

### What will de-risking mean for the EU?

After decades of rapid expansion in global trade, partly driven by China's integration into the world economy, the latest wave of globalisation has been losing steam. There are many factors behind this slowdown, including the fading of certain comparative advantages, such as the wage cost gap, as new global production centres developed, particularly in Asia.¹ In addition to these macro-trends, in the last decade there has been an increase in geopolitical tensions and in the level of uncertainty relating to trade policies. All this has revived discussions around concepts such as economic security and has led to profound changes in the economic policies of the world's major trading powers.

In 2015, the Chinese authorities presented the «Made in China 2025» plan with the aim of boosting the country's production in strategic sectors. In 2022, two economic stimulus packages were approved in the US, namely the Inflation Reduction Act and the Chips and Science Act, aimed at boosting the country's industry in the green and digital spheres. In the EU, the new «strategic autonomy» has materialised since the pandemic in the launching of large-scale investment programmes, such as Next Generation EU and RePowerEU.<sup>2</sup> This return to industrial policy comes at the same time as barriers to trade and capital flows are increasing, while national security laws, intellectual property laws and mechanisms for controlling investment flows are also under review.

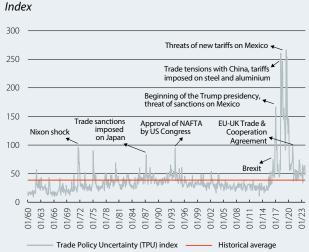
# De-risking, decoupling, fracturing, reshoring, nearshoring, friendshoring... understanding the new era of globalisation

The multiple shocks which we have suffered in recent years have placed the interdependencies between economies under the spotlight. In previous editions of this same report, we have seen just how significant the interdependencies between the European, Asian and American economies are, especially in manufacturing and particularly in sectors such as electronics, machinery, transportation, chemicals and pharmaceuticals.<sup>3</sup> On the one hand, the emergence of China as the «world's factory» in the field of electronics profoundly transformed value chains in the sector, as the country went from being almost irrelevant in the sector's

### 1. See the Focus «¿Quo vadis, globalisation? (part I and II)» in the MR10/2023.

2. In each of these regions, it is estimated that the programmes will amount to hundreds of millions of dollars. See M.J. Zenglein and A. Holzmann (2019), «Evolving Made in China 2025 – China's industrial policy in the quest for global tech leadership», MERICS, Papers on China nº 8, and the Franco-German Council of Economic Experts (2023), «Joint Statement – The Inflation Reduction Act: How should the EU react?». 3. We concluded, for example, that China's «electronic footprint» in the largest advanced and emerging economies was equally as significant as Russia's «energy footprint» is in the EU.

#### Trade policy uncertainty

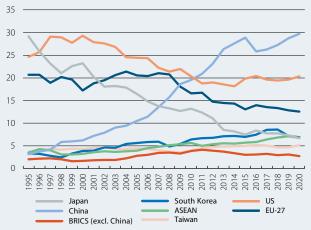


**Notes:** The Trade Policy Uncertainty (TPU) index is built using searches of electronic newspaper archives, and is calculated by counting the monthly frequency of articles discussing trade policy uncertainty (as a percentage of the total number of articles). Latest figure: 1 October 2023.

**Source:** CaixaBank Research, based on data from D. Caldara et al. (2020). «The Economic Effects of Trade Policy Uncertainty», JME, 109,38-59 (downloaded from: https://www.matteoiacoviello.com/tpu.htm, on 17/10/2023).

## Origin of the value added of global demand in the electronics sector

(% of global demand)



**Source:** CaixaBank Research, based on data from the OECD Trade in Value Added (TiVA)

production to utterly dominating its value chains (see second chart). On the other hand, the US was able to strengthen its technological leadership (see the high value added which its industry generates in the third chart), despite a significant portion of production being relocated to Asia, particularly China.

This sector offers a prime example of the crossroads at which the EU currently finds itself in a context of growing trade tensions, as it is dependent on the production capacity of a trading partner such as China, on the one hand, and on the innovation dynamism of the US, on the other.



These «dependencies», however, work in different directions and have multiple dimensions. A partial analysis of global value chains (e.g. without considering the relationships between different sectors) can lead to a distorted view of a region's dependencies. The same is true if factors such as the geographical concentration of production, the scarcity of certain products or the level of substitutability between production factors are not taken into consideration.<sup>4</sup>

In this context, in recent months the EU has proposed a European Economic Security Strategy focused on minimising the risks arising from trade dependencies in a context of accelerating technological change, while also seeking to keep the bloc's economy both open and buoyant. This new approach has resulted in the emergence of new jargon: de-risking has come in part to substitute an earlier discussion, more focused on decoupling or so-called «friendshoring» (the relocation of production to allied countries). In this regard, the European Commission has recently published a recommendation<sup>5</sup> in which, out of 10 critical technologies, it identifies four priority areas where it considers there are more likely to be immediate and sensitive risks: advanced semiconductors, artificial intelligence, quantum technologies and biotechnologies.<sup>6</sup> In addition, the recommendation calls for risk assessments to be based, among other factors, on a thorough analysis of these technologies' value chains, as well as on the identification of «threats and threat actors» and geopolitical factors.

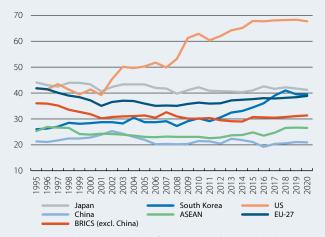
## EU de-risking in the double transition: the search for chips, rare earths, investment and trade agreements

Just as today's interdependencies are the result of decades of global economic integration and have produced numerous benefits for all parties, minimising risks and vulnerabilities in value chains will not be a short-term task and will entail costs. In this new phase of globalisation, perhaps more than ever, the devil will be in the details. If the battle for technological leadership (and the ensuing geopolitical benefits) remains active, we may see a gradual rethinking of global value chains. The case of electronics offers a good illustration of the EU's

4. See, in this regard, ECB (2023), «The EU's Open Strategic Autonomy from a central banking perspective – Challenges to the monetary policy landscape from a changing geopolitical environment», International Relations Committee Work stream on Open Strategic Autonomy, n° 311. 5. See Recommendation on Critical Technology Areas, published by the European Commission on 3 October 2023.

6. The other six technology areas considered critical include: advanced connectivity, navigation and digital technologies; advanced sensing technologies; space and propulsion technologies; energy technologies; robotics and autonomous systems; and advanced materials, manufacturing and recycling technologies. The selection of the technologies where the risk assessment is considered a priority was based on criteria such as the technology's «enabling and transformative» nature or the risk of civil and military fusion.

# Technological intensity of the value chain of each country in the electronics sector Value added/gross production (%)



**Source:** CaixaBank Research, based on data from the OECD Trade in Value Added (TiVA) database.

challenges and priorities in this sphere: in order to minimise the risks associated with external dependencies, the bloc wishes to continue to encourage investment in new technologies through strategies and programmes defined at the EU level, while at the same time avoiding, insofar as possible, a protectionist escalation. On the other hand, the challenges of the energy and digital transition highlight the importance of ensuring continued access to markets and products where bottlenecks could form across various technologies or sectors, such as chips or rare earths. In those cases where the bloc is lagging too far behind the technological frontier or is geographically too far away from the extraction sources, the idea is that economic diplomacy will be the best weapon for de-risking in an environment of growing geopolitical tensions. This can be achieved through the search for multilateral dialogue forums and new trade agreements in order to facilitate the gradual and effective diversification of Europe's value chains.

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