation costs, disruption risks, flexibility, market proximity, and policies, making decisions that are both task- and industry-specific.

The “smile curve” perspective clarifies upgrading value is typically concentrated in pre-production (research, design, branding) and post-production (logistics, marketing, data, customer support) activities, rather than assembly. While assembly offers jobs and learning, it does not ensure lasting domestic value added. For South-East Europe, the key issue is whether firms and institutions can advance to higher-value process, product, functional, and chain roles within regional and global networks, not just whether production shifts geographically (Gereffi, 1999; Humphrey & Schmitz, 2002).

2.2 Resilience, robustness, and the efficiency-resilience frontier

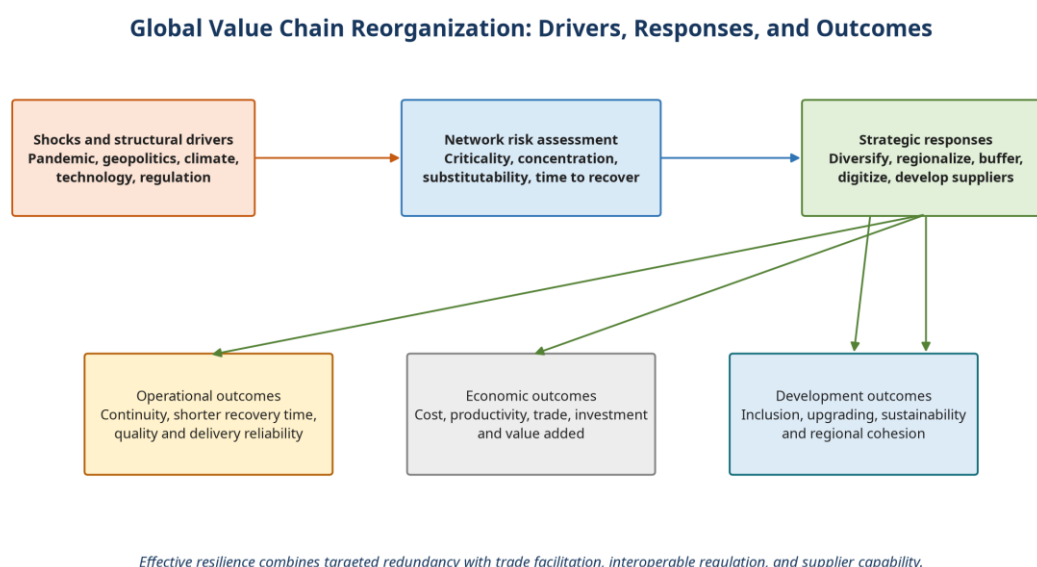
Supply-chain resilience is the ability to prepare for, respond to, recover from, and adapt after disruptions, while robustness refers specifically to resisting disruption without changing the system. A resilient supply chain may experience temporary failures but can recover via substitution, rerouting, or redesign. This distinction matters: systems optimized for efficiency may handle minor

fluctuations but remain vulnerable to major shocks, whereas redundancy, though less efficient, can lower expected losses under uncertainty (Baldwin & Freeman, 2022; Miroudot, 2020).

The dichotomy between lean globalization and self-sufficiency is overly simplistic. Full domestic redundancy is costly, but international diversification of suppliers and transport routes can enhance resilience without sacrificing the benefits of specialization. The OECD (2025) finds that broad relocation does not guarantee more stable supply chains and can reduce trade and GDP. Instead, it advocates for agile, adaptable, and aligned chains supported by trade facilitation, digital readiness, and international cooperation, viewing resilience as a portfolio rather than a nationality issue.

Resilience is multidimensional. Geographic diversification mitigates risks from local disasters or political constraints. Supplier diversification reduces reliance on single firms but may weaken economies of scale and learning. Redesigning products and processes enables input substitution, component standardization, or modular manufacturing. Inventory buffers guard against brief disruptions but increase capital and obsolescence costs. Digital visibility improves monitoring and coordination but introduces data-governance and cyber risks. Public policy also plays a role, as customs, infrastructure, and regulatory alignment affect firms' adaptability.

Figure 1. Conceptual framework of GVC reorganization: interacting shocks, firm responses, and development outcomes.



Source: Author's synthesis based on Antràs (2020), Baldwin and Freeman (2022), Miroudot (2020), and WTO et al. (2023).

2.3 Regionalization, nearshoring, and geoeconomic fragmentation

Regionalization involves denser production, trade, and investment ties within a geographic area. Nearshoring refers to relocating or expanding production closer to key markets, while friend-shoring prioritizes political alignment and policy reliability. These approaches can overlap but serve different purposes; for example, a European firm may be near-shore for logistical advantages and friend-shore for geopolitical security.

Regionalization does not eliminate global connections. Regional systems rely on global capital goods, software, minerals, technology, and expertise. Firms often adopt multi-regional strategies: global sourcing for specialized inputs, regional manufacturing for time-sensitive goods, and segregated networks for sensitive technologies. WTO et al. (2023) report both ongoing GVC expansion and increased risk from concentrated suppliers. This coexistence makes "rewiring" a more accurate term than "decoupling." Geoeconomic fragmentation may accelerate regionalization. Tariffs, export controls, investment screening, subsidies, sanctions, and local-content rules influence location decisions, especially in sectors like semiconductors, clean technology, critical minerals, defense goods, and data services. However, such fragmentation carries costs: policies that disregard supplier capabilities can create bottlenecks, raise consumer prices, and merely shift risks. International coordination remains essential for interoperable standards, emergency communication, and open trade in non-sensitive goods.

For South-East Europe, regionalization offers greater potential than widespread reshoring. The main opportunity is to serve as a reliable partner in European production systems near enough for rapid lead times and engineering collaboration, integrated for customs and standards compliance, and skilled beyond routine tasks. Achieving this requires a clear understanding of sectoral strengths and the institutional barriers still separating the Western Balkans from the EU Single Market.

Table 1. Selected turning points in the reorganization of global value chains, 2008–2026

Period	Principal shock or trend	Main GVC implication	Typical firm or policy response
2008–2012	Global financial crisis and weaker trade growth	Hyper-globalization slows; risk and demand uncertainty increase	Cost discipline, supplier rationalization, more cautious investment
2018–2019	Trade tensions and tariff uncertainty	Policy risk becomes a location variable	Dual sourcing, tariff engineering, partial relocation
2020–2021	COVID-19, border restrictions, transport bottlenecks	Correlated global shocks expose low inventory and concentration risks	Buffer inventories, multi-sourcing, supply-chain mapping
2022–2023	War-related energy shock, food insecurity, industrial-policy competition	Energy security, sanctions compliance, and strategic dependency gain importance	Regional energy diversification, supplier qualification, investment screening
2024–2026	Red Sea disruption, climate risk, regulatory due diligence, AI-enabled logistics	Network visibility, compliance, and resilience become integrated strategic capabilities	Route diversification, traceability, digital twins, regional supplier development

Source: Author's synthesis based on European Commission (2024), OECD (2025), WTO et al. (2023), and World Bank (2022).

3. Methodology

Goeconomic fragmentation may accelerate regionalization. Tariffs, export controls, investment screening, subsidies, sanctions, and local-content rules influence location decisions, especially in sectors like semiconductors, clean technology, critical minerals, defense goods, and data services. However, such fragmentation carries costs: policies that disregard supplier capabilities can create bottlenecks, raise consumer prices, and merely shift risks. International coordination remains essential for interoperable standards, emergency communication, and open trade in non-sensitive goods.

This study uses a structured integrative review and descriptive comparative analysis of secondary sources. This approach suits a research question spanning international trade, industrial organization, supply-chain management, development economics, and regional policy. Instead of presenting new causal models or survey data, the article combines established theory with recent institutional evidence to explain GVC reorganization patterns and draw policy implications for South-East Europe.

The review addresses four questions: (1) What is changing in GVC geography and governance? (2) Which shocks and trends explain these changes? (3) Which strategies enhance resilience without sacrificing efficiency or development? (4) Under what conditions can South-East Europe upgrade its role in European and global production networks? Evidence is drawn from academic research on GVCs and resilience, international organization reports, and regional studies by the JRC, Vienna Institute, and Bruegel.

Sources were chosen for conceptual relevance, methodological transparency, institutional authority, and focus on the post-financial crisis period, especially the 2020–2026 polycrisis. The review emphasizes value-added measures and research distinguishing temporary trade disruptions from structural relocation. Regional analysis covers the Western Balkans, Bulgaria, Croatia, Greece, Romania, and Slovenia, highlighting both common constraints and sector-specific opportunities rather than assuming a uniform regional model. The findings are synthesized using a framework that links shocks, firm responses, enabling conditions, and outcomes, enabling comparison of strategies such as reshoring, nearshoring, supplier diversification, digitalization, and inventory buffering. The analysis distinguishes between participation and upgrading, noting that attracting production does not guarantee significant domestic value added if local firms lack strong ties to higher-value functions.

The framework assesses policy options based on resilience, productivity, inclusion, environmental impact, and fiscal sustainability. Several limitations should be noted. Trade-in-value-added data lags, making it difficult to assess recent changes as announced relocations may exceed actual investments, and country-level data mask firm-level variation. The recommendations here are strategic and comparative, not substitutes for detailed feasibility studies.

These caveats highlight the context-specific nature of GVC reorganization. For South-East Europe, regionalization is a more viable strategy than widespread reshoring. The region's main opportunity is to become a reliable European partner close for fast lead times and collaboration, integrated for customs and standards, and capable beyond low-value tasks. Achieving this requires a clear view of sectoral strengths and the institutional barriers still separating the Western Balkans from the EU Single Market.

4. Findings

4.1 The empirical pattern: persistence with selective rewiring

The evidence supports three main findings. First, GVCs have shown more resilience than pessimistic pandemic forecasts anticipated, due to high sunk costs, specialized supplier relationships, and multinational firms' ability to absorb short-term shocks. The European Commission (2024) attributes this to intra-firm trade, low price sensitivity in specialized partnerships, and

the difficulty of switching in integrated chains. WTO et al. (2023) also report ongoing expansion but note rising dependence risks in specific products.

Second, resilience investments are targeted rather than comprehensive. Firms rarely replace global networks with domestic ones. Instead, they map supplier tiers, qualify alternatives, regionalize certain stages, develop dual sourcing, employ longer contracts, and buffer critical components. Responses vary by product: standardized inputs are easy to switch, while specialized or regulated components require lengthy validation and adaptation. Location choices thus depend on the task's role in the chain.

Third, public policy now plays a greater role in shaping corporate networks. Beyond trade agreements and investment incentives, firms face export controls, sanctions, carbon border measures, due diligence rules, cybersecurity, and subsidies. These policies can foster diversification and strategic capacity but also risk market fragmentation and redundant investment. The challenge is to address critical dependencies without broadly discouraging foreign sources.

4.2 The drivers of reorganization

The first driver is shock exposure. The COVID-19 pandemic demonstrated the risk of correlated disruptions; when lockdowns, port closures, demand shifts, and labor shortages occur simultaneously across multiple locations, geographic distance does not ensure diversification. According to the World Bank (2022), alternative production configurations have distinct trade and poverty implications, and broad reshoring may shift costs to developing economies. Firms now differentiate between routine volatility, which can be managed with inventory and flexible logistics, and catastrophic interruptions, which may necessitate supplier or location diversification.

The second driver is concentration. Reliance on a small number of economies, firms, or facilities matters most when inputs are hard to substitute, and disruptions affect downstream sectors. Concentration can result from economies of scale, technological leadership, resource distribution, regulatory environments, or accumulated supplier expertise. Consequently, policy responses should differentiate between broad import dependence and critical dependence. A high import share is not necessarily a vulnerability if supplies are diversified and easily substituted, while a lower import share may pose strategic risks when a single supplier holds unique technology or certification.

The third driver is the evolving economics of distance. A high import share is not necessarily a vulnerability if supplies are diversified and easily substituted, while a lower import share may pose strategic risks when a single supplier holds unique technology or certification. Transport costs, delivery uncertainty, carbon accounting, and the need for rapid engineering collaboration can make regional production more attractive for certain goods. It reduces lead times and improves coordination, particularly for fashion, perishables, custom machinery, automotive components, and repair-intensive equipment. However, these advantages must outweigh differences in labor productivity, supplier density, energy costs, scale, and regulatory stability. Nearshoring is most viable when it complements, rather than replicates, established Asian or North American production ecosystems.

The fourth driver is technology. Innovations such as cloud platforms, advanced planning systems, digital twins, artificial intelligence, blockchain-based traceability, and Internet-of-Things sensors enable more detailed visibility across suppliers and shipments. These technologies reduce information asymmetry and enhance scenario planning, but their effectiveness depends on reliable data, interoperable standards, skilled personnel, and robust cybersecurity. Digitalization enables remote coordination, which may reduce the need for regionalization but also enhances regional network responsiveness. Thus, technology's effect on supply chain geography is ambiguous and shaped by organizational choices.

The fifth driver is sustainability and regulation. Climate change heightens physical risks for transport corridors, agriculture, hydropower, and industry. Simultaneously, carbon pricing, product standards, and due-diligence rules require firms to monitor emissions, labor, and environmental performance throughout their supply chains. Sustainable reorganization may encourage shorter routes and cleaner energy but demands investment in traceability and compliance. Countries unable to demonstrate compliance risk exclusion from supply chains, even if their production costs are competitive.

4.3 Strategic responses and trade-offs

Table 2 summarizes the principal strategic responses. No single response dominates across all conditions. A resilience strategy should be proportional to the severity of disruption, the substitutability of inputs, the cost of failure, and the firm's capacity to manage a more complex network. Excessive duplication can reduce productivity and strain scarce skills; insufficient redundancy can turn a localized shock into a systemic production stoppage.

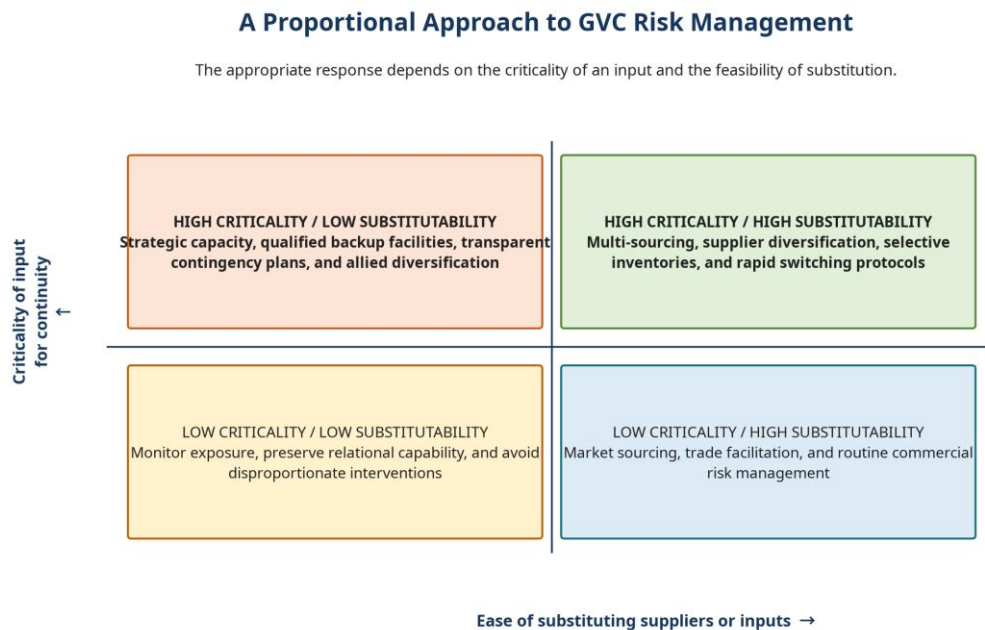
Table 2. GVC reorganization strategies and their principal trade-offs

Strategy	Resilience contribution	Main cost or risk	Conditions favoring use
Multi-sourcing and supplier diversification	Reduces exposure to a single supplier or country	Lower scale economies; supplier-qualification costs; managerial complexity	Standardized or moderately complex inputs; sufficient supplier base
Nearshoring or regional capacity	Shorter lead times; closer engineering interaction; lower	Higher unit cost; limited local supplier depth; possible capacity	Time-sensitive, customized, regulated, or carbon-intensive

	transport exposure	bottlenecks	products
Reshoring	Greater domestic control for selected critical functions	High fiscal cost; smaller scale; may not reduce upstream foreign dependencies	Security-sensitive tasks; strong domestic capability and market scale
Strategic inventories	Protects against short-term interruptions	Working-capital, storage, and obsolescence costs	Critical inputs with predictable demand and high stockout losses
Vertical integration or long-term partnerships	Improves control, information sharing, and joint problem solving	Capital commitment; reduced flexibility; governance burden	Highly specific inputs and relational/captive governance settings
Digital traceability and analytics	Improves visibility, forecasting, compliance, and routing	Data quality gaps, cyber risk, unequal supplier capabilities	Multi-tier chains with reliable digital infrastructure
Supplier development and regional ecosystems	Builds durable capability and local value added	Slow returns; coordination failure; requires public-private commitment	Medium-term upgrading in automotive, agri-food, electronics, IT, and green industries

Source: Author's synthesis based on Gereffi et al. (2005), Baldwin and Freeman (2022), Miroudot (2020), OECD (2025), and WTO et al. (2023).

Figure 2. A proportional approach to GVC risk management: criticality and substitutability



Source: Author's synthesis based on OECD (2025), Baldwin and Freeman (2022), and WTO et al. (2023).

Supplier diversification is often the most cited response, but it is not costless. A second supplier must satisfy technical, quality, social, and environmental standards. For high-complexity components, approval can take months or years. A lead firm may consequently choose "China plus one," "Europe plus one," or another portfolio strategy rather than abandon its principal incumbent. Diversification is most effective when suppliers are geographically and organizationally independent; adding a facility on the same grid, route, or reliant on the same sub-tier supplier provides only an illusion of resilience.

Nearshoring and regionalization have stronger potential when they are accompanied by ecosystem formation. A manufacturing plant does not create a competitive GVC node on its own. It needs specialized suppliers, engineering firms, testing laboratories, logistics services, vocational education, finance, and predictable public administration. Where these complementary assets are absent, investment may remain an enclave with limited local spillovers. Policies should therefore focus on the capability system around the lead investment, not the initial investment announcement alone.

Inventory and capacity buffers have returned to strategic discussion after decades of just-in-time optimization. The relevant shift is not toward indiscriminate stockpiling. Firms classify inputs by criticality, replenishment time, substitutability, and shutdown cost. They may hold additional inventories of semiconductors or specialized spare parts while keeping standard inputs lean.

Governments face a similar issue for health supplies, energy equipment, and emergency reserves. Transparency, rotation rules, and clear release criteria are important to prevent strategic stocks from becoming wasteful or politically captured.

Digitalization is an enabling response rather than a complete substitute for physical capability. Visibility tools can identify the location of a disrupted shipment or the exposure of a sub-tier supplier, but they cannot generate a missing component. The highest payoff comes when digital investments are paired with supplier collaboration, standardized data, and credible contingency plans. For emerging and transition economies, digital readiness is also a market-access requirement because lead firms increasingly require traceability and compliance documentation from suppliers.

4.4 South-East Europe: opportunity, constraints, and differentiated pathways

South-East Europe possesses several attributes that can support closer integration with European chains. Geography offers short transport times to major EU markets. The region has a base in selected manufacturing activities, business services, agriculture, tourism, and energy. EU member states in the region are embedded in the Single Market, while Western Balkan economies have trade links with the EU and increasingly cooperate through regional initiatives. Wage levels and time-zone proximity can be attractive for labor-intensive and service-intensive activities. The region can also benefit from growing European demand for clean-energy equipment, grid modernization, circular-economy services, and digital solutions.

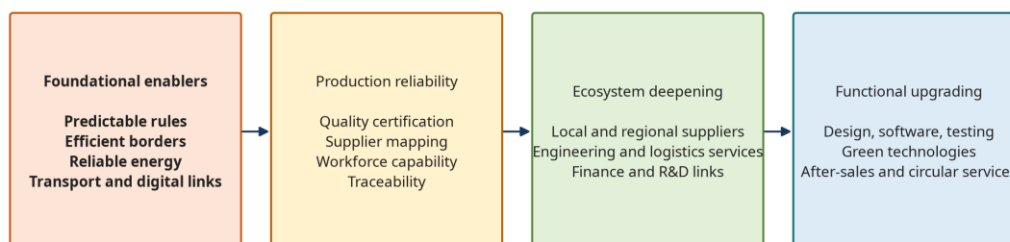
Nevertheless, the regional opportunity should not be exaggerated. The JRC's comprehensive study of Western Balkan value chains identifies sector-specific barriers and prospects across agri-food, textiles, automotive, energy, tourism, and information technology (Matusiak et al., 2022). Bruegel's recent assessment concludes that Western Balkan integration with the EU has advanced through trade liberalization and EU foreign direct investment, but substantial costs persist despite zero tariffs. These costs arise from non-tariff measures, technical and sanitary requirements, border inefficiencies, and the challenge of complying with newer EU frameworks such as the Carbon Border Adjustment Mechanism, Corporate Sustainability Reporting Directive, and Corporate Sustainability Due Diligence Directive (Barata da Rocha et al., 2026). The key constraint is often not geographic distance, but institutional and capability distance. Firms near EU customers may still face obstacles such as slow border procedures, certification gaps, unreliable power, limited freight links, technician shortages, or inconsistent regulations. In contrast, Slovenia, Croatia, Romania, Bulgaria, and Greece illustrate how EU regulatory and infrastructure integration can support regional network participation, despite diverse industrial bases. The Western Balkans stand to gain most from practical integration steps that lower cross-border operational costs before formal EU accession.

Automotive and electrical equipment sectors remain important as European manufacturers seek flexible, high-quality regional suppliers. The shift to electric vehicles brings new opportunities in wiring, electronics, batteries, software, recycling, and charging infrastructure, but threatens positions based solely on internal combustion components. Countries should focus on dynamic skills and supplier development to match evolving product architectures.

Agri-food holds potential when linked to food safety, cold chains, processing, branding, and logistics, rather than just commodity supply. Climate adaptation is crucial, given the impact of droughts, floods, and heat on productivity and transport. Textile and apparel sectors can benefit from short fashion cycles and demand for traceable, low-carbon supply, but upgrading requires investment in design, technical textiles, automation, circularity, and labor standards. Information technology and business services offer scalable GVC entry points, as proximity, language skills, diaspora ties, and time zones favor software, customer service, data, and engineering support. Energy is vital to all value chains and a potential specialization area. Renewables, grid integration, storage, and efficiency services enhance regional competitiveness, but unstable supply, high electricity costs, or slow permitting deter investment. GVC readiness extends beyond export promotion to a coordinated agenda across trade, infrastructure, regulation, education, innovation, energy, and environmental governance.

Figure 3. From proximity to functional upgrading: a capability pathway for South-East European participation in European value chains.

South-East Europe: From Proximity to Functional Upgrading in European Value Chains



Cross-cutting conditions: regional cooperation, EU regulatory alignment, green transition, and SME inclusion

Outcome: reliable participation, higher domestic value added, and greater resilience within European and global networks

Source: Author's synthesis based on Matusiak et al. (2022), Zavorská (2022), and Barata da Rocha et al. (2026).

Table 3. Regional priorities for resilient and higher-value GVC participation in South-East Europe

Policy domain	Immediate objective	Illustrative actions	Expected GVC effect
Regulatory alignment and customs	Lower the time and uncertainty cost of crossing borders	Mutual recognition, risk-based inspections, digital customs, authorized economic-operator schemes	Greater reliability and easier insertion into EU supply networks
Transport and logistics	Improve multimodal connectivity and corridor resilience	Border infrastructure, rail and port links, logistics parks, contingency routing	Shorter lead times and lower disruption exposure
Skills and technology	Build supplier capability beyond routine assembly	Dual vocational education, engineering partnerships, management training, applied R&D	Product and process upgrading; stronger local linkages
Supplier development	Deepen domestic and regional production ecosystems	Quality certification support, matchmaking, finance for SMEs, local-content learning programs	More domestic value added and diversified supplier base
Green transition and traceability	Meet climate and due-diligence requirements	Renewable energy, energy efficiency, carbon accounting, digital product passports	Continued EU market access and new green-industry opportunities
Regional cooperation	Turn fragmented small markets into a functional production space	Common standards, interoperable payments and data, coordinated investment promotion	Scale, predictability, and regional specialization

Source: Author's synthesis based on OECD (2025), Matusiak et al. (2022), and Barata da Rocha et al. (2026).

5. Discussion

The central implication is that reorganization does not automatically mean resilience. Shortening a supply chain can reduce transit time, but may still increase vulnerability if the new source is concentrated, relies on imported equipment, faces similar climate risks, or cannot meet quality requirements at scale. Conversely, a long-distance chain can remain resilient if it has multiple suppliers, flexible routes, transparent information, and strong coordination capacity. The relevant unit of analysis is therefore the network of dependencies, not national borders alone.

This conclusion complicates contemporary debates about economic security. Governments have legitimate reasons to secure supplies of critical medicines, energy technologies, semiconductors, and defense-related goods. Market signals may not fully price systemic risk, especially where stockouts create high social costs. Nonetheless, an indiscriminate push for domestic content can transfer risk upstream, duplicate capacity, raise fiscal burdens, and undermine the diversification that resilience requires. The OECD's conclusion that broad relocation need not improve stability is particularly important in this regard (OECD, 2025). Better policy uses targeted risk assessments, transparent criticality criteria, and cooperation with trusted partners.

The international-economics perspective also underscores distributional consequences. GVC restructuring can create new opportunities for regions positioned close to major markets, but it can also bypass places with weak infrastructure, insecure energy, or limited capabilities. Reshoring into high-income economies can reduce demand for production in developing countries. The World Bank (2022) warns that a global shift toward reshoring to high-income countries and China could worsen poverty outcomes in developing economies. Development strategies should therefore combine participation with learning, domestic linkages, worker protection, and environmental upgrading rather than treat any foreign investment as intrinsically beneficial. For South-East Europe, a two-level strategy is recommended. Regionally, countries should reduce fragmentation by making cross-border production more predictable through shared standards, interoperable digital systems, efficient borders, regional transport corridors, and coordinated energy investment, turning small neighboring markets into a credible production base. Nationally and locally, governments should identify niches where firms can meet European standards and support supplier upgrading through disciplined selection based on existing capabilities, market conditions, environmental constraints, and learning potential. A key risk is a race to the bottom: competing on tax breaks, low wages, or weak regulation may attract mobile assembly but fails to build lasting resilience or high domestic value added, and may conflict with EU sustainability standards. A more sustainable approach is "high-reliability competitiveness": dependable logistics, transparent compliance, skilled labor, clean energy, and responsive institutions that lower total delivered costs and risk for lead firms, even if labor is not the cheapest.

Climate concerns reinforce this. Firms increasingly consider embedded emissions, carbon costs, and the reliability of low-carbon energy. South-East European countries that modernize grids, scale renewables, improve efficiency, and establish credible reporting will be more attractive to European manufacturers and service providers. These efforts also create opportunities in engineering, installation, software, maintenance, recycling, and environmental services. Digital transformation has dual effects. It enables lead firms to coordinate production across longer distances, reducing the advantage of proximity, but also raises supplier entry barriers as traceability, data quality, interoperability, and cybersecurity become standard. Digital capability should be viewed as essential infrastructure for GVC participation. SMEs in the region require targeted support, as the costs of certification, ERP, and cyber protection are proportionally high.

The governance perspective underscores the role of power: lead firms set specifications and capture high-value activities. Policies focusing solely on attracting lead firms risk dependency. Strengthening domestic suppliers through development programs, university-industry links, finance, and local professional services can enhance bargaining power and upgrading capacity. The aim is diversified, capable regional participation in interdependent networks, not self-sufficiency.

6. Implications for Research and Practice

This analysis identifies several key policy implications:

First, resilience assessments should be detailed and grounded in empirical evidence. Governments should systematically map dependencies at the product, firm, and sub-tier levels prior to implementing subsidies, procurement preferences, or trade restrictions. This process should consider factors such as substitutability, qualification time, concentration, transport exposure, and the social cost of disruption. Aggregate import ratios alone are insufficient to reveal underlying vulnerabilities.

Second, policy should prioritize 'no-regrets' resilience measures that enhance competitiveness under both normal and adverse conditions. Initiatives such as trade facilitation, efficient infrastructure, reliable electricity, digital connectivity, skills training, and transparent regulation reduce costs and support agile, adaptable supply chains, as the OECD (2025) advocates. For South-East Europe, these measures may be more impactful than narrowly targeted relocation incentives.

Third, investment-promotion agencies should transition from generic marketing approaches to strategic ecosystem development. This strategy includes identifying anchor sectors, mapping supplier networks, supporting certification processes, facilitating connections between investors and universities, and promoting supplier upgrading. Incentives should encourage training, local supplier development, decarbonization, and knowledge transfer where feasible, with the objective of fostering learning and spillovers rather than imposing unrealistic local-content requirements.

Fourth, firms should prioritize resilience at both the board and operational levels. Key actions include multi-tier mapping, stress testing, supplier financial monitoring, alternative-route planning, emergency contracting, and enhancing digital visibility. Procurement processes should incorporate resilience metrics alongside considerations of price, quality, delivery, sustainability, and innovation to avoid hidden risks associated with an exclusive focus on price.

Fifth, regional cooperation should be regarded as a key instrument for economic security. The Western Balkans and South-East Europe can enhance their attractiveness by addressing regulatory and infrastructure fragmentation. As Bruegel observes, zero tariffs alone do not eliminate trade costs when technical regulations and border procedures remain burdensome. Progressive European Union integration, mutual recognition, and the development of shared digital infrastructure can generate significant benefits prior to full convergence. For researchers, the findings raise key conceptual and measurement challenges. Studies should distinguish between announced and realized investments and differentiate firm-level from national resilience, since multinationals may insulate themselves while increasing host-country dependence on foreign technology or investors. The interaction of environmental regulations, digitalization, and security policies also warrants attention, as these can complement each other or create trade-offs (e.g., greener inputs raising mineral concentration risks).

7. Conclusion

The reorganization of global value chains (GVCs) is a defining economic trend of the decade. Evidence does not show the end of globalization but rather a rebalancing of efficiency, resilience, sustainability, and security. GVCs persist because replicating specialization and scale is difficult, yet firms and governments are responding to uncertainty with selective diversification, regional capacity, strategic inventory, digital traceability, supplier development, and active industrial policy.

The key conclusion is that resilience is not synonymous with domestic production. It relies on diversified, transparent, and adaptable networks supported by robust infrastructure and institutions. Broad re-localization may reduce trade and GDP without guaranteeing stability, whereas targeted, evidence-based measures can mitigate critical risks while preserving international exchange. This approach should inform business and policy decisions.

For South-East Europe, shifting production geography presents conditional opportunities. Proximity to EU markets, certain industrial and service strengths, and the potential for roles in energy and digital transitions are advantages, but benefits are not automatic. Closing gaps in border efficiency, regulatory alignment, transport, energy reliability, skills, innovation, and sustainability compliance is essential. The strategic goal should be functional upgrading and high-reliability competitiveness, not just low-cost assembly.

A cooperative regional strategy can reinforce national efforts. By reducing institutional distance from the EU, supporting sectoral supplier ecosystems, and embedding green and digital standards, South-East Europe can strengthen its role in European and global value chains. GVC reorganization can thus become an opportunity for more diversified, inclusive, and sustainable interdependence. Future research should integrate micro data, network analysis, and case studies to better understand the pace and impacts of supply chain rewiring, focusing on value added, innovation, sustainability, and local supplier resilience.

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