IN-DEPTH ANALYSIS

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European Economic Security: Current practices and further development





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ABSTRACT

The rise in geopolitical tensions in recent years and the weaponisation of trade links have led to an increased focus on economic security. With its Economic Security Strategy, the European Commission has put EU-level initiatives in this area into an overarching framework. In this in-depth analysis, we discuss the challenges posed by economic security and the approaches to it taken by other large economies. We then analyse the European strategy in this framework. While the EU has been slower than other large economies to focus on economic security, it has learned from its peers and there has been a notable evolution of European measures in this area. However, challenges remain, in particular with regard to the coordination of measures that are still largely national competencies. Furthermore, more could be done to align incentives for both companies and countries to avoid moral hazard risks. Finally, more progress has to be done to align the foreign policies of EU countries to give credibility to economic security instruments.

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1 Introduction

The last decade has seen a trade war between the world's two largest economies, a pandemic during which access to critical medical supplies was used as for diplomatic leverage, the politicisation of access to semiconductors – perhaps the most important technology currently in use – and the weaponisation of European energy supplies after the invasion of Ukraine by Russia. All of this and more has led to an increased focus on the question of 'economic security'. The European Commission has reacted to these challenges by developing new policy tools and updating some existing ones. These policies have also been embedded into an 'economic security strategy' aimed at "promoting the EU's economic base and competitiveness; protecting against risks; and partnering with the broadest possible range of countries to address shared concerns and interests" (European Commission, 2023).

Economic security is of course a multiplayer game, meaning that the actions of other countries cannot be ignored. Furthermore, other economies have longer experience of dealing with the types of challenges the EU economic security strategy aims to address: China has for a long time focused on carefully managing the exposure of its economy to outside influences; the US has experience with screening of foreign direct investments and the strategic use of export controls; while Japan is often considered the advanced economy with the most sophisticated economic security strategy. There is therefore a lot to be learned from comparing the EU's strategy with other experiences, which is particularly important because of the plethora of new initiatives that have been introduced or proposed in recent years.

In this paper, we provide an analytical framework to assess the Commission's strategy (European Commission, 2023). This framework is built around a discussion of the definition of economic security, a comparative analysis of the economic security strategies employed by major economies around the world, and an analysis of the underlying challenge of economic security and how policy should be used to address it. The paper presents the main elements of the Commission's economic security strategy, and based on these elements, offers policy recommendations on how to improve the strategy put forward by the European Commission.

2 Definitions of economic security

'Economic security' has become an integral part of not just the EU trade concept of 'open strategic autonomy', but also of the broader economic policy framework. Economic security has been posited as the justification for significant trade policy interventions, industrial policies and a whole host of other initiatives. However, the framework behind this fashionable concept is still somewhat undefined, with this vagueness allowing different players to project their own ideas (Steinberg and Wolff, 2023). Therefore, it is useful to discuss the different angles from which economic security guestions are scrutinised.

Two different aspects should be considered when defining economic security for policy purposes. **The first is the policy aim.** Some policy instruments aim to affect economic outcomes, whereas others represent economic policy measures that try to affect non-economic outcomes.

Examples of the former are trade defence measures that try to prevent economic harm arising from economic coercion, or to protect the economy from broader trade disruptions. From this perspective, economic security strategies and instruments are those that aim to 'secure' economic outcomes against certain types of shocks. This definition would include industrial and trade policies that diversify the supply of key inputs, trade defence measures that aim to deter economic coercion (i.e. the targeting of the economy by adversaries to achieve political outcomes), and policies that mitigate shocks when they occur. It would not include measures and instruments that try to affect non-economic outcomes, such as maintaining a technological edge in dual-use technologies or hardening cyber infrastructure (except possibly to prevent other countries from developing market power).

Alternatively, economic security could be defined as encompassing measures aimed at ensuring (national) security using economic policy tools. Maintaining an edge in critical technologies that have military applications, ensuring that potential adversaries do not have access to cyber infrastructure or control the digital information space, and limiting other countries' access to certain technologies are all outcomes that are not primarily 'economic' in nature. This is also the case for the goal of ensuring access to certain goods for non-economic reasons, e.g. public health. Ensuring the safety of supply of medicines is undoubtedly a very important policy goal, but the reason to pursue it is not primarily to prevent economic harm. Examples of the types of measure that fall under this definition include most forms of FDI screening to prevent technology transfers, and export restrictions on high-tech goods. As McCaffrey and Poitiers (2024) argued, these measures are generally hard to justify on economic grounds alone and would therefore not fall under a strict application of the first definition. The lines are however sometimes blurred, given that some of the 'security' outcomes (e.g. regarding critical infrastructure) have economic implications.

This differentiation between economic security and (national) security is not just an academic exercise. It has political and legal implications. Policies that aim at national security outcomes are easier to justify and might not be subject to the same type of scrutiny and constraints as those that aim at economic outcomes. The types of trade-off and cost-benefit analysis that are appropriate in the economic policy context are less relevant when hard, physical security is concerned. Trading partners might also be more willing to consider economic security measures as not motivated by protectionism if a direct link with defence purposes is established.

The World Trade Organization permits countries to undertake measures that would be otherwise prohibited under its rules if they pertain to 'security'. However, the application of this definition is highly disputed. The United States has interpreted it in a very broad sense, using it to justify Section 232 tariffs on steel and aluminium against military allies, including the European Union (see Dadush, 2023). This interpretation is not shared by other WTO member states, and a WTO panel has rejected this argument (Maruyama and Wolff, 2023). Overall, the use of 'security' arguments in trade debates should not be treated merely as semantic, making the interpretation of economic security important.

The second aspect is **the broadness of the definition.** Economic outcomes are affected by many factors, and domestic shocks and exposures (think of a financial crisis) can cause as much harm as those arising from trade relations. If the aim is to reduce exposure to risk that could inflict significant pain, should policy-makers care where these risks arise? One could therefore take a broad view of economic security and argue that it should encompass all measures aimed at reducing the economy's exposures to shocks, both foreign and domestic. Indeed, there are many overlaps between policies that make an economy more resilient against external trade shocks originating from foreign policy and those that make it more resilient in general. The counter argument is that such a broad definition means that more or less any policy aimed at improving economic resilience could then be considered a part of economic security, diluting some of the analytic value of the term.

Different analyses of economic security policies have applied different definitions to the concept. Noting that this remains an emerging concept, Bown (2024) observed that it builds on the idea of supply chain resilience to incorporate hostile actors, but maintains a narrow focus in terms of both the aims and breadth categories discussed above. McCaffrey and Poitiers (2024) similarly used a narrow definition, treating economic security as securing economic outcomes against targeted hostile foreign interventions and discounting measures pertaining national security.

The European Commission on the other hand applies a hybrid approach in its economic security strategy (European Commission 2023)¹. It includes measures aimed at securing economic outcomes in a narrow sense (i.e. against foreign policy shocks), and also measures in the economic domain that influence national

See https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023JC0020&gid=1687525961309.

security outcomes. The emphasis on economic outcomes is stronger than that on national security objectives. The strategy seems to be derived from the historic evolution of security-related measures, which have been subsequently rationalised as part of a grander strategy (promote, partner and protect; see Section 4 for more details). Other economies have approached economic security in different ways, with generally a stronger emphasis on the intersection between economic and national security than in the EU. As we discuss in the next section, in the US, economic security directly links national security objectives with goals around economic prosperity, whereas in China economic security is tightly linked with ambitions around self-sufficiency.

3 Economic security approaches in third countries

Over the last few years, economic security has become a policy priority for most major economies. Some countries, including the US and Japan, have explicitly extended their national security frameworks to economic security, while others have not necessarily formalised articulated strategies. The governance frameworks for the economic security strategies vary widely across countries, as do the definitions of economic security that delimit the scope of the strategies.

This section documents the economic security strategies and recently developed policies for a selected group of countries against the backdrop of their geo-economic positions and exposures to external dependencies. We detail the US, Chinese and Japanese approaches to economic security, and provide elements on other countries, including South Korea, Australia and Taiwan.

3.1 Geo-economic positioning

We consider several geo-economic indicators to map the dependence of each country with respect to the rest of the world and vice versa, and position them in the economic security landscape. The indicators presented in Table 1 cover three aspects: the overall inward or outward orientation of the economy, its dependence on specific imported products or export markets, and how dominant it is in world trade. The overall outward or inward orientation is measured by market size (GDP), as larger economies rely relatively less on cross-border flows, and trade openness as the sum of exports and imports over total GDP². We also include military spending as an indicator of the importance given to the national security domain³.

Among the large economies, the US is less dependent on trade overall than China, and Japan and the EU. South Korea is a relatively smaller economy that depends greatly on external supply chains and foreign demand. Military spending also differentiates countries in which national security is an important factor (the US and South Korea, and to a lesser extent China⁴) and those where military spending is less relevant to the economy (Japan). Table 1 also shows measures of dependency on both the import side (foreign supply chains) and the export side (foreign demand)⁵. Following Lefebvre and Wibaux (forthcoming), we label a product as dependent on foreign supply based on three criteria: 1) the degree of import concentration, 2) the concentration of world exports, and 3) the substitutability with domestic production⁶. A country is considered dependent on foreign supply for a product when imports are concentrated in a small number

² Data from the World Bank's WDI database.

³ Data from the <u>SIPRI Military Expenditure Database</u>.

⁴ The figures for China are however disputed; see William D. Hartung (2023). <u>Reality Check: Chinese Military Spending in Context</u>. Watson Institute for International and Public Affairs (brown.edu). December 5.

⁵ We focus on 2021 and use trade flows from the <u>CEPII-BACI database</u> (version 202401), which provides trade flows at the Harmonized system 6 digit level, covering more than 5 000 products.

⁶ The methodology is derived from the European Commission (2021) methodology and adapted to cross-country comparisons. It is a first step in identifying vulnerabilities. Section 4 however points out limitations to such an exercise.

of trade partners, when world exports are concentrated in a small number of exporters, limiting diversification opportunities, and when domestic production cannot fully substitute foreign supply. The first criterion is evaluated based on the Herfindahl-Hirschman Index (HHI), which measures the concentration of imports over all trading partners, using 0.4 as threshold for concentrated imports⁷. The second, export concentration, is measured using an HHI of world exports at the product level, using again 0.4 as threshold. We use the ratio of a country's imports over its exports as the basis for the third criteria⁸. The product is considered as not substitutable when the ratio is larger than 1. We consider separately dependencies in strategic sectors, defined as agrifood, chemicals, health, steel, defence and aerospace, transport and electronics⁹. We also identify the top-three destinations for exports as a proxy for the geographical concentration of a country's exports and dependency on foreign demand. Geographically concentrated exports may provide leverage to the importing country and create vulnerabilities.

China stands out with a relatively low number of dependent products: 205 across all sectors, and only 67 in strategic sectors. Considering all products identified as having a dependency, China is mainly dependent on Australia, which represents 45 % of its dependent product imports. The number of dependent products is much larger for South Korea and Japan, although they have different levels of openness. The US is in an intermediate situation, with 494 dependent products and 155 in strategic sectors. Not surprisingly, China is the main provider of dependent products for all countries, representing 44 %, 55 % and 63 % of dependent product imports, respectively, for South Korea, Japan and the US.

The geographical concentration of exports constitutes another form of dependency – on foreign demand. Chinese exports are highly concentrated, with the top-three importers being the destinations for 42 % of Chinese exports. Export markets for the US, Japan and South Korea are even more concentrated. Almost half of their total exports go to only three destinations. All countries depend on demand from the US and the EU, which often represent one sixth of total exports. Chinese demand is also very substantial, in particular for Japan and South Korea, for which it represents 21 % and 25 % of total exports, respectively.

Finally, we focus on dominant export positions, defined as products for which a country represents more than 50% of world exports. This indicator can be thought of as a measure of the indispensability of countries for specific segments of global supply chains. China's position as a world supplier stands out, with a dominant position in over 700 products, including 220 in strategic sectors¹⁰. In contrast, the US is export-dominant in just 68 products (28 in strategic sectors), and Japan and South Korea in only 15 and 4 products in strategic sectors, respectively. With 289 dominant positions (94 in strategic sectors), the EU takes an intermediate position between China and the US.

Overall, Japan and South Korea stand out for being dependent on a relatively high number of strategic products, while not dominating world exports, except in a handful of products. China is a large provider of strategic products and exhibits a lower level of product-level import dependencies than other economies. The US has an intermediate position, with import dependencies comparable to the EU, while being the main provider of fewer strategic products and also being less exposed, because of its low trade openness.

⁷ The HHI is the sum of squared market shares of imports from country i, over all trading partners.

⁸ We use exports as a proxy for domestic production because harmonised domestic production data at the product level is not available.

⁹ We distinguish seven sectors likely related to the strategic ecosystems mentioned by the European Commission using the CEPII-Chelem industry classification. The health industry includes pharmaceuticals and medical equipment, including active components upstream in the production chain as defined in Cotterlaz *et al* (2022). They represent 40 % of total products.

¹⁰ The number of China's product-level dominant positions is not explained by its sole export market share and is atypical by historical standards (Sébastien Jean, Ariell Reshef, Gianluca Santoni, Vincent Vicard (2023). Dominance on World Markets: the China Conundrum. CEPII Policy Brief, N°44, décembre 2023).

Table 1: Geo-economics indicators (2022)

	Market size (GDP, billion USD)		-	Nr of dependent products	3 main origins	3 largest importers	Nr of dominant products	in strat sectors
USA	23 315	19	3.5	494	1) CHN (63 %) 2) EU (10 %) 3) CAN (7 %)	1) EU (17 %) 2) CAN (15 %) 3) MEX (15 %)	68	28
China	17 820	30	1.6	205		1) EU (17 %) 2) USA (16 %) 3) HKG (10 %)	704	220
Japan	5 006	30	1.0	538	, , ,	1) CHN (21 %) 2) USA (17 %) 3) EU (10 %)	26	15
Republic of South Korea	1 818	69	2.8	561		1) CHN (25 %) 2) USA (14 %) 3) EU (10 %)	6	4
European Union	17 316	30	0.0*/1.5**	430		1) USA (18 %) 2) GBR (13 %) 3) CHN (11 %)	289	94

Source: World bank WDI, SIPRI, Lefebvre and Wibaux (forthcoming) based on CEPII-BACI.

Note: *EU level **Weighted average at Member State level.

3.2 The United States

Recent geopolitical events have led to an expansion of the scope of what the US administration considers national security. The current paradigm of 'economic security' entered official documents with the 2017 national security strategy ("economic security is national security") (The White House, 2017)¹¹ of the Trump administration. In the US paradigm, economic security is directly linked to economic prosperity. The 2022 Biden Administration national security strategy lays out "expand[ing] economic prosperity" as one of the main national interests (The White House, 2022)¹². The economic security strategy is carried out by several agencies, including the Department of Homeland Security (DHS), created in 2002 in response to the 9/11 attacks, the Commerce Department, State Department, Treasury Department, and the US Trade Representative.

Jake Sullivan, the United States National Security Advisor defined the Biden Administration approach to economic security in a speech to the Brookings Institution in April 2023. He highlighted four main challenges faced by the United States (The White House, 2023)¹³. First, its industrial base has shrunk. Second, the US needs to adapt "to a new environment defined by geopolitical and security competition, with important economic impacts." The third challenge is the climate and energy crisis. Finally, Sullivan pointed out rising inequality and the damage it inflicts on democracy. The National Security Strategy of 2022 insisted on the need to out-compete some trading partners, arguing that the most strategic challenge is the emergence of the People's Republic of China as a competitor able to reshape the international order.

To tackle these challenges, the strategy outlined a combination of both internal and external policies. The first step is to identify specific sectors that are fundamental for economic growth and are strategic from a

¹¹ National security strategy of the United States of America, December 2017. https://trumpwhitehouse.archives.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf.

¹² https://www.whitehouse.gov/wp-content/uploads/2022/10/Biden-Harris-Administrations-National-Security-Strategy-10.2022.pdf.

 $[\]frac{13}{\text{https://www.whitehouse.gov/briefing-room/speeches-remarks/2023/04/27/remarks-by-national-security-advisor-jake-sullivan-on-renewing-american-economic-leadership-at-the-brookings-institution/.}$

national security perspective, justifying trade defence policies and large public investments. These investments aim at developing key technologies, and improving the resilience of American strategic infrastructure, identified as transportation, climate and energy, and cybersecurity (see Infrastructure Investment and Jobs Act of 2021, American Rescue Plan of 2021, Inflation Reduction Act of 2022). The goal of these investments is also to de-risk global supply chains, in particular for strategic products. To this end, the CHIPS and Science Act authorizes USD 280 billion for investment in civilian R&D, especially in critical sectors such as semiconductors and advanced computing, next-generation communications, clean-energy technologies and biotechnology. These public investments also aim to crowd-in private investment. To complement this strategy, foreign investment is further promoted through the SelectUSA initiative ¹⁴.

The US economic security strategy also relies deeply on cooperation with democracies, favouring economic relationships with allies and trusted trade partners¹⁵. An example is the friendshoring strategy, through which the US intends to secure supply chains of critical products by confining them to like-minded countries. This also takes the form of a network of alliances and partnerships outside of traditional free trade agreements. The Indo-Pacific Economic Framework for Prosperity (IPEF) aims at fostering partnerships in several sectors – trade and the digital economy, supply chains and resilience, clean energy and decarbonisation, and tax and anticorruption - with Australia, Brunei Darussalam, Fiji, India, Indonesia, Japan, the Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, Thailand and Vietnam¹⁶. This new approach, departing from the traditional reciprocal market access concessions bargain, also factors in the reluctances by US public opinion towards further opening the domestic market to foreign products. The agreement reached on most of the dimension, but the one dedicated to trade, have yet to demonstrate their usefulness. Other partnerships include the Indo-Pacific Quad, focusing on cybersecurity cooperation between Australia, India, Japan and the US, and the US-EU Trade and Technology Council, fostering transatlantic coordination on semiconductors and critical mineral supply chains among others. There is a clear geographical focus on the Indo-Pacific region to ensure the autonomy, security and prosperity of countries, in line with the objective of preventing China from reshaping the international order.

On the offensive side, the strategy to address the challenges posed by China combines investment in the domestic economy, reducing its exposure to the Chinese economy by deepening its cooperation with allies, and competing "responsibly with the PRC to defend our interests and build our vision for the future"¹⁷. For example, the US and Japan agreed to work together, "to identify and resolve geographic concentrations of production undermining semiconductor supply chain resilience"¹⁸. The US is also working actively to counter foreign economic coercion, especially from China. In 2023, the Countering China Economic Coercion Act was presented to the Senate, as a complement to the Countering Economic Coercion Act¹⁹. It would create an interagency task force to respond to China's growing economic coercion against governments, businesses, organisations and individuals, including foreign allies.

¹⁴ https://www.trade.gov/selectusa-home

¹⁵ Yellen, Janet (April 13, 2022). "Remarks by Secretary of the Treasury Janet L. Yellen on Way Forward for the Global Economy". U.S. Department of the Treasury. "Favoring the 'friend-shoring' of supply chains to a large number of trusted countries, so we can continue to securely extend market access, will lower the risks to our economy, as well as to our trusted trade partners."

¹⁶ Members failed to agree on the trade pillar on November 2023. Its focus was not on market access, but on labour, trade facilitation, regulatory practices, agriculture and the digital economy, including legally binding commitments (https://www.csis.org/analysis/ipef-three-pillars-succeed-one-falters).

¹⁷ https://www.whitehouse.gov/briefing-room/statements-releases/2022/10/12/fact-sheet-the-biden-harris-administrations-national-security-strategy/.

¹⁸ https://www.reuters.com/technology/japan-us-issue-statement-chip-cooperation-yomiuri-2023-05-25/.

¹⁹ https://www.congress.gov/bill/118th-congress/senate-bill/295?s=1&r=14. H.R.5580 - 117th Congress (2021-2022): Countering China Economic Coercion Act | Congress.gov | Library of Congress.

In the trade and investment area, the US has been using pre-existing policies while updating them to the current context. The Export Control Reform Act of 2018 extends the scope of the Export Administration Regulations (EAR) initiated in 1979. It targets new digital technologies that were not previously subject to export controls. One goal of this update is to maintain US technological leadership, especially with regard to non-allied countries. In October 2022, the US implemented a set of export controls aimed at restraining Chinese military modernisation efforts by controlling the supply of advanced AI chips made with US inputs. Another example is the Foreign Investment Risk Review Modernization Act of 2018 (FIRRMA) which expands the jurisdiction of the Committee on Foreign Investment in the United States (CFIUS) to address growing national security concerns over foreign exploitation of certain investment structures which traditionally have fallen outside of CFIUS jurisdiction.

It is important to note that the reach of these measures was extended through the inclusion of extraterritorial elements²⁰. In its original (1979) form, the EAR included: "(1) a requirement of prior United States consent for reexport of American goods or technology; (2) control of the export of items produced in foreign states incorporating technology previously exported from the United States; and (3) authority to prohibit exports, of whatever origin, by persons subject to the jurisdiction of the United States" (University of Pennsylvania, 1984)²¹. This extraterritorial scope was increased in the 2018 update which included new foreign direct product rules. These rules apply to certain products in the EAR which contain US technology, even when produced outside of the US (Voetelink, 2023)²².

3.3 China

Self-sufficiency has long history in the Chinese Communist Party (CCP), going back to before 1949. Under President Xi, China has again embraced economic security as a core element of national security (Wang, 2022)²³. This has been operationalised through both the expansion of national security domain and the national security apparatus, and a redirection of instruments towards national security aims. In 2013, the powerful Central National Security Commission was established, soon followed by a "comprehensive national security" definition with sixteen essential security areas (Drinhausen and Legarda, 2022)²⁴. Economic security is characterised as the "basis" of national security. Without an official strategy or even a clear overarching approach to the matter, Beijing has iteratively developed what is today quite a comprehensive arsenal of measures. Growth has been slowly deprioritised to the benefit of securitisation and resilience considerations. Economic security language has mushroomed through high-level documents, with an emphasis on reducing dependencies²⁵. High-level documents indicate a renewed priority after 2018, enriched with a self-sufficiency dimension after 2020²⁶.

²⁰ Their scope of application also depends on the definition of US persons to which obligations extend. In particular, multinational firms have no clear definition of their nationality. The global reform of the taxation of multinationals agreed in October 2021 has addressed this issue for taxation: it allocates residual taxing right under Pillar 2 of the reform to the country of location/incorporation of the ultimate parent entity, which can be different from ultimate beneficial owner (the person that ultimately owns or controls a company) or the global decision centre (where strategic decision of the enterprise are made).

²¹ https://scholarship.law.upenn.edu/cgi/viewcontent.cgi?article=4628&context=penn_law_review #:~:text=The%20law%20as%20applied%20contains,8%20and%20(3)%20authority%20to

²² https://www.esu.ulg.ac.be/the-extraterritorial-reachof-us-export-control-law-the-foreign-direct-product-rules/.

²³ Howard Wang, "'Security Is a Prerequisite for Development': Consensus-Building toward a New Top Priority in the Chinese Communist Party," Journal of Contemporary China, August 7, 2022, 1–15, https://doi.org/10.1080/10670564.2022.2108681
²⁴ "Comprehensive National Security" unleashed: How Xi's approach shapes China's policies at home and abroad | Merics

²⁵ The key long term plan states that the party "must strive to develop our own industrial and supply chains that are controllable, secure, and reliable and ensure we have an industrial backup system with at least one substitute for each major product and supply channel" (http://www.qstheory.cn/dukan/qs/2020-10/31/c 1126680390.htm). The Innovation-Driven Development Strategy of 2016 aimed at reducing bottlenecks "constraining economic and social development and national security".

²⁶ The new 'dual circulation' mantra of 2020 aims at boosting the 'domestic cycle' to bolster the resilience of the economy against external shocks. On top of multiple references to "self-reliance in sciences and technology", the five-year plan for 2020-2025

Beyond prioritising economic security, Beijing has expanded its capacity to monitor and guide economic actors. The illiberal nature of the Chinese political system offers more margins for intervention in both the economy and throughout society. The National Security Law of 2015 states that "everyone is responsible for national security". Laws, guidelines and campaigns have since underlined that all of society ought to proactively prevent security threats (Drinhausen and Legarda, 2022)²⁷. The numerous instruments of the party-state to influence society have been refined and upgraded, as the "whole-of-nation approach" has been extended to closing "technology gaps and rid[ding] China of its dependency on foreign actors" (Zenglen and Gunter, 2023)²⁸.

Multiple instruments related to economic security have been updated, especially redirection of the industrial policy toolbox away from development and towards promoting sectors critical from a geostrategic perspective. The revival of Chinese industrial policy since 2006 has had mixed developmental and security objectives by targeting sectors with military and economic spillovers, such as shipbuilding and railway vehicles (Naughton, 2021). The Made in China 2025 plan of 2015 reinforced the geostrategic dimension of previous policies. The sectoral scope targeted areas with security synergies, and foreignsubstitution ambitions became explicit and central to the strategy. State funds with hundreds of billions of dollars of investment capacities have flourished to finance such ambitions, often with a proclaimed dependency-reduction objective (Brown et al., 2023)²⁹. As for the broader shift away from growth and towards security of the party state, the evolution of the objectives of industrial policies is more a rebalancing than a substitution, meaning commercial and developmental objectives are still part of the plans. Traditionally limited to energy, then food, and in 2016 extended to minerals, the Chinese approach to secure critical supply combines support for domestic production, diversification of suppliers, securing suppliers through FDI and national strategic reserves (Wu, 2014)³⁰. Expanding its scope, recent efforts have beefed up this approach³¹. After a few years of liberalisation, a formal screening mechanism was established in 2018 for outward direct investment.

Broader endeavours have been refocused on core economic security objectives: scaling down of the internationalisation of the RMB towards sanction proofing; the Belt and Road Initiative on supply-security; and similarly for outward investment overall (Nedopil, 2023)³². For SOEs, priorities have shifted away from commercial and social goals towards securing key technologies and inputs³³. Public procurement procedures have been modified to favour local value-chains³⁴. Even recent selective opening of the

explicitly calls for achieving "security and controllability in critical 125 areas such as important industries, infrastructure, strategic resources, and major S&T fields, and strive to improve the security development capabilities in food, energy, finance, and other fields" (t0284_14th_Five_Year_Plan_EN (georgetown.edu)).

²⁷ "Comprehensive National Security" unleashed: How Xi's approach shapes China's policies at home and abroad | Merics

²⁸ MERICS Report The party knows best-Aligning economic actors with Chinas strategic goals 2 0.pdf

²⁹ Accelerator state: How China fosters "Little Giant" companies | Merics.

³⁰ Kang Wu, China's energy security: Oil and gas, Energy Policy, Volume 73, 2014, Pages 4-11, ISSN 0301-4215, https://doi.org/10.1016/j.enpol.2014.05.040.

³¹ 权威访谈·"强信心·抓落实"丨激发要素活力,释放发展潜力——访自然资源部部长王广华--时政--人民网 (people.com.cn); Pourquoi la Chine, plus que la guerre en Ukraine, menace la sécurité alimentaire mondiale - Le Blog du CEPII

³² China Belt and Road Initiative (BRI) Investment Report 2023 – Green Finance & Development Center (greenfdc.org).

³³ New central SOEs have been recently established specifically on grain purchase, critical minerals and even logistics. 刘鹤出席 国务院国有企业改革领导小组第四次会议并讲话_财经上下游_澎湃新闻-The Paper: "Promote state-owned enterprises to play a greater role in building a modern industrial system and building a new development pattern" (推动国有企业在建设现代化产业体系、构建新发展格局中发挥更大作用), Zhang Yuzhou, People's Daily, 20th of Sept. 2023, 张玉卓:推动国有企业在建设现代化产业体系、构建新发展格局中发挥更大作用_部门动态_中国政府网 (www.gov.cn).

^{34 &}lt;u>关于操作系统政府采购需求标准向社会公开征求意见的通知 (mof.gov.cn)</u>; <u>公开征求《高端医疗装备应用示范基地管理办法(试行)》意见 (miit.gov.cn)</u>; La strategie de nationalisation des chaines de valeur industrielles, Bulletin d'analyse

domestic markets appears to have had geostrategic underpinnings³⁵. The absence of communication on and by the new party-state techno-industrial governance is another testimony to the increased national security focus of those policies³⁶.

China has also created a flurry of new instruments, mostly to put itself on par with American legal instruments and protect its economy from foreign interference and the weaponisation of dependencies (Drinhausen and Legarda, 2022)³⁷. Beijing has also updated legal frameworks to protect key infrastructures, products and resources, especially around data and cyber with a new dedicated agency. The export control law of 2020 established a comprehensive framework for the country's various export control regimes. The law has also seemingly opened up the possibility of formally controlling products beyond the internationally agreed framework, including in a strategic way where China has a position of strength.

China under Xi has frequently resorted to offensive measures against 'misbehaving' partners, or to economic coercion. Beijing often misuses regulatory instruments, for instance, sanitary rules to block imports in the cases of Australia or Canada.³⁸ Beyond outright economic coercion, China often threatens retaliation against countries that go against its economic interests, even when they do so in line with international rules³⁹. This acts as a deterrent against the potential 'weaponisation' of Chinese dependencies by its trading partners.

3.4 Japan

Japan stands out for its early and comprehensive approach to economic security. Its 2022 National Security Strategy embraced the economic domain as an integral area of national security, adopting a broad definition of economic security. According to this definition, economic security aims "to ensure Japan's national interests, such as peace, security, and economic prosperity, by carrying out economic measures"⁴⁰. The strategy provides a roadmap to achieve four strategic objectives: increasing supply chain resilience and curbing vulnerabilities; protecting critical infrastructure, including internet infrastructure; control over technology transfers; and preventing economic coercion by foreign countries. Taking a whole-of-government approach, Japan has sought to embed economic security into its policy framework by creating a ministerial position to oversee the implementation of the national security strategy⁴¹.

Japan's awareness of economic security issues can be traced to the emergence of China in the region and its willingness to exploit trade dependencies. The Chinese embargo on rare earth exports to Japan in 2010 was a prime example of weaponisation of trade links. Using active industrial policy, Japan later diversified its sources of minerals imports, notably through investments in companies in alternative source countries

économique Chine (décembre 2022), DG Tresor (<u>Bulletin d'analyse économique Chine (décembre 2022)</u> <u>Direction générale du Trésor (economie.gouv.fr)</u>.

³⁵ To promote Chinese-style modernization, we need to deal with a number of major relationships - Qiushi.com (qstheory.cn)).

³⁶ Mystery around China's new science and tech body a sign of secrecy to come, analysts say | South China Morning Post (scmp.com)

³⁷ "Comprehensive National Security" unleashed: How Xi's approach shapes China's policies at home and abroad | Merics

³⁸ China lifts curbs on Canadian canola, demand seen muted | Reuters; Strategic Brief No. 15 - 2021 - China's policy of economic coercion against Australia: what can Europeans learn from it? (irsem.fr)

³⁹ It is well documented that considerations for anti-dumping measures against telecommunication devices in the EU back in the early 2010s were hindered by threats of retaliation against key exports to China from some European countries. More recently, a trade defence investigation has suddenly been opened against French liquors as an obvious retaliation to the EU investigation on China-made electric vehicle that French authorities allegedly lobbied for.

⁴⁰ National Security Strategy of Japan. December (2022). p.30.

⁴¹ The creation of a ministerial position in charge of the national security strategy is complemented by a Council for the Promotion of Economic Security and a network of dedicated council in ministries and government agencies.

(Mary Hui, 2021)⁴². The emergence of new classes of dual-use technology also contributed to the increasing relevance of economic security in Japan (Adler, 2023)⁴³.

The May 2022 Economic Security Promotion Act developed the Japanese economic security toolbox in four broad areas. First, to ensure the stability of key supplies, it lists key products and offers support (grants or loans) to firms submitting plans to secure their supplies or build stockpiles. Key specified products are those "vital for lives, or on which economic activities depend, and of which steady supply is particularly necessary", and for which sourcing depends excessively on specific countries⁴⁴. Second, to ensure the protection of critical infrastructure, the Act set up government screening over vital equipment and computer systems and recommendations to business entities. The third part focuses on enhancing the development of advanced critical technologies through government support, including subsidies for researchers and research institutions developing designated critical technologies; it also created a Public-Private Cooperation Council to share information and guide research. Finally, in terms of protection of technology, it created a mechanism for non-disclosure of selected patent applications for security purposes.

Japan's strategy emphasises industrial policies⁴⁵ and private sector involvement. Instruments addressing supply chains dependencies include subsidies and other support for private firms for reshoring, diversifying supply chains, reinforcing domestic production and developing alternative products⁴⁶. In the semiconductor industry, policy interventions involve combining subsidies to attract foreign firms at the technology frontier (e.g. TSMC) with support for the development of domestic firms' capabilities in specific and core segments of the value chain (Duchatel, 2023). Although Japan has moved quickly in this area, uncoordinated policy interventions risk fuelling a subsidy race with like-minded countries that are implementing similar measures.

The protection of technologies is a significant aspect of the Japanese economic security agenda. In 2019 and 2020, amendments to the Foreign Exchange and Foreign Trade Act reduced the FDI screening threshold (from 10 % to 1 %) and expanded its sectorial coverage. In addition, export control over dual-use goods has been tightened: in March 2023, Japan added 23 new types of semiconductor manufacturing equipment to the scope of export controls, in consultation with the US and the Netherlands. Japan's approach also includes engagement with like-minded countries and the Indo-Pacific region in particular through both (1) dedicated dialogues (e.g. Indo-Pacific Quad with Australia, India and the US, Japan-U.S. Economic Policy Consultative Committee, China-Japan export control dialogue established in 2023), and (2) participation in schemes like IPEF and in regional trade agreements (CPTPP, RCEP).

The Japanese strategy tackles the reduction of vulnerabilities through the lens of dependencies and protection but also by enhancing Japan's "strategic indispensability" on the global stage. The promotion of advanced critical technologies aims at establishing Japanese firms as key suppliers of goods and services, in order to reinforce Japan's centrality and leverage over strategic stages of supply chains. The scope of 20 critical technologies listed in October 2022 remains however broad, and includes both emerging technologies such as Al and machine learning and quantum information science, and more advanced fields (e.g. microprocessor and semiconductor, marine or transportation technologies). It also combines sectors

⁴² Mary Hui (2021). Japan's global rare earths guest holds lessons for the US and Europe. Quartz, April 23, 2021.

⁴³ David Adler (2023). Why Economic Security' Became Magic Words in Japan. Foreign Policy. January 20.

⁴⁴ The list of 11 specifically designated important supplies established in December 2022 includes semiconductors, batteries, rare-earth metals, liquefied natural gas, fertilizers, antimicrobials, machine tools/industrial robots, aircraft parts, ship-related equipment, cloud computing and permanent magnets. https://asia.nikkei.com/Spotlight/Supply-Chain/Japan-seeks-to-release-rare-earths-10-other-critical-items-from-China-s-grip.

⁴⁵ In line with capabilities historically developed at METI.

⁴⁶ Beyond the support measures for securing key products enacted in the Economic Security Promotion Act, the programme to strengthen overseas supply chains initiated in 2020 mobilised USD 2.2 billion to help Japanese multinationals relocate their affiliates outside China in the wake of COVID-19 (87 projects have been deemed eligible, 30 of which involved reshoring to third countries in Asia; Bown, 2024).

of traditional specialisation for Japan and sectors in which it could catch-up with leading countries (Suzuki, 2023).

3.5 Other G20 countries

Most other advanced economies have invested recently in the area of economic security, largely motivated by the perception of the challenges posed by China, but without formal strategies *per se*. The G7 members have been increasingly concerned with inbound investment screening, research security and, more recently, outbound investment screening. Most of those efforts have been reactions to Chinese actions. While the G7 as a group has been engaged formally with economic security only since May 2023, prior efforts against coercive technology transfers, protection of key firms and infrastructure as well as economic resilience go back to at least 2017⁴⁷.

As a result of their high exposures to China and its practice of economic coercion, Australia, South Korea and Taiwan began ramping up economic security measures a few years earlier, before doubling down since 2021. South Korea for instance, which has been subject to Chinese coercion and is highly exposed to foreign demand and supply risks, elevated economic security to a "core tenet" of national security in 2022, while creating an implementation office directly under the head of state⁴⁸.

This said, none of the countries mentioned above have formal, comprehensive economic security strategies. South Korea and Taiwan, both with a particularly complicated geopolitical relation with China, have pursued diversification policies since 2016 to reduce reliance on China (Pacheco, 2023)⁴⁹. Australia and Canada established investment screening in 2015 (more a significant upgrade of national security concerns for the latter), a few years after Chinese outward investment spiked⁵⁰.

More structured views and efforts on securing their economies emerged more recently, starting around 2020⁵¹, triggered by Beijing's uncooperative behaviour during and around the COVID-19 pandemic. In the case of South Korea, more effort was triggered also by an aggressive economic move by Japan, when in July 2019 export controls were reinstated on advanced technologies going to the partner on the other end of the Japan sea⁵².

These smaller economic players tend to pursue more targeted approaches that focus on critical strengths and main exposures. Commodity-rich countries have focused on tightening their supervision of foreign investment from non-like minded partners in their domestic extractive markets. Technological and know-ledge-intensive economies have bolstered monitoring of their critical technologies and research. There are attempts to shield research from foreign interference, while the monitoring of knowledge and technology

⁴⁷ In May 2023, the G7 formally issued for the first time a dedicated statement on economic security. The statement established seven objectives: building resilient supply chains; creating resilient critical infrastructure; addressing non-market policies and practices; tackling economic coercion; countering harmful practices in the digital sphere; collaborating on international standard-setting; preventing leakage of sensitive critical and emerging technologies. G7 Leaders' Statement on Economic Resilience and Economic Security - Consilium (europa.eu). Efforts on FDI screening mechanisms and economic resilience were formally initiated in 2020.

⁴⁸ 게시글 상세 페이지 | 대통령실 뉴스룸 > <u>보도자료 (president.go.kr)</u>

⁴⁹ Pacheco Pardo, R. (2023). South Korea's grand strategy: Making its own destiny. New York: Columbia University Press

⁵⁰ Guidelines on the National Security Review of Investments, available at: <a href="https://ised-isde.canada.ca/site/investment-canada-act/en/i

⁵¹ See Appendix A of H. Channer and G. Edmonstone. What does 'economic security' mean to Australia in 2024? United States Studies Center, January 2024. <u>Economic-Based Threats to National Security (publicsafety.qc.ca)</u>

⁵² <u>High-Tech Competition in the Age of Hyper-Uncertainty: The evolution of South Korea's economic security strategy | Centre for Emerging Technology and Security (turing.ac.uk)</u>

outflows has been tightened up⁵³. Some countries have doubled down on supporting sectors in which they have (or are close to having) state-of-the-art capacities. Taiwan has unrolled a USD 1 billion package to support its domestic top-notch semiconductor players, while South Korea announced USD 450 billion for its domestic chips industry and unrolled a broader plan for critical sectors⁵⁴.

Multiplying partnerships and cooperation to diversify and increase their strategic relevance has been a common feature among these countries, with the US as the key partner but certainly not the only one (Lai 2023)⁵⁵. On top of schemes such as IPEF, they have also engaged in more targeted initiatives. The Chips 4 alliance, for instance, was established in March 2022 by the United States, Japan, South Korea and Taiwan, to better secure the global semiconductor supply chain. South Korea, Japan and Australia have also been proactive members of regional trade agreements, including CPTPP and the RCEP, aiming at diversifying and further consolidating their positions in regional value chains.

4 The European Commission's Economic Security Strategy

From an institutional perspective, it is worth highlighting at the outset the ways in which the EU differs fundamentally from the economies covered in section 3, and the implications institutional differences have for the economic security policies. Notwithstanding the growing momentum around enhanced defence competencies for the EU⁵⁶, the Commission has a central role in economic affairs that it does not have in security or defence policy. As such, it has tended to approach the issue of economic security more from the realm of trade policy than national security. Additionally, the governance level at which economic security policies are implemented adds complexity. Even in areas where legislation was decided on at EU level, economic security policies are often implemented at the national level (e.g. the FDI screening Regulation⁵⁷). Similarly, the Commission or Council have a wider set of tools to protect the single market from interference or shocks (see for instance Anti-coercion Instrument) than they do for the industrial policy domain, in which EU competence is less evident.

The EU must reckon with the fact that it consists of 27 different countries, many of which have different attitudes towards geoeconomics and international affairs, and which have their own national security strategies that include a focus on economic threats (German National Security Strategy, 2023)⁵⁸. The fragmentation of preferences also leads to a more complex decision-making process than in the case of nation states. While this has yet to manifest itself as prominently in economic security as it has in common foreign and security policy in general, this may change if some of the instruments in the EU's economic security toolbox are put to the test (see section 5.4). Taken together, the lack of competences, coupled with heterogeneous preferences, means that a considerable portion of the role for EU policymaking in economic security is around encouraging greater cooperation between Member States.

For reasons broadly shared with many other countries and outlined in the introduction, the EU launched its economic security strategy (European Commission, 2023)⁵⁹ in June 2023, in which a definition for

⁵³ Taiwan government (2022). "Executive Yuan guards core technologies with draft amendments to national security and mainland relations laws". Korean government (2021). "Technology Protection Strategy under Global Competition for Technology Hegemony".

⁵⁴ Overseas Community Affairs Council of the Republic of Taiwan (2023). "Taiwan set to budget TWD 800 million to develop advanced IC processes". Korean ministry of Science and ICT (2022). "Korea to announce national strategy to become a technology hegemon". Press release. Argus Media (2024). "South Korea unveils USD 470 billion semiconductor cluster plan".

⁵⁵ Christian Lai (2023) Finding the trade-security poyus: Taiwan's geonomic states at the process of the pr

⁵⁵ Christina Lai (2023) Finding the trade-security nexus: Taiwan's economic statecraft from 2009 to 2021, The Pacific Review, 36:5, 1067-1093, DOI: <u>10.1080/09512748.2023.2200024</u>

⁵⁶ See for instance https://www.euractiv.com/section/defence-and-security/news/eu-defence-commissioner-proposal-gains-traction/.

⁵⁷ See https://eur-lex.europa.eu/eli/reg/2019/452/oj.

⁵⁸ See for instance the German strategy https://www.nationalesicherheitsstrategie.de/National-Security-Strategy-EN.pdf.

⁵⁹ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023JC0020&gid=1687525961309

economic security is still missing. The strategy brings together multiple policy efforts undertaken during the last five years with most of the policies included in the document already existing prior to its launch.

Table 2: Identified risks and proposed remedies

Risk	Process proposed
Supply chain resilience, including energy security.	Develop EU's strategic dependencies analysis, focusing on dependencies more likely to be weaponised for geopolitical purposes.
Physical-security and cyber-security of critical infrastructure.	To be assessed in line with the Council Recommendation of 8 December 2022 on the resilience of critical infrastructure ⁶⁰ .
Technology security and technology leakage.	List of strategic technologies critical for economic security (already published). The EC adopted a list of 10 dual-use technologies for risk assessment in October 2023.
Weaponisation of economic dependencies or economic coercion.	To be assessed within the context of EU anti-coercion instrument.

Source: Authors based on the European Commission's Economic Security Strategy

The EU's approach is built around four general risks to European economic security – (a) supply chain resilience, (b) critical infrastructure, (c) technology security and (d) economic coercion – and three (broad) sets of actions to mitigate the risks: (1) promoting the single market, (2) protecting the EU from risks, and (3) partnering with third countries. Table 2 highlights the proposals included to further analyse and monitor these risks (more details on the assessment of supply chain vulnerabilities below), while Table 3 lists the range of policies included by the Commission under the various umbrella priority groups.

Some of these instruments are clearly relevant and designed with the purpose of improving economic security. This is the case of the Internal Market Emergency and Resilience Act⁶¹, which should guarantee the correct functioning of EU markets in the event of a crisis by assessing risks and impacts to supply chains and guaranteeing reserves of strategic goods. Similarly, the Anti-Coercion Instrument⁶² would give EU countries an EU tool to protect them from political or economic pressures enforced by third countries. This relevance to economic security is not present however with some other instruments or policies mentioned within the economic strategy, such as the Cohesion Funds or the EU Standardisation Strategy. Both policies have objectives rather different to economic security – the former to "correct imbalances between countries and regions"⁶³, and the latter to "ensure European leadership in global standards"⁶⁴.

⁶⁰ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023H0120%2801%29

⁶¹ Formerly 'Single Market Emergency Instrument', https://www.consilium.europa.eu/en/press/press-releases/2024/02/01/single-market-emergency-instrument-council-and-parliament-strike-a-provisional-deal-on-crisis-preparedness/

⁶² https://policy.trade.ec.europa.eu/enforcement-and-protection/protecting-against-coercion_en

⁶³ https://ec.europa.eu/regional_policy/2021-

 $[\]underline{2027_en\#:} \sim : text = EU\%20 Cohesion\%20 Policy\%20 contributes\%20 to, the\%20 green\%20 and\%20 digital\%20 transition.$

^{64 &}lt;a href="https://single-market-economy.ec.europa.eu/single-market/european-standards/standardisation-policy/standardisation-strategy_en">https://single-market-economy.ec.europa.eu/single-market/european-standards/standardisation-policy/standardisation-strategy_en

Table 3: Policy measures included in the EU Economic Security Strategy

Priorities	Policies	Intended outcome		
Promoting EU's growth and	NextGenerationEU	Investments contributing to long-term growth		
competitiveness	Cohesion Funds	Improve regional convergence		
	EU Industrial Strategy	Support innovation in EU industry		
	Green Deal	Fight climate change: lower economic costs and keep productivity levels		
	RepowerEU	Guarantee EU energy supply		
	Critical Raw Materials Act	Guarantee market functioning and green technologies deployment		
	European Chips Act	Promote market for critical technological area		
	Net-Zero Industry Act	Support innovation and greening EU industry		
	Internal Market Emergency and Resilience Act	Guarantee single market functioning even under exceptional circumstances		
	Capital Market Union	Improve EU financial market		
	Strategic Technologies for Europe Platform (STEP)	Guarantee EU critical supply chain		
Protecting the economy	Trade Defence Instruments	Protect EU imports and exports		
	Foreign Subsidies Regulation	Defend MS against foreign dumping		
	EU Anti-coercion Instrument	Defend MS against third parties coercions		
	Foreign Direct Investment (FDI) Screening regulation	I Protect critical intrastructure and technology leakage		
	Horizon Europe	R&D investment in related areas		
	Toolkit on Tackling Foreign R&I Interference	Protect critical technology leakage		
	EU standardisation strategy	Set international standards		
	Cyber Resilience Act	Protect cyber critical infrastructure		
	EU Hybrid and Cyber Diplomacy Toolboxes	Protect cyber critical infrastructure		
	Directive on the Resilience of Critical Entities	Protect critical infrastructure		
	Revised Directive on the security of network and information system (NIS2 Directive)	Protect cyber critical infrastructure		
	5G Toolbox	Protect critical technology leakage		
	Cyber Resilience Act	Protect cyber critical infrastructure		

	Cyber Solidarity Act	Protect cyber critical infrastructure		
	EU's Regulation on dualuse export controls	Protect critical technology leakage		
Partnering	Trade and Technology Councils (TTC)	International cooperation on critical technology areas		
	Foster bilateral and plurilateral cooperation	International cooperation on critical technology areas		
	Free Trade Agreements	Guarantee MS to international markets in fair conditions		
	Partnerships with developing countries	Set long-term relationships and open new markets		
	Global Gateway	Address global issues through financial assistance for development projects		
	Partnership for Global Infrastructure investments	International cooperation on critical infrastructure		
	Critical Raw Materials Club	International cooperation on critical materials		
	Reform World Trade Organization	Guarantee MS to international markets in fair conditions		

Source: Authors based on the European Commission's Economic Security Strategy.

Note: Some policies are already in place, while others are proposals.

Two main steps have been taken since the June 2023 Communication (European Commission, 2023). First, in October 2023, the Commission followed up with a Recommendation on critical technology areas for the EU's economic security (European Commission, 2023)⁶⁵. Ten technology areas in total were identified as critical and should be assessed by Member States and the Commission.

Second, in January 2024, the Commission issued a second Communication⁶⁶ on economic security, to build on the one from June 2023. In it, it proposed five new initiatives, as detailed in Table 4. In relation to the two broad areas covered by the proposed initiatives, scope for action exists at EU level in terms of investment and trade, in line with the competencies and subsidiarity principle the EU holds. However, there is little scope at EU level for the research and innovation component, as it is mostly linked to the action of Member States in collaboration with the private sector and research institutions.

Table 4: Initiatives proposed in the January 2024 Economic Security Communication

Area	Initiative		
	Proposal for a new regulation on the screening of foreign investments		
Investment and trade	White Paper on Export Controls		
	White Paper on Outbound Investment		
	Proposal for a Council Recommendation on Research Security		
Research and innovation	White Paper for enhancing support for research and		
	development involving technologies with dual-use potential		

Source: Authors based on the European Commission's Economic Security Strategy.

⁶⁵ https://defence-industry-space.ec.europa.eu/commission-recommendation-03-october-2023-critical-technology-areas-eus-economic-security-further en

⁶⁶ https://commission.europa.eu/system/files/2024-01/Communication%20on%20European%20economic%20security.pdf,

Beyond the new initiatives proposed, the Commission also provided updates on progress across the three sets of actions (protect, promote and partner) identified in the June 2023 strategy.

Protect

The Commission and Member States are currently conducting the risk assessments on four of the 10 critical technologies ⁶⁷ ⁶⁸ identified in the October 2023 Recommendation, with a plan to report them by February 2024. To our knowledge, these risk assessments have not been published yet by the end of March 2024. Different instruments and legislative packages supporting these assessments already exist, including an Observatory of Critical Technologies and the Supply Chain Alert Notification (SCAN) analysis focusing on monitoring critical technologies and supply chains respectively. Similarly the NIS 2 Directive (Directive (EU) 2022/2555) and the Critical Entities Resilience Directive (Directive (EU) 2022/2557) ⁶⁹ may contribute to this risk assessment exercise. In terms of research security, EU-funded programmes are covered by security measures as well which can adjust their regulations, for example the Horizon Europe and Euratom Regulations.

Promote

Various regulations, either being introduced or already implemented, are taken into account in the strategy. The Internal Market Emergency and Resilience Act, the Artificial Intelligence Act, Net-Zero Industry Act (NZIA), the Critical Raw Materials Act (CRM Act) and the EU's electricity market reform are some of the examples offered by the Commission as measures taken to bolster economic security. Interestingly, many of these legal instruments can be reasonably interpreted as part of the 'protection' component when they include elements more related to supply-chain resilience or other economic risks (think for example of the domestic production targets in the NZIA).

Partnering component

Finally, on the partnering side, the Commission notes that different free trade agreements were signed in 2023 (New Zealand, Chile and Kenya⁷⁰, and negotiations were finalised with Japan on the data flow cross-border agreement⁷¹. The latter was signed by the Council in January 2024. The Commission also highlights work with the US and India in the respective Trade and Technology Councils, and cooperation as part of Raw Materials Partnerships and other such cooperation forms. The G7 has taken up the issue of economic coercion and is highlighted as an important forum for cooperation on matters of economic security.

As per bilateral and multilateral cooperation, the Commission remarks on its commitment to different actions, for instance reform of the World Customs Organisation and developing partnerships on access to raw materials and supply chain resilience.

⁶⁷ Advanced semiconductors, artificial intelligence, quantum technologies and biotechnologies.

⁶⁸ Advanced connectivity navigation and digital technologies, advanced sensing technologies, space and propulsion technologies, energy technologies, robotics and autonomous systems, advanced materials, manufacturing and recycling technologies

⁶⁹ https://ec.europa.eu/commission/presscorner/detail/en/ip 23 3992

⁷⁰ https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/negotiations-and-agreements_en

 $[\]frac{71}{\text{https://www.consilium.europa.eu/en/press/press-releases/2024/01/31/eu-japan-economic-partnership-agreement-eu-and-japan-sign-protocol-to-include-cross-border-data-flows/#:~:text=14%3A38-$

[,]EU%2DJapan%20economic%20partnership%20agreement%3A%20EU%20and%20Japan%20sign%20protocol,Japan%20for%20an%20Economic%20Partnership.

4.1 European Commission risk assessment conducted on supply chains

The Commission applies a quantitative, bottom-up, approach to identify strategic trade dependencies in supply chains (European Commission, 2021)⁷². It combines three criterion measuring, at the product level⁷³: (i) the concentration of extra-EU imports, (ii) their importance in demand, and (iii) their substitutability by EU production. Applying pre-defined thresholds (see Table 5), the methodology considers as dependent products those pertaining to "sensitive ecosystems"⁷⁴.

For 2018, 137 products were identified, representing 6 % of the value of extra-EU goods imports. More than half of dependent products in value are imported from China, with Vietnam and Brazil ranking second and third. Strategic dependencies are especially relevant in the energy intensive ecosystem (99 products in raw/processed materials and chemicals), the health ecosystem (14 products including active pharmaceutical ingredients), and renewables, digital and electronics ecosystems.

Table 5: Classification criteria for dependent products

	European Commission (2021)	Bonneau and Nakaa (2020)	Jaravel and Méjean (2021)	Baur and Flach (2022)
Criteria 1	Concentration of imports: HHI>0.4	Source of imports: Extra-EU imports>50 %	Source of imports: a majority of extra- EU imports	Relevance of the goods for domestic production: 3 most used intermediate goods in the 5 most important sectors of the economy
Criteria 2	Importance in demand: ratio extra-EU imports / total EU imports>0.5	Concentration of imports: HHI>0.5	Concentration of imports: HHI>0.5	Concentration of imports: HHI>0.33
Criteria 3	Substitutability by EU production: ratio extra-EU imports / total EU exports>1	Diversification potential: centrality risk>2.5 (Korniyeko <i>et al</i> , 2017)	Granularity of demand: one French firm represents at least 90 % of imports	Substitutability by domestic production: ratio imports/exports>1
Additional criterium	Restricted to sensitive ecosystems (not defined) Diversification potential 1: HHI of exports>0.4 Diversification potential 2: price difference between extra-EU imports and total EU exports>30 %			

Source: Vicard and Wibaux (2023). EU Strategic Dependencies: A Long View. CEPII Policy Brief, N°41, June 2023.

The Commission methodology draws on other similar exercises (see Table 5). Several consider an indicator of supply concentration, capturing the potential for diversification in case of supply disruption. The Commission methodology focuses on the import side; it considers export concentration only as an additional criterion for vulnerability.

⁷² Table 1 applies a variant of this methodology to measure dependent products for a sample of countries other than the EU.

⁷³ Products are defined at the harmonized system 6-digit level, including more than 5 000 different products.

⁷⁴ Sensitive ecosystems include aerospace and defence, electronics, energy-intensive industries, renewable energy, health, and digital industries. Their delineation is however not published.

An in-depth review complements the bottom-up approach, focusing on four areas of strategic importance: raw and processed materials (including rare earths, magnesium and chemicals), cloud and edge services, photovoltaic panels, and cybersecurity (European Commission, 2022). The Commission also publishes a list of critical raw materials (CRMs) based on their economic importance and supply risk. The 2023 revision of the list includes 34 CRMs⁷⁵, several of which are identified as strategically dependent in the European Commission (2021) exercise.

Identifying trade dependencies and risk assessing supply chains comes with different challenges. First, the level of disaggregation of trade data matters. Product-level data, even at the 6-digit level of the harmonised system nomenclature, may not be disaggregated enough, thus hiding dependencies on more refined and detailed products. Second, focusing on a single year of data hides the significant churning of dependent products: 22 % of dependent products in 2018 were not tagged as dependent just one year later in 2019 (Vicard and Wibaux, 2023). Such volatility questions the strategy's forward-looking dimension and points to accounting for the dynamics of dependencies. Finally, the current methodology is a useful quantitative exercise but is based on a criterion specific to the EU, using intra-EU trade flows that are not available for other countries. Studying cross-country dependencies calls for the definition of consistent criteria across countries. Such a methodology would allow for international comparisons and for identifying areas of partnerships.

5 Analysis

Previous sections detailed the range of measures introduced by different countries and the EU under the umbrella of economic security, to build a detailed overview of the global state of play. In this section, we turn to the more restrictive definition of economic security, as discussed in section 2, to analyse how an EU economic security strategy should work, and to discuss where there might be deficiencies in the European Commission's approach. In other words, we focus on how policies should be designed and implemented to insulate the EU economy from shocks arising in other regions, deliberate (e.g. coercion) or not (e.g. climate disasters). As such, we omit consideration of economic policies with national or public security aims, such as protecting critical infrastructure or controlling the export of dual-use goods⁷⁶.

As simple as it sounds, the first step, and *sine que non*, of achieving economic security is to generally improve the economic performance of the EU. The strength of the European economy is for instance likely correlated with the dissuasive power of the anti-coercion instrument, as other countries would be less likely to fear retaliation from a weaker EU. Using the language of section 3, the more indispensable the EU is in the global economy, the more secure it is against economic coercion. Similarly, targeted industrial policy to support certain industries would be more likely to succeed if the general business environment is strong. Therefore, measures aimed purely at fostering economic security should not distract from the importance of generally improving the EU economy (see Kleimann *et al*, 2023 for a discussion various measures the EU could take in this regard). Some of the measures included in Table 3 which aim to foster EU economic growth more generally, such as NGEU or Cohesion Funds, are relevant for this purpose.

However, notwithstanding the above, we focus here on the policies that can and should be introduced with the express purpose of strengthening economic security (though they may have impacts in other areas). In our view, a comprehensive strategy can be built around a number of key building blocks:

- 1. Developing an understanding of the risks and dynamics;
- 2. Fostering diversification of both exports and imports;

⁷⁵ Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020. Annex II.

⁷⁶ Beyond concerns regarding the scope of economic security, we also feel we are not best placed to comment on these national security policies.

- 3. Targeted intervention in narrow sectors, namely:
 - a. Bespoke industrial policy where we want to develop industries,
 - b. Enhanced technological security and leakage prevention in some sectors, and
 - c. Stockpiling and joint procurement for certain critical products;
- 4. Ex-post measures to disincentivise coercion and minimise harm.

5.1 Building an understanding of the threats to economic security

Despite the welcome efforts documented in section 4, there is broad consensus that policymakers have insufficient knowledge for understanding and responding to economic security threats, and that a deeper understanding of the risks is needed (Bown, 2024)⁷⁷. Data that would allow for a comprehensive understanding of exposures is often lacking (e.g. intra-EU firm level trade data) or incomplete (e.g. Eurostat production data⁷⁸ or data on multinational corporations' geographic distributions of revenue, assets and profits). Even when data is available, indicators that seem similar often highlight different elements of interdependencies and can therefore lead to different conclusions on exposure to shocks (Baldwin *et al*, 2022).

Beyond policymakers, firms themselves are often unaware of their overall exposures, which is to an extent simply a reflection of the enormously complex nature of global value chains (Baldwin *et al*, 2023). For instance, estimates put Airbus's direct suppliers at over 1,600, but with these firms' suppliers numbering over 12 000, showing that indirect exposure can be an order of magnitude larger than direct exposure (Lund *et al*, 2020). Analysis suggests that, while most Belgian firms do not import themselves, they indirectly rely on foreign imports as inputs (i.e. inputs they get from other Belgian firms who themselves imported the products), meaning that their appreciation for their exposure to trade risks may be underappreciated (Dhyne *et al*, 2020). Focusing particularly on categories in which dependencies have been identified, Mejean and Rousseaux (2024, p.11) exploited intra-EU French export data to demonstrate *"important spillovers"* from French firms' dependencies to other EU firms, noting that almost 450 000⁷⁹ EU firms are exposed indirectly to strategic dependencies arising from their trade with French firms.

Recent trade shocks, such as the COVID-19 pandemic and the US-China trade war, appear to have made firms more aware of the importance of supply chain risks (EBRD, 2022). Some survey data points to welcome improvements from firms around supply chain awareness and assessments of risks (Alicke *et al*, 2023). In addition, some recently introduced legislation (e.g. the 2023 EU Deforestation Regulation⁸⁰) and proposed rules (e.g. Corporate Sustainability Due Diligence Directive⁸¹) will result in greater supply chain awareness across firms, at least in those participating in the affected sectors. However, while increased awareness on the part of firms is a positive development, policymakers need to enhance their own understanding of this complex area, and better data is critical in the formulation of a response to economic security risks.

Since 2021, the European Commission has been conducting strategic dependency analyses to identify risks. I commitment in the Economic Security Strategy to deepen these analyses and focus on areas in

⁷⁷ Indeed, President von der Leyen acknowledged as such in a March 2023 speech on EU-China relations when she said "the starting point for [economic de-risking] is having a clear-eyed picture on what the risks are", see: https://ec.europa.eu/commission/presscorner/detail/en/speech 23 2063

⁷⁸ As Mejean and Rousseaux (2024) illustrated, large shares of missing data and zeroes (20 % and 49 % respectively for the EU27 in 2019) make it difficult to establish whether production capacities are non-existent, or the data is simply of poor quality.

⁷⁹ The exact numbers vary with the specifications of dependency used; see Mejean and Rousseaux (2024) for a thorough discussion.

⁸⁰ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023R1115&gid=1687867231461

⁸¹ See https://www.euractiv.com/section/economy-jobs/news/eu-parliament-and-member-states-reach-deal-on-corporate-due-diligence-law/

which geopolitical weaponisation is more likely is welcome. Similarly, the strategic mapping, monitoring and Member State reporting regarding the semiconductor value chain detailed in the third pillar of the European Chips Act⁸² should help to guard against risks in that important industry. The EU Internal Market Emergency and Resilience Act (see section 4 for further information) places additional responsibilities on firms to disclose information to the Commission on their suppliers, stocks and productive capacities in the case of certain disruptions.

While industry concerns⁸³ about the regulatory and administrative burdens of any additional information sharing should be taken on board, there is a clear public interest in developing a more thorough understanding of the risks facing the EU economy, at least in key industries in which supply chain disruptions may lead to significant macroeconomic shocks. One way to balance these concerns may be to make additional policymaking support conditional on information sharing (see section 5.4).

There are also however steps that could be taken to boost understanding that would not entail additional regulatory burdens on firms. The aforementioned issues with EU production data should be addressed, and better usage should be made of existing data on intra-EU firm-to-firm trade exposures⁸⁴ – both of which would allow for a much more thorough analysis of the real exposure of EU countries to external shocks (Mejean and Rousseaux, 2024)⁸⁵. Greater centralisation under one umbrella of the various existing relevant Commission analytical competencies (e.g. of supply chain dependencies in DG GROW and market access in DG TRADE) would allow for more comprehensive and streamlined analysis of risks, as argued by Hackenbroich *et al* (2022). Even measures to ease burdens on firms, such as the EU Customs Data Hub proposed in 2023, could help by providing EU policymakers with real-time information on trade flows and disruptions⁸⁶.

The need for enhanced data gathering and analysis has been reinforced by the shifts seen in global trade in recent years. Geopolitical developments, such as the US-China trade war or the Russian invasion of Ukraine, have led to significant changes in trade dynamics that are arguably not yet sufficiently understood, and are therefore underappreciated. For instance, some research suggests that the EU has inadvertently become more interdependent with China as an unintended consequence of the US-China trade war (Bown, 2024). Further research, both in academia but also in the respective analysis divisions of the Commission, could help to inform policymakers of the relevant shifting 'big picture' trade dynamics that may not appear in more targeted, firm or sector-specific analysis.

5.2 Fostering diversification of both exports and imports

Building awareness of risks is a necessary component of any economic security strategy, but it is not enough. For instance, less than half of the firms in the latest EIB Investment Survey had changed, or intended to change, their sourcing strategy, even though almost all (95 %) had experienced disruption to trade, suggesting they were at least somewhat aware of the risks in question. Survey data suggests that EU firms would find it very difficult to substitute key inputs from countries deemed to be a risk (Attinasi *et al*,

⁸² See https://digital-strategy.ec.europa.eu/en/factpages/european-chips-act-monitoring-and-crisis-response

⁸³ Which are already collected for VAT compensation-purposes, see Mejean and Rousseaux (2024).

⁸⁴ Bown (2024) made the interesting point that, despite widespread concerns about exposure to critical raw materials, this is one of the few sectors in which global production data is actually available, meaning that we are significantly more informed of risks here than in other areas.

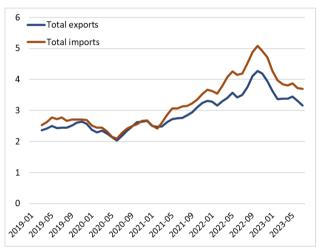
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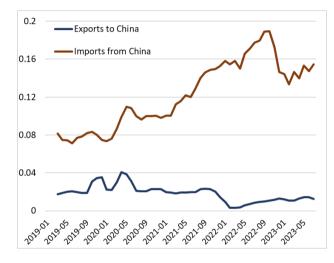
⁸⁶ In fact the proposals states that "the resilience of supply chains in crisis scenarios... would be strengthened significantly by providing for immediate, specific and uniform targeting of risky flows while minimising the scope and scale of disruption"; see https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52023PC0258.

2023). Economic incentives must align, and alternative markets must exist, for firms to diversify and for exposures to be reduced.

By reducing dependencies on certain economies, diversification limits the impact on the EU any shocks to that trading relationship will have. Regarding the threat of economic coercion in particular, diversification reduces the monopolistic power that is essential for this to be effective. While firms will have the biggest role to play in diversifying⁸⁷, policy can play a role in fostering the right environment for them to do so. Where private and public risks and benefits from the exposure are misaligned (i.e. where the benefits of diversification for the economy/society outweigh those for the firm, possibly in the case of vaccines for instance), there is a particularly strong argument for policies to promote diversification (for a discussion on the occasional mismatch between public and private costs and benefits arising from globalisation, see EBRD, 2022, and Baldwin *et al*, 2023).

Figure 1: Lithuanian exports and imports to the world (left) and to China (right), 3-month average in EUR billions





Source: McCaffrey and Poitiers (2024).

While import dependencies tend to dominate the economic security conversation, export dependencies should not be overlooked, in particular in relation to the risk arising from economic coercion⁸⁸. Data on incidents of Chinese economic coercion since 2012 indicates that exports to China are more likely to be targeted than imports from China, for example (Adachi *et al*, 2022)⁸⁹. This conclusion is supported by the recent experiences of Chinese economic coercion in Australia and Lithuania⁹⁰, in which their exports to the Chinese market were more likely to be targeted than their imports (Figure 1 shows that Lithuanian imports from China continued to rise over the period in question, while exports fell; for a more comprehensive discussion, see McCaffrey and Poitiers, 2024). As such, ensuring that no country is overly represented in the export shares documented in Table 1 in section 3 is important.

⁸⁷ And survey data suggests large EU firms are expecting to diversify their operations to a greater extent in the next five years and have already begun diversifying inputs (Attinasi *et al*, 2023).

⁸⁸ Given that import restrictions, particularly of inputs, can have knock-on effects on EU exports, this focus is perhaps understandable.

⁸⁹ Economic coercion is of course not limited to China, but given its documented use of these measures, we use it to illustrate the patterns in this area.

⁹⁰ China introduced a range of restrictive trade measures against Australia in mid-2020 following then-Australian Prime Minister Scott Morrison's calls for an investigation into the origins of COVID-19. China introduced measures against Lithuania in 2021 following the decision by Lithuanian authorities to allow a Taiwanese representation office to be opened in Vilnius. While the measures were opaque, most restrictions in both cases have since been lifted. For a more comprehensive analysis, see McCaffrey and Poitiers (2024).

Broad, economy-wide diversification strategies should be pursued, as opposed to targeting the areas in which current dependencies have been identified in exports or imports. This is for the simple reason that we do not know where dependencies will lie in the future. As highlighted in section 4, previous research has found that significant churn in the categories in which the EU is overly dependent in its imports, i.e. the goods in which the EU is found to be overly dependent on a single supplier, are not constant (Vicard and Wibaux, 2023). The pace of innovation in important sectors, such as the green economy, also means that the imported products critical to the EU economy will likely change over time. Taking electric vehicle batteries, for example, progress around sodium-ion batteries⁹¹ could ultimately reduce the need to import lithium, for which global demand is currently very high⁹². Overall, in the absence of broader diversification, policymakers will be continuously scrambling to secure supply chains in newly identified dependent and key sectors.

Given their ability to open new markets to both exporters and importers, the best policies for increasing diversification are the ratification of more free or preferential trade agreements (FTAs/PTAs). The EU already has the largest network of bilateral trade and regional FTAs in the world⁹³, with the vast majority of EU exports being covered by reciprocal PTAs (including intra-EU trade; see Dadush and Dominguez Prost, 2023). New agreements should of course be pursued, but it would be unwise to rely exclusively on their promise for a number of reasons. First, some recent experiences have suggested that it is becoming increasingly difficult for the EU to agree and ratify these deals, because of pressure from domestic groups ranging from environmentalists to farmers⁹⁴ 95. Second, there may in fact be little 'low hanging fruit' from FTAs in the form of tariff reductions in areas in which the EU has problematic trade dependencies, given that there exists no European industry to justify protective measures (McCaffrey and Poitiers, 2024). In other words, deals to remove tariffs will not help to diversify EU imports if there are no tariffs in the first place, as is the case for many critical raw materials (Le Mouel and Poitiers, 2023). Notwithstanding this, reaching new agreements, or indeed modernising existing ones to reflect changing circumstances, as was the case with Chile in 2023 96, are important for diversification and reducing economic security risks.

Trade agreements could be complemented and diversification increased through the EU's external financial instruments. Rather than representing a form of 'mission creep' into development policy, this interlinkage with trade is explicitly referenced in existing EU development policy. For instance, Article 5 of the Neighbourhood, Development and International Cooperation Instrument Regulation⁹⁷ specifically notes that the EU should "seek to promote increased synergies and complementarities" between sustainable development and trade policy. Similarly, the Communication⁹⁸ on the Global Gateway expressly states that among the goals of this instrument is to strengthen the resilience of EU supply chains and increase trade opportunities. Announcements by the Commission, on for instance deals reached with Rwanda to expand vaccine manufacturing⁹⁹ and to develop raw material value chains¹⁰⁰, suggest that this avenue is being

<u>response.anonymous&gad_source=1&gclid=CjwKCAiA29auBhBxEiwAnKcSqkpa_pn5UJ6iDAXEwNtlltDqMFmEtltBnJbcLu5fElxNR_c6t_Gp6rhoCJS4QAvD_BwE&gclsrc=aw.ds_</u>

⁹¹ See for example: https://www.economist.com/leaders/2023/10/26/sodium-batteries-offer-an-alternative-to-tricky-lithium?utm_medium=cpc.adword.pd&utm_source=google&ppccampaignID=18151738051&ppcadID=&utm_campaign=a.22br_and_pmax&utm_content=conversion.direct-

⁹² See for example https://www.cnbc.com/2023/08/29/a-worldwide-lithium-shortage-could-come-as-soon-as-2025.html

⁹³ See Mavroidis and Sapir (2024) for an in-depth analysis on EU trade and its agenda for the coming years.

⁹⁴ For the case of difficulties around the EU-MERCOSUR FTA, see https://www.euractiv.com/section/agriculture-food/news/france-reaffirms-opposition-to-eu-mercosur-deal-as-farmers-protests-mount/

⁹⁵ Mavroidis and Sapir (2024) highlighted and discussed an interesting trend in which it appears the EU struggles in particular to reach trade agreements with countries from the Global South.

⁹⁶ See https://ec.europa.eu/commission/presscorner/detail/en/ip_23_6542

⁹⁷ https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A32021R0947

⁹⁸ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021JC0030

⁹⁹ See https://ec.europa.eu/commission/presscorner/detail/en/AC 24 123

¹⁰⁰ See https://ec.europa.eu/commission/presscorner/detail/en/IP 24 822

utilised for economic security purposes, and this should be accelerated into further sectors and regions as appropriate.

Export credit agencies – state-owned or supported bodies that provide a range of financial instruments, including insurance, guarantees or loans, below market rates to exporters – should also be part of the diversification strategy. They are in operation across most Member States, and provide significant sums to support European firms (e.g. approximately EUR 90 billion in 2021, according to Schlögl *Et al*, 2023). When targeted appropriately, these agencies can support investments that can also serve to improve the diversification of imports in areas such as critical raw materials to the EU. Ongoing work exploring the feasibility of an EU export credit agency to complement those in Member States should be accelerated, and national agencies should be encouraged to work in synchronisation towards supporting economic security.

Finally, there is scope to improve the effectiveness of EU policies in terms of supporting the internationalisation and diversification of firms, especially SMEs (for a list of these policies, see European Court of Auditors, 2022). Overall, the various policies have been found to be insufficiently coherent and lacking in coordination (European Court of Auditors, 2022). While the Enterprise Europe Network assists SMEs in areas such as 'internationalisation' and 'resilience', recent survey data suggests that less than 10 % of SMEs are aware of its existence (Eurobarometer, 2023).

5.3 Targeted intervention in narrow sectors

Much of the discussion around economic security has focused on policy responses designed to bolster or protect European production (see the Net Zero Industry Act, European Chips Act). Similarly interventionist policies at least somewhat motivated by the apparent same economic security concerns have been pursued globally (see section 3). In some sectors, where international substitutability is low and economic costs are high, targeted interventions to secure supply may indeed be justified. Additionally, technological complexity, which can lead to monopolistic power, may justify policies to prevent technology leakage in some rare instances. However, the high costs and risks associated with these measures must be acknowledged front and centre in policymaking.

An increased use of trade distortive interventionist measures to foster domestic production or relocate supply chains (e.g. 'near-shoring' or 'friend-shoring') runs the risk of increasing geoeconomic fragmentation, which would reduce the gains from trade and lower global GDP (see for instance Bolhuis *et al*, 2023; Javorcik *et al*, 2022). These costs would be especially high for the EU, with small, open economies such as Malta and Ireland particularly affected (Baur *et al*, 2023)¹⁰¹. Beyond macroeconomic shocks, these policies can also adversely affect a range of outcomes. Limiting imports of green technology to foster European production would increase costs and likely slow decarbonisation for instance, while increasing the use of state aid in the EU may result in single market fragmentation (Tagliapietra *et al*, 2023). In addition, reducing trade interdependencies in the name of economic security could plausibly have the opposite effect, as doing so could increase exposure to domestic or regional shocks to supply or demand (Baur *et al*, 2023).

Similarly, the use of technology security measures (such as outbound investment screening ¹⁰² or export controls) to prevent leakages of sensitive knowledge are not cost-free, with retaliation by the affected party a clear and obvious risk. For instance, in 2023 China introduced export controls on certain critical raw

¹⁰¹ Different scenarios lead to different economies being particularly affected; see Baur *et al* (2023) for a comprehensive discussion.

¹⁰² Outbound investment screening would allow technology transfers via investments by EU companies in facilities in third countries to be prevented. It would be somewhat analogous to inbound investment screening; however the use cases and its interaction with conventional export controls are somewhat unclear.

materials in response to restrictions on the export of advanced semiconductor manufacturing machinery introduced by the Netherlands¹⁰³. Some have also floated the possibility that targeted export controls could be used to divide EU Member States, which is a key factor in the success of any economic coercion (Bown, 2024). There are also concerns about the effectiveness and unintended consequences of these measures. Recent export restrictions failed to prevent Huawei and SMIC from making significant breakthroughs on semiconductor manufacturing¹⁰⁴. Some analysis points to the export restrictions imposed by the US on soybeans in the 1970s as a significant factor in the subsequent growth of the competing Brazilian industry (Schnepf *et al*, 2001)¹⁰⁵, while attempts to protect the US semiconductor industry from Japanese competition may have inadvertently led to the current concentrated nature of chip manufacturing (Bown, 2024).

These documented costs and risks associated with economic security policy interventions are not an argument against any such policies. The potential costs associated with disruptions may still justify action. Indeed, in their analysis on the potential effects of German decoupling from China, Baqaee *et al* (2024) argued that a pre-emptive reduction in exposures to China would greatly reduce the impacts of any such future cessation of trade, and they therefore advocated for targeted interventions to reduce dependencies over time¹⁰⁶. Interventions may be especially warranted in those instances when the private risks from shocks, and therefore firms' incentives to diversify, fail to capture the impacts on the wider European economy and society. However, policymakers should acknowledge these costs and focus on limited, targeted and well-designed interventions in order to minimise the disruptions entailed while also achieving their aims, as the Commission commits to doing when it speaks of precision and proportionality in the Economic Security Strategy. The design of these policies is what we turn to now.

Where overdependencies are the motivating concern, a number of policies can be pursued. First, where appropriate, maintaining strategic reserves may represent a cost-effective method to ensure that a certain buffer level exists. However, stockpiling should only play a limited and industry-specific role in economic security efforts, given for instance that innovation often renders reserves obsolete.

Proponents of economic security have often promoted industrial policy aimed at growing domestic production. Where such policies are justified – and not many industries warrant them – they should be targeted to the sector in question and designed to complement and address the particular strengths and weaknesses of that existing EU industry. The answer is not simply to increase state aid allowances. Indeed, differences in national capacities to support their domestic industries is a strong argument for strengthening the role of the EU in the provision of financial support, be that through the STEP platform funding currently in negotiations ¹⁰⁷ or by improvements to the Important Projects of Common European Interests (Poitiers and Weil, 2022). An industrial policy for the European solar panel industry should for instance prioritise recycling and innovation (McWilliams *et al*, 2024), while any measures to support the EV battery sector should address its documented skilled-labour shortage (McCaffrey and Poitiers, 2024b).

Policymakers should not operate under the assumption that the only alternative to importing from one country is to produce domestically, as international partnerships will be critical to the success of any economic security strategies. Various proposals to internationalise industrial policy offer promising solutions to the challenge of enhancing supply security while minimising protectionism. For instance, García-Herrero *et al* (2023) advocated for the establishment of what they term *"clean-tech partnerships"*,

¹⁰³ See https://www.csis.org/analysis/chinas-new-graphite-restrictions.

¹⁰⁴ See https://www.ft.com/content/327414d2-fe13-438e-9767-333cdb94c7e1.

¹⁰⁵ Japan began to heavily invest in the emerging Brazilian industry as part of its search for alternative suppliers.

¹⁰⁶ Their analysis can however also be read as cautioning against excessive policy interventions. Even in the most severe scenario (a complete and abrupt cessation of trade), they found that the effects could be managed through appropriate policy measures and would be of similar magnitudes to crises that have been successfully managed in the past.

¹⁰⁷ See https://www.europarl.europa.eu/RegData/etudes/BRIE/2023/754547/EPRS_BRI(2023)754547_EN.pdf

which would build supplementary supply chains to reduce reliance on China while maintaining the benefits of comparative advantage. Regardless of the precise configuration, partnering with, and developing trust between, like-minded countries should be a critical component of attempts to build alternative supply chains in critical areas.

In the event that policies fail to secure the necessary supply prior to a shock that disrupts imports, joint procurement between EU countries (and possibly EFTA countries and the UK) should be considered, as envisioned in the Internal Market Emergency and Resilience Act. This would reduce adverse competition for the by-definition now scarce resource, and allow for a coordinated response that leverages the size of the single market. Recent examples of this approach in operation include procurement of COVID-19 vaccines¹⁰⁸ and measures for gas supplies during the energy crisis following the Russian invasion of Ukraine¹⁰⁹.

On technology security, the relative competencies largely rest with Member States. A lack of coordination among countries limits the effectiveness of these measures by potentially opening loopholes that can be exploited. As such, the proposals documented in section 4 to enhance coordination across some of these measures, such as in export controls and FDI screening, are welcome, as they should both increase efficiency and reduce the potential for single market fragmentation due to a proliferation of national measures. More broadly, the growing focus on technology restrictions, and export controls in particular, as geopolitical instruments means that it is critical for the EU to develop a more coherent approach, which would allow it to withstand pressure from different actors and only implement the relevant measures when it deems appropriate (Gehrke and Ringhof, 2022). However, notwithstanding the need for a stronger, independent EU strategy on technology security, Bown (2024) detailed some possible avenues for cooperation among partners in this area (e.g. mutual agreement not to impose export controls on one another). These avenues are worthy of consideration, but the first step should be to make the EU's own strategies more effective.

5.4 *Ex-post* responses

The final range of policies to be considered are those that operate once the shock has occurred. In most cases, these should entail provision of support to affected firms to help limit the pain. In cases of coercion, the promise of retaliatory measures is needed to change the adversary country's incentives. In sum, the existence of credible *ex-post* policies should reduce both the likelihood and severity of shocks.

Addressing the issue of coercion first, the Anti-Coercion Instrument (ACI) that came into force in December 2023 is a welcome addition to the EU trade toolbox. It has a broad mandate that provides it with many potential avenues to retaliate against efforts by third countries to exploit trade and investment links to influence Member States' behaviour¹¹⁰. While the Commission clearly states that its main purpose is deterrence¹¹¹, some questions remain as to whether it could be effectively activated by the European Council if called on (see for example Olsen and Schmucker, 2024). Indeed, the lack of a unified European

¹⁰⁸ See https://commission.europa.eu/strategy-and-policy/coronavirus-response/public-health/eu-vaccines-strategy_en

¹⁰⁹ See https://www.europarl.europa.eu/thinktank/en/document/EPRS BRI(2023)751411

¹¹⁰ The Anti-Coercion instrument establishes a legal framework for the EU to deal with economic coercion. It foresees retaliation with a broad range of trade measures against any third country that tries to use economic coercion against an EU country. The measures that can be taken include import and export restrictions, restrictions on intellectual property rights, FDI, public procurement and market access. While the scope is very broad, it is yet to be seen how it will be applied in practice and whether or not it serves as effective deterrent. See https://policy.trade.ec.europa.eu/enforcement-and-protection/protecting-against-coercion_en.

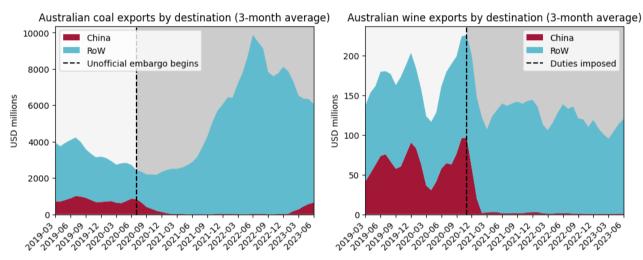
¹¹¹ See https://policy.trade.ec.europa.eu/enforcement-and-protection/protecting-against-coercion/qa-political-agreement-anti-coercion-instrument_en

response to Chinese coercion against Lithuania failed to inspire confidence that future coercion will be forcefully addressed¹¹².

To an extent, this captures a broader challenge that is unique to the EU but common across many policy areas: how to respond to security concerns in a Union in which different countries have very different perceptions of security risks, and foreign policy more generally, as well as different exposures to these risks. That the ACI is based on qualified majority voting, not unanimity, is welcome, but it does not substitute for further developments on a common foreign policy. In the absence of progress and more streamlined decision-making, it seems likely that the same issues that plague EU common defence and security policy will similarly impede its economic security.

Beyond the retaliatory policies designed to combat coercion, there is an outstanding question about whether the EU lacks an instrument to support firms affected by the shocks (and to share the burden of coercion in those instances). Most shocks will fail to impact countries or the EU on a macroeconomic level (see for instance the performance of Lithuanian trade while under coercive measures in Figure 1), and the vast majority of sectors do not warrant the extensive policy interventions described in section 5.3¹¹³. Similarly, many industries will adapt successfully to the shocks and will neither desire nor require state assistance. Some, however, will not, as the varied experience of Australian industries affected by Chinese economic coercion highlights (Figure 2)¹¹⁴.

Figure 2: Chinese economic coercion against Australia



Source: McCaffrey and Poitiers (2024).

There is scope for an additional EU instrument to support affected firms in responding to the shock in question, through for instance financial, logistical or even legal assistance. This could help those affected weather the initial storm brought about by the shock, and to find the new export or import markets necessary for their survival. *Ex-post* fiscal support was unsurprisingly found to be helpful in enabling firms exposed to supply chain disruptions in the COVID-19 pandemic to adapt more quickly, by helping them overcome temporary liquidity pressure and scale-up production again when possible (Schwellnus *et al*,

¹¹² Beyond words of condemnation, the only substantive actions taken by the EU were to initiate proceedings at the WTO and to grant approval to a limited Lithuanian state aid scheme to support affected businesses. Both Taiwan and the US offered more support than other EU countries (see McCaffrey and Poitiers, 2024).

¹¹³ Schwellnus *et al* (2023) found that 96 % of global supply chains are either adequately diversified and/or of limited in terms of strategic importance.

¹¹⁴ Some of the targeted Australian sectors (e.g. coal and barley) successfully navigated the Chinese measures by diversifying their exports. Others, such as the wine and crustacean sectors, failed to do so, and therefore suffered shocks not visible in the macroeconomic data (see McCaffrey and Poitiers, 2024).

2023). Recent experiences have demonstrated that firms themselves are often capable of adapting and diversifying in the face of shocks¹¹⁵, but this instrument would simply aim to complement these efforts where needed.

Such a tool would be particularly beneficial in responding to economic coercion, as it would limit the pain that such coercive measures would inflict on EU firms. Like the ACI, its provision at EU level, as opposed to national, would symbolise EU resolve and commitment to support all firms affected by such measures, while also allowing firms in other EU countries indirectly affected by the measures to access support without additional national state aid schemes having to be created¹¹⁶.

The key challenge in designing such an instrument would be to avoid the introduction of moral hazard. In other words, introducing a measure to support firms overly dependent on a certain market may actually reduce that firm's incentives to diversify in the first place, which altogether only increases exposure to the original risk. Some of this could be addressed through the design of the instrument itself (e.g. concessional loans with strict conditionality would be less likely to induce hazard than grants), while strict eligibility requirements could also reduce the associated risks 117 118. Further developments on common foreign policy would also likely be necessary before national governments commit to supporting firms in other countries against possible coercion (see McCaffrey and Poitiers, 2024, for a more detailed discussion of this potential instrument).

In all these policy areas, one component that should not be overlooked is governance. The competencies required to deal with economic security rest uncomfortably between Member States (for instance, industrial policy) and the Commission (for instance trade), and then at EU level between different directorates-general within the Commission: TRADE for supply chains, GROW and COMP for different facets of industrial policy, INTPA for relations with the Global South, etc. This fragmentation contrasts with the example of the ministerial position created in Japan highlighted in section 3, for instance, and could lead to inefficiencies. Some have called for an EU agency or office (Hackenbroich *et al*, 2022) or even a dedicated Commissioner (Fabry *et al*, 2024) to bear responsibility for economic security. In our view, the latter is not required. However, especially in the aforementioned context of a potential new Commissioner dedicated to security, and the possibility that economic security would be included in that portfolio, the next Commission should clearly designate responsibility for economic security to a DG focused on economics (ideally TRADE), with strong coordination mechanisms between the other relevant units.

6 Conclusion

While the EU has been slower than some of peers to develop stringent economic security measures, recent years have seen an evolution of instruments that aim to strengthen the EU's resilience. These have now been embedded into a European Economic Security strategy. We analysed this strategy against the background of the economic security strategies of other large economies and argue that a comprehensive strategy should be built around four blocks: improving our understanding of economic security risks; diversification of both imports and exports; targeted interventions in narrow sectors through bespoke industrial policies, enhanced technological security and stockpiling and joint procurement of critical

¹¹⁵ Lafrogne-Joussier *et al* (2023) showed, for example, that French firms that had failed to diversify their supply chains pre-COVID-19 managed to compensate by more actively diversifying after the shock had occurred.

¹¹⁶ A feature of the Chinese coercion towards Lithuania was the threat to also target non-Lithuanian firms that used Lithuanian imports, such as German car manufacturers.

¹¹⁷ The Lithuanian state aid scheme introduced to respond to Chinese coercion required potential beneficiaries to have been refused financing by three financial institutions, and to have had high dependencies on China for either imports or exports. This scheme was ultimately ended early because of a lack of uptake, with this conditionality cited as one factor. See McCaffrey and Poitiers (2024) for a detailed outline.

¹¹⁸ Eligibility for this support could also be made conditional on information sharing, to complement the efforts discussed in section 5.1.

products; and *ex-post* measures that disincentivise economic coercion and mitigate any harm that could be inflicted by it.

The progress made in recent years is welcome and the comparison with Japan and the US shows that the EU has learned lessons from these countries. However some broad challenges remain. The first concerns the coordination and the degree of Europeanisation of certain measures. Many of the economic security instruments are under control of EU countries, while an effective economic security strategy relies on coordinated action by the entire EU. Furthermore, there are moral hazard risks for both companies and countries when risks are shared but incentives are misaligned. Finally, a European economic security strategy has to be underwritten by the Member States and can only be successful if foreign policy is aligned as well.

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