POLICY BRIEF
What can we learn from long term shifts in the EU's Global Value Chains (GVCs)?

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CONTEXT

The world is changing, and new trade realities are emerging. The division of production into phases, located across the globe, the so-called global value chains (GVCs), that characterised organisation of production over the last two decades is challenged. In recent years, two forces have been pushing international production in opposite directions. On the one hand, the widespread diffusion of digital technologies further decreased transport and organisational costs, reinforcing the development of global production. Firms could seek the most efficient and cheapest partner for their inputs all over the world, with few limits on geographical distance. On the other, geopolitical tensions and shocks like the pandemic have highlighted the fragility of such international production systems. This has led to calls for the reconfiguration of production, bringing it home (reshoring), or at least favouring close or allied countries (nearshoring or friendshoring) and increasing autonomy in strategic sectors.

Looking at long term trends in EU Global value chains, two important messages arise: Europe is still dependent on foreign key knowledge, and it needs to prioritize its trade and investment agreements to leverage complementarities. The full report of TWIN SEEDS project, from which these messages arise, is available here.

EUROPEAN DEPENDENCE ON FOREIGN KEY KNOWLEDGE

(1) Recent trends show some vital EU industries (computers, electronics and pharmaceuticals) **are still highly dependent on international linkages**, especially for R&D. This dependence on strategic foreign knowledge, suggests that R&D policy needs to **prioritize developing autonomous capacity in these sectors,** without cutting them off from global partners.

As the EU seeks to secure its objective of 'open strategic autonomy', strong support for a phased approach is needed. The reality is that the EU is dependent on imported R&D in some key industries. Decoupling them from foreign inputs will be very challenging in the short to medium term. The greatest **dependencies are in computers, electronic and optical products, and pharmaceuticals**, the very sectors where public concerns about such reliance are strongest. These sectors are both very R&D intensive, and highly dependent on foreign knowledge. Seeking to rapidly de-couple them from their global networks **will have negative side effects on competitiveness and industrial performance**. The **balance between autonomy with openness is therefore fundamental** to maintain the positive impacts of existing global linkages and at the same to reduce reliance on overseas knowledge in strategic industries. Thus, although Europe needs to develop its technological autonomy**, there is a need for a fine-grained approach to this objective, accounting for existing interdependencies**.

(2) New research partnerships are needed to diversify dependence, especially on China.

International Research and development (R&D) partnerships are vital to building and maintaining EU capacities in key technologies. In this context, the Union **needs to strengthen research exchanges with a wider range of partners**. The EU has reduced its share of global R&D output in the last decade, while **dependency on China has grown**. This effect varies across member states, with the 'factory economies' of Central, East, and Southeast Europe (CEESE) particularly dependent on Chinese research inputs. At the same time, the EU is less dependent on China than the US and Japan, while global R&D is becoming increasingly diverse. With technological capabilities worldwide more evenly distributed, **the EU should grasp the opportunity to strengthen existing technological collaboration with key partners and build new relationships**. The recent accession of Korea to Horizon Europe is a good example of strengthening such scientific exchange.

(3) **Investments in R&D and digital technologies help firms to integrate into GVCs,** especially in less developed member states

R&D enables companies to move up the chain to high value-added knowledge and innovation-intensive activities. Therefore, **support for R&D and the uptake of new technologies** across the Union is vital to helping **EU companies to successful integrate into GVCs.** In addition, the use of technology fosters exporting, which itself encourages upgrading and improves innovation performance, creating **feedback loops and supporting employment**. **Thus, EU integration into GVCs has many positive effects**. In addition, promoting uptake of new digital technologies like **robots and 3D printing**, indirectly helps companies to expand their global integration. In this context, targeted support for **less developed EU economies,** where investments in software and R&D have particularly positive impacts, is also essential.

PRIORIZATION OF TRADE AND INVESTMENT AGREEMENTS

(4) **Free Trade Agreements (FTAs) and regulatory harmonization support GVC integration, but the EU needs to be selective.**

In terms of the wider geopolitical context, given the substantial political capital needed to negotiate and ratify trade and investment agreements, the EU should **prioritize strengthening economic partnerships which are the most impactful for the economy**. Although the development of deep agreements on trade and investment can foster increased integration, **the impacts of such accords vary quite considerably**. Free trade agreements (FTAs) have only had important impacts on trade flows with a limited number of trading partners, mostly those in the EU neighborhood**.**

The inclusion of regulatory harmonization in FTAs can support increased trade. In recent years **non-tariff measures (NTMs) like standards and regulations have had increasing effects on trade**. They now pose greater challenges to EU companies operating globally than traditional tariffs do. So-called 'deep' FTAs, where the EU seeks to establish common approaches to regulating goods with their trade partners can turn these potential barriers into advantages.

International cooperation and harmonization of standards **should be prioritized in particular in high tech sectors**, where they have particularly strong impacts. Given that these industries are drivers of GVCs and international trade more generally, **the reduction of such barriers should be a clear priority**, including outside of formal FTAs. In this context, **the EU's Trade and Technology Councils with the US and India** provide opportunities to expand cooperation on high tech standards and regulation.

(5) **Investment agreements promote global integration,** but not for all EU regions and partners. **Prioritization and policy support is needed.**

When prioritising future Bilateral Investment Treaties (BITs) – the agreements the EU negotiates with partner countries to protect mutual investments - **country and region level differences should be taken into account.** Such agreements have been particularly effective in promoting the formation and extension of EU firms' global reach **in partner countries that are either very similar or very different** to the EU in development terms. In addition, their effects differ across the Union – they only seem to stimulate investment by EU **MNEs based in the richest or poorest regions**. Policy support may be required to encourage MNEs in mid-level EU regions to grasp the opportunities created by BITs to develop their global presence.

(6) **Novel sustainable trade tools are likely to have unintended consequences.**

Finally, the EU needs to take into account **the unintended side effects of unilateral policy measures** such as trade defense tools and preferential access schemes. We know from past experience that these can have a decisive direct and indirect impacts on trade. As the EU rolls out new policy tools like the Carbon Border Adjustment mechanism (CBAM), the Deforestation Regulation and the Forced Labour Regulation, **their direct and indirect effects on trade partners need to be carefully monitored** to ensure that they secure their policy objectives, while not undermining key partnerships and long standing GVC relationships.

THE TWINSEEDS PROJECT

TWIN SEEDS (Towards a World Integrated and Socio-economically Balanced European Economic Development Scenario) is a research project funded by the Horizon Europe program led by Politecnico di Milano. The objective of the project is to study the recent evolution of Global Value Chains (GVC), focusing on the role played by technological transformations and geopolitical and policy shifts (the 'Twin Seeds'). It is a joint effort of eleven universities and research institutions from eight EU countries. A key objective of the project is to enrich European debates and inform the development of public policies related to GVC reconfiguration which support economic prosperity, social cohesion and environmental quality.

FUTURE POLICY BRIEFS

Future WPs are currently building on this work to explore how GVC reorganisation will affect employment, the environment and economic growth. As these finding emerge the project will develop policy briefs later this year.

PROJECT IDENTITY

PROJECT NAME

Towards a World Integrated and Socio-economically Balanced European Economic Development Scenario (TWIN SEEDS).

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WEBSITE

https://twinseeds.eu/

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