FRAMING PAPER[1]

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Europe's Make -or-Break Moment

Putting Economic Security at the Heart of the EU's 2024-2029 Strategic Agenda

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EUROPE'S ECONOMIC SECURITY PROJECT

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ACKNOWLEDGEMENTS / DISCLAIMER

This Framing Paper sets the stage for the EPC's new strategic project on the EU's economic security. It reflects the EPC's interest and investment in the topic of economic security over the past two years. It is the product of research, workshops, interviews, and valuable exchanges across the EU's policymaking community. The EPC's Economic Security project was launched on 10 January 2024 and brings together actors from EU institutions and the wider stakeholder ecosystem to work on EU policy questions and solutions in response to today's paradigm shift to economic security through a number of expert roundtables, policy dialogues, and thematic policy papers. The EPC is grateful to the partners supporting this project, an updated list of which can be found on the EPC's project website.

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Executive Summary: Lessons and recommendations

The EU has entered the third period of its economic history. A paradigm shift is now needed to ensure that EU policy reflects the necessities of economic security. In today's vehemently competitive, fragmented and shock-prone world, there is simply no alternative. Failing to anchor this agenda at the heart of EU policy 2024-2029 would risk ripping wide open the vulnerabilities of today, with existential consequences for Europe.

This is not to suggest that the EU should turn protectionist. Openness remains the best guarantee of Europe's prosperity and an integral part of its DNA. However, given how the world has changed in the past years, the EU cannot remain oblivious to the fact that a safety net is urgently needed to reduce its exposure to outside pressures and encourage stronger and more strategic value creation.

This Framing Paper proposes 18 recommendations for the EU's 2024-2029 economic security agenda. It also defines the setting for the EPC's new strategic project on economic security in 2024. The latter will feature a number of expert roundtables, policy dialogues and thematic policy papers. It will result from the EPC's close collaboration and knowledge partnership with institutional and corporate partners.

RECOMMENDATIONS FOR THE NEW EU ECONOMIC SECURITY PARADIGM:

FACE THE FACTS – Do not be delusional with respect to the state of the world, and apply economic security statecraft with heart and conviction.

Recommendation 1: Put aside earlier assumptions and **make a sober assessment of the state of global governance** and the economic security implications of the reversal of globalisation and **risks of future conflict and disruption** (e.g. Russia, China/Taiwan, Middle East, North Korea, Trump).

Recommendation 2: Build in the requirements of **security, resilience and 'strategic indispensability'** into the **growth and competitiveness agenda** from the start. Accept that the cost of doing so later will be higher while efficiency is more limited.

Recommendation 3: Apply the **EU's 'Economic Security Matrix'** across relevant policy areas, ensuring that the objectives of ***Preparing, Promoting, Protecting*** **and *Partnering*** form a cohesive policy.

PREPARE – Reinforce Europe's 'capacity to decide' and 'capacity to know' both on high-level geopolitical parameters and international value chains.

Recommendation 4: Establish a **standing EU Economic Security Council (EU-ESC)** to support the EU's strategic orientation and decision-making process, linking together security and economic thinking across institutions with actionable levers.

Recommendation 5: Develop **mapping, analysis and foresight capacities on critical technologies and value chains** and monitor the international flows of other key elements of the industrial base, such as investments and skills.

Recommendation 6: Perform a **regular Common Economic Security Risk Analysis** to strengthen common understanding of threats and challenges between the EU institutions and member states and develop a **European Economic Security Index** to track progress towards greater resilience.

PROMOTE – Adopt a pro-active agenda doubling down on scale, speed and directionality to maximise Europe's value creation and technological potential.

Recommendation 7: Create a **500-billion *Futura Fund***, financed partly by the issuance of EU-level debt and partly by drawing in institutional investors such as pension funds, to address current market failures and policy gaps linked to scaling and strategic economic positioning.

Recommendation 8: Seek out chokepoints and **positions of 'strategic indispensability' in critical technologies** to gain leverage in today's geoeconomic power contest. To help deliver on this mission, establish the EU equivalent to the US Bureau of Industry and Security.

Recommendation 9: Perform a **reset of the Single Market** by returning to the foundational **principle of "mutual recognition"**, re-consolidating EU state aid rules and applying as the default setting an EU-wide 'relevant market' competition test in economic sectors where Europe is in a position to gain global leadership.

Recommendation 10: Recast **'Better Regulation' as a fully-fledged partnership with business**, as growth strategies, strategic technological positioning, and risk mitigation approaches rely on corporate decisions necessitating an effective and close channel of consultation.

PROTECT – Reinforce Europe's protection of critical economic and societal functions and vigorously defend economic and security interests through its own autonomous actions.

Recommendation 11: Complete national and **European risk assessments across all vital functions** – from water, food, energy and transport to digital infrastructure, financial markets and public administration

Recommendation 12: Apply singular attention to **Europe's cybersecurity vulnerabilities**, including emerging challenges linked to technologies such as AI and quantum, and accelerate **society-wide efforts for cyber-resilience**.

Recommendation 13: Consolidate the competences and administrative capacities required to **manage economic sanctions, export restrictions and licensing requirements** for technologies and goods at the EU level and establish European cooperation mechanisms on **outbound investment** and **knowledge security**.

Recommendation 14: Propose a strategy for investment and **consolidation of Europe's defence technological and industrial base**, recognising the interfaces between hard and economic security and the major challenges and opportunities in the sector.

PARTNER – Fight for fundamental international norms and consolidate alliances to build mutual economic security.

Recommendation 15: Act without falling foul of the WTO's non-discrimination rules insofar as possible but provide strong **incentives for cooperative practices and the respect of open international norms**.
In parallel to WTO processes, encourage the OECD to scope out trade, climate and economic security nexus (e.g. subsidy disciplines).

Recommendation 16: Build an informal, **like-minded Economic Security Alliance**, loosely **structured around an extended G7**, to converge emerging practices and rules from export controls and supply of critical raw materials to cybersecurity and industrial and trade policy.

Recommendation 17: Double down on the **EU-US Trade and Technology Council** as a privileged forum to discuss the full range of EU and US economic security concerns and aim for **its institutionalisation** with a small secretariat and parliamentary consultative arm.

Recommendation 18: Co-build economic security with the **EU's closest geographic partners, starting with the UK, Norway and Ukraine**, making full use of respective assets from food and energy production to investment capacity.

1. Introduction

The European Union has now entered the third period of its economic history. The first one, from the inception of the integration project until 1989, took place in the circumstances of post-war reconstruction, the creation of the Single Market and relatively few competitive pressures from the outside world. The subsequent period, from 1989 until the 2010s was one of both the largest expansion of the EU to new members as well as globalisation, which Europe was for a time able to shape in its image.

"Europeans are facing a situation in which we suffer the consequences of [having] decoupled the sources of our prosperity from the sources of our security."

HRVP Josep Borrell,
EU Ambassadors Conference, 10 October 2022

The EU has now entered the third period of its economic history.

There is little that remains of that world today as the global environment becomes ever more conflictual and shock-prone. The EU needs to draw the right conclusions, and change its model to defend its interests while not giving up the aspiration to achieve greater global collaboration.

In this context, **economic security is becoming increasingly central, as seen at the recent G7 meeting,[3] signalling a paradigm shift in international economic relations**. Economic security, defined through the symbiotic relationship between competitiveness and a security agenda, is foundational for the EU's future strategic agenda.

Indisputably, the EU has done much in this field already over the past months and years. Whether reacting to or anticipating events, it has developed Europe's autonomous trade and investment measures and several new strategic industrial policy initiatives, such as the Chips' Act. In mid-2023, the European Commission and the High Representative of the Union for Foreign Affairs and Security Policy adopted their proposal on the European economic security strategy.

In the 2024-2029 EU political cycle, it is essential to bring this approach to the point of impact by developing the EU's capacity for economic security statecraft and boosting offensive and defensive instruments to ensure Europe's lasting prosperity in a world where tension is the new normal.

2. This time is different: Understanding the world we are in

I. ADAPTING TO *GEOPOLITICS*

The geopolitical marker of the past few years has been a continued shift away from a cooperative and rules-based world to a power-based and confrontational one. Intensifying global geo-economic competition, US-China rivalry, the COVID-19 pandemic, Russia's aggression on Ukraine, and the war in the Middle East all profoundly question the logic that has shaped Europe's outlook and much of the international economic order of the past decades.[4]

In the 'previous era', economic prosperity had been seen to depend on the flow of goods, services, people, capital, information, and technology across borders. While economic and political interdependence was considered a powerful tool to reduce the possibility of conflict. Now, compounding shocks and risks are forcing state and private actors to map new geopolitical realities onto their economic choices and evaluate security risks.[5]

"Right now there are changes – the likes of which we haven't seen for 100 years – and we are the ones driving these changes together."

President Xi to President Putin,
Kremlin, 22 March 2023

A sober assessment of the state of globalisation is necessary. The US has made it explicit that the premise of its international economic policy in the last few decades, aiming to bring countries into the rules-based order and incentivise them to adhere to its rules, "didn't turn out that way", in the words of Jake Sullivan, the National Security Advisor.[6]

As a result, **the US is now intent, as China plays outside the international economic rulebook, to do so too**. The writing has been on the wall for some time, with the US tariffs on steel and aluminium and WTO appellate body blockage. This is the significant message of the US Inflation Reduction Act, given the "Made in America" requirements on which its implementation is based, as well as of recent US export control policy, which can increasingly be seen as an industrial policy in disguise.

Europeans are watching on aghast as the multilateral order they believed in is forced to retreat. For the WTO, the consequence is increasing irrelevance. Still, it is only a symptom of a broader questioning of the former 'Washington consensus' and a much deeper erosion of current international rules and institutions.

To this bleak international picture, one should add profound global shifts and challenges in technology and climate where positive outcomes fundamentally depend on cooperative international strategies. To take only the climate change example, insufficient degree or the absence of mitigation could shave off 14-18% of the world economy in the next three decades.[7] Although the results of COP28 mean that the end of the fossil fuel- based world economy is now on the cards, they are within the 1.5C limit deemed as safe for humanity.

II. ANTICIPATING *NEW ECONOMIC EQUILIBRIA*

Private sector actors are the weathervanes and foot soldiers of this retreat from globalisation and securitisation of the economy. Although **conceptually, de-risking has replaced de-coupling as the dominant paradigm for addressing the rising trade tensions with China**,[8] Western companies have a growing tendency to reorganise their supply chains and set up new manufacturing facilities in alternative locations.

As an illustration, although only 5% of Apple products were made outside China in 2022, the number is expected to rise to 25% in 2025.[9] As the latter numbers suggest, what is often happening is a significant correction but not a complete rupture of the global economic interaction.

This is likely to be the reality of the present decade: **a new equilibrium will be sought, allowing for the benefits from global collaboration to be reaped, but with a significantly stronger safety net in place**, as often expressed by companies' "China +1" supply chain policies. In some areas of economic activity, it is probable that we will be close to what we see today, in others decoupling and fragmentation are more likely, or the formation of new blocks and alliances.

The EU has no interest in actively contributing to decoupling, even if decoupling will inevitably happen in parts of its ecosystem. Its future prosperity is closely tied to openness, given that the EU is the main trading partner for more than 80 countries around the world. Less globalisation should not necessarily mean less openness, as the Financial Times' Martin Sandbu has phrased it.[10]

Equally, it does not suffice for the EU to merely de-risk its engagement in the world, even if de-risking is essential to avoid others exploiting its numerous dependencies. **"De-risking our economy is a precondition to any competitiveness agenda,"** as Commissioner Breton puts it.[11] Europe needs to grow from the inside out, and perhaps even more critically, it has become a necessity to turn dependencies into securitised leverage points in global economic relations.

III. ENVISAGING THE *POSSIBILITY OF CONFLICT*

At the same time, Europe must be clear-eyed about the deeper and tougher questions.[12] Even as new economic equilibria emerge, geopolitics retains its primacy and at its core, economic security remains a question of possible future conflicts and disruption. In this regard, whereas Russia set off today's geopolitical storm, **China represents the geopolitical climate change Europe must prepare for and mitigate over the long run**. This is despite the fact that cracks in the Chinese economic model are increasingly visible, whether one looks at the level of demand, demographic trends or sluggish productivity.

Commission President von der Leyen did not mince words in her speech on EU-China relations in March 2023.[13] China's illiberal international rise aims to make China the centre of a new international order. Under President Xi, the country has gone from openness and reform to a logic of security and control and is on **"a clear path and push to make China less dependent on the world and the world more dependent on China."**

In the US, the intense strategic rivalry with China has been the subject of sustained, bipartisan focus for over a decade. With policies such as the US Chips Act and the Inflation Reduction Act, the US aims to bring critical resources, technology, and industries home or within immediate territorial reach in North America. Here lies the most ominous message of today's great power rivalry: wars are won by those with the resources and industries to sustain them, and **economic security, therefore, entails also imagining and preparing for a world of possible conflict**.

Economic security entails also imagining and preparing for a world of possible conflict.

These new logics profoundly challenge Europe, having neither the security nor the economic and fiscal 'superpower' attributes of the US and China and having successfully relied in the past on the logic of mutual interdependence. **If it wants to retain agency**

with respect to the critical variables of its future prosperity and security, Europe faces stark choices. The "triple" green, digital, and economic security transitions involve significant economic costs and trade-offs but also require a form of strategic thinking which is structurally difficult for Europe to curate. As Commissioner Breton said in a recent speech at the EPC, economic security is an antonym of naivety.[14]

From the ashes of the old free-trade and cooperative consensus, novel mechanisms, rules, and institutions are emerging. The use of autonomous defensive instruments combines with the offensive application of subsidies and industrial policies at scale and new forms of bilateral and multilateral cooperation. A new paradigm of economic security statecraft, with the simultaneous deployment of economic instruments and foreign security policy is in play.

3. EU economic statecraft for European economic security

I. PROBING *FUNDAMENTAL ASSUMPTIONS*

In *The Wealth of Nations*, Adam Smith argued against rising mercantilism, and identified how prosperity derives not from natural riches but from human labour and trade. As seen from the Industrial Revolution and onwards, **knowledge, technology and infrastructure provide the most lasting foundations of prosperity and security in the international competition of nations**.

Liberal market principles have provided the cornerstones of European economic integration since the Treaty of Rome – and have served Europe well. For an open and globally engaged economy such as the EU, there is no better long-term strategy to achieve economic security than maximising value creation and technological potential.

An economic security strategy distinguishes itself from a pure growth and competitiveness agenda by considering and accepting trade-offs in favour of resilience and security parameters.

At the same time, an **economic security strategy distinguishes itself from a pure growth and competitiveness agenda by considering and accepting trade-offs in favour of resilience and security parameters.** Security of supply, resistance to disruption, adverse events or antagonistic behaviour, and strategic positioning and leverage in international value chains, must be considered in conjunction with economic efficiency.

A complex arbitrage will need to be performed to ensure a viable equilibrium between a vibrant home-grown industrial and technological base, an efficient shield against unfair competition and excessive exposure, as well as openness and partnerships with like-minded countries. This involves refocusing the collective attention on the provision of European public goods, which can create a positive-sum outcome for the EU at large, but crucially also identifying strategic weaknesses of the European model combined with a readiness to question past convictions.

One of the key areas where Europe underdelivers is in reaching the benefits of scale that are increasingly important in today's economy.

One of the key areas where Europe underdelivers is in reaching the benefits of scale that are increasingly important in today's economy. This is about more than returns to scale in physical markets and network effects in digital markets. What Europe has belatedly realised is the full extent to which massive-scale resource mobilisation is paramount both in facing today's transitionary challenges and in building geoeconomic power and leverage.

A second and related weakness is Europe's difficulty in positioning itself strategically. In today's geoeconomics, the strict liberal economic doctrine of market neutrality and a non-intervening state has received a shot across the bow. Technology and industrial policies work,[15] and not only that, they create new, irrevocable geopolitical facts and conditions. The EU's problem here is not only with doctrine. The EU's multilevel governance characteristically struggles with defining a common European interest rather than settling on the lowest common denominators within a patchwork of national economic interest.

In this sense, this third period of the EU's economic history is synonymous with the need for a significant rethink of the EU's political economy and approach to economic statecraft. It places major new demands on the

EU's fiscal and investment capacity, the single market, and the deployment of competition and trade policy, and equally on innovations in the EU's institutional set-up and decision-making capacity.

II. FOCUSING ON THE FOUR PS: *PREPARE, PROMOTE, PROTECT, PARTNER*

Addressing the needs of Europe's competitiveness, resilience, and security of supply will require designing an optimal economic security policy mix covering a range of specific policy areas from raw materials, energy, and health to emerging technologies, cybersecurity and defence.

The European Commission and the High Representative's **Economic Security Strategy from 20 June 2023 identified three Ps – Promote, Protect and Partner –** as lodestars for the EU's interventions. The Ps provide a useful guide for the questions and arbitrages to be considered. However, as an essential starting point for the EU's economic security decision-making, there is also a strong need for a thorough analysis and landscape scanning, which we refer to under an additional P – Prepare. **The application of all four Ps combined creates the Economic Security Matrix for the 2024-2029 period.**

The application of all four Ps combined - *Prepare, Promote, Protect, Partner* - create the Economic Security Matrix for the 2024-2029 period.

In the design of an optimal strategy for the EU at large, and when addressing each policy area, the Commission, the relevant EU Council, or the Committee of the European Parliament should optimise the impact of all four Ps. As part of **Prepare**, the EU should examine the following questions:

- What decision-making mechanisms and structures are needed for the EU to deal collectively with economic security?
- What instruments of foresight, situational awareness and analysis are needed, both regarding high-level geopolitical parameters and looking into the specifics of the economy?
- How can the EU underpin its economic strategy and efforts towards resilience and technological competitiveness by data-intensive analysis as regards resources, technologies and value-chains, both existing and emerging ones?

The second P, as in Promote, is about enabling optimal conditions for the development and growth of Europe's capacity to generate economic value and about positioning strategically within international value chains. As part of **Promote**, the EU should examine the following questions:

- How can Europe mobilise resources and use the single market to develop more scale and economic value? Are all possible resources mobilised and is investment sufficiently leveraged?
- Is the directionality of EU policy sufficient to obtain desired outcomes, meaning in this case not just growth of any kind but one that reflects the need for strategic positioning in international value-chains and the demands of economic security?
- Have mechanisms of public interventions been optimised between the EU and national levels, and have regulatory and administrative barriers to doing business been reduced to the minimum?

The third P, as in Protect, is about securing essential resources and infrastructure and redressing unfair advantage accruing to foreign companies because of the policies of their countries of origin. As part of **Protect**, the EU should examine the following questions:

- What measures are needed to protect critical infrastructure, from energy, food and water to financial markets and public administration? How can Europe create society-wide cyber-resilience in a new threat environment?
- What must Europe do to protect the flow of goods and secure essential supplies to the economy?
- What autonomous trade and economic security instruments should the EU develop and deploy to match or shield from US and Chinese interventions in the economy? How should it act to develop agency and strategic leverage as regards critical technologies?

The final P, as in Partner, is about building a conducive global environment which can benefit Europe's economic security by broadening export markets, increasing the resilience of Europe's supply chains and imports of critical materials and resources. As part of Partner, the EU should examine the following questions:

- How can Europe protect the gains of the global system of governance built in recent years and incentivise the respect of norms?
- What new trade initiatives and agreements can help build more resilient supply chains and contribute to extending markets for European goods and services?
- What partners can Europe rely on, and how can it participate in consolidating an Economic Security alliance with like-minded countries without falling foul of non-discrimination rules?

HAD THE ECONOMIC SECURITY MATRIX BEEN APPLIED TO THE GREEN DEAL…

Should the Economic Security Matrix have been applied to the 2019 Green Deal, or to its predecessor, the 2015 Energy Union, **the EU would have scaled up investment in clean tech and activated trade defence in a much earlier bid to prevent today's Chinese dominance of clean tech markets**. Currently, China holds a share of over 80% in all the manufacturing stages of solar panels (such as polysilicon, ingots, wafers, cells and modules)[16] and a 75% share in lithium-ion batteries.[17] The Economic Security Matrix would have allowed for another balance to be struck between foreign-produced, more affordable clean tech and requirements of economic security, while avoiding it being tilted as heavily as it is today.

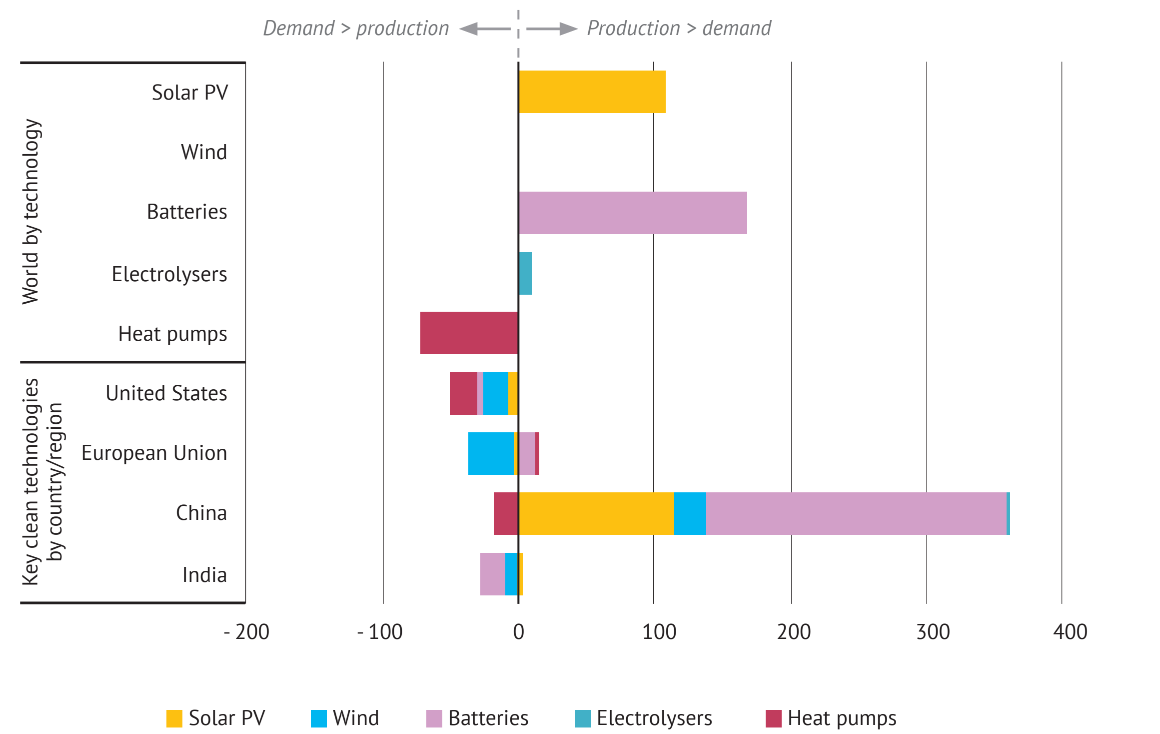
The recent legislative offensive, with the Critical Raw Materials, the Chips Act, and the NZIA, is meant to "ramp up Europe's manufacturing capacities like no other EU instrument has done before", according to Commissioner Breton,[18] although its impact will only be visible over an extended timeframe. However, presently the EU flagship policy proposals, such as the recent Net Zero Industry Act (NZIA), do not clearly distinguish between the aims of technological competitiveness and security of supply considerations. When the NZIA, rather ambitiously, listed eight strategic net-zero technologies for which domestic manufacturing capacity should reach 40% of the EU's annual deployment by 2030, there was no proper discussion of which of these technologies the EU needs at home and for what underlying reasons.

Focus on economic resilience entails deploying industrial policy and trade defence mechanisms where China's current dominance, such as in the clean energy market, including electric mobility, is unsustainable.[19] An updated protective toolbox (value-chain monitoring, technological foresight, knowledge security, anti-dumping and anti-subsidy measures, export controls, investment screening inwards/outwards, etc.) must be effectively available for use in line with the EU interest, rather than held up by short-term national/mercantilist interests as was often the case in the past. There must be increased recognition that trade tools and instruments have a role in diversifying market access and supply chains, levelling the playing field and shoring up domestic actors.

Fig. 1

THE EU DEPENDS ON CHINA TO REACH ITS RENEWABLE ENERGY TARGETS FOR 2030

Market value of imbalances between supply from existing and announced projects and demand in the Announced Pledges Scenario in 2030 for key clean technologies



Source: www.iea.org.

4. The EU's Economic Security Matrix

P1 - Prepare: Putting Economic Security at the Heart of the EU Policy System

Given its fervent assumption of the primacy of multilateralism in the preceding period and the division of competences attentively guarded by the member states, the EU is not well-equipped to deal with matters of economic security within its complex decision-making system. In their Joint Communication on European Economic Security Strategy, the Commission and the High Representative do not address this question directly, choosing instead to list the steps they are proposing to undertake. The framework for assessing risks affecting the EU's economic security is to be developed with member states, while a structured dialogue with the private sector is to be undertaken to shape a collective understanding of economic security.

I. REINFORCING EUROPE'S *CAPACITY TO DECIDE*

Reinforcing Europe's *capacity to decide* goes to the heart of the debate on the EU's institutional framework in a polity of 27 member states and questions the EU's readiness to make geopolitical choices. Stronger EU planning and decision-making go hand in hand with a political mindset capable of thinking and deploying economic and foreign policy tools across the geopolitical space. The two are sides of the same coin. As it stands, the EU's institutional set-up is incapable of achieving this outcome.

At the highest level, coordination needs to be ensured by the European Council, which should regularly meet for economic security discussions to review, programme and make strategic decisions. Otherwise, the risk would be real of arriving at a plethora of national economic security policies, rather than a European one. When treaty reform comes onto the agenda, an adjustment of competences will also be required to empower the EU with a range of instruments that can have more immediate and more thorough impact.

A standing EU Economic Security Council (EU-ESC) should be created, with the capacity to join up security and economic thinking across institutions with actionable levers.

To support the strategic orientations and decision-making process, **a standing EU Economic Security Council (EU-ESC) should be created, with the capacity to join up security and economic thinking across institutions with actionable levers**. Given the EU's specificities, this can only work if it takes the form of an integrated architecture across institutions, that report directly to the leadership of the European Commission and the High Representative and serve to prepare discussions at the European Council.

At the working level, the Council would simultaneously draw on the resources of the Commission and bring in member states representatives. Given the institutional prerogatives, the core of the operational capacity should be formed by teams of today's Commission's Secretariat General with contributions from the most relevant Directorates-General and the European External Action Service, and crucially, with standing arrangements for continuous work with the member states.

This would, over time, contribute to developing a common strategic culture across the EU. On a day-to-day basis, the EU ESC would coordinate the implementation of relevant economic security instruments, such as investment screening, foreign subsidies, and export controls, and plans for investigations or potential new initiatives. **The EU ESC would also become an interlocutor to the high-level structures set up by like-minded countries**, including the Council on Supply Chain Resilience, recently announced by President Biden and chaired by the National Security Advisor and National Economic Advisor,[20] or the Minister in charge of economic security and the Council of Experts on the Economic Security Legislation created in Japan in 2022.[21]

II. REINFORCING EUROPE'S *CAPACITY TO KNOW*

In a turbulent world characterised by shifting vectors of economic power, acting on the basis of thorough evidence and data is essential. There are already too many black boxes in the global corridors of power and in the networks of commercial interactions. **In an era that will be increasingly affected by disinformation and deep-fakes, the scope for misunderstandings and unnecessary aggregation of tensions is enormous**, testing the relationship between decision-makers and their information sources. Today, it is not only the case that the Chinese decision-making remains cryptic. There are also growing complexities in the US political system, which must be considered with the 2024 presidential election in mind.

Reinforcing Europe's *capacity to know* entails developing situational awareness, analytical instruments, and foresight focusing both on high-level geopolitical parameters and global impacts, and looking into the specifics of the economy: what are the main areas and value chains – from energy and food to raw materials and technology – affected by risk? The EU has a growing number of instruments, ranging from civilian research at the Joint Research Centre to security-related and operational elements such as the Emergency Response Coordination Centre, the EU Satellite Centre and the Single Intelligence Analysis Capacity (SIAC).

The EU ESC should have the role of aggregating and combining analysis from different sources and domains. In a similar fashion to the preparatory work that led to the EU's Strategic Compass for Security and Defence,[22] the EU ESC should also engage member states in a **Common Economic Security Risk Analysis** allowing, EU institutions and member states to strengthen their shared understanding of the threats and challenges, as well as of the ways to tackle them.

Importantly, economic security needs to be assessed both at the level of individual member states and at the level of the Union. Taking stock of the interactions between the European Commission and the member states to date, the European Commission should develop a **European Economic Security Index**, as an aggregate measure of key indicators in the area, allowing it to track progress in building greater resilience.

In the forthcoming term, priority should also be attached to **deepening analytical capacities concerning critical technologies and value chains**, as well as their resilience potential. The Commission has developed a data-driven method to identify strategic dependencies[23] as well as market monitoring instruments in areas such as semiconductors and raw materials. This methodology needs to be taken further to reflect the need for de-risking to cover the full spectrum of product development and production, and for **technological foresight to position strategically in emerging value chains**, making also use of new analytical tools available with artificial intelligence.

The economic security strategy needs to be worked out in **strong partnership with business**. Business needs to be treated as a fully-fledged knowledge partner by the institutions, enabling their data and foresight to be shared, with respect for the confidentiality both of state and business-sensitive information. There should also be a channel for close consultation on changes to the existing framework to solicit feedback from the business community and enable it to prepare for what is coming.

Finally, preparedness is not only about knowledge. It is also about having a complete range of instruments in place to deal with the risks to economic security. A review process of the existing mechanisms needs to be performed on a regular basis with immediate action in case of deficits being identified.

P2 - Promote: Building strategic European positions in international value-chains

"It is an economic and national security imperative to preserve a European edge on critical and emerging technologies."

2023 State of the Union Address by President von der Leyen

There is no better core strategy to achieve economic security than to adopt a pro-active agenda maximising value creation and technological potential, while reducing vulnerabilities and excessive exposure to risk. The strengths of the European socio-economic model are undisputable. Europe offers stable, reliable conditions for economic activity with mature markets and significant innovation potential. Conversely, the limitations of the models of other world powers are real, as evidenced in the stagnant Chinese productivity rates.[24] The latter should not lead to any presumptuousness but rather identification of the strategic weaknesses of the European model.

I. REACHING FOR THE BENEFITS OF *SCALE*

Despite its good intentions, the EU is often incapable of looking after its interests or exerting sufficient influence because it is not in the possession of a sufficient gravitas in economic action. **Today, scale is Europe's most painful policy deficit, and it combines inauspiciously**, as geoeconomic tensions ratchet up, **with a lack of strategic positioning in international value chains**.

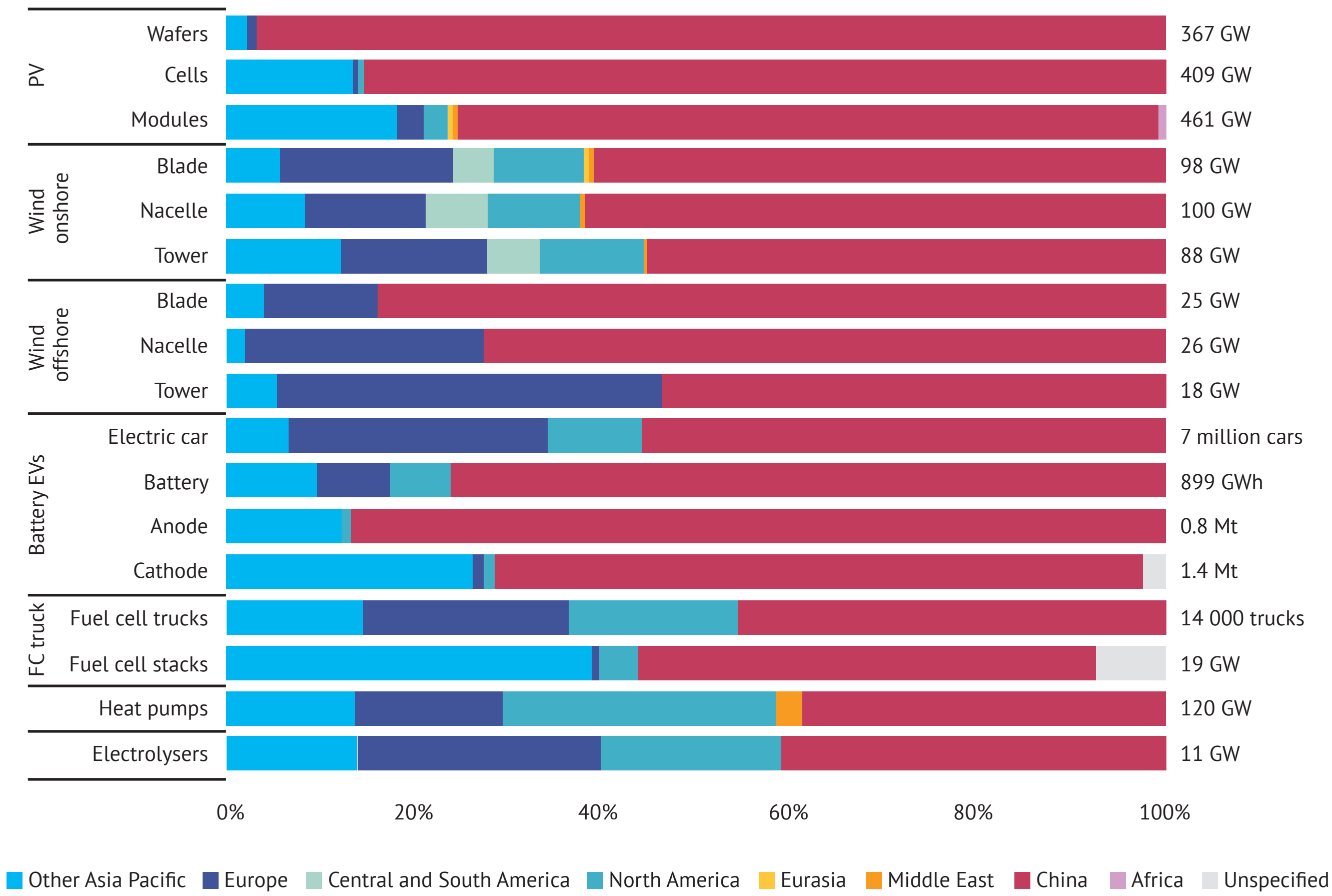
Over the past three decades, the scale of physical markets and the widespread significance of network effects in digital markets have largely contributed to US economic prowess and dominance including over Europe. Across the Pacific, China developed over the same period its own model of massive-scale state resource mobilisation, infrastructure development and manufacturing to address its transitionary challenges and as a vector of geoeconomic power.

Magnitudes today in China are simply staggering. Every year now, China deploys more renewable capacity than the US, EU and India combined, for an economy that represents less than half of their GDP.[25] Over the past two decades, China has built over 40,000 km of high-speed rail infrastructure, dwarfing efforts in the US and the UK that barely exceed a few hundred kilometres.[26] Most ominously perhaps, the provision of the clean technologies that are critical for the world to decarbonise is largely reliant on China's productive capacities – and willingness to export.

China's economic rise is undeniably a story also of growing geopolitical leverage with potentially far-reaching strategic implications. Since 2020, China has withheld exports of graphite, a key raw material in today's battery technologies. Europe's budding battery giant Northvolt is among the players exposed to these pressures. Behind, there likely lies a Chinese strategy to keep Europe's fledgling battery value chain down while Chinese competitors establish themselves internationally and in Europe.[27]

Fig. 2

REGIONAL SHARES OF MANUFACTURING CAPACITY FOR CLEAN ENERGY TECHNOLOGIES



Source: European Commission, 2023.

The US has decided to pick up the gauntlet of this strategic economic competition. Measures such as the US Chips Act and Inflation Reduction Act, now estimated to provide $1.2 trillion of green incentives by 2032,[28] count as massive-scale resource mobilisation domestically, but as trade and investment wars internationally, given their protectionist slant. As the US also locks horns with China on export controls on critical technologies, US policymakers are candid about this change of outlook: Markets are not deemed to work in today's strategic environment, and the prior 'Washington consensus' is now defunct.[29]

Although the EU is not short of instruments to support strategic areas of the economy, their scale and impact tend to be dwarfed by what is needed and what is available in the United States and often in China. Its 38 bn euro Innovation Fund is one of the world's largest funding schemes focused on the demonstration of innovative low-carbon technologies. However, as the Rhodium Group reports, 213 bn USD has been made available for investment in clean tech in the US economy in the past year, a 37% increase from the previous year and a 165% increase from five years ago.[30]

Robust ability to create economic value in the face of growing, and often unfair, international competition will be decisive for maintaining Europe's prosperity and welfare. While often addressed through the notion of "industrial policy", this capacity should be more optimally conceptualised as value creation, which reflects better the current reality of strongly intertwined products and services. However, a principle of realism also suggests that Europe will often not have the capacity to mobilise on the same scale as the US and China. What the US and China do with raw financial muscle, Europe must, therefore, seek to do with agility and flair.

The EU can partly compensate for what it lacks in size by going after strategic positions in critical international value chains, seeking out points of strong technological and industrial leverage in international markets. ASML's position as the sole provider of EUV lithography machines needed to make today's most advanced semiconductors[31] is a rare but strong European example of that today. It is essential that Europe seeks to develop the same in other areas of clean tech and deep tech, such as AI, quantum technologies and biotech. Joined-up action to push technological competitiveness across all four Ps, starting with proper technological mapping and foresight, can help deliver this.[32]

The EU can partly compensate for what it lacks in size by going after strategic positions in critical international value chains.

II. PROVIDING *STRATEGIC ECONOMIC DIRECTION*

Economic security requires that these deficits are urgently addressed through coordinated action at the level of all four Ps, with special emphasis on P2 - Promote. Scale, speed and direction in the economy cannot be prescribed through a rapid makeover but need to result from consistent action across several areas, with three being of prime importance.

- Firstly, it is the question of **sizeable and well-structured investment instruments**, allowing for significant push for market creation, technological competitiveness and economies of scale.
- Secondly, **conducive framework conditions** are necessary, which include non-intrusive regulatory rules putting a premium on value creation but also an adapted competition framework.
- Thirdly, it is the question of **skills and talent**, one of the decisive territories where global competition is played out.

Ambitious policy initiatives are necessary in all three of these areas in the next EU cycle.

The extent of investment needs is particularly clear with respect to the scale-up of Europe's deep and clean tech competitiveness, and more broadly the delivery of the EU's energy transition. For example, the latter will not succeed without significantly strengthening the electricity generation capacity and grids. Only for North Sea offshore wind, Europe's ambitions to reach 120 gigawatts capacity by 2030 (up from 30 GW today) and at least 300 GW by 2050 are estimated to cost 800 billion euros.[33] The build-up of capacity and identification of the main gaps and new needs in gas, hydrogen, CO2 interconnection and storage also requires urgent action.

Therefore, **the EU must arrive at an aggregation of investment**. Mobilising swift and sufficient private capital is of the essence. More focus must be put on unlocking private investments while avoiding crowding-out effects and subsidy races between member states. The most immediate way to achieve this lies through using the EU budget as leverage both for borrowing on the market and to crowd in private investments. Currently, most of the EU's spending power transits through legacy instruments such as the cohesion funds, which are often unleveraged and unfocussed on today's principal challenges. In addition, whenever the EU budget is not relied upon to a sufficient extent, the capable Member States are incentivised to intervene on their own, within the scope of their national economies, hence creating a challenge to the Single Market.

To address current deficiencies, **the EU should create a *Futura Fund***, partly based on the aborted concept of a European sovereignty fund.[34] Established partly by means of issuance of EU-level debt and **partly by drawing in institutional investors such as pension funds**, insurers, asset managers, large family offices and other financial actor, the logic of the fund is to give the Europe investment firepower it lacks both at national and EU-levels. At the same time, a European sovereignty fund can be the single most important factor in restoring the level-playing of the Single Market. Just as the EU has agreed to pursue de-risking in its external economic policy, the Futura Fund would achieve de-risking internally by enabling further investments in the green transition, and avoiding the distortive effects of state aid.

Given the political limitations on the scale of funding that can be mobilised through the Sovereignty Fund, one has to look at other resources that remain to be mobilised in Europe, including with the recourse to the pension assets, whose total volume in the euro area is equal to 3.42 trillion in Q2 2023.[35] Prudential rules constitute a certain limitation, but they cannot and should not explain stark underutilisation of available capital in Europe. Today, there is a curious situation wherein 10 percent of German unicorns are held by US pension funds while only 0,02 percent is owned by German pension and retirement funds.[36]

The announcement in February 2023 of the 3.75-billion-euro European Tech Champions Initiative 'Fund of Funds', with contributions from Belgium, France, Germany, Italy and Spain alongside EIB Group resources,[37] another 1-billion-euro German initiative in November 2023,[38] and UK plans for a 75 bn GBP Fund, the momentum is growing across Europe to put dormant capital to use to support value creation. Launching a European Fund of Funds would have the additional benefit of ensuring a European value-added and avoiding fragmentation, which would be inevitable should such initiatives be launched predominantly nationally. It would also provide a vital element of support for the completion of the Capital Markets Union.

While the volume of investment is of prime importance, the method of spending can make an enormous difference. Many of the EU's investment schemes in technological development, such as the Important Projects of Common European Interest (IPCEIs), are complex and time-consuming. This creates a significant comparative disincentive, especially when compared to the US's Inflation Reduction Act (IRA), which is based on tax credits, and creates a predictable and rapidly implementable framework for companies. While financial scale is of paramount importance, the additional contribution of dimensionality needs to come from the eternal promise of the Single Market, Europe's undisputable advantage. Ever since its launch in 1993, the project has been the subject of numerous incremental reforms. It now needs to undergo a more significant reset if it is to cater for the needs of sustaining Europe's economic weight in the 21st century. This is a watershed moment for Europe's Single Market, as it is now directly challenged from the outside to an extent that has never been the case before. The concept of the Single Market emerged in an entirely different context, to remove barriers and control member states in their interventions, with as a result an increasingly open European economy for a time able to shape globalisation in its image.

THE *FUTURA FUND*, EUROPE'S 500-BILLION-EURO SOVEREIGNTY FUND

Established partly by means of issuance of EU-level debt and partly by drawing in institutional investors such as pension funds, the Futura Fund would become the EU's prime investment vehicle to respond to current market failures and unmet transitionary needs.

There is no one-size-fits-all model with respect to the allocation of investment. The choice of the respective instrument should be a function of the specific requirements of each policy area. The menu of options includes the following possibilities:

i. Fund-of-funds structures to tackle the European scale-up gap, investing in large-scale venture capital funds, which will, in turn, provide growth financing to European deep or clean tech champions in their late-stage growth phase. The EU is already gaining significant experience with such vehicles, with recent interesting examples being the aforementioned European Tech Champions Initiative and Escalar.1 As part of its mandate, a 'sovereignty fund' should have the possibility to take equity participations in strategic assets and industries alongside private institutional investors.

ii. Support to infrastructure development and the deployment of new technologies, such as carbon capture and storage (CCS), green hydrogen, offshore wind, electrolysers, clean fuels, long-duration storage or direct air capture. Public sector intervention mechanisms could involve competitive bidding mechanisms and procurement as well as long-term contracting to offer predictable, guaranteed prices or cover demand and supply gaps or the costs of technology development.

iii. Supplementary financing to existing strategic initiatives such as the EU Chips Act. There is a clear mismatch between the objectives set by the Chips Act and the means available. Most significantly perhaps, the Chips Act should serve to prepare the future of semiconductors and the existing pilot lines that have been established will require significant follow-up financing.

iv. Base or top-up financing to Important Projects of Common European Interest (IPCEIs), whether new or existing (such as in batteries, cloud or microelectronics), to add critical scale and momentum and make them proper EU industrial projects.2

v. Support towards Airbus-like consolidation of national industries with a dispersed supply chain, multiple manufacturing sites, developing deep expertise in each location and level of specialisation leading to innovations and lowering cost. The Airbus model can today be replicated in the defence industry, for whom there has not been a better moment for consolidation. Similarly, consolidation should be pursued in areas where Europe retains or must regain a competitive advantage, such as pharmaceuticals, cybersecurity or life sciences. As part of its mandate, a 'sovereignty fund' should have the possibility to take equity participation in strategic assets and industries alongside private institutional investors. Such an action would build on the system of industrial alliances in areas such as chips, cloud, batteries, or solar, created in recent years.

vi. Financing through NPBIs (National promotional banks and institutions) and RTOs (Research and Technology Organisation) capable of leveraging EU-scale investments. Belgium's IMEC, originating as a university spin-off, is an example of an RTO persistently working at the cutting edge of technology development, engaging with leading global businesses.

vii. Public-Private Partnerships dedicated to specific European common interest outcomes, along the lines of the Innovative Health Initiative,3 a 1 bn euro funding scheme, which brings research institutions and industry together for impactful projects remaking how the health system is run and organised.

At the same time, reform efforts to install more dynamism in the Single Market have a long and often troubled history. They initially struggled with the sensitivity of opening the service market to cross-border competition. Later, the digital transformation became a challenge, as it meant going beyond the initial designs of the Single European Act. Today's logic of building the Single Market is one of extending the area of the free flow of goods, services, capital, and people. This is done painstakingly through the process of ongoing, and often piecemeal, harmonisation relying on adequate implementation at the member state level. Delays and loopholes are the inevitable by-products of this approach.

A reset of the Single Market is urgently needed by returning to the foundational principle of 'mutual recognition' and adapting competition rules to vie for positions of global leadership.

A reset of the Single Market would imply assuming that the free flow of goods, services, capital and people is the default mode for the European Union, with every exception having to be justified. In other words, **what is needed is a return to the foundational principle of 'mutual recognition'**, which was at some point the engine of Europe's single market integration. Of course, mutual recognition has also a long history of sensitivities. Therefore, rather than undoing legacy problems of the past, member states should agree to pilot this approach to areas where Europe is in a strong position to regain global leadership.

Competition control has been a cornerstone policy of the Single Market since its inception but not without, often significant, adaptations with time. Opening a new chapter in the EU's economic history is also about examining the EU's competition policy. In the context of the back-to-back COVID-19 pandemic and energy crisis, the European Commission has adopted wide 'Temporary Crisis and Transition Framework'-relaxations concerning state aid rules allowing for extraordinary national support measures.[39] While these measures had legitimacy in the light of the extraordinary economic circumstances, they are also potentially very distortive to the Single Market.

In parallel to scaling up EU-level investment capacity, **the Commission should work as a matter of priority on the post-crisis consolidation of these measures to reinstate the Single Market level playing field**. A contrario, it is now in competition and merger control that relaxations seem warranted. The EU has long deployed a strict 'relevant market'-test at the level of national markets to prohibit industrial consolidations into bigger entities, and to favour fierce price competition in national markets. At the same time, this has often prevented the emergence of bigger 'European champions', the telecoms sector being a case in point. As Europe turns it focus on the need for more economic scale, an EU-wide 'future relevant market'-test should be the strong default presumption.

In this regard, as part of a **forward-leaning industrial policy strategy**, the EU should aim to support Airbus-like consolidation of national industries with a dispersed supply chain, multiple manufacturing sites, developing deep expertise in each location and level of specialisation leading to innovations and lowering cost. A specific area of focus should be **Europe's defence technological and industrial base**, recognising the interfaces between hard and economic security and the major challenges and opportunities in the sector, which now require a European strategy for investment and consolidation.

On the other end of the scale, **increased administrative burden** is a growing challenge for especially small and medium-sized companies in Europe. A recent open letter from the German family firms under the title "Europe's economic base is eroding", points to the new obligations introduced by the CSR Directive, the new directive on pay transparency and the Carbon Adjustment Mechanism. Well documented are the high costs of quantitatively and qualitatively assessing hundreds of data points, but also new personnel costs for auditing and consulting services, as well as those for setting up an IT infrastructure. The money spent on additional reporting is not spent on research and business development, or on sustainability, which is the reporting requirements' initial objective.[40]

The EU's two-decades-old 'better regulation' drive must be recast as a fully-fledged partnership with business.

The EU must reduce compliance costs for enterprises, acting forcefully not only on the cumulative reporting requirements but also on monitoring the overall administrative burden imposed by EU legislation. A common method should be introduced to calculate additional reporting costs for businesses, ensuring that new commitments – when they must be introduced – are legally sound, giving the planned SME Ambassador sufficient power within the Commission and a mandate to work closely with the business community. Beyond SMEs, particular focus is needed on Europe's mid-caps, which in many respects are the EU's hidden economic champions but remain largely overlooked by policy.[41]

Most significantly, the Single Market must be a source of continued impulse to innovate. In this regard, **the EU's two-decades-old 'better regulation' drive must be recast as a fully-fledged partnership with**

business, as growth strategies, strategic technological positioning and risk mitigation approaches rely on corporate decisions necessitating an effective and close channel of consultation. A European equivalent of the US Breakthrough Innovation provision should be introduced. It would amount to a closer dialogue between the innovator and the regulatory authorities.

In addition, the public sector is most effective as an early consumer of innovation. In the EU, where procurement amounts to 14% of the GDP, this is a significant resource which can have a sizeable impact on the evolution of the market. Current innovation procurement guidelines should be turned into a mandatory instrument. The inclusion of start-ups in procurement contracts needs to be actively pursued, to avoid vendor lock-in and entrenching of legacy technologies.

An EU action plan to tackle labour shortages is needed, including extensive training programmes given the technological acceleration we are witnessing.

Finally, **given the technological acceleration we are witnessing, Europe-wide extensive training and retraining programmes will be needed**. Insufficient supply of skilled labour is already one of the most significant challenges to European industry, with manufacturing technicians currently being poached from industry to industry. One of the most significant phenomena in the labour market is the vacancy rate, which has been constantly rising, with the highest level of 4.7% registered in the Netherlands in Q2 2023.[42]

Just as the European Commission successfully launched its temporary Support to mitigate Unemployment Risks in an Emergency (SURE) instrument in 2020, a similar programme is now needed for addressing Europe's skills gap and retraining in the light of technological acceleration and the need for enterprise adaptation. Companies that train in these areas could be supported, and the successful model of the 'European Batteries Academy', which develops training content adapted to the new skills needs should be replicated in other critical areas for Europe's economic security.

P3 - Protect: Shoring up Europe's resilience to face crisis and adversity

The most fundamental risks and challenges to our society often come in the form of disruptive economic acts or activities or from the lack of preparation for natural phenomena. The COVID-19 pandemic exposed insufficient readiness for a crisis that in the light of history and available knowledge could have been anticipated. Pandemics are only one item on a long list of economic threats that Europe must now be prepared to effectively tackle as our societies grow more complex – and geopolitical tensions rise.

The European Commission and the High Representative's Economic Security Strategy from 20 June 2023 identifies **four main types of risks**: risks to the resilience of supply chains and energy security; risks to the physical and cyber-security of critical infrastructure; risks related to technology security and technology leakage; and risk of weaponisation of economic dependencies or economic coercion. What is common to all four is that they require more intense and new forms of EU-level action to protect critical societal functions and defend Europe's economic interests.

I. PROTECTING *CRITICAL SOCIETAL AND ECONOMIC FUNCTIONS*

Power stations, pipelines, transportation networks, electronic communication networks and undersea cables are the beating heart and arteries of essential societal functions. About 8,000 kilometres of oil and gas pipelines crisscross the North Sea alone, which according to reports,[43] have been surreptitiously mapped out in detail by Russia over the past years. As this example highlights, **Europe must now move on from a form of naiveté of insouciance to affirm and establish a common culture of anticipation and prevention**.

The June 2023 Economic Security Strategy provides such a sense of direction to a growing battery of EU acts and measures in recent years aiming to protect Europe's critical infrastructure. The EU Directive on the Resilience of Critical Entities requires member states to adopt national strategies by October 2024 and carry out regular risk assessments to identify entities that are considered critical or vital across eleven sectors, from water, food, energy and transport to digital infrastructure, financial markets and public administration.

In the aftermath of the acts of sabotage against the Nord Stream pipelines on 5 October 2022, the Council also adopted a Recommendation for an EU-wide coordinated approach to strengthen the resilience of critical infrastructure, intensifying preparedness, response capacity and international cooperation, including with NATO and key partner countries. To enhance

WHAT IF... EUROPE FAILS ON DIGITAL SECURITY?

Energy has grabbed most of the headlines in the past two years, but cyber resilience might be the next major test for Europe. Russia and other malicious actors dispose of significant offensive cyber capacities and can mobilise private cybercriminal organisations. European decision-making centres and critical infrastructure of all types are potential targets of so-called distributed denial-of-service (DDoS) attacks. Border Gateway Protocol (BGP) hijacking attacks could aim for internet availability, as seen already in Ukraine, where more than 15% of the internet infrastructure has been destroyed.

Europe's economic fabric at large is also looking particularly vulnerable to cyberattacks. The number of cyberattacks in Europe has increased tenfold between 2010 and 2022. In 2023, more than 85% of cyberattacks on businesses affected SMEs.1 These are worrisome trends for Europe, as many actors within Europe's SME segment support important economic functions and have little capacity to prepare.

Fig. 7

NUMBER OF CYBERATTACKS EACH YEAR ON EU COUNTRIES

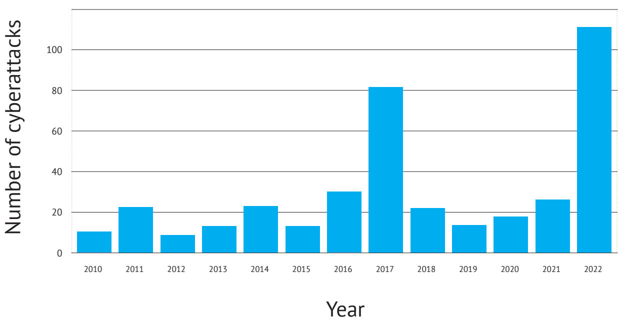
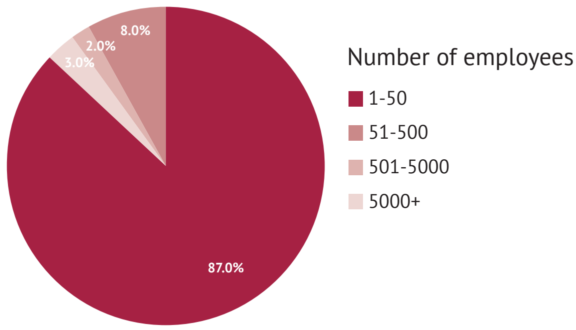


Fig. 8

SIZE OF COMPANIES AFFECTED BY CYBERATTACKS



Source: Auriane Técourt with data from EuRepoC and the European Digital SME Alliance.

preparedness, the recommendation invited member states to update their risk assessments to reflect current threats and to conduct stress tests based on common principles and joint scenarios at EU level, starting with the energy sector. As a matter of priority, these **national risk assessments must now be completed across all domains of critical functions and made to converge in a Common Economic Security Risk Analysis**, as proposed.

National and European risk assessments must be completed across all vital functions – from water, food, energy and transport to digital infrastructure, financial markets and public administration.

Acceleration is also necessary at the EU level as regards cybersecurity. The recent revision of the Directive on the security of network and information system (NIS2 Directive) and the EU Cyber Resilience Act, which bolsters cybersecurity rules for hardware and software products that are placed on the European market, are important steps forward. Still, **the rolling out of cyber preparedness across Europe's economy and critical functions is too slow and reflects a lingering mindset of unconsciousness towards new threats.**[44] Supported by the proposed EU Economic Security Council, a much more sustained political focus on preparation and response capacities is necessary at the level of the European Council, Commission and member states.

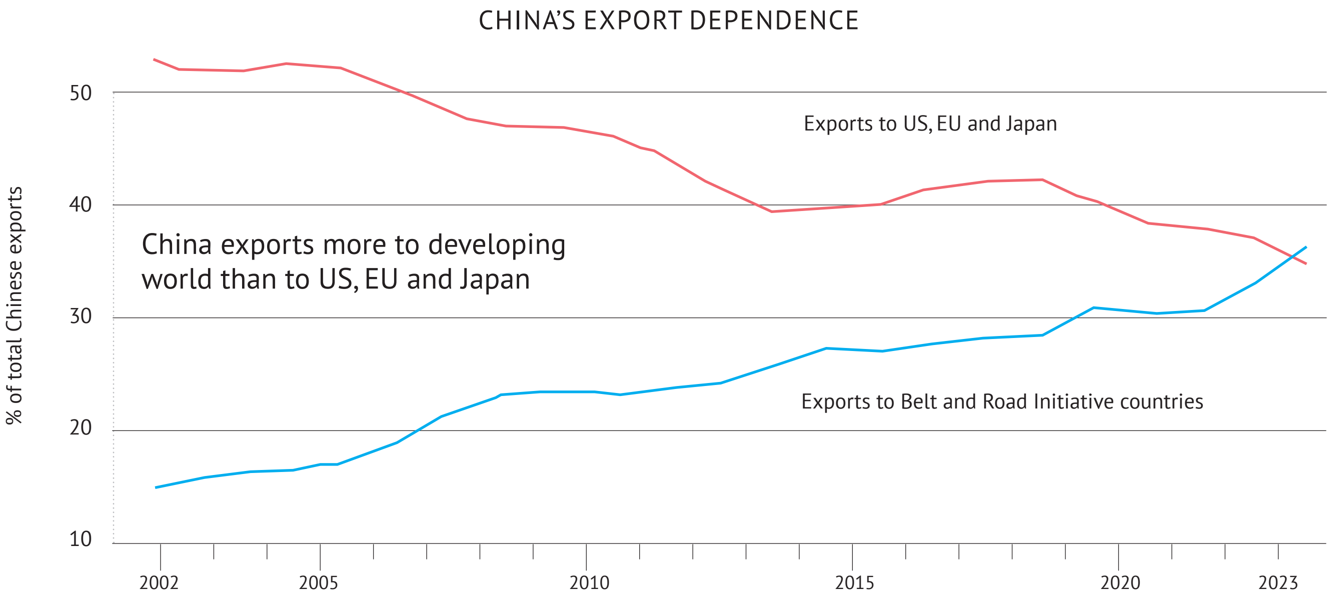
Finally, recent years have also exposed how vulnerable our societies can be in relation to the flow of goods and maritime routes, with the Houthi attacks in the Red Sea coming as a stark reminder. The links and cross-overs between the EU's ambitions for economic security and capacities in security and defence will likely only go on increasing in years to come.

More broadly, **sustained focus is needed on the significant dependence between Western companies and suppliers across the world.** The geopolitical dimension needs to become a permanent part of the resource allocation and risk mitigation strategies. Just like China is diversifying its trade, with more exports to the Belt and Road Initiative countries than the EU, the US and Japan (see figure below), the West should also arrive at a more balanced pattern of engagement.

The first step in this direction needs to be greater transparency and better analysis of the complex supply chains across the world with instant identification of the pressure points they entail, and rapid response mechanisms by government and business. An entire spectrum of interventions needs to be envisaged from immediate substitution through the Single Market Emergency Instrument, directing productive assets to where they are most needed, to the incentivisation of EU-based value creation through the Futura Fund.

The EU's focus on reducing vulnerabilities in raw materials is part of Europe's necessary aggiornamento. The directionality of the approach in the Critical Raw Materials Act is obvious, and its impact will be felt, but a reality check is needed. A mixture of onshoring, friend-shoring and creating a recycling market is proposed. However, the EU is unlikely to be able to extract 10% of the raw materials domestically given the nature of the permitting processes which tend to last 10-15 years. The incubation and growth of a new market for recycled materials is an example of an economic security strategy that relies on growth, and needs to be scaled up, given the availability of the technology to achieve these goals. Partnering with like-minded countries will need to fill the gap that internal action cannot achieve.

Fig. 9



Source: FT, Dongwu Securities.

II. DEFENDING *EUROPE'S ECONOMIC INTERESTS*

Excessive exposure to risk is also an unwanted by-product of the EU's ultra-strong commitment to multilateralism in the previous economic period. More by default than by design, it has led to the creation of several dependencies, often at a systemic level. In the less benign international environment, they stand to be exploited by countries wishing to challenge not only a level playing field but also the EU's economic interest.

A course correction has been ongoing for several years, starting with the Juncker Commission's attempts to do away with naïveté in trade policy by upgrading and modernising the EU's Trade Defence Instruments.[45] Their objective has been to address unfair policies and practices of third countries. Yet the EU is now faced with a deeper shift in this space: **today's competition is not only for economic advantage but crosses over and mixes with political and security concerns as economic blocs are vying for strategic leverage**.

Today's competition is not only for economic advantage but crosses over and mixes with political and security concerns as economic blocs are vying for strategic leverage.

Liberal democracies across the world, including Australia, Canada, Japan and South Korea, have been targeted by Chinese economic pressures and coercion as China seeks to enforce its foreign policy views and objectives. Also, European countries have fallen victim to Chinese economic arm-twisting, with the plights of Lithuania[46] and Norway[47] often cited as textbook cases of Chinese economic coercion. Historically, the US has been no stranger either to pursuing gain and projecting power with its economic might. Over time, and with a clear acceleration under the Trump administration, there has been a significant build-up of pressure on European companies through direct and indirect sanctions making use of US extraterritorial jurisdiction.[48] In response, the EU adopted last year an Anti-Coercion Instrument aiming to deter third countries from restricting trade or investment, with the possibility of EU countermeasures.

More recently, the US-China strategic **competition and related pressures are increasingly centred in on technology**. Like the US before it, China pursues an ambitious military-civil fusion programme with the goal of developing the most technologically advanced military in the world. So-called dual-use technologies are increasingly omnipresent, from semiconductors to AI, and the upshot is that, whereas economic security and national security in the past were separately defined, they are now merging.

Just before the US imposed sweeping export controls towards China on advanced chips and chips manufacturing equipment in October 2022, the US National Security Advisor Jake Sullivan had formulated a new American doctrine in approaching technology and security: "We previously maintained a 'sliding scale approach' that said it needed to stay only a couple of generations ahead. That is not the strategic environment we are in today", he said.[49] To be clear, the US aim is now to arrest Chinese developments *tout court* in force multiplying technologies.

Whether the US will succeed or not, this has dramatically reshaped discussions around technology. It is a fair assumption that China's views on the desirability of technology will diverge considerably from the West, as its citizen surveillance programmes show. Yet, it is another discussion whether the West is still capable of influencing China's technological path. According to the Australian ASPI Institute's Critical Technology Tracker it is now China that leads the world on 37 out of 44 critical technologies, with an innovation system that is largely decoupled and has sufficient critical mass to sustain itself irrespective of Western transfers.[50]

For Europe, it is, in any event, yet another dramatic geopolitical wake-up call. In pursuit of its aims, the US has moved to push key partner countries to enact similar export control policies as its own. Most notably, Japan and Netherlands agreed after months of pressures to curtail exports of advanced semiconductor manufacturing equipment to China, in the Dutch case affecting ASML, Europe's only tech juggernaut.[51] On its side, China has responded by restricting exports of two metals, germanium and gallium, that are key to manufacture electronics and semiconductors, in particular bearing upon industries in Germany, France and Italy.

The geopolitics of technology have become a fundamental test of European agency.

With China breathing down its neck and America in its face, **the geopolitics of technology have become a fundamental test of European agency**. Today's geoeconomics is a game of leverage where scale and "strategic indispensability" through ownership of chokepoint technologies convey power. As discussed under P1-Prepare and P2-Promote, **significant European investment into technological forecasting, research and development and scaling is therefore required**. To have leverage in today's power games, Europeans must as a matter of urgency build up their stakes in critical future value chains, be they in Artificial intelligence or climate technologies.

The Commission recently adopted in this regard a Recommendation on critical technologies for the EU's economic security.[52] In a list of ten areas, the Recommendation identifies four technologies that are considered the most sensitive: advanced semiconductors, Artificial Intelligence, quantum and biotechnologies. In a sign of new European ambitions, a common assessment process was initiated speedily and aimed to be concluded by the end of 2023. However, with that come also some limitations: the process is narrowly focused on security parameters and requires close, trusted interaction with the member states. To build up Europe's assets, a more encompassing and growth-oriented assessment with the involvement of industry is required.

The January 2024 economic security package is a test case of Europe's resolve and capacity to act together across a number of parameters from investment screening to knowledge security, including a possible review of Regulation 2021/821, which governs the control of exports of dual use items. Amid a strong reluctance from member states to have stronger EU powers over matters that pertain to national security, the previous **EU export control reform** took five years to negotiate and yielded only vague and sometimes confusing provisions. Whether more can be achieved now is perhaps doubtful, but if reform again proves unsuccessful, Europe's member states and industrial champions will remain exposed to being picked apart by others.

In a number of critical areas EU research has undeniably been too open or easily accessible to the rest of the world.

Many other EU policies are also on the ballot, from knowledge security to investment screening. **In a number of critical areas, EU research has undeniably been too open or easily accessible to the rest of the world.** Today, China's lead in dual-use quantum communication technologies is a direct heritage of significant cooperation and knowledge transfers from European universities over many decades.[53] While these forms of collaboration are

CARVING OUT POSITIONS OF 'STRATEGIC INDISPENSABILITY' IN CRITICAL TECHNOLOGIES

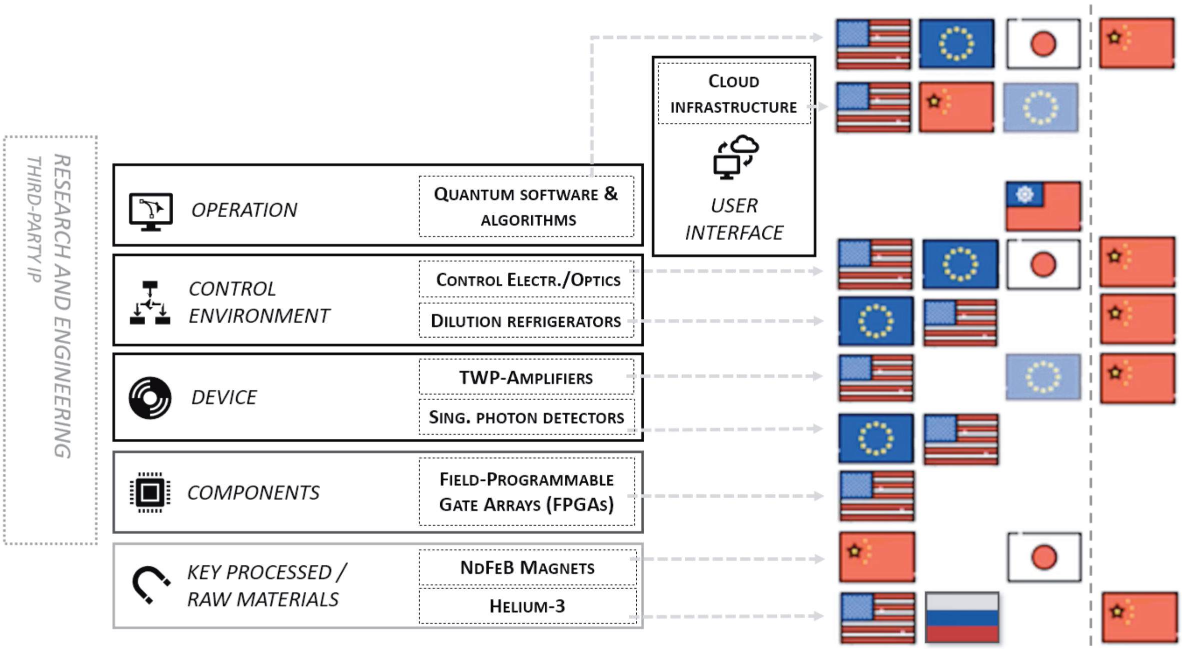
In today's changing geopolitics, the ownership of chokepoint technologies is increasingly employed to build leverage and economic power. It is a strategic turn that the EU's innovation, industrial, trade and single market policies have insufficiently focused on. Going forward, it is essential that EU policies actively seek out European positions of **'strategic indispensability' in critical technologies** activating all available policy levers across the 4Ps. To help deliver on the multifaceted requirements of this mission, combining trade, industrial and security policies, the EU should consider establishing within its institutional set-up the EU equivalent to the US Bureau of Industry and Security.

Quantum computing is a next-generation foundational technology with significant economic and security implications. Truly powerful quantum computing might be years away, but when it arrives it is widely expected to be able to break the digital encryption system that underpins most security and defence communication and business transactions today. Although the technology is still immature, critical chokepoints and entrenchments are already emerging in the global quantum computing value chain.

The US is a leading actor, centred on the innovation capacity and financial power of its Big tech champions. China is also a prime actor, but its efforts remain largely shielded from international research collaboration and global value chains. On its side, Europe has a very promising ecosystem of leading innovators and start-ups, but they are now at a critical juncture. Quantum technologies stand out as one significant area where **the EU must apply its "4Ps policy mix" to scale and develop a promising technological ecosystem into strategic positions in international value chains.**[54]

Fig. 10

THE RACE FOR TECHNOLOGICAL SUPREMACY: THE EXAMPLE FROM THE QUANTUM COMPUTER STACK



Source: Quantum Delta NL/TNO, QUIC, QED-C, EPC stakeholder workshops & interviews.

increasingly unthinkable today, more recent examples including exchanges with Chinese military universities[55] highlight the need for a new European frame of action. Following up on the Commission's voluntary toolkit on foreign interference in research and innovation from 2022,[56] more restrictive policies and controls are needed in areas that are defined as sensitive.

An EU initiative is also emerging regarding outbound investment screening, following in the footsteps of recent US developments and G7 discussions.[57] The initiative should lead to a structured cooperation mechanism between member states that would subject investment in some sensitive technologies abroad to notification, or in the utmost consequence, prohibition.

When it comes to **inward investment**, the FDI Screening Regulation implemented in 2020 has by-and-large enabled an efficient exchange of information and space to flag security concerns resulting from FDI projects. Member states generally have a positive assessment of the usefulness of the mechanism, as reflected in the recently published results of the consultation on the possible revisions to the screening regulation.[58] However, the European Court of Justice has recently clarified in the Xella judgment that the EU FDI Regulation does not cover "indirect" foreign investments, namely those carried out by EU investors over which a third-country entity has control. It also ruled that any restriction of FDI must be justified by a "genuine and sufficiently serious threat to a fundamental interest to society".

The Advocate General described the Regulation "as a kind of a platypus, a strange creature when compared to the 'ordinary' type of regulations envisaged by Article 288 TFEU", the reason being that it does not impose binding rules but merely authorises member states to introduce legislation that governs the screening of FDI.[59] In this context and **in the light of the argument that FDI flows should be considered as falling under exclusive common commercial policy competence, stronger EU-level rules and procedures will be necessary**, even if member states are unlikely to be enthusiastic endorsers of this approach. This issue is partly addressed in the January 2024 economic security package of the European Commission, which proposes to tighten the screening mechanism, making it obligatory for all Member States, introduces a set of minimum criteria for assessment and extends the scope of the activities covered to both direct and indirect investments.

It highlights again the distance the EU still has to travel before it has strong economic statecraft instruments on a par with the US. The EU must now act swiftly to consolidate the competences and administrative capacities required to **manage economic sanctions, export restrictions and licensing requirements** for technologies and goods at the EU level and establish European cooperation mechanisms on **outbound investmen**t and **knowledge security**. In the future, **the EU should have within its institutional set-up European equivalents to the US Bureau of Industry and Security (BIS) and the US Office of Foreign Assets Control (OFAC)**, effectively enforcing economic and trade sanctions and managing export restrictions and licensing requirements for technologies and goods, based on the definition of common European interests.

P4 - Partner: Building economic security from the outside-in

A strong Partnering pillar of the EU economic security policy is needed to answer Europe's resilience needs through a diverse and balanced international engagement. Although the multilateral system is increasingly dysfunctional, with the number of trade concerns before the WTO's Council for Trade in Goods rising to an unprecedented level and only a small fraction of new trade restrictions being notified to the WTO, the counterfactual is bound to be risky and disadvantageous to Europe.

The objective of partnering efforts should be two-fold. First, to maintain the global multilateral framework as performant as possible in the face of historical pressures. Secondly, to work with partner countries to coordinate policy on economic security and secure alternative sources of supply for critical products and services, hence avoiding collective or individual vulnerabilities which can easily be abused.

I. FIGHTING FOR *INTERNATIONAL NORMS*

Europe's challenges in economic security are part of a global phenomenon of decreasing supply chain diversification in the last two decades. WTO economists estimate that 19 percent of global exports are in bottleneck products, defined as products that have few suppliers but a large market share, and this share has doubled over the past two decades.[60]

Although under pressure and in need of thorough reform, the rules-based multilateral trading system built around the WTO remains the best anchor of free and fair trade. **Ensuring resilient global supply chains is more likely through a functioning WTO system than without it**, by reducing the risk of supply chain disruptions, expanding the system to include new actors and new areas, and increasing the likelihood of markets staying open when alternative sources of supply are needed most. Although significantly weakened, the WTO remains capable of providing for a global version of 'flexicurity' by mitigating supply shortages.[61] In addition, multilateral crisis mechanisms may limit the detrimental impact of trade restrictions.

In the run-up to the 13th WTO Ministerial Conference in Abu-Dhabi in February 2024, it is vital for the EU to argue for economic security concerns to be duly and openly recognised in the international arena, rather than remain an afterthought in the context of mounting trade tensions. As the World Trade Report 2023 acknowledges, "security concerns are here to stay for the foreseeable future", and states that "this may require the adaptation of the multilateral trading system to a new trade environment."[62] The EU should actively favour extending the WTO deliberative process to economic security issues, as part of the existing Specific Trade Concerns process and further political and technical dialogue, information sharing and improved transparency.

Global mechanisms are also needed for subsidy coordination, with a recognition that subsidies can play, in certain instances, a necessary role within climate policies to correct market failures. In other cases, subsidies should be reduced to the utmost minimum. **In the absence or in preparation of WTO processes, the OECD is well placed to advance work on the trade, climate and economic security nexus.** This should include a 'subsidies rulebook', along the lines of its taxation-related initiatives, also taking inspiration from the work on agricultural subsidies in the 1990s. As a first step, common carbon accounting standards should be within reach, leading eventually to a classification of climate subsidies according to the standard traffic light 'boxes': green (permitted), amber (slow down), and red (forbidden).

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More broadly, **the EU must reflect on how it can incentivise the respect of international norms and cooperative economic practices**. The continued buildup – and timely, just and effective deployment – of the EU's autonomous trade and economic security instruments can act not only as a major factor of dissuasion and credibility in today's economic power play, but also as a strong incentive towards the respect of open norms by others. The EU's Carbon Border Adjustment Mechanism (CBAM) is a case in point: its deployment and defence in line with the WTO's non-discrimination rules matter significantly for establishing a level playing field but also from a wider systemic point of view.

Similarly, the building of strong like-minded alliances can serve the same dual purpose of consolidating Europe's economic security and inciting rule-consistent behaviour. The EU should keep doors open within its economic security and industrial policies for special friends who are ready to act in the same way.

II. BUILDING *ALLIANCES*

New trade agreements are an essential element of the strengthened EU resilience. One of the main benefits of trade is to gain access to the most critical products for which domestic substitutes are hard to find. It has been calculated that 10 percent of such critical products account for 90 percent of the gains from trade,[63] which also means that diversification of the production of such products would come at high welfare costs. In itself, this will be an argument for many countries to maintain open trade relationships. The first step to ensure economic security remains to remove impediments to trade.

Trade agreements can support the diversification of supply, including raw materials. The recent EU-Chile agreement is an example of an arrangement that contributes to economic security through its provisions related to lithium, copper, and hydrogen. Although making it operational has proved to be difficult, the EU has announced it wants to establish a Critical Raw Materials Club. In parallel, the EU should intensify efforts to conclude free trade agreements with Australia, India, Indonesia and Mexico. The economic security dimension can also be a powerful argument in the finalisation of the Mercosur agreement, currently hanging by a thread.

Partnering with emerging and developing economies within the framework of the Global Gateway Strategy will require a new set of initiatives, addressing some of their most pressing problems, including investment and the level of debt. Adopting the economic security paradigm can help Europe become more cognisant of the interests and points of view of the countries of the Global South. This can only benefit its global engagement, as the EU continues to think beyond its borders and immediate interests to accomplish its biggest goals.

Finally, **the EU needs to align with like-minded countries and build an informal Economic Security Alliance, loosely structured around an extended G7**, to converge emerging practices and rules from export controls and supply of critical raw materials to cyber security and industrial and trade policy. As seen at the Hiroshima summit in May 2023, such an Alliance is already taking shape but sustained economic diplomacy is needed to keep it alive and make it deliver.

The EU needs to align with like-minded countries and build an informal Economic Security Alliance, loosely structured around an extended G7.

This Alliance must build on the agreements reached in Hiroshima to coordinate security-related outbound investment and export controls, launch the Coordination Platform on Economic Coercion, and pursue the 'Five-Point Plan for Critical Mineral Security' adopted earlier by the G7 Climate, Energy and Environment Ministers. In addition, at the Fasano summit in Italy in June 2024, the EU should pursue a G7 initiative to collaborate on subsidies, which could aid European clean energy producers to access foreign markets. Its first element should be a clearinghouse of information about new policy initiatives taken to address the resilience of the supply chains.

Within this group, the US should in normal circumstances be Europe's natural go-to partner in economic security just as it has been in hard security for the past century. Unfortunately, there is currently no possible futureproofing of the transatlantic relationship and, as the US Inflation Reduction Act has shown, the EU cannot take a low-barrier transatlantic trade and investment space for granted. Still, **the EU should double down on its investment in the EU-US Trade and Technology Council as a privileged forum** for both parties to discuss the full range of their economic security concerns.[64]

Although there is no future-proof EU-US relationship, the EU should double down on its investment in the EU-US Trade and Technology Council.

Going into the next political cycle, the EU should aim for the institutionalisation of the TTC by establishing a small secretariat and a parliamentary consultative arm, as well as an active channel to the business to the business community. As shown by the recent failure of the talks on sustainable steel and aluminium, the meeting of minds across the Atlantic is never easy. Yet any compromises that can be found, whether on emerging technologies, supply chain coordination, tariffs or subsidies, will contribute positively to delivering both parties' domestic economic security agendas.[65]

Last but not least, **the EU must look to its closest geographic partners, such as the UK, Norway, and Ukraine, in building joint economic security**. As a G7 economy, permanently bound in a community of values and destiny with the rest of Europe, the UK is a natural economic security companion for the EU. Across the North Sea, Norway is the EU's most stable partner and is already integrated into the single market as part of the European Economic Area. Norway is home to some of Europe's most significant strategic resources, from hydropower, oil and gas to wind and critical minerals. Besides, given its significant energy revenues, enormous capital reserves, and for the moment, untargeted investment profile, the Scandinavian country could contribute significantly to Europe's investment capacities in the context of a Futura Fund.

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At the opposite end, there is Ukraine, whose technological, industrial and agricultural capacity has been significantly curtailed by the Russian onslaught. Yet, the underlying economic security potential is undeniable, and, in a spirit of mutual benefit, remains a hitherto unexplored strategic argument for EU membership. In the medium term, Ukraine's strong industrial base and vast natural resources can significantly bolster Europe's resilience and strategic independence across critical areas such as food, energy, metals and raw materials, as well as in IT and defence.[66]

Ukraine is already a major producer of critical raw materials such as titanium and graphite and aims to direct rich copper and lithium deposits towards Europe's emerging battery value chain.[67] By counting Ukraine, the EU's total arable land increases by a third, and its overall share of wheat exports could go as high as 30%.[68] These are parameters that count – and that the EU must develop the capacity to engage with strategically – in today's economic security paradigm.[69] By investing in storage capacity as China has done,[70] **Europe could carve out a role for itself as a guarantor of global food security and significantly increase its weight as a benevolent geostrategic player**.

5. Conclusions

Major changes to the international economic system invariably require important economic and societal transformations at home. The current EU institutional cycle had two clear priorities in the 'twin' green and digital transitions. With the shift towards an economic security paradigm, the next policy-making cycle will have to grapple with three major, concomitant transitions: green, digital and economic security. The compounding depth of these challenges signals major trade-offs and demands a capacity to prioritise.[71] Trade-offs abound between security, economic efficiency, climate action and sustainability in a political environment where EU unity and social acceptability across member states are also challenged.

If the EU can muster the political will, it is better positioned than may be commonly assumed to integrate the economic security prerogative into its *modus* *operandi*. It has the instinct to act based on evidence, which will help it become optimally prepared for the unknown unknowns of the new world order. It also has a natural inclination to partner with third countries, being the main trading partner of 80 economies around the world.[72] Where it will need to show exceptional determination and skill is in overcoming its lack of strategic thinking and inhibition of scale and in the more resolute and timely use of the mechanisms of protection.

Significantly, an international order that reflects the need for economic security, does not necessarily need to be more fragile than the one that came before. The idealised multilateral world order may seem steadily more distant but should remain Europe's long-term point of reference. However, at this point, not addressing potential risks and vulnerabilities would be bound to bring significantly more instability rather than less. Global common goods, especially in climate action and equitable development, can only be successfully built when the essentials of economic security are adequately addressed. For so many reasons therefore, at this juncture of the EU's economic history, economic statecraft has become an existential imperative for Europe.

1 This Framing Paper sets the stage for the EPC's new strategic project on the EU's economic security.

2 Georg Riekeles is Associate Director and Head of Europe's Political Economy Programme, while Paweł Świeboda is Senior Visiting Fellow and Co-Lead of the EPC's Economic Security Project.

3 European Council, "G7 Leaders' Statement on Economic Resilience and Economic Security"(accessed 09 January 2024).

4 Borges de Castro *et al.* (2023), "Europe in the world in 2023: Learning the language of power?", Brussels: European Policy Centre.

5 Mollet, Frederico and Riekeles, Georg (2022), "Europe must prepare for a wartime economy", European Policy Centre (accessed 19 January 2024).

6 Sullivan, Jake, "Remarks by National Security Advisor Jake Sullivan on Renewing American Economic Leadership at the Brookings Institution", Brookings Institution, 27 April 2023.

7 In a severe scenario of 3.2° temperature increase, the world economy is set to lose 18% of GDP because of climate change according to a Swiss Re Institute report. In a scenario of 2.6° increase, 14% of GDP is lost. (Swiss Re, "World economy set to lose up to 18% GDP from climate change if no action taken, reveals Swiss Re Institute's stress-test analysis" (accessed 09 January 2024).)

8 Von der Leyen, Ursula, "Speech by President von der Leyen on EU-China relations to the Mercator Institute for China Studies and the European Policy Centre", European Policy Centre, 30 March 2023.

9 *The Economist*, "The end of Apple's affair with China", (accessed 09 January 2024).

10 Remarks at the conference "European Competitiveness and Economic Security: Towards a New Strategic Agenda", European Policy Centre, 10 January 2024.

11 Breton, Thierry, "A Europe that protects its citizens, transforms its economy, and projects itself as a global power", European Policy Centre, 10 January 2024.

12 Zuleeg, Fabian, "A watershed moment in European history: Decision time for the EU", European Policy Centre (accessed 19 January 2024).

13 Von der Leyen (2023), *op. cit.*

14 Breton (2024), *op cit.*

15 See for instance, 'The new economics of industrial policy' by Réka Juhász, Nathan Lane, and Dani Rodrik.

16 International Energy Agency, "China currently dominates global solar PV supply chains" (accessed 09 January 2024).

17 International Energy Agency, "Global Supply Chains of EV Batteries" (accessed 09 January 2024).

18 Breton (2024), *op cit.*

19 *The Economist*, "Xi Jinping risks setting off another trade war" (accessed 09 January 2024).

20 The White House, "Fact sheet: President Biden Announces New Actions to Strengthen America's Supply Chains, Lower Costs for Families, and Secure Key Sectors" (accessed 09 January 2024).

21 Jochheim, Ulrich (2023), "Japan's economic security legislation", Brussels: European Parliamentary Research Service.

22 European External Action Service, 'A strategic compass for security and defence" (accessed 09 June 2023).

23 Centre for Economic Policy Research, "The EU's strategic dependencies unveiled" (accessed 09 January 2024).

24 Foreign Affairs, "The End of China's Economic Miracle" (accessed 09 January 2024).

25 Wolf, Martin, "The market can deliver the green transition – just not fast enough", *Financial Times* (accessed 22 January 2024).

26 *CNN*, "Past, present and future: The evolution of China's incredible high-speed rail network" (accessed 09 January 2024).

27 *The Economist*, "Why is China blocking graphite exports to Sweden?" (accessed 09 January 2024).

28 Goldman Sachs, "The US is poised for an energy revolution" (accessed 09 January 2024).

29 Sullivan (2023), *op cit.*

30 Rhodium Group, "The Clean Investment Monitor: Tracking Decarbonization Technology in the United States" (accessed 09 January 2024).

31 *The Economist*, "How ASML became chipmaking's biggest monopoly" (accessed 10 January 2024).

32 Riekeles, Georg (2023), "Quantum technologies and value chains: Why and how Europe must act now", Brussels: European Policy Centre.

33 *France24*, "European summit aims to scale up wind energy production in North Sea" (accessed 10 January 2024).

34 See Commissioner for Internal Market, Breton, Thierry, "A European Sovereignty Fund for an industry "Made in Europe" I Blog of Commissioner Thierry Breton", Brussels, 15 September 2022, as well as previous discussions of investment needs and the sovereignty fund concept : Lausberg, Phillip and Riekeles, Georg (2022), "The EU's Trillion-Euro Question", New York: Project Syndicate; and Zuleeg, Fabian (2022), "Applying an intergenerational mindset to European technology investments", Brussels: European Policy Centre.

35 Statista, "Total assets reported by pension funds in the Euro area from Q1 2008 to Q2 2023" (accessed 19 January 2024).

36 Redstone, "Pension funds research" (accessed 19 January 2024).

37 European Investment Fund, "European Tech Champions Initiative" (accessed 22 January 2024).

38 *Sifted*, "Germany announces close of €1bn fund of funds to invest in German and European VC", 22 November 2023.

39 European Commission, "State aid: Commission adopts Temporary Crisis and Transition Framework to further support transition towards net-zero economy" (accessed 19 January 2024).

40 Foundation for Family Businesses and Politics "Europe's economic base is eroding - Family businesses appeal to the EU: Stop the deluge of regulations" (accessed 19 January 2024).

41 European Policy Centre, "Facing a recession, Europe should focus on its mid-caps" (accessed 19 January 2024).

42 *Eurostat*, "Job vacancy statistics" (accessed 19 January 2024).

43 *VG*, "Russisk «spionskip» har gjort to undersøkelser på norsk sokkel siden 2019", 5 October 2022.

44 García Rodríguez, Andrea (2023), "A quantum cybersecurity agenda for Europe", Brussels: European Policy Centre.

45 European Commission, "Commission welcomes landmark deal modernising the EU's trade defence" (accessed 19 January 2024).

46 CSIS, "China's Economic Coercion: Lessons from Lithuania" (accessed 19 January 2024).

47 *The Interpreter*, "Beijing's bad books: Australia can learn from Norway and South Korea" (accessed 19 January 2024).

48 Jacques Delors Institute, "American extraterritorial sanctions - Did someone say European Strategic Autonomy?" (accessed 19 January 2024).

49 Sullivan, Jake "Remarks by National Security Advisor Jake Sullivan at the Special Competitive Studies Project Global Emerging Technologies Summit", Special Competitive Studies Project, 16 September 2022.

50 Australian Strategic Policy Institute, "Critical Technology Tracker" (accessed 22 January 2024).

51 *Financial Times*, "Netherlands to restrict chip exports after US pressure over China threat", 8 March 2023.

52 European Commission, "Commission recommends carrying out risk assessments on four critical technology areas: advanced semiconductors, artificial intelligence, quantum, biotechnologies" (accessed 22 January 2024).

53 Giles, Martin (2018), "The man turning China into a quantum superpower", MIT Technology Review.

54 Riekeles (2023), *op cit.*

55 Science Business, "European universities under fire over work with Chinese military" (accessed 22 January 2024).

56 European Commission, "Commission publishes a toolkit to help mitigate foreign interference in research and innovation" (accessed 22 January 2024).

57 Grieger, Gisela (2023), "US approach to outbound investment screening", Brussels: European Parliamentary Research Service.

58 CIRCABC, "Summary results - Targeted consultation on the evaluation and revision of Regulation (EU) 2019-452 (the 'FDI Screening Regulation')" (accessed 22 January 2024).

59 See paragraph 32 of the Opinion of Advocate General of 30 March 2023, Xella Magyarország Építőanyagipari Kft. v Innovációs és Technológiai Miniszter, Case C-106/22.

60 World Trade Organization, "Views of the Chief Economist" (Accessed 22 January 2024).

61 *Ibid.*

[62] World Trade Organization, "World Trade Report 2023" (accessed 22 January 2024).

[63] Ossa, Ralph (2015) "Why trade matters after all", *Journal of International Economics*, Volume 97, Issue 2, November 2015, pp. 266-277.

[64] European Policy Centre, "Searching for economic security in an age of confrontation: The Trade and Technology Council takes shape" (accessed 22 January 2024).

[65] Lichfield, Charles; Riekeles, Georg (2022) "How the EU and the US should overcome their trade and supply chain disputes", Brussels : European Policy Centre.

[66] Lausberg, Philipp and Taran, Svitlana (2024), "Economic security: a strategic argument for Ukraine's EU membership", *Euractiv*.

[67] S&P Global, "Metals and the invasion: Ukraine aims for critical minerals after the war" (accessed 22 January 2024).

[68] Stiftung Wissenschaft und Politik, "Ukraine's possible EU accession and its consequences" (accessed 22 January 2024).

[69] Army University Press, "Does China Have Enough Food to Go to War? Practical Indicators for U.S. Military and Policy Makers" (accessed 22 January 2024).

[70] State Council Information Office (SCIO) of the People's Republic of China, "China has 700 million metric tons of grain storage capacity" (accessed 22 January 2024).

[71] As Fabian Zuleeg writes "prioritizing everything will deliver nothing", in Zuleeg, Fabian (2023), "Economic security: A new EU paradigm?", Brussels: European Policy Centre.

[72] By comparison, the US is the main trading partner of only 20 countries.

The **European Policy Centre** is an independent, not-for-profit think tank dedicated to fostering European integration through analysis and debate, supporting and challenging European decision-makers at all levels to make informed decisions based on sound evidence and analysis, and providing a platform for engaging partners, stakeholders and citizens in EU policymaking and in the debate about the future of Europe.

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