

# Global value chains:

## Potential synergies between external trade policy and internal economic initiatives to address the strategic dependencies of the EU

### Context and political relevance

A global value chain (GVC) involves cross-border manufacturing and distribution of commodities. It integrates various processes, from acquiring raw materials to delivering completed products to customers. A worldwide value chain involves product idea, design, marketing, and after-sales services. Global supply networks impact how we make things. Most modern final goods comprise foreign and domestic materials added at different stages of manufacture and distributed through worldwide supply networks. These linkages constitute complex, diversified, fragmented, dynamic, and developing organizational systems. The globalized economy is coined by the internationalization of supply networks. Dismantling trade barriers, expanding technology breakthroughs, liberalizing investment, and Asia's development as a global industrial centre, especially after China's WTO entrance in 2001, made it feasible. While driven by Multi-National Enterprises (MNEs), global supply chains also increasingly incorporate Small and Medium Sized Enterprises (SMEs). According to the World Bank, supply chain growth occurred mainly in machinery, electronics, and transportation in Europe, North America, and East Asia. **While most countries in these regions participate in complex global value chains, engaging in advanced manufacturing and innovative activities, many countries in Africa, Latin America, and central Asia still supply commodities and intermediate goods for further processing.** Overall, North America, Europe, and Asia dominate global supply networks.

The OECD verified in February 2020 that **the integration of GVCs is strong but has decreased.** The **financial crisis** had hurt trade financing and consolidated global supply networks. This has **slowed international trade** growth **due to restrictive regulations** and **limited cross-border investment.** Many **structural causes suggest the decline will continue.** China, the USA, and other rising economies increase local (and interregional) supply networks and domestic production.

### Authors

Alessia A. AMIGHINI, Andreas MAURER, Elitsa GARNIZOVA, Jan HAGEMER,  
Peter-Tobias STOLL, Marcus DIETRICH, Riya ROY, Agnieszka SKOWRONEK,  
Davide TENTORI

Policy Department, Directorate-General for External Policies  
March 2023

With a greater focus on research and development (R&D) and innovation, global value and supply chains are becoming more knowledge-intensive, signalling a shift from labour-intensive to capital-intensive manufacturing processes. This change benefits countries with strong innovation ecosystems and trained labour.

More than **two-thirds of international trade is facilitated by global supply chains**, and this is especially true for the EU. Despite a global downturn in economic integration, the Euro area is deeply linked in global industrial chains, more so than the USA and China. Against this background, **the EU has the utmost interest in supporting its trade relations with third countries and organizations in such a sustainable way that interruptions in trade routes can be compensated**. Compensatory, defensive trade policy mechanisms and instruments must always be assessed for their compatibility with WTO law and the corresponding secondary legislation of the EU.

While these very days the EU, the G-20 and G7, the WTO, or the IMF are warning about the **risks of geo-economic fragmentation and geo-politicization of trade**, policymakers and business leaders are to discuss ways to re-evaluate global supply chains, including how far they should and could go to regulate authorities and governments in trying to regulate cross-border production in favour of resilience. Yet, both theoretical frameworks and empirical assessment of supply-chain vulnerabilities are still underdeveloped.

The idea of **European strategic autonomy** has its origins in the fields of security and defence but gone beyond these areas extending to foreign and trade policies, after the EU tabled its new trade strategy in 2022. The Covid-19 pandemic and more recently the Russian invasion in Ukraine, have made clear **the vulnerability of GVCs and the need to maintain functioning and resilient supply chains and trade flows** during such crises.

### Aims and structure of the study

Adopting the EU's understanding of "Open Strategic Autonomy", this study **aims at exploring the foundations and fabric of contemporary European supply of raw materials, energy, and critical goods**. It addresses the following questions: Which raw materials are particularly important for the EU - especially against the background of the green transformation - and at the same time critical in terms of supply? Where are these currently obtained from, what alternative sources are there? What (economic) importance could raw material partnerships in the EU have? How can the EU, whenever possible, work strategically with trade partners (at multilateral, plurilateral and bilateral level) and, when necessary, defend its interests and take autonomous trade decisions offsetting other countries' unfair practices and undue interferences? In addition, how can the needs of European economies in terms of maintaining global supply chains be reconciled with the EU's climate, sustainability, human rights and labour rights policy goals and standards?

The study pays specific attention on **how international trade and investment can help address the EU's vulnerabilities relating to energy, raw materials, and critical goods and on the importance of GVCs for the strategic sectors** concerned. It analyses how international agreements as well as EU-internal, legislative, and other tools so far address these items and the question of raw materials dependency of the EU.

### Findings

The **EU's strategic autonomy effort is interconnected**. Other major economies have adopted "strategic autonomy" discourses, strategies, and policy instruments with different aspects. The COVID-19 crisis has accelerated a long-term decline in globalization, but major countries' inward-looking responses might worsen it as a self-fulfilling prophecy or prisoner's dilemma. Such strategies also **risk producing a "security dilemma," in which one power's defensive measures are seen as aggressive by others, causing friction and disintegration of the international system**.

Addressing the EU's strategic reliance on other states requires a continuous and comprehensive examination of product and partner criticalities. The European Commission's main criteria for assessing supply risks, such as the potential of material shortages in the EU, is supply concentration. Critical Raw Materials (CRMs) make up just 0.7 % of EU imports, whereas other raw materials make up 5 %. **CRMs are heavily concentrated at the national level and typically found in poor-governance nations, even if their collective impact in total additional EU imports is minor.**

Thus, the **concentration of suppliers and the nature of their countries make raw material supply problematic, and there are often no obvious substitutes.** Barite, borate, and antimony are imported from nations with low economic freedom and democratic ratings. After processing, the EU's import partners for borate, coking coal, cobalt, titanium, vanadium, and tantalum have low economic freedom and democracy scores. CRMs are essential to many businesses and goods. These include the aircraft, military, battery, medical, chemical, semiconductor, and automobile sectors (vanadium, titanium).

**Investment agreements** from EU member states (BITs) or EU-wide trade agreements **cover 55 % of CRM imports on average.**

EU Raw Materials Diplomacy aims to build bilateral, regional, and global cooperation frameworks to include specialized chapters and provisions in prospective and current free trade agreements. To date, the EU Raw Materials Diplomacy seeks to source CRM from "trusted" partners.

**To improve supply chain resilience, the EU's external policies require more attention. This should be done while understanding that EU and worldwide demand for raw materials has and will continue to rise as global material usage will more than double in 2060 compared to 2011, with metal use growing by 250 %. The EU usually gets its raw materials from the same countries that supply the globe. Thus, raw material competition will rise globally.**

If one examines the EU's import dependence on non-FTA trade partners, the PRC is its most significant partner. The EU's direct import dependent on China ignores China's importance as a trade partner of other EU suppliers. **This suggests that China can "command" more global exports.**

This study's second section examined the EU's main policy instruments on GVCs to see whether they address identified deficiencies. Direct vs. indirect and considerable vs. small synergies are analysed. We examine whether these devices address short-term or long-term vulnerabilities. Our screening showed: 23 instruments connect internal and external policy goals. Most instruments emphasize supply chain security: 22 instruments prioritize preserving supply, while seven prioritize broadening international sources. Most instruments seek long-term sustainability: 23 tools prioritize capacity development at home or abroad. Only the EU's FDI screening framework and the InvestEU concentrate on onshore supply networks. Our analysis suggests a gap in instrument deployment and enforcement: 12 instruments are binding, 28 are excellent attempts. 22 EU and signatory agreements need partner cooperation. **The screening demonstrates that the EU has addressed deficiencies in each category, linking short-term responses to the COVID-19 pandemic and economic recovery with long-term diversification and sustainability goals. Trade and investment mechanisms dominate due to the EU's particular expertise and negotiating power.**

The 2020 nomination of the Chief Trade Enforcement Officer (CTEO) underscored the need to improve EU global, regional, and bilateral trade agreements and partner compliance. The Anti-Coercion Instrument and further trade defence instruments were introduced with the CTEO.

Recent EU trade instruments have focused on improving trade implementation and enforcement. **New or amended measures could target foreign activities, increase EU CRM access, and address trade and investment imbalances.** Some of the tools discussed here affect supply chain diversification and resilience but are not directly related. Climate change risks have spurred initiatives to minimize its effects,

meet EU climate commitments and objectives, and improve EU and foreign partner capability to innovate and meet sustainability standards. **Synergy-based climate change policy may impact supply chains.**

Finally, the risks highlighted above need geopolitical action to foster regional cooperation and external partnerships and protect EU strategic interests. In this regard, **the EU-US framework is vital, but balancing internal and external aims is difficult.** EU-US cooperation on standard-, product-, or sector-specific challenges may produce multilateral synergy. Since most countries trade and invest with the EU or US, the transatlantic connection affects the global economy.

The proposed **Corporate Sustainability Due Diligence legislation** has **immediate, massive, and long-term benefits.** The Directive's supply chain sustainability makes it a model. It will apply to value chains of additional minerals related to human rights, climate, and environmental problems. It will add value chain due diligence for raw materials not covered by the Batteries Regulation without certification for EU market placement.

**EU climate change goals have a large indirect impact on the CBAM strategy.** CBAM targets climate leaks to rewrite supply networks. Its **extraterritoriality might influence EU and global supply networks.**

The study's empirical data show that **closing markets does not help the EU diversify its trade and control important technological industries.** Moreover, the study's findings suggest that **trade diversification benefits the environment and sustainable development by spreading EU trade laws and practices.** However, a sustainable trade diversification strategy and trade policy based on it requires a better understanding of those EU goods and sectors that should be diversified and expanded.

Given the current state of the global trading system, the **EU should expect further economic coercion, whether through sanctions against EU member states, arbitrary tariffs or export bans on raw materials.** To prepare for a more competitive, aggressive and antagonistic international trading system, the EU needs to lead on security of supply while remaining open for trade. **Material stockpiling, recycling, replacement, and EU innovation should coexist with lowering potentially harmful dependences.**

**EU trade agreements enable diversification.** The EU might use FTAs to offset risks including political instability, economic coercion, and climate vulnerability. **Since a green and digital economy requires more minerals and commodities, trade diversification is needed to secure supply.**

The **EU should build enforceable bilateral and plurilateral resource and cooperative industry partnerships to alleviate raw material shocks.** In the sake of balanced, fair competition based on a rules-based system inside the WTO, **the EU should not see other countries as raw material suppliers alone! Thus, we recommend not just including full commodities chapters in future trade agreements. These chapters should also include sustainable cooperative industrialization and shared value generating tools.**

To minimize imports and respective dependency, the **EU should invest in research and development and encourage local industry growth.** To diversify its global value chains and minimize its dependence on a few important trading partners, the **EU should develop its "region-to-region" plurilateral trade partnerships with Africa, Asia, and Latin America.** The EU should continue to give **financial and technical assistance to SME's to enable them penetrate new markets and diversify global value chains.** It should encourage firms to adopt sustainable and ethical practices to decrease the environmental and social implications of global value chains and make them more resilient. Moreover, the EU should assist companies develop partnerships to reach new markets and diversify their global value chains.

This document is the executive summary of the study '*Global value chains: Potential synergies between external trade policy and internal economic initiatives to address the strategic dependencies of the EU*'. The full paper, which is available in English can be downloaded at: [https://www.europarl.europa.eu/RegData/etudes/STUD/2023/702582/EXPO\\_STU\(2023\)702582\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2023/702582/EXPO_STU(2023)702582_EN.pdf).

This executive summary will be available in the following languages: English, French, German, Italian and Spanish. The study, which is available in English, and the summaries can be downloaded at: [ThinkTank](#)

#### Contacts in the European Parliament

Coordination: Wolfgang IGLER, Policy Department for External Policies

Editorial assistant: Balázs REISS

Feedback is welcome. Please write to [poldep-expo@europarl.europa.eu](mailto:poldep-expo@europarl.europa.eu)

The content of this document is the sole responsibility of the authors, and any opinions expressed herein do not necessarily represent the official position of the European Parliament.

Brussels, © European Union, 2023

Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the European Parliament is given prior notice and sent a copy.

EP/EXPO/INTA/FWC/2019-01/LOT5/R/09  
PE 702.582